

If Doctors In The NHS Use Evidence Based Medicine, Why Don't Managers In The NHS Use Evidence Based Healthcare Management? Can This Paradox Be Explained And Is The Paradox True?

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Context

Scientific management was the first attempt to systematically treat management and process improvement as a scientific problem. With the advancement of statistical methods, the approach was improved and referred to as quality control in 1920s and 1930s. During the 1940s and 1950s, the body of knowledge for doing scientific management evolved into Operations Research and management cybernetics. In the 1980s the subject was studied as total quality management, in the 1990s re-engineering.

Evidence-based medicine (EBM) is an attempt to more uniformly apply the standards of evidence gained from the scientific method, to certain aspects of medical practice. Specifically, EBM seeks to apply judgments about the inductive quality of evidence, to those aspects of medicine which depend on rational assessments of risks and benefits of treatments (including lack of treatment). According to the Centre for Evidence-Based Medicine, "Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients." (Strauss 2005)

Evidence-based design is a process used by architects, interior designers, facility managers, and others in the planning, design, and construction of commercial buildings. An evidence-based designer, together with an informed client, makes decisions based on the best information available from research and project evaluations. This is a method applicable to many types of commercial building projects, but is uniquely suited to healthcare because of the unusually high stakes and major issues of safety and improved clinical outcomes. A natural parallel and analog to evidence-based medicine, it is currently being used in the healthcare industry to help convince decision-makers to invest the time and money to build better buildings - and realize strategic business advantages as a result.

Evidence based healthcare management (EBHM) refers to using research evidence in making management decisions. Defined narrowly it describes using evidence from randomised controlled trials investigating the effectiveness of clinical therapies and procedures in management decisions (for example, whether to add or discontinue a therapy in a service or revise guidelines). For example evidence about the effectiveness of models of service (case management or team work), or about changes to organisation (changing skill mix or merging two organisations) or about new financing arrangements (e.g. primary care purchasing), or about public health or health promotion programmes. This accommodates a more flexible concept of evidence of effectiveness which can include the opinions of stakeholders if gathered using accepted systematic methods.

The word effective is sometimes used in a quantitative way, "being very or not much effective". In strict epidemiological language, 'efficacy' refers to the impact of an intervention in a clinical trial, differing from 'effectiveness' which refers to the impact in real world situations Therefore, what is

effective is not necessarily efficacious, and what is efficacious is not necessarily efficient. Performance measurement is the process of assessing progress toward achieving predetermined goals, while performance management is building on that process adding the relevant communication and action on the progress achieved against these predetermined goals (Bourne, M.,Franco 2003)

Dr Muir Gray is Director of the National electronic Library for Health and of the National Screening Committee, and Project Manager for the National Public Health Network Project. He was also instrumental in setting up the Centre for Evidence-Based Medicine in Oxford, which has played a leading role in promoting and supporting the teaching and practice of evidence-based medicine worldwide. In Muir Gray's view the evidence based philosophy is widened to health care as a whole. It is concerned with groups of patients and populations rather than individuals.

The first key author in the area of practical application of researched best practice by managers in healthcare in England was Hamlin, a Principal Lecturer at the University of Wolverhampton (Hamlin 2001). His paper presents arguments in support of evidence-based healthcare management, drawing on organisationally based empirical research, set within an NHS Trust Hospital in the UK. The research focuses on identifying the criteria of managerial effectiveness applying at the middle and front line management levels of the organisation, using critical incident technique and factor analysis methods. The findings suggest the existence of generalised criteria of managerial effectiveness, supporting the notion of the 'universally effective manager'.

Other notable authors in this area include Karen Davis who has made comparison studies of the functioning of health policy in Denmark, Germany, the Netherlands and the United Kingdom to understand the incentives, rewards and penalties that might make players in a health system allocate resources efficiently (Davis 2007). Jo Boufford was former head of the Kings Fund, an influential English research organisation in the field of health policy and upon her move to New York University to head up the Wagner Faculty on Healthcare policy she wrote about "Teaching Evidence Based Healthcare (Boufford 2003). Kovner and Sklar both write for the AHRQ, part of the American government Department of Health and Human Services, on Evidence Based Healthcare Management

There are alternatives to Evidence Based Healthcare Management (EBHM) but they are not universally acceptable. Pfeffer (Sutton and Pfeffer 2005) notes the problems and benefits of trying to draw conclusions from the alternative to EBHM of simple comparison or benchmarking, to arrive at the perceived best healthcare model. "You can use uncritical emulation and its business equivalent: casual benchmarking. Both doctors and managers look to perceived high performers in their field and try to mimic those top dogs' moves. I am not damning benchmarking in general – it can be a powerful and cost-efficient tool. Yet it is important to remember that if you only copy what other people or companies do, the best you can be is a perfect imitation. So the most you can hope to have are practices as good as, but no better than, those of top performers – and by the time you mimic them, they have moved on.

The OECD Health Project has run for four years, embracing nearly a dozen studies including policies on human resources, new and emerging health-related technology, and long term care, and private health insurance, cost controls in health care and waiting times for elective surgery, along with research on measuring income-related equity of access to care. In effect the project highlights the dilemma that the evidence and the policy in healthcare management are in conflict over how to improve the effective application of resources. The first findings of the Health Project were published in May 2004 at a first-ever meeting of OECD Health Ministers, in the ambitiously-titled report *Towards High-Performing Health Systems*. The final chapter in the report looks at “increasing value for money in health systems” – and is forced to dismiss many of the stock neoliberal policies: cost sharing; the purchaser-provider split; decentralisation; payment by results (activity based systems of payment); and competition between providers are all found wanting, while contracting out (privatisation) of support services is given only the most fleeting and uncritical attention, ignoring any considerations of quality.

This study will concentrate the practical elements of the research on the East Midlands NHS.

The National Health Service (NHS) is the "public face" of the three publicly funded health care systems of Great Britain (Northern Ireland does not use the title) and the full title of the national public health service for England. The NHS provides the majority of healthcare in England, from general practitioners to Accident and Emergency Departments, long-term healthcare and dentistry. It was founded in 1948 and has become an integral part of English society, culture and everyday life: the NHS was once described by Nigel Lawson, former Chancellor of the Exchequer, as "the national religion". Private health care has continued parallel to the NHS, paid for largely by private insurance, but it is used only by a small percentage of the population, and generally as a top-up to NHS services. NHS services are largely "free at the point of delivery", paid for by taxes; the NHS's budget for 2006–07 is £96 billion. Employing over 1.3 million people, the NHS is the largest employer in Europe and one of the largest employers in the world, (believed to be third or fifth, according to different commentators).

The East Midlands is one of the regions of England and consists of most of the eastern half of the traditional region of the Midlands. It consists of the combined area of Derbyshire, Leicestershire, Rutland, Northamptonshire, Nottinghamshire and most of Lincolnshire. Its main settlements are Nottingham, Leicester, Lincoln, Derby, Northampton, Mansfield and Chesterfield. Leicester is officially the largest city in the region, although the largest conurbation is the Nottingham Urban Area. For the purposes of this study the East Midlands represents a significant border for the division of delegated responsibility of the Department of Health. NHS East Midlands provides strategic leadership to NHS organisations in the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland. These organisations have a total NHS budget of £4.1bn, and serve a combined population of 4.3 million.

There is a structure, albeit an informal one, for the implementation of management research in the National Health Service. The National Institute for Health Research was created in 2006 “to create a health research system in which the NHS supports outstanding individuals, working in world class facilities, conducting leading edge research focused on the needs of patients and the public”. The NIHR is a virtual organisation, which provides a new framework for the Department of Health to work with its key partners involved in the different elements of NHS research. .West Midlands Health Technology Assessment Collaboration between universities and academic groups mostly based at the University of Birmingham, United Kingdom. It produces reviews and evaluations for a variety of national and regional clients, undertakes methodological research on health technology assessment, and provides training in systematic reviews and health technology assessment. The Service Delivery and Organisation (SDO) Research and Development Programme aims to produce research evidence directed at improving the organisation and delivery of health services, and to promote the uptake and application of that evidence in policy and practice. The SDO Programme is one of the National Institute for Health Research (NIHR) Programmes

The Cochrane Collaboration is an international not-for-profit organisation that helps people make well informed decisions by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health care interventions. The major product of the Cochrane Collaboration is its database of systematic reviews. Most reviews are prepared by health care professionals and published in the Cochrane Library. The activities are supported by staff in Cochrane Centres around the world. .Centre for Reviews and Dissemination (CRD) was established in 1994 to provide the United Kingdom's National Health Service (NHS) with important information on effectiveness of treatments, delivery and organization of health care. A Sibling organization of the United Kingdom Cochrane Centre and is part of a network of academic departments and research centres at the University of York concerned with teaching, research and consultancy in health and public policy.

2. **Research proposal and justification**

Health care is one of the biggest industries of all; with a global health spend in excess of \$3 trillion annually. With many traditional manufacturing industries in decline, 'reforms' to health care systems, aimed at opening up a growing share of public health care budgets and insurance funds to private providers, have become the talking point of policy-makers in many countries. But the truth is that health is a tremendously valuable good to the individual, and this is what is behind growing health demands. The more affluent we become, the more we value our health. Within that context what role does Evidence Based Healthcare Management play?

I wish to consider the willingness to take an evidence-based approach – and to use any bad news it brings as a stimulus for improvement. In the influential *Good to Great* (2001), US author Jim Collins labels 'level 5 leadership' as the ability to combine individual competence with unwavering resolve to confront the facts head on, fierce ambition (for the organisation) and personal modesty. All these are needed because once the evidence is assembled; the only way of creating a customer-orientated organisation is to make it face the customer. Paradoxically, the only way for leaders to gain control of the system is to give up the idea of controlling people through authority and hierarchy (the leader-facing organisation) and enable customers and frontline workers to jointly reconfigure the system to deliver what customers. As Robert Pfeffer and Jeffrey Sutton note in *Hard Facts, Dangerous Half-Truths and Total Nonsense: Profiting from Evidence-Based Management* (2005), if decision are made on facts, then everyone's facts must be equal, but you don't need 'transformational leaders' to do it.

A drive for EBHM does make the manager understand what is not known about 'best practice'. The NHS Institute for Innovation and Improvement and the Integrated Service Improvement Programme, which sponsor the Learning from Practice database, invited Paul Pisek, a respected international consultant on innovation and complexity, to challenge expectations and use of 'best practice' material. Pisek maintained that Best practice searches typically uncover only successful case studies; negative experiences are under-reported. The reader won't know if others have done the same things and had poor results. All you can truthfully say is: "There is evidence that when this practice was implemented successfully it resulted in improvement, but we don't know how often it can be implemented that successfully." If you can create a similar context to the best practice site (the nature of relationships, power, eagerness to learn etc.) you have a reasonable chance of getting best practice results. But the fact is that one can never know if a given practice is 'best' in another context until one works with it in that context. When the inevitable disappointment associated with overstated potential occurs, it often leads to questioning the sincerity of the efforts of leaders in the field. Eager new leaders then come along who, despite thinking they can get it right, face the same patterns that contributed to their predecessors' 'failure'. There is no real learning and the best practice guide on whatever becomes the next performance lever will likely repeat the same process. There is therefore real merit in understanding EBHM as a tool to management decisions.

For the purposes of my study my audience and cohort will be NHS Senior Management and above. Senior management is generally a team of individuals at the highest level of NHS management who have the day-to-day responsibilities of managing a division of the local health economy that will typically be 2000 people and/or a +£40 million budget.. There are also higher levels of responsibility, such as a board of directors and those who run the Department of Health that focus on managing the senior management (instead of the day-to-day activities) of the business and they will be the audience and cohort also

3. **Literature Review**

3.1 **Policy and Practice**

The NHS has three major challenges – how to motivate its staff to deliver world class service; how to organise itself to give frontline staff resources (buildings, money, leadership) they require in that task, and how to employ the right technology to do that as effectively as possible. Leadership that is not up to date in terms of the best thinking in all of these areas will make good but less an optimal decisions. Just as clinicians require the right new drugs, technology and equipment to deliver the products (patient care) that our taxpayers demand, the executives of the NHS must have the same or equivalent tools in their box of solutions.

As a publically funded body shouldn't the public want decisions about the NHS made on the best evidence possible? Not necessarily so. Recent Institute for Public Policy Research/Ipsos Mori survey work indicates that only around a quarter of the public thinks that the availability of drugs and treatments should be determined by cost and effectiveness (Brooks 2006). There is simply little public recognition that resources are limited and that choices must be made. There are legitimate concerns about the cost and effectiveness of new drugs and treatments, and about the role of private companies in stimulating demand for their products, and these require a robust and transparent regulatory response. We certainly need a system that allows a rational pattern of expenditure rather than focusing disproportionate resources on specific treatments when they hit the headlines.

Muir Gray has said “management in health care is a young discipline without the trappings and traditions of medicine. Is it, though, more of an art than a science? Resistance to change may be less, but the increased rigour required could be much greater. Furthermore, in management and policy making the anatomy of a decision is very different from a clinical intervention. Deciding whether to invest in a further cardiothoracic centre in a health region or to move five vascular surgical units to one site, even if evidence were available, is a complex process. It can involve managers, professionals, local interest groups, politicians, the media, and the public. At times, social systems will undermine the science. For example, how often have we seen a decision changed late in the day by a bravura performance in committee, based on emotion?” The National Institute for Clinical Effectiveness (NICE) has been created to help to create a more evidence based climate and to avoid the emotive response noted by Gray. The work that NICE is involved in attracts the attention of many groups, including doctors, the pharmaceutical industry, and patients. NICE is often associated with controversy, because the need to make decisions at a national level can conflict with what is (or is believed to be) in the best interests of an individual patient, and because there is an inherent need for rationing in the NHS. From an individual's perspective it can sometimes seem that NICE is denying access to a potentially life-saving treatment. NICE has been criticised for its over-reliance on evidence-based medicine, which it is argued privileges certain kinds of econometrically derived types of studies over others. NICE has also been criticised for being too slow to reach decisions. Some of the more

controversial NICE decisions have concerned beta-interferon for multiple sclerosis, imatinib (Glivec) for leukaemia, and trastuzumab (Herceptin) for breast cancer. The process aims to be fully independent of government and lobbying power, basing decisions fully on clinical and cost-effectiveness. There have been concerns that lobbying by pharmaceutical companies to mobilise media attention and influence public opinion are attempts to influence the decision making process. A fast-track assessment system has been introduced to reach decisions where there is most pressure for a conclusion.

Evidence-based medicine categorizes different types of clinical evidence and ranks them according to the strength of their freedom from the various biases that beset medical research. For example, the strongest evidence for therapeutic interventions is provided by randomized, double-blind, placebo-controlled trials involving a homogeneous patient population and medical condition. In contrast, patient testimonials, case reports, and even expert opinion have little value as proof because of the placebo effect, the biases inherent in observation and reporting of cases, difficulties in ascertaining who are an expert, and more. Evidence-based healthcare management is an emerging movement to explicitly use the current, best evidence in management decision-making. Its roots are in evidence-based medicine and as such is a quality movement to apply the scientific method to management practice

Pfeffer notes that there is a poor correlation between “Evidence Based” practice which the NHS requires of its doctors and “Evidence basis” management which the NHS does not require. “We have just suggested no less than six substitutes that managers, like doctors, often use for the best evidence – obsolete knowledge, personal experience, specialist skills, hype, dogma, and mindless mimicry of top performers – so perhaps it is apparent why evidence-based decision making is so rare. At the same time, it should be clear that relying on any of these six is not the best way to think about or decide among alternative practices

3.2 Theory

A fit with management theory

In its broadest sense EBHM describes using any “acceptable evidence” to make better informed management and policy decisions. Such evidence could be a survey of opinions about the likely value of a change or new policy, or an internal data gathering project to collect service statistics and assess their validity for informing a decision.

There are Critics of EBHM who say lack of evidence and lack of benefit are not the same, and that the more data are pooled and aggregated, the more difficult it is to compare the patients in the studies with the patient in front of the doctor — that is, EBHM applies to populations, not necessarily to individuals. In *The limits of evidence-based medicine* Tonelli (2001) argues that "the knowledge gained from clinical research does not directly answer the primary clinical question of what is best for the

patient at hand." Tonelli suggests that proponents of evidence-based medicine discount the value of clinical experience.

Niedzwiedzka, Walshe, Hewison (2003) identify a dilemma: Evidence Based Healthcare Management is not feasible because of policy constraints, lack of time, lack of data, lack of skills, ineffective dissemination and access to evidence. PCTs might instead try to borrow commissioning techniques and data management from the insurance sector, and local commissioning might be handed to supermarkets in return for a large share in the profits. The proposal that the pursuit of Evidence Based Management in Healthcare is itself based on prejudice not evidence. 'At the moment, commissioning (by Evidence Base) is not working. Were this itself evidence based, we would have dropped it years ago as a technique and gone back to central planning.'

Joseph Ippolito (co-head of public sector health at Deloitte) also identifies a conflict between government vision and evidence based decision making. Considering this conflict he offers a different take on the choice debate, regarding it largely as a diversion. 'Choice might work in a free or semi-free market, which adjusts itself to serving customer needs. But I don't understand how the government thinks choice can work for the NHS, which isn't a market with free entry or exit.' Ippolito is no anti-politician intellectual though as he further berates the lack of evidence based decision making when considering the quality of NHS management. "The NHS was right to reduce the number of strategic health authorities, not least because of the dearth of quality management teams. 'The NHS is focusing on the lack of teams skilled enough to implement the evidence of what needs to be reformed' he said".

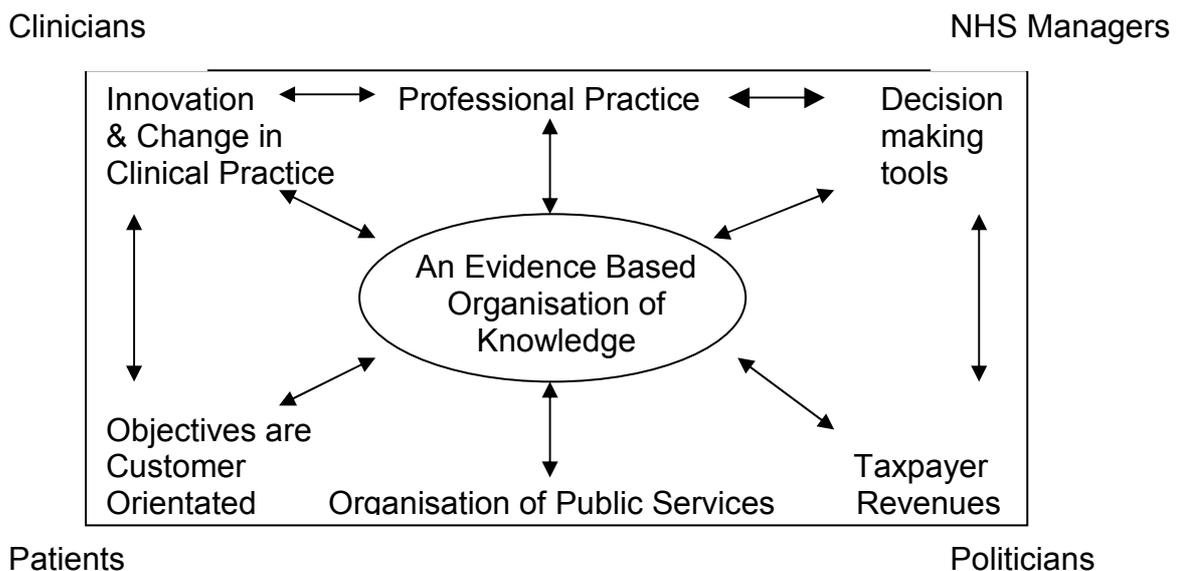
4. Research Objectives

4.1 Key Questions

I wish to consider the extent to which Evidence Based Practice is a norm or an ideal for daily professional management in the National Health Service? To what extent do practicing NHS Managers think Evidence Based Healthcare Management is an appropriate tool to resolve problems and what do they actually use?

As a publicly funded body do the public want decisions about the NHS made on the Best evidence possible? Is there a conflict between politicians' view of an effective national health service and the view of NHS managers? If so, where is the conflict and would application of Evidence Based Healthcare Management resolve the conflict.

4.2 Conceptual Framework: the Evidence Based NHS Box



Specifically I will ask the following questions.

Are decisions based on a careful appraisal of the best evidence available? How is that evidence incorporated into the decision making process? Are the resources available for using "best evidence"

consistent with the needs or values of the NHS Senior managers under consideration? Do NHS managers have a bias towards particular interventions and their impact and if so/not then why? To what extent does a structured, dispassionate debate exist about whether evidence, values and assumptions of NHS managers are consistent?

Using these questions it is my intention to understand and draw conclusions about the nature of the preferences and decisions using Evidence Based Practice within the NHS. The focus of the study will be predominantly in the top right hand corner of the box and will therefore begin with the question of appropriate decision making tools for NHS Managers. The researcher intends to be shocked and surprised during the process and has a flexible opinion about the answer at the outset of the research.

5. **Research Plan**

Document 2

Document 2: Will be The Critical Literature Review – the academic, managerial and political contribution to EBHM as a subject.

The literature review will identify what people are saying about evidence based practice and where they are saying it. More precisely it will review how other people have researched the subject of Evidence Based Healthcare Management. There is a loaded question of whether doctors within the NHS use a qualitative better decision making tool than managers at the same level. The literature review will take in issues about equality, rationality, power of the majority, the political choices made in health care. The literature review will consider what organisations, academics and politicians said about the NHS in 2006/07.

It will develop and refine the research questions and method and provide a Conceptual framework and justification for the research

Document 3

Document 3: Will be a Qualitative data review – simple structured questionnaire, focus groups and in-depth one to one conversations

20 Senior NHS managers across a variety of NHS organisations in the East Midlands will be recruited to work in focus groups or to answer 1:1 structured questions. This will derive subjective and qualitative data responses to the questions posed by the literature review. The review will test whether managers will use Evidence Based Healthcare Management (in) appropriately when it is (not) expedient to use it? Working with colleagues within the NHS Executive community 2 or 3 dilemmas will be posed and managers will be surveyed as individuals and groups to collect their reactions.

Specifically I will ask the following questions stated in 4.1 (above)

Are decisions based on a careful appraisal of the best evidence available? How is that evidence incorporated into the decision making process? Are the resources available for using “best evidence” consistent with the needs or values of the NHS Senior managers under consideration? Do NHS managers have a bias towards particular interventions and their impact and if so/not then why? To what extent does a structured, dispassionate debate exist about whether evidence, values and assumptions of NHS managers are consistent?

I intend to repeat at least in part the work carried out by Hewison in 1992 when analysing the reforms of the National Health Service arising from the White Paper Working for Patients, which were predicated on a particular view of management. The implementation of the changes heralded by this act relied heavily on the actions of the managers charged with carrying them through. Hewison reported on work undertaken to discover how middle managers responded to this challenge. The views of middle managers concerning the values that guide their work were explored in the context of managing in the reformed NHS. Data was collected by means of a focused ethnography and analysed thematically. This process was informed, in part, by recourse to Weber's conceptualization of rationality. It was found that managers are struggling to reconcile the demands inherent in their role that arise from contrasting and often competing rationalities, which is a reflection of conflict over priorities in the wider health policy environment

Document 4

Document 4: Quantitative structured piece of research using statistical techniques of data collected by academics government, organised labour, professions and international agencies about the impact of “evidence based decision making”. Place the subject and the NHS in a longitudinal and cross-cultural context. Efficiency, productivity, satisfaction, outcome will be key areas tested by the qualitative review

A questionnaire will be designed again. Different to Document 3, this will gather quantitative data about the consequences or otherwise, of implementing Evidence Based Healthcare Management. 4 or 5 NHS organisations in the East Midlands will be asked to choose from a range of Evidence Based Healthcare Management Practices (the menu) and say the extent to which they apply these techniques on a scoring basis. The researcher will similarly score the organisations on the same basis. This score set will then be cross referenced with performance scores issued about the same organisations in the public domain. A numerate conclusion will be drawn about the relationship between high/low performing organisations, their perceived application of Evidence Based Healthcare Management and any gap between perception and researcher scored responses. A typical relationship or correlation would be with Fit for Purpose scores or Star Ratings.

Document 5

Will take the richness of materials gained in documents 2-4 and design an audit and evaluative model of Evidence Based Healthcare Management in Practice. This has two possible outcomes. If EBHM is said to work then the theses will provoke a credible response to the Chief Executive of the NHS, Secretary of State and the cohorts used in document 3 and 4 to say that its use should be deepened. If EBHM fails the audit and evaluative tests it will be possible to provoke a credible response to GPs and

non-executives in the Board Room that whilst Evidence Based Medicine is used in the NHS there is insufficient reason to use Evidence Based Healthcare Management. The researcher intends to be shocked and surprised during the process and has a flexible opinion about the answer at the outset of the research.

6. **Organisational and Ethical Considerations**

Time Plan

	Literature Review	Quantitative Review	Qualitative Review	Thesis
March 2007	Prepare Document 2 – identify research questions, research framework or model and methodology	Make first contact with advisors on ethical committee approval with attempt to avoid process. Identify 5 key NHS organisations to work with	Make first contact with expected cohort of NHS managers identifying participants and time commitment	Proposition 1 can research evidence based management 2. results will be able to inform management
September 2007				
March 2008		Ethical Committee approval if necessary	Conduct focus groups and 1:1 interviews	Discuss with cohort of managers likely audience for thesis Do managers use research
September 2008				
March 2009	Return to original research framework to identify new papers or updated thinking in this area	Conduct numerical review of management practice with 5 NHS organisations and compare to ‘high performing organisation’ scores	Return results to cohort participants with significant thank yous and updates on further process	Write thesis – identify conclusions and likely impact Evaluate theory and practice

Ethical Views

The author holds a senior management position in the National Health Service. The National Health Service being under transition affects the individual professionally therefore there is a subjective bias in the analysis of EBHM in the NHS. This issue of being a player in the system under review will qualify the judgements and interpretations of the researcher. Significantly the researcher has been a player in the National Health Service system since 1987, during which time many theoretical and practical models have been applied to the NHS. The National Health Service is an organisation that continues to deliver services. As with all socio-economic models, it is not possible to hold the day to day experiences of patients and the public frozen, therefore it is not possible to experiment with the system which will affect people's lives just for the purposes of observation. The organisation that employs the individual is part-funding this research, therefore the NHS has a discernable desire to achieve a piece of management information.

7. Personal and Organisational outcomes

Management Practice

Overall project strategy

As with medicine, management is and will likely always be a craft that can be learned only through practice and experience. Yet I believe that managers (like doctors) can practice their craft more effectively if they are routinely guided by the best logic and evidence – and if they relentlessly seek new knowledge and insight, from both inside and outside their companies, to keep updating their assumptions, knowledge, and skills. We are not there yet, but we are getting closer. “The managers and companies that come closest already enjoy a pronounced competitive advantage”. (Pfeffer 2006)

What, then, are NHS managers to do? There are a number of ways the dramatic conflict in the NHS might be resolved. In broad terms, there are three answers. Introduce more resources, reduce demand and make better use of our existing resources. Let’s examine each in turn.

If the initial challenge is smaller real-terms increases in government money, might there be scope for substituting other sources of funding? After all, the pan-European vista suggests society at large is willing to commit an even greater share of national wealth to health care. The tension in Britain is between this willingness and reluctance to increase taxation, with the political mantra of an NHS free at the point of care tying all parties’ hands. What then of reducing demand, otherwise known as ‘demand management’? At one end of the spectrum, this implies an explicit decision to discontinue a particular form of care, on the grounds that NHS resources have higher priorities. Tattoo removal, varicose vein surgery and in-vitro fertilisation are common examples of treatments that primary care trusts have chosen not to fund. In reality, however, the decision to disinvest in a specific treatment is often contentious, based on values that are open to challenge (so who says IVF if low priority and why?) and – as PCT’s that initially chose not to fund Herceptin quickly learnt – prone to being undone by higher authorities.

Given the limited effectiveness of additional funding and demand management to resolve the conflicts what are the options to embrace improved effectiveness in application of resources? No, the answer applies in better management of resources. The outcome of this paper/thesis will be a much better basis upon which management practice in the NHS can make decisions. EBHM will be researched as to its ability to be a tool, the only tool or no-use-at-all in the NHS management tack.

Impact

The NHS response to the same question was to employ the company McKinsey to create “Fit for Purpose” models for PCTs and aspiring Foundation Trusts. This model assesses the short-term risk of a PCT’s failure to meet its objectives. Tools to evaluate outcomes assess financial results; Operating outcomes are provided and tools to evaluate main drivers of performance are introduced. Strategy; Governance; External relations; Emergency planning are considered with the NHS organisation at hand. Near term risk of failure: low (green), medium (amber), high (red) is classified and required actions are agreed. An NHS organisation rated red in finances need to develop a recovery plan showing how the PCT will reach minimum standards within next 12 months. Divisions rated red elsewhere need to show the remedial plan that they have developed to address these issues within 18 months. A detailed Diagnostic is used to spot process and capability development needs of the NHS organisation. In this way the NHS should act effectively as commissioners of health services including evaluating functional performance: Strategic planning; Care pathway management; Provider management; Monitoring are all assessed for strength? The question for the researcher is to what extent the McKinsey model represents a bias towards heuristic or detailed evidence based decision making?

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Critical Literature Review and Conceptual Framework

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Cohort 8

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Abstract

The NHS was set up in 1948 and is now the largest organisation in Europe. The NHS has many and myriad subdivisions and specialisms. The NHS is regulated by the Healthcare Commission and funded by the government from general taxation. Managerial accountability and authority has been a part of the NHS since 1983 and NHS managers have been given the responsibility for delivery of structural reform and therefore an understanding of the managers' views, beliefs and attitudes is an area worthy of study. Evidence based management is but one of a number of ways that an organisation might attempt to improve its effectiveness. Within the specific context of the NHS there are a number of questions to be answered. Can we have in the circumstances a system process view of management? Is health management based on facts? Whose facts and fallacies prevail and why?

The student is on a personal journey as a practicing NHS manager, to consider whether the notation of being a manager in the NHS could be grouped within an evidence based organisation of knowledge. The literature review helps to understand not only the rationale for an evidence based approach to management but also whether this concept is alien and damaging to the NHS. The student shows that he is with Murphy and Mintzberg believing in the NHS management is more and more a craft and takes issue with writers such as Learmonth, who claims that management in the NHS is a crudely imposed reduction technique. Through referencing writers such as Hewison, Mitten and Karl the writer says NHS management is both evolving and technically skilled. Conversely, Mello writes about the preoccupation of management with norms and averages and this "myth of the mean" is a particular branch of decision making tools that is possible to consider further. At the core of the conceptual framework is an evidence based organisation of knowledge, and supporters of this school of thought are sceptical about experience or wisdom. Sherman's model of grading evidence from weak to strong, based on rules of scientific inference, would say that Mellow was correct. In Sherman's view a manager who uses evidence but then ranks this evidence against normative performance/behaviour is guilty of weak decision making just the same.

The desire for managers in public services to portray that they know all they need to know to make decisions for the public, is shown to be very persuasive. Ambiguity and research leading to conclusion may not be the model preferred by the public even if the NHS manager were to express such a preference. The literature identifies research methods and strategies that have been employed in studying the grey area of public preference for 'Best Evidence Possible' in a publicly funded body like the NHS.

A lengthy journey through relevant writers leads the author to conclude that the public do not want decisions made on the best evidence possible (a philosophical challenge for the author early on the DBA), and that although there is no conflict between politicians and managers view of an effective NHS this is only because neither party accept or set a consistent frame of reference. The author hits a second philosophical challenge because the literature review seems to be obfuscating conclusions and the literature review detours into the

nature of qualitative material to see if it is the nature of language, discourse analysis and grounded theory and the student is struggling with. Some additional ideas were encountered in the literature review. Learmonth and Sambrook both say that the significance and implications of management language are an important part of this study, but it is difficult to continue to pursue this area within the conceptual framework.

Are decision making tools disciplined or does it follow the hopes of the managers? The reason for reviewing this particular question in the literature is the juxtaposition of science and management. This is important for the NHS because the practice of medicine is bounded by the scientific method. Medical progress, the development of pharmaceuticals, the review of outcomes following a randomised control trial and even public health interventions are progressed using a cycle of observation-recording-discourse and conclusion. If that is true for the medicine then what of the management system that manages the medicine? The literature highlights a writer with an approach to the combination of science and decision making.

The literature leads to a conclusion that a falsehood or myth had been perpetrated within the NHS. Managers and clinicians both have an inherent bias towards making change in professional and organisational practice based upon the best available evidence. The falsehood that evidence based decision making is prevalent amongst clinicians and absent by managers, is exposed as an exaggeration – even the scientific method used by doctors is ignorant of cultural aspects of phenomena that cannot be measured, controlled and counted. Similarly Rousseau is used to show that for an NHS manager, evidence based management or “decision based on careful appraisal of the best evidence available” is not only possible but empowering. Ultimately Rousseau proves to be a powerful tool for rescuing evidence based knowledge from a ‘challenge and despair’ that earlier parts of the literature review (about the public and politicians) had unfortunately left the author in.

Ultimately, the writer concludes that the decision making box proposed in document 1 as a way of understanding and explaining the problem under consideration, is sustained by the literature review.

Significant writers in the study of NHS management and evidence based management such as Learmonth and Rousseau are studied and a conceptual framework “The Evidence Based NHS Box” is discussed and used to reference ideas about the subject. The key outcomes of the NHS such as improving health, value for money, wellbeing and better experience of care are taken as givens but the management responses to this problem are compared from the views of those who propose and oppose evidence based management.

What do writers conclude about evidence and the nature of evidence? Guven-Uslu was able to ask whether the nature of papers written upon the consideration of evidence based management were qualitatively different from those of other management disciplines. Moving through the literature, the writer concludes that “evidence based management” is not so much a tool of decision making, as it is a state of mind. The incorporation of evidence based

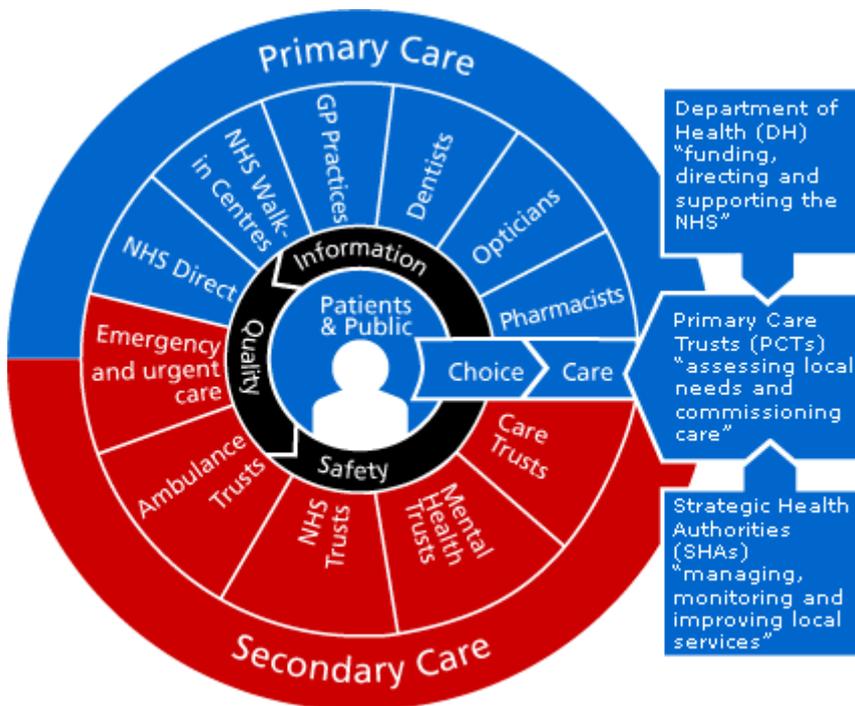
management into decision making is not at the decision point – it is the entire continuum of the philosophy of management. It becomes a credo wherein all decisions are taken in a structured and methodical way, and to some extent, trading timeliness for accuracy.

Introduction

The context of the National Health Service. (www.nhs.uk).

The NHS was set up in 1948 and is now the largest organisation in Europe. It is recognised as one of the best health services in the world by the World Health Organisation but there need to be improvements to cope with the demands of the 21st century. This has brought about some fundamental changes in the way the NHS is structured and the way in which the different organisations within the NHS relate to each other.

The diagram below shows you how the NHS structure works in England.



Authorities and trusts are the different types of organisations that run the NHS at a local level. The whole of England is split into 10 strategic health authorities (SHAs). These organisations were set up in 2002 to develop plans for improving health services in their local area and to make sure their local NHS organisations were performing well.

Within each SHA, the NHS is split into various types of trusts that take responsibility for running the different NHS services in the local area.

The different trust types are:

Acute trusts

Hospitals are managed by acute trusts, which make sure that hospitals provide

high-quality healthcare, and that they spend their money efficiently. They also decide on a strategy for how the hospital will develop, so that services improve.

Acute trusts employ a large part of the NHS workforce, including nurses, doctors, pharmacists, midwives and health visitors, as well as people doing jobs related to medicine – physiotherapists, radiographers, podiatrists, speech and language therapists, counsellors, occupational therapists and psychologists. There are many other non-medical staff employed by acute trusts, including receptionists, porters, cleaners, specialists in information technology, managers, engineers, caterers and domestic and security staff.

Some acute trusts are regional or national centres for more specialised care. Others are attached to universities and help to train health professionals. Acute trusts can also provide services in the community, for example through health centres, clinics or in people's homes.

Foundation trusts

Foundation trusts are a new type of NHS hospital run by local managers, staff and members of the public, which are tailored to the needs of the local population. Foundation trusts have been given much more financial and operational freedom than other NHS trusts and have come to represent the government's commitment to de-centralising the control of public services. These trusts remain within the NHS and its performance inspection system.

They were first introduced in April 2004, and there are now 67 foundation trusts in England.

Ambulance trusts

There are currently 13 ambulance services covering England, which provide emergency access to healthcare.

If you call for an emergency ambulance the calls are prioritised into:

- Category A emergencies, which are immediately life-threatening, or
- Category B or C emergencies, which are not life-threatening.

The emergency control room decides what kind of response is needed and whether an ambulance is required. For all three types of emergency, they may send a rapid-response vehicle, crewed by a paramedic, equipped to provide treatment at the scene of an accident. Over the past five years the number of ambulance 999 calls has gone up by a third.

The NHS is also responsible for providing transport to get patients to hospital for treatment. In many areas it is the ambulance trust that provides this service.

Care trusts

Care trusts are organisations that work in both health and social care. They may carry out a range of services, including social care, mental health services or primary care services.

Care trusts are set up when the NHS and local authorities agree to work together, usually where it is felt that a closer relationship between health and social care is needed or would benefit local care services.

At the moment there are only a small number of care trusts, though more will be set up in the future.

Mental health trusts

Mental health trusts provide health and social care services for people with mental health problems. Mental health services can be provided through a GP, other primary care services or through more specialist care. This might include counselling and other psychological therapies, community and family support or general health screening. For example, people suffering bereavement, depression, stress or anxiety can get help from primary care or informal community support. If they need more involved support they can be referred for specialist care.

More specialist care is normally provided by mental health trusts or local council social services departments. Services range from psychological therapy, through to very specialist medical and training services for people with severe mental health problems. About two in every 1,000 people need specialist care for conditions such as severe anxiety problems or psychotic illness.

Primary care trusts

Primary care is the care provided by people you normally see when you first have a health problem. It might be a visit to a doctor or a dentist, an optician for an eye test, or just a trip to a pharmacist to buy cough mixture. NHS walk-in centres and the NHS Direct phone line service are also part of primary care. All of these services are managed by the local primary care trust (PCT).

A PCT will work with local authorities and other agencies that provide health and social care locally to make sure that the local community's needs are being met. A PCT must make sure there are enough services for people within their area and that these services are accessible. It must also make sure that all other health services are provided, including hospitals, dentists, opticians, mental health services, NHS walk-in centres, NHS Direct, patient transport (including accident and emergency), population screening, and pharmacies. They are also responsible for getting health and social care systems working together for the benefit of patients.

Strategic health authorities

Created by the government in 2002 to manage the local NHS on behalf of the secretary of state, there were originally 28 strategic health authorities (SHAs). On July 1 2006, this number was reduced to 10.

Strategic health authorities are responsible for:

- developing plans for improving health services in their local area,
- making sure local health services are of a high quality and are performing well,

- increasing the capacity of local health services - so they can provide more services, and
- making sure national priorities - for example, programmes for improving cancer services - are integrated into local health service plans.

Strategic health authorities manage the NHS locally and are a key link between the Department of Health and the NHS.

Special health authorities

Special health authorities are health authorities that provide a health service to the whole of England, not just to a local community – for example, the National Blood Authority.

They have been set up to provide a national service to the NHS or the public, under section 11 of the NHS Act 1977. They are independent, but can be subject to ministerial direction like other NHS bodies.

Regulation and inspection, performance

Independent regulations – The Healthcare Commission is England’s healthcare watchdog. Through its regulatory work it promotes and drives improvements in the quality of healthcare and public health for the benefit of patients and the public.

In 2005-06 the Healthcare Commission introduced a new system for assessing NHS healthcare organisations, aimed at measuring the things that matter to patients. Known as the annual health check, it gives each trust a rating for the quality of its healthcare services and for how well it manages its financial resources. These ratings, along with detailed information about each trust’s performance, are published on the Commission’s website each October.

Annual health check

What the two ratings mean:

Quality of services

The score for quality of services covers a range of areas that matter to patients, including safety, cleanliness and effectiveness. In particular, it reflects:

- whether a trust is meeting basic standards of care,
- how a trust is performing in relation to targets set by the government, and
- the results of reviews of specific services or topics, such as tobacco control, community mental health, management of admissions and diagnostic services.

Use of resources

The score for use of resources is based on how well an organisation in the NHS manages its finances. This could include how it plans and reports on its

financial performance, how it monitors the money it spends, and how it makes sure that the services it offers to patients represent good value for money.

The role of competition and co-operation between professionals

National service frameworks (NSFs) cover some of the highest-priority conditions such as the UK's biggest killers - cancer and coronary heart disease - as well as other common conditions including mental health and diabetes. There are also NSFs for some of the key patient groups including children and older people.

NSFs have two main roles. They:

- set clear quality requirements for care based on the best available evidence of what treatments and services work most effectively for patients, and
- offer strategies and support to help organisations achieve these.

One of the main strengths of each NSF is that they are inclusive, having been developed in partnership with health professionals; patients, carers; health service managers; voluntary agencies and other experts.

Patient Choice - What is choice? If the patient and GP decide that the patient's needs to see a specialist, the patient can now choose where and when they see the specialist from a list of hospitals or clinics. This will include several local hospitals, NHS foundation trust hospitals across the country and a growing number of independent sector treatment centres and hospitals that have been contracted from the private sector to provide services to NHS patients. A patient can choose according to what matters most to them: waiting lists, MRSA rates, bus routes, or many other criteria.

Over the next few months more and more hospitals will be added to the list of choices until, by April 2008, patients will be able to choose from any hospital that meets the standards set by the NHS.

The NHS Choices website will help the patient make the choice of where to go by providing information on different hospitals. Patients can select a hospital based on how close it is to their home, how it rates on quality of cleanliness and services such as car parking, waiting times and more.

What isn't included in choice?

It may not always be appropriate for the patient to choose where to see their specialist. For the time being they will not be able to choose if their GP decides they need to see a specialist quickly, for example, if the patient has chest pain, or need to see a cancer specialist. A patient will also not be able to choose if they need to see a hospital specialist about a mental health condition or about

pregnancy. NHS care has always been delivered as a partnership between patients, NHS staff and other carers. GPs will offer only the choices they are confident will provide the right type of treatment.

Managing in the National Health Service

Sarah Harvey of LOOP2 Consultancy often begins her seminars with a slide something like the following.

quality driven consolidation of acute services
'commissioning' PCTs hospital 'closures'
'divestment' of PCT services network re-engineering
public demands for better access
consistent policy pressure for OoH care
drive for big '2nd loop' efficiencies
roll out of FT status
Practice Based Commissioning Primary care the money
regulation
new sources of health capital decline in PFI orthodoxy
new building technologies private sector behaviour
new providers new remote diagnostic technologies
reduced 'costs of entry' powerful new 'IPCO's
independent consultant 'chambers'
reliable telemedicine emerging choice in primary care

Her method is to derive the main points of debate about health policy in large distribution documents and significant peer reviewed publications (in the previous month) to juxtapose humorously the contentions that managing complex public health systems is simple with the challenges facing managers at the moment.

In order to understand the significance of the role of the National Health Service managers as far as the NHS reforms are concerned it may be useful initially to provide a brief background on the relative increase in prominence of the managerial function within the NHS. Prior to the advent of managerialism within the NHS, decision making was influenced through "consensus management" by the various professional groups within the NHS. This system came under constant criticism for being inefficient, wasteful of resources and lacking in professional management and direction, and as a result in 1983, the Thatcher

government commissioned Roy Griffiths, a senior Sainsbury executive, to look at management in the NHS and his report which was subsequently implemented, introduced general managers at regional, district and unit levels. "The Griffiths team was struck by what it saw as an apparent lack of clearly identified leaders and lines of management authority". The introduction of "line management" by the Griffiths report created a new more powerful cadre of managers who were given the "strategic role of change agents (within the NHS)". This approach was in harmony with the ideology associated with the evolution of the new public management movement in the UK at the time. The prescription in the 1980's was to reinforce the authority of this new cadre of managers with a battery of reviews and performance indicators and eventually to introduce the competitive incentives of an internal market and change the culture of the NHS so that it was more business-like. The intention was also to highlight the significance of value for money and financial control.

The role of managers

As the main change agents NHS managers have been given the responsibility for the implementation of the recent reforms and therefore an understanding of the managers' views, beliefs and attitudes to these reforms should provide an insight into the extent to which the NHS managerial culture supports and facilitates the implementation of the recent wave of NHS reforms. Considering the importance of managers' views there has been a relatively limited amount of research undertaken to examine in any great depth what the reforms have actually meant on a day-to-day basis to the people (including managers) who work in the NHS. Much of the work carried out has often adopted a positivist approach to the analysis and understanding of these issues and it has tended to neglect the recognition of the multiple factors that influence and affect the social construction of reality of the actors involved in the implementation of the reforms. Furthermore, it has been suggested that overall there has been a poverty of research focused on middle management within the NHS.

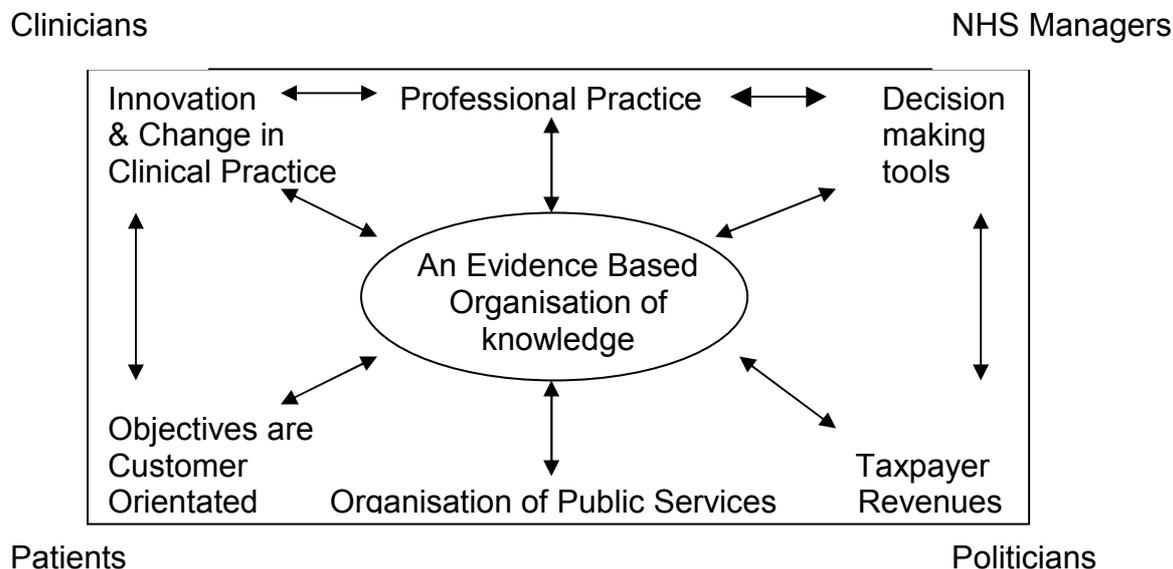
The approach to management

Mark Brittnell, the NHS Director of Commissioning, has identified in his policy document “World Class Commissioning” the following competencies for the NHS manager:

- Visible leaders with the mandate of the local population
 - Local ownership and accountability
 - Confident choices
- Driving success through partnerships
- Seek and act on patient expectations and experience
- Strategic vision, clear goals and outcomes
- Professional organisations that learn and develop
- Excellent knowledge management and use of evidence
- Excellent business organisations – turning vision into practice
- Stimulating and managing a provider market
- A commissioning process that’s fair, transparent and open to influence

An examination of these NHS managers’ core competencies shows that they are mainly altruistic in nature. Although directions in this policy suggests that most of the managers (a majority of whom have worked for the NHS for a number of years) believe they held altruistic values which remain unchanged despite the previous and present reforms, there are also other values identified in this policy. These values relate to personal enhancement and career development, but such values are commonly quoted alongside altruistic ideals. Britnell believes that the majority of managers feel that the perceived value system in which they operate is an important and rewarding quality of their work and they perceive that their shared values had always been present and had survived over the years despite the increasing “business-like” emphasis in the NHS introduced by the new public management movement.

The Extent to which Evidence Based Practice is a norm or an ideal?



Over the last few years I have been in a quandary about something and that is whether the notion of being a manager could be, within the NHS, grouped within an evidence based organisation of knowledge. On the one hand the discipline of the 'balance sheet' gave a respectability to the performance management methods used by me to help shape the patient care, but the use of that tool was necessarily shaped by the business and value model upon which it is based. Not all companies that employ accountants are successes so where was the equivalent for an 'evidence base' within the literature?

Specifically within the day to day experience of NHS managers: what does the literature tell us about the use of Evidence Based Management? Let me start with two pieces of literature, one an authored piece of academic work and the other a document from the Department of Health. The reason for starting here is to try and establish two polarities of what is already known in connection with this research area. One comes from the bottom right left corner of the conceptual framework and is the Department of Health attempt to ensure managerial objectives are customer oriented and the other is a critique by an academic of the top right hand corner of the conceptual framework of the decision making tools used by NHS managers.

Evidence based management is but one of a number of ways that an organisation might attempt to improve its effectiveness. Within the specific context of the NHS there are a number of questions answered by the literature. In the circumstances does a system process view of management exist? Is health management based on facts? Whose facts and fallacies prevail and why? In terms of what is already known in connection with this area, I would

like to refer to a landmark author and a landmark document. The author Learmonth maintains that evidence based management is but one of a number of previous and potential imposition of ideologies he calls managerialism onto the NHS. The document is the code of conduct for NHS managers which has, as its basis, an idea that 'we simply must not repeat the mistakes of the past'.

In a 2006 work informed by the work of French geographer Henri Lefebvre Learmonth (2006) suggests that in the long term the very study of evidence based management is likely to inhibit rather than encourage, a fuller understanding of the nature of public services. The author critically evaluates the recent phenomenon of 'evidence based management' in the public services that Learmonth says is especially prominent in health care. He goes on to suggest that the current approach, broadly informed by the pursuit of evidence based medicine, is misguided. The reasoning behind this approach from Learmonth is that there is a weakness at the heart of evidence based management. There is, quite simply, a deep debate to be had about the nature of 'evidence' within the discipline of management studies. Ultimately Learmonth moves to the conclusion that the pursuit of evidence based management has less to do with improving organisational effectiveness than it has to do with the transfer of certain management styles to the public service in spite of theoretical problems with their deviation. I find Learmonth to be personally challenging and he may help me get to the identification of my quandary – how does a respectable NHS manager confess that he is not sure whether he is being an effective part of the NHS.

It is important to start the review of literature in this research area with Learmonth, not only because he is an academic and former NHS Manager, but because work like his 2006 piece are part of a continuum of investigations by the author into managerialism and NHS managers stretching back to his own doctoral thesis soon after leaving the NHS. Learmonth (1997) presents the results of empirical work examining public attitudes towards UK NHS managers, with the author discussing possible explanations for the findings that there is a strong lack of sympathy for managers. The preferred explanation is that NHS managers as a group, tend to share an ideology about the nature of the NHS and the role of management within the NHS which is at odds with the belief held by most members of the public on these matters. Consistent with what Learmonth is still writing in 2006. Learmonth explores the origins and nature of managerial ideology (managerialism) in the NHS. In both his 2006 and 1997 papers, Learmonth suggests that management styles are being imported to the NHS, based on little effectiveness and that his 2006 identification of the symptom is evidence based management. Winyard (2003) agreed with Learmonth and further added that the introduction of general management in 1984 created new fault lines between doctors, managers and politicians. Now we are getting somewhere – my whole professional ethic and credo is, according to these writers, doing more harm than good – but where did these ideas, ethics and credo come from in the first place?

In *Hard Facts, Dangerous Half-Truths and Total Nonsense*, Pfeffer examines the evidence for the effectiveness of various popular management ideas.

(However, the goal is to demonstrate what an evidence based approach is like in my interpretation).

Pfefer (2006) says “evidence based management entails three things. First it involves making decisions on what we know to be true. Many companies and government organisations disregard the facts and act instead on belief, ideology, casual benchmarking, what they want or hope for, what they have done in the past, what they seem to be good or experienced in doing – in short, on everything except the facts”. “ How do managers make decisions? Normally, they make decisions based on their own opinions, ideologies, hopes and by copying what other companies are doing. If a company adopts forced ranking then it may be because the CEO believes in a survival of the fittest ideology. If they use psychological assessments it may be because the VP Staffing knows other organizations do it. If a company uses incentives to drive performance it may be because the VP Manufacturing desperately hopes it will improve productivity.”

The emergence of evidence based medicine in the early 1990’s led to some clinicians challenging managers and policymakers to be equally evidence based in their policymaking. This demand was shared by some health policy analysts: “At a time when ministers are arguing that medicine should be evidence based, is it not reasonable to suggest that this should also apply to health policy? If doctors are expected to base their decisions on the findings of research surely politicians should do the same The case for evidence based policymaking is difficult to refute” (Ham).

The need to be seen to be making evidence based decisions has permeated all areas of British public policy. The government has proclaimed the need for evidence based policing, and the 1998 strategic defence review introduced evidence based defence. In the health sector, the concept of evidence based policy has gained ground, and a journal has been launched devoted to this challenge (journal of Evidence Based Health Policy and Management).

Having joined the NHS management in 1987 and being part of the ‘objectives’ discipline of finance myself, I have often thought about the role that an accountant has in improving the performance of a healthcare system. Taking 3.5 years of post graduate training to become a qualified professional, I then enjoyed the benefits of professional practice within a recognised discipline. Learmonth and Winyard are important parts of the literature to me in that they critique not only the reasons for what I practice in terms of whether it is efficient, effective and economical a method to improve patient care. Rather they put the role of NHS managers, such as myself, into the category of an imposed philosophy upon the NHS. The extent to which other writers agree, disagree, enhance or corrupt the Learmonth view of the world will be a theme throughout this literature review.

It is interesting though to understand how limited the freedom of an apostate NHS manager would be to challenge the prevailing ideology. Midway between these two dates of Learmonth lay the 2002 introduction of a code of conduct for NHS managers (Department of Health, 2002). The idea of the code was

developed in the aftermath of high profile scandals around the management of clinical safety (Bristol) and dignity of the treatment of the body parts of deceased children (Alder Hey). The code set out the ethical and behavioural standards expected of managers. Breaches were to be viewed as gross misconduct leading to dismissal. Serious breaches such as financial fraud, supplying false information and negligence towards patient safety would result in the offender never being employed in the NHS again. Nigel Crisp, the then NHS Chief Executive said 'the vast majority of managers in the NHS are highly principled and value driven people who will welcome the code. But we must deal with failure'.

According to supporting documentation from the NHS issued at this time, this would be consistent with an evidence based culture. This code of conduct could be contrasted with how models for organisation and management in health care over the last 20 years had been based on popular trends and fads rather than research on organisational and management practice. Strategic decisions, it was maintained, typically follow the recommendations of consultants with the information upon which these are based remaining unchallenged. As evidence based healthcare was popularized among health care professionals there would be increasing recognition that these ideas should be adopted in management. Management innovations that were not evidence-based included the use of organisational mergers in tackling service quality; decisions on the optimal size of organizations for capacity or financial viability; substitution of doctors with other health professionals and the move towards home care as an alternative to hospital inpatient care.

Of course, this reflects what managers are paid to do—make decisions. However, it should not be asking too much for managers to make informed decision based on evidence, not just on their opinion.

Systematic management in the NHS would look like something that the literature can say answers the Ham and Pfeffer questions. This paper will go on to review the extent to which evidence based management is a norm or an ideal for daily professional management in the NHS. The literature does go some way to answering the question of the extent to which practicing NHS managers think evidence based decision making is an appropriate tool to resolve problems, but also asks what do they actually use. Rousseau (2005) says that evidence based management links how managers make decisions to the continually expanding research base on the effect of human behaviour on organisational actions.

What Rousseau has done is link how managers make decisions to the continually expanding research base. Evidence-based management, as in the example derives principles from research evidence and translates them into practices that solve organizational problems. This isn't always easy Rousseau maintains "Principles are credible only where the evidence is clear, and research findings can be tough for both researchers and practitioners to interpret. Moreover, practices that capitalize on a principle's insights must suit the setting (eg who is to say that the particular performance indicators the executive director uses are pertinent to all units?)"

Having spent most of this chapter on a critique of the philosophical underpinning of my training I would like to move on to a more practical analysis. The literature can help us to understand not only the rationale for an evidence based approach and we have seen it can even help us to consider whether this is alien and damaging to the NHS, but all of this is only a rhetorical debate unless we consider what tools NHS managers actually use so I will look at that next.

What tools do NHS managers actually use?

Clinicians

NHS Managers



Patients

Politicians

Away from reading Learmonth and Pfeffer as academic sustenance, I have explained how I am, on a day to day basis, an NHS manager. What does the literature offer me by way of introspection about the individual manager and the way they make decisions? How do managers make decisions? Does the use of opinions or ideologies prevail? I wish to consider the opposing theoretical and methodological approaches to this research area. If we take the NHS management tack it is possible to see hierarchical structures from national down to local level. It is also possible to see methods that employ modern technology such as the now ubiquitous “blackberry” handheld communication device and management policies exist covering areas as diverse as the governance of clinicians and the terms of exchange between buyers and providers of service. But how do equipped, guided and structured managers make their decisions?

There are obviously a number of other ways that this management task of resource gathering and allocation can take place. I would like to continue with the theme of the Learmonth approach to NHS management before moving on to other studies. Learmonth (2003) returns to the areas he had covered previously in suggesting that much of the established work in health services management research takes for granted managerial assumptions that are not consequently subjected to sustained critical examination. Learmonth maintains that this veneer of research credibility reinforces a view of management style and contribution to the NHS that appears to be neutral and disinterested, but actually supports elite interests. But, having established that Learmonth is a major writer in this field – who is there to challenge Learmonth’s own observations?

Even prior to Learmonth, Harries (1999) acknowledges the importance of developing an NHS where practice and policy is more evidence based. Harries paper is based on a qualitative study which aimed to identify factors which

facilitate or impede evidence based policy making at a local, rather than, national level in the NHS. Harries drew conclusions about the importance of influences and commitment in facilitating evidence based change. Harries actually did what Learmonth accuses the NHS of not doing and moved beyond the rhetoric of evidence based policy by conducting a series of in depth interviews with lead policy makers and analysis of project documents to see if and where and why evidence based management exists in the NHS.

Further to Harries; Pearson (2007) took on Learmonth by conducting a re-consideration of what constitutes evidence in healthcare. Pearson offers the Joanna Briggs Institute model to illustrate the broader definition of what works as evidence and therefore challenges Learmonth that the whole concept of evidence can be described fairly and without prejudice. Enthoven (2000) in Pursuit of an Improving NHS, says that previous reforms of the NHS were quite limited in effect because the essential conditions for a market to operate were not fulfilled. Enthoven ascribes the management tasks of innovation, improving efficiency and driving good customer service as absent from NHS management and recommends the market as the best stimuli to improve the quality of management in the NHS with little or no evidence other than replication of what Enthoven saw elsewhere. But Enthoven himself was more a politician than an academic researcher in his prescription for the NHS so what can be learned from that more learned teacher Henry Mintzberg?

Henry Mintzberg famously said “if you want to be a manager, get yourself educated in something that teaches you about the world – physics, philosophy, whatever – and then get a job in an industry you really care about, and prove yourself. The specialised MBA degree is great if you want to be an analyst or financial expert; just don’t pretend it will teach you to be a manager”.

Do ideas simply follow fashion? If we take this Mintzberg view of the world, do we conclude that decision making in the NHS follows the courses and philosophies set by the business schools? There are two areas to pursue here – what the literature tells the researcher about the nature of received versus demonstrated wisdom in managing health service, and whether the setting of an organisational culture by acquisition of management training is an enhancement or impediment to good organisational performance.

In an interview with Henry Mintzberg, Murphy (2006) reads again the Mintzberg approach to this research area and concludes that management is a craft and not something that can be learned in the classroom. When asked by Murphy what he means in the book “Managers not MBA’s” Mintzberg replies that he means a style where people are involved and personally engaged in their work which makes them able to engage others. If Mintzberg were to be taken as a direct challenge to the evidence based management approach specifically and the whole concept of scientific management generally it might cause a dilemma for the further use of Mintzberg in informing this research paper. Tengblad (2006) to some extent reveals a different pattern of behaviour compared with Mintzberg. Whilst the empirical data shows that new work practices such as evidence based management are combined with older practices such as craft and personal engagement in complex and content-specific ways as the

appropriate occasions for each solution arises. Soltani (2007), using case evidence, explores the implications for senior management of attempts to move from, as Mintzberg (2005) put it, 'direction and supervision towards protection and support'.

Finkler (2003) explored the then state of the use of evidence by managers for cost containment in hospitals. Finkler took this narrow premise to try and reconcile and direct future efforts by researchers and managers in the area of evidence based management. The author presents a framework for priorities that managers and researchers can use to increase the amount of research done to generate evidence and to increase the use of evidence by health care managers. Finkler added to the methodological debate by observing that there was a duality to the problem. Part of the problem is that managers do not seek out available evidence that exists and part of the problem is a lack of sufficient research to generate evidence for managers to use.

Delbanco (2006) published the Leapfrog Hospitals Insights Measures. In this US approach, purchasers will be asking hospitals to report their effectiveness and efficiency in five clinical areas. Similarly Zairi (2001) developed, on behalf of the European Centre for Total Quality Management, an organisational effectiveness model. What is useful in the context of this review of methodological approach is that, although falling into the Learmonth critique of designing best models based on prejudice about managerialism, neither approach believes organisational effectiveness to be a result of management process or people, but a combination of both.

HTO Davies (2007) explored the relationship between senior management team culture and organisational performance in English hospital. Davies used an established culture-rating instrument, the Competing Values Framework to assess senior management team culture. Organisational performance was assessed using a wide variety of measures routinely collected by the 197 NHS hospitals in England. Through multivariate econometric analysis Davies provided that there was a contingent relationship between culture and performance.

This issue of organisational culture and its effect on the implementation of evidence based practice in the NHS had been reviewed by Dopson (2006). Dopson noted that for the past several years evidence based healthcare has been viewed by NHS policy makers, managers and clinicians as an important level ensuring clinical practice is more effective and represents value for money.

What typical decisions might a manager make with their tools? Three writers, Hewison, Mitten and Peacock help to answer this question. Whilst the literature review makes a case for the terms of evidence based management decision making, these three writers make a set of leadership interventions they believe are preferable for sustained improvement of the NHS. They create arguments that even if the manager is proficient with using a researched evidence base this would not necessarily be the right system for decision support.

Hewison (2004) examines the development of evidence based approaches in health care and question the appropriateness of such an approach to management. The problem inherent in applying the principles of evidence based decisions to management are explored and alternative approaches based on the notion of craft is suggested as more practical and realistic.

In Mitten (2002), several approaches to priority setting are critiqued here from both practical and theoretical perspectives, including needs assessment, cost-of-illness studies, core services, economic evaluation and quality-adjusted life-year league tables, and programme budgeting and marginal analysis (PBMA).

In conclusion Mitten says PBMA is based on underlying economic principles and has been widely used in practice. While there are many approaches to priority setting, even so-called "economic" techniques often fail to recognise fundamental economic principles, leaving decision makers unable to meet key objectives. Greater focus on these principles will aid in priority setting in practice. Peacock (2007) recognises that Programme budgeting and marginal analysis (PBMA) is becoming an increasingly popular tool in setting health service priorities. The paper presents a novel multi-attribute utility (MAU) approach to setting health service priorities using PBMA. This approach includes identifying the attributes of the MAU function; describing the scaling attributes; quantifying trade-offs between attributes; and combining single conditional utility functions into the MAU function.

Are decision making tools disciplined or does it follow the hopes of the managers? The reason for reviewing this particular question in the literature is the juxtaposition of science and management. This is important for the NHS because the practice of medicine is bounded by the scientific method. Medical progress, the development of pharmaceuticals, the review of outcomes following a randomised control trial and even public health interventions are progressed using a cycle of observation-recording-discourse and conclusion. If that is true for the medicine then what of the management system that manages the medicine? The literature highlights a writer with an approach to the combination of science and decision making.

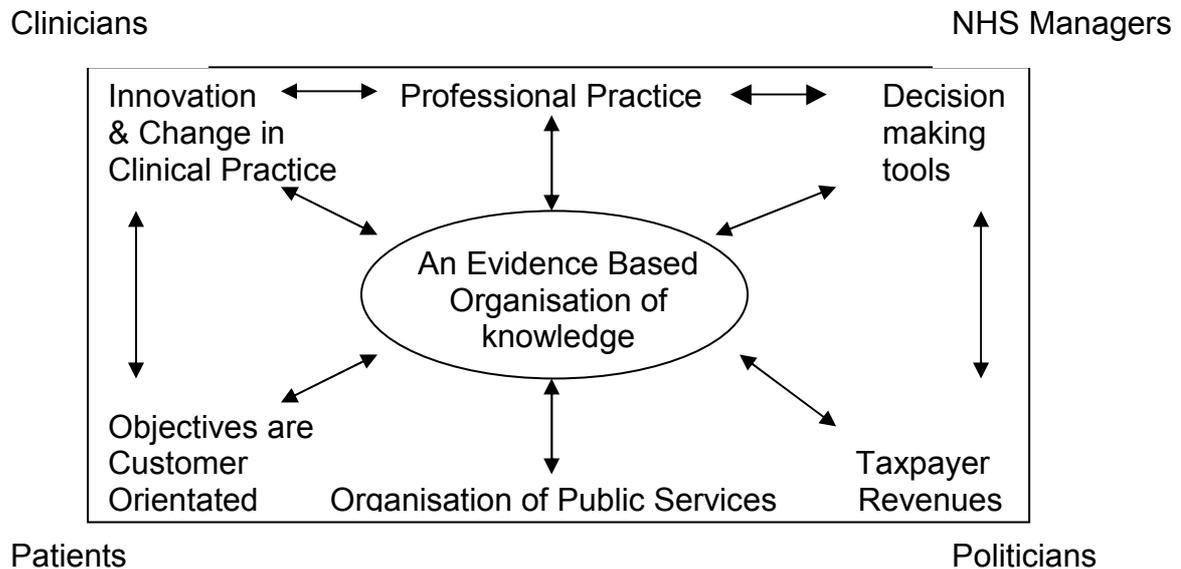
Karl (2007) discusses scientifically based decision making and the role of politics in establishing environmental dialogues. The author suggests that policy making is never completely rational and that in an adversarial process advocates seek to prevail rather than find solutions. Karl recommends collaboration and joint fact finding in which all participants have a role in framing the questions, analysing the alternatives and their impacts, and fashioning solutions given the limits of the resources and levels of scientific uncertainty.

Joint fact finding (JFF) refers to a procedure or set of best practices that have evolved over the past decade or so for ensuring that science and politics are appropriately balanced in environmental decision making at the federal, state, and local levels. Because JFF promotes shared learning, it helps to create knowledge that is technically credible, publicly legitimate, and especially relevant to policy and management decisions. JFF is a procedure for involving those affected by policy decisions in a continual process of generating and

analysing the information needed to shape scientific inquiry and to make sense of what it precludes. It allows for the consideration of local and cultural knowledge as well as expert knowledge. A well-designed and managed JFF process does not result in "science by committee" or all science to devolve to lowest common denominator thinking. A high quality JFF process helps ensure that the best-quality science (from the standpoint of those committed to the norms of independent scientific inquiry) is used to inform discussions.

So what do I make of these writers? To what extent have they helped me to understand the tools I actually use and why? I am with Murphy and Mintzberg – NHS management is more and more a craft. My MBA was learned in the classroom but the tools would not of themselves, add value without a sympathetic and positive reaction to the organisation. It is possible to extrapolate this interpretation to say that Delbanco and Davies were management ideas re-framed for their applicability to healthcare rather than an imposed ideology. The other thing that Learmonth didn't understand when I reviewed his writings, was that people like Hewison, Mitten and Karl represent a drive for technical excellence in management. Although their acronyms (PBMA, JFF etc) may seem at odds with a caring clinical NHS, they were actually improvement tools that managers used that try to work with the grain of the prevailing organisational culture. Moreover, these acronyms show that the same tools managers use are constantly evolving to meet the tasks of managers and in that way management cannot, as Learmonth says, be taken to be a bluntly imposed reductionist technique.

As a publicly funded body, do the public want decisions made on the best evidence possible?



If we accept that in a liberal democracy people are interested with the extent to which politicians whims could change their lives, the conceptual framework must quite rightly consider the bottom right-hand corner in the literature review. Politicians are responsible for the collection of taxpayer revenues which mostly fund the National Health Service and the organisation of public services which include the provision of health services direct to the patient. The NHS is thus both insurer of the populations health and the provider of health care to the same insured population. Within this context the role of research in helping to direct the policymakers is an important part of the literature review.

Evidence based policy is not simply an extension of evidence based medicine: it is qualitatively different. Research is considered less as problem solving than as a process of argument or debate to create concern and set the agenda. During the 1980s and 1990s this view was extended to a more interactive model based on a close dialogue between researchers and policymakers in which knowledge is considered to be inherently contestable (Giddens 2003).

The implication of accepting this model is that policymakers have to get something out of research if they are to use it. It is necessary, therefore, to consider which arguments are likely to be useful or gratifying to which policymakers. Researchers have to accept that their work may be ignored because policymakers have to take the full complexity of any situation into account. They need to recognise that the other legitimate influences on policy (social, electoral, ethical, cultural, and economic) must be accommodated and that research is most likely to influence policymakers through an extended process of communication.

Chester Barnard (1938) promoted the development of a natural science of organization to better understand the unanticipated problems associated with authority and consent. Since Barnard's time, however, writers have struggled to connect science and practice without a vision or model to do so. Evidence based management may provide the needed model to guide the closing of the research-practice gap.

Rousseau continues to address why evidence-based management is timely and practical in resolving the dilemma proposed by Barnard. An "evidence orientation" according to Rousseau shows that decision quality is a direct function of available facts, creating a demand for reliable and valid information when making managerial and organisational decisions. Improving information continues a trend begun in the quality movement giving systematic attention to discrete facts, indicative of quality "This trend continues in recent developments regarding open-book management (Case, 1995; Ferrante & Rousseau, 2001) and the use of organizational fact finding and experimentation to improve decision quality (Pfeffer & Sutton). In all the attention we now give to evidence, it helps to differentiate what might be called Big E Evidence from little e evidence. Big E Evidence refers to generalizable knowledge regarding cause-effect connections derived from scientific methods. Little e evidence is local or organization specific, as exemplified by root cause analysis and other fact-based approaches the total quality movement introduced for organizational decision making (Deming, 1993; Evans & Dean, 2000)".

Little e evidence, according to Rousseau refers to data systematically gathered in a particular setting to inform local decisions. "As the saying goes, "facts are our friends," when local efforts to accumulate information relevant to a particular problem lead to more effective solutions. Although decision makers who rely on scientific principles are more likely to gather facts systematically in order to choose an appropriate course of action fact gathering ("evidence") doesn't necessarily lead decision makers to use social science knowledge ("Evidence") in interpreting these facts".

We can observe the substance and discipline behind the evidence based culture; two writers Lomas and Rist are found in the literature with a number of lessons that they prescribe for anybody wishing to understand whether the public actually want their decisions to be made on the basis of best evidence. As a simple rule book this part of academic practice can be helpful in shaping an understanding for the later documents of how policy, public preference and management decision making come together. The writers make some bold statements as follows:

The relation between research and policy depends on the arena and, thus, the policymakers. Research evidence is more influential in central policy than local policy, where policymaking is marked by negotiation and uncertainty. Thirdly, the use of research depends on the degree of consensus on the policy goal. It is used if it supports the consensus and is used selectively if there is a lack of consensus. Fourthly, many researchers are politically naive. They have a poor understanding of how policy is made and have unrealistic expectations about what research can achieve. And, fifthly, policy-making is not an event but is

“ethereal, diffuse, haphazard and somewhat volatile. (Lomas 2006) ”The consequences of failing to understand this are clear: “So long as researchers presume that research findings must be brought to bear upon a single event, a discrete act of decision making, they will be missing those circumstances and processes where, in fact, research can be useful. (Rist 1994) ”In other words, we need a better model to underpin the relation.

The desire for managers in public services to portray that they know all they need to know to make decisions for the public, is very persuasive. Ambiguity and research leading to conclusion may not be the model preferred by the public even if the NHS manager were to express such a preference. Starting with the possible methods for conducting this literature review, I myself am demonstrating some of the bias inherent in NHS management to precise rather than deliberating decision making. The literature identifies research methods and strategies that have been employed in studying the grey area of public preference for ‘Best Evidence Possible’ in a publicly funded body like the NHS.

I have considered five separate areas for conducting the literature review. I chose in the end ‘formative evaluation’. In this way I considered definitions and solutions already tried, provided a summary of the possible choices by elimination. Ultimately I aimed to summarise the problem, the solution and explanations tried and gave an insight into alternative approaches.

Of the methods I chose and then rejected for the literature review, two were given by the author Learmonth. Arising from his 2003 work Learmonth (2003) proposed the idea of the radical critical management studies. This means taking only those views that challenge the orthodoxy of NHS management and exploring literature in an emancipating way. The other Learmonth method was from Learmonth (2001) when he analyzes the NHS management task in a post structuralist way. Learmonth ironically represents NHS Chief Executives as heroes in the style of a story. Although the paper represents a material of the reading of the transcripts of interviews with NHS Trust Chief Executives Learmonth concludes his study of the nature of truth by following NHS Trust Chief Executives in a Homeric classic hero story line. Danger and magic are both overcome by the masculine characteristics of rationality, strength and resourcefulness and places the management style as evocatively drawing on the religion/myth of ancient origin and therefore impervious to the tests of truth or evidence.

The last two possible structures for the argument that I rejected were the summative evaluation and analytical evaluation. Summative evaluation describes the nature of the problem showing its extent and offers evidence that the problem exists, developing a possible definition of the problem. Analytical evaluation establishes the possible cause of the problem and shows the main factors underpinning the proposed causes.

At the heart of this chapter – do the public want evidence based management – is the nature of how the public wish choices in healthcare to be analysed, indeed, how they wish these choices to be expressed. In Dakin (2006) the main issue for the writer is that previous research modelled NHS management

decisions on the cost effectiveness of new pharmaceuticals had emphasised decision making as a binary choice (accept/reject). Dakin's paper proposes and tests an alternative model of decision making that may better represent the "yes, but..." nature of many such NHS management decisions. In employing the multinomial modelling method Dakin is able to identify that somewhere between routine use of absolute rejection of these pharmaceuticals emerges a concept of restricted use to modify the impact of each extreme. If Dakin is so clear that the finery choice model is so difficult for the public to accept and therefore so difficult for NHS managers to use, then where are the alternatives? My favourites are listed here as follows:

Elliot (2000) conducted a literature review and case studies of social research papers that were initiated by NHS managers and clinical leaders in one region of the NHS. In depth interview and document analysis were used. Elliot concentrated on only one NHS region in England. Elliot used a qualitative study that aimed to identify factors that facilitate or impede evidence based policy making at a level in the English NHS. Elliot considered how models of research utilisation drawn from the social sciences map onto empirical evidence from this study.

A number of writers propose arguments, hypothesis and techniques of other researchers that inform the relationship between what the public want and executive decision making in public authorities. By looking outside the NHS to the global view writers such as Laurie talk about evidence juxtaposed with public preference. There seems to be no clear pattern emerging from the literature. It is clear, however, that the public preference for common sense or the status quo is at least as strong if not stronger, as the promise proposed by evidence based management. To meet public expectations over how publicly funded NHS makes its decisions, the literature cannot support an evolution towards evidence based management.

In Laurie (2007) the author notes that a lack of evidenced based management in the global health programs was likely to lead to a squandering of an unprecedented rise in public and private giving. Laurie noted that diseases and health conditions that enjoy a temporary spotlight in rich countries garner the most attention and money. This means that advocacy, and the particular concerns of wealthy individuals and governments drive practically the entire global public health effort. Evidence is that the top three killers in most poor countries are material death around childbirth and paediatric respiratory and intestinal infections leading to death from pulmonary failure or uncontrollable diarrhoea. But few woman's rights groups put safe pregnancy near the top of their list of priorities and there is no dysentery lobby or celebrity attention given to coughing babies.

Sambrook (2006) studied the language of NHS management. A particularly interesting dimension is the transition from being a nurse to becoming a manager and the ways in which different individuals cope as articulated in their language use. The results highlighted some of the linguistic techniques used to maintain ones professional (nursing) identify when promoted to managerial positions.

In Millward (2005) the article draws on a study of Housing Investment Programme submissions to study the effect of evidential performance. Millward notes that there is nothing to distinguish those authorities receiving high and low levels of funding except for considerable differences in their use of language that would please government policy makers.

In *Open Boundaries*, Howard Sherman and Ron Schultz of the Santa Fe Centre for Emerging Strategies see many parallels between complex natural systems and markets. Both involve so many intricate interactions that outcomes cannot be predicted. The authors advise managers to stop trying to plan and prepared for change and instead build companies into self-organising teams ready to adapt to whatever opportunities emerge.

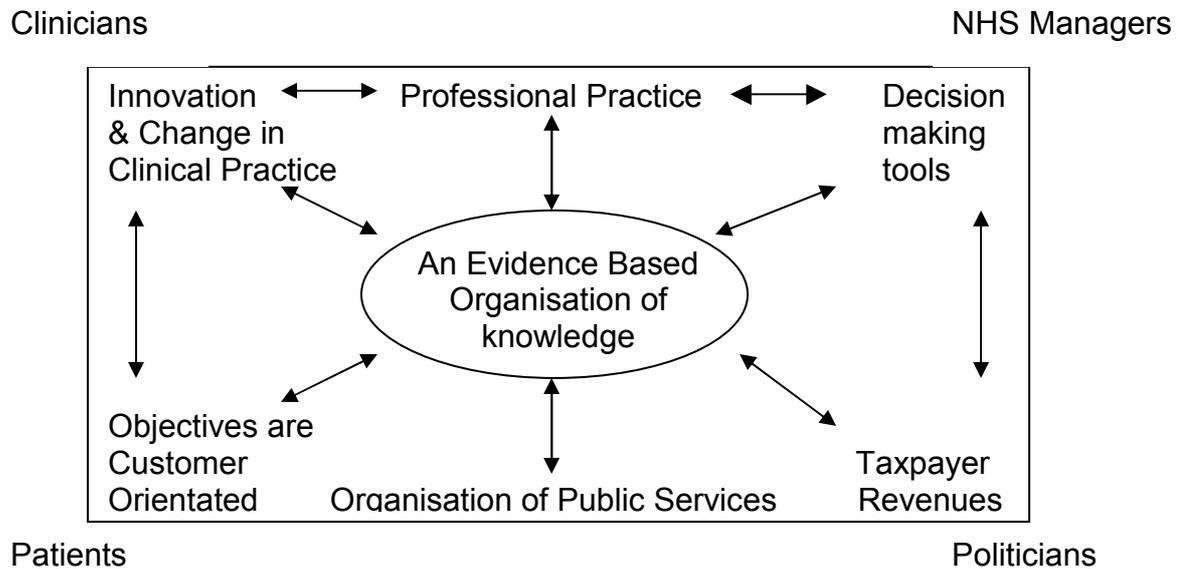
Thomas Hout (1999) of the Boston Consulting Group finds much that is useful in complexity theory, particularly for turbulent industries. But there are limits to the pursuit of flexibility and self organisation, he argues.

Even in the fastest-industries, good managers can still add value by creating the right working conditions to spur creativity. In other words, management still matters a lot, Hout says, even in the new economy.

Findings from the third annual Tufts Centre for the Study of Drug Development survey of 22 leading diseases and pharmacy benefits managers suggest that incorporation of disease management into Medicare would lower hospital inpatient costs. However, it is unclear whether hospital cost savings would be sufficient to offset increases in pharmacy, physician, and outpatient expenditures as a result of an added combination disease management and pharmacy benefit. Furthermore, the survey indicates that the Centres for Medicare and Medicaid Services (CMS) would likely struggle in recruiting disease managers due to their limited enrolment of Medicare beneficiaries, relative inexperience with contracts that put disease managers at risk.

So, in summary, it is possible from the literature to deduce that the answer to the question is in fact “no”. The public do not want decisions made on the best evidence possible. Rousseau has given a compelling analysis of evidence and choice, but it would appear that managerial judgement or sentiment are more popular with the public for decision making by NHS managers. Laurie, Sambrook and Millward have indicated that the public like successful organisations to say and do the acceptable and preferable thing whether or not they have the evidence. This could have left me philosophically challenged with no where to go only half way through the paper. But Tufts and Sherman/Shultz helped by pointing out that no matter whether you are evidence based or not, the adaptive and risky nature of organisational structure means that in the end there are just so many synapses in the chain that I should give up trying to control and predict and should simply ‘choose’!

Is there a conflict between politicians view of an effective National Health Service and the view of NHS managers?



The need to be seen to be making evidence based decisions has permeated areas of British public policy. The National Health Service went through a structural reform during the summer and early autumn of 2006 know as “creating a patient led NHS”. The new organisations created as a result, were subjected to an extended peer to peer review designed by the McKinsey Corporation known as “Fit for Purpose” to judge management capabilities against the McKinsey definition of “World Class”. It is therefore worthwhile in this literature review of evidence based decision making in the NHS to understand what Rousseau worries about “McKinsey says it, that doesn’t make it true”. Similarly, the political imperative to make management evidence based just because medicine is, needs to be considered.

There is evidence that the same problems (of the under use of effective interventions and the overuse of ineffective ones) are as widespread in health care management as they are in clinical practice. Because there are important differences between the culture, research base, and decision-making processes of clinicians and managers, the ideas of evidence-based practice, while relevant, need to be translated for management rather than simply transferred. The experience of the Center for Health Management Research (CHMR) is used to explore how to bring managers and researchers together and promote the use of evidence in managerial decision-making. However, health care funders, health care organizations, research funders, and academic centers need wider and more concerted action to promote the development of evidence-based managerial practice.

Rousseau says “Several decades of research on attribution bias indicate that people have a difficult time drawing unbiased conclusions regarding why they are successful, often giving more credit to them-selves than the facts warrant.

Management gurus are in no way immune. Sadly, there is poor uptake of management practices of known effectiveness.

There is, consistent with McKinsey an observed research-practice gap. In businesses populated by managers who have acquired MBAs from top-ranked universities there is un-explained wide variation in managerial practice patterns (eg, how [or if] goals are set, selection decisions made, rewards allocated, or training investments determined) and, even, persistent use of practices known to be largely ineffective (eg, downsizing [Cascio, Young, & Morris, 1997]; high ratios of executive to rank-and-file employee compensation [Cowherd & Levine, 1992]).”

The NHS is a case study for the application of Evidence Based Management in the public sector. It is possible to observe its impact in two fields highly influenced by legislative decisions: policing and secondary education. In evidence-based policing, community police officers are trained to treat criminal suspects politely, because doing so has been found to reduce repeat offences (Sherman, 2002). In evidence-based education, many secondary schools have restored the practice of social promotion, where students who have difficulty passing their courses, even after several tries, are advanced to the next grade level. Research indicates that social promotion’s benefits outweigh its costs, because a high school diploma increases the likelihood of sub-sequent employment and lowers the incidence of drug use, even among students who wouldn’t otherwise have qualified for that diploma (Jimerson 2005). Evidence-based practice is a paradigm for making decisions that integrate the best available research evidence with decision maker expertise and client/customer preferences to guide practice toward more desirable results (Sackett 2000). Proponents of Evidence Based Organisation of Knowledge are sceptical about experience, wisdom, or personal credentials as a basis for asserting what works. W. Sherman indicates that evidence can be graded from weak to strong, based on rules of scientific inference, where before-and-after comparisons are stronger than simultaneous correlations—randomized, controlled tests stronger than longitudinal cohort analyses. Strong evidence trumps weak, irrespective of how charismatic the evidence’s presenter is. Sherman sums it up: “We are all entitled to our own opinions, but not to our own facts”.

The government has proclaimed the need for what works to overrule ideology in the delivery of public services in the 21st Century. There is a remarkable consensus between both the Labour and Conservative parties over the structure, remuneration and incentives of the National Health Service. If there is a conflict between the NHS as a politically totemic vote winner/loser in general elections and the managerial agenda to run the health service on a day to day basis what do writers do to help. Is there an evidence base to help managers and politicians distinguish what does and does not work?

In Navarro (2006) the aim of the study was to examine the complex interactions between political traditions, policies, and public health outcomes, and to find out whether different political traditions have been associated with systematic patterns in population health over time. The author analysed a number of political, economic, social, and health variables over a 50 year period, in a set of

wealthy countries belonging to the Organisation for Economic Co-operation and Development (OECD). Findings support the hypothesis that the political ideologies of governing parties affect some indicators of population health. Analysis makes an empirical link between politics and policy, by showing that political parties with egalitarian ideologies tend to implement redistributive policies. An important finding of the research is that policies aimed at reducing social inequalities, such as welfare state and labour market policies, do seem to have a salutary effect on the selected health indicators, infant mortality and life expectancy at birth.

Marks (2005) said that Key NHS policy initiatives have been developed in isolation from each other. While their combined effect remains unpredictable, they may serve to threaten the welcome shift towards managing for health improvement. Marks continues that the current system of targets and incentives prioritised access to acute service. The author says public health skills were too thinly spread, baseline data were inadequate, decision-making for public health investment was fragmented and evidence for effective interventions was scanty. Health improvement targets should be plausible, longer term and locally owned says Marks. Strengthening the NHS's role in managing for health was welcomed, but enthusiasm was tempered by concurrent NHS policy initiatives and incentives pulling in opposing directions.

Various writers write that some policymakers have goals other than maximising clinical effectiveness. The goal may, for example, be social or financial. The UK government's decision to aim the safe sex campaign in the 1980s at the entire population, rather than those at high risk, owed nothing to research but to avoiding a possible backlash against gay men and black people. (Klein 1990) And the introduction of the prenatal triple test for detecting Down's syndrome helped providers fulfil their contract with local purchasers. (Rosen 2000) Even terms and conditions of employment of staff can justify a policy. Decisions regarding health promotion in primary care in the early 1990s were influenced by negotiations on the general practitioner contract between the profession and the department of health. (Florin 1999) Policy may also be shaped by electoral considerations. For example, the Changing Childbirth policy in the 1990s was politically led with no secure scientific base. (Fergie 2000) Local policymakers are therefore under a myriad of often competing pressures, of which scientific evidence is but one. Secondly, research evidence may be dismissed as irrelevant if it comes from a different sector or specialty. For example, general practitioners have been reluctant to extrapolate the results of randomised trials on the use of anticoagulants to primary care because the studies were carried out in hospitals.

If it is difficult to argue that objective research should not drive policy, then what role does evidence based management have, according to the literature, to help improve the quality of what might be described as fundamental and essential aspects of patient care? Politicians clearly understand about comparison and league tables. The introduction of benchmarking – undertaken with some success, although not universally implemented – is understandable by politicians. Of more value to managers may be, according to the literature, evaluation, audit and research where in, data is submitted for validity checking

and once this has been reviewed, the findings are returned to the originator of the data to share with the wider NHS.

Evidence may also be dismissed in areas where practice often depends on tacit knowledge, such as surgery. Perceived lack of applicability can also lead to dismissal—because research on the effectiveness of interferon alfa for hepatitis C was confined to patients with no other serious health problems, the evidence has been seen as irrelevant for a population with high comorbidity (Raine 1998).

There may be a lack of consensus about the research evidence because of its complexity, scientific controversy (incomplete or inconsistent evidence), or different interpretations. Policy on preventing heart disease in primary care has suffered from widely differing interpretations of the results of the two major randomised trials (Horch). Policymakers may value other types of evidence such as personal experience, local information on services, eminent colleagues' opinions, and medicolegal reports. The social environment may not be conducive to policy change. Attempts at introducing evidence based needs assessment, have been hampered by frequent organisational changes lowering staff morale. (Harries) And finally, the quality of the “knowledge purveyors” may be inadequate. These are the people who carry the research evidence into the policymaking forums. In central government, civil servants usually have this crucial role. In the United Kingdom, a high turnover of such staff, lack of experience in a particular field, and high workload militate against good quality advice.

There is an implied model of policy making in all of this. The essence of which is that evidence based management for the NHS is a conflict with policy making. The reason for this conflict is essentially one between an NHS based solution founded on evidence and the politicians decision made in the context of taxpayer revenues, the maintenance of electoral authority (not losing votes) and consistency/precedent. In order to resolve whether there is a conflict between politicians and managers view of an effective National Health Service the literature seems to direct us not to whether the conflict exists, but the extent to which this conflict is played out.

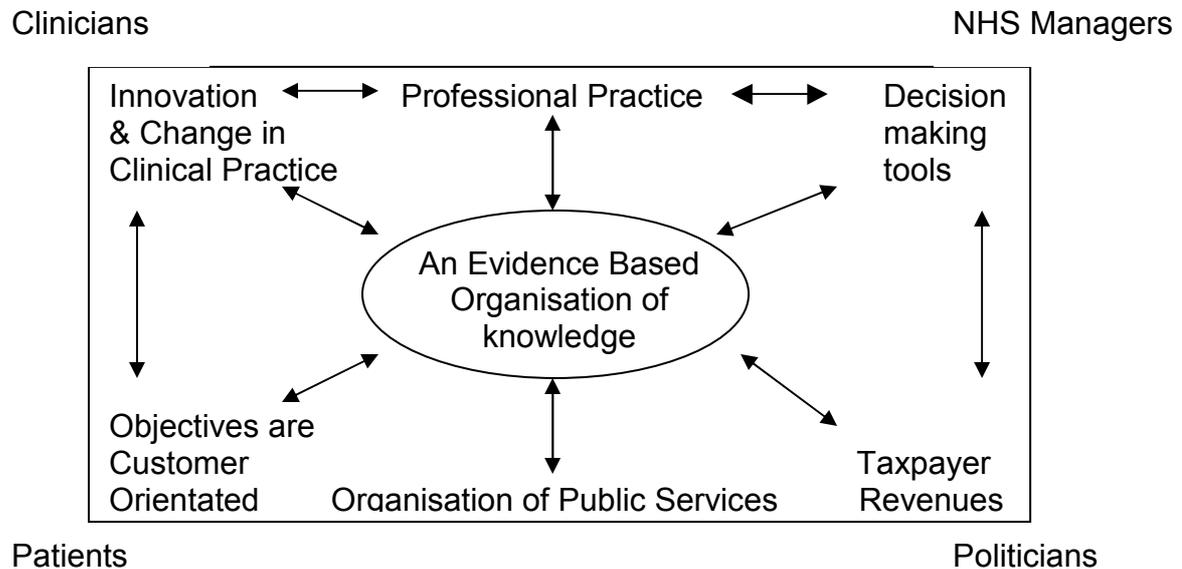
What is the implied model of policymaking? In essence, protagonists assume that the relation between research evidence and policy is linear; a problem is defined and research provides policy options. Research is used to fill an identified gap in knowledge. This is consistent with both a positivist model of science and professional dominance, in which the views and priorities of healthcare professionals (and doctors in particular) dominate healthcare policies. It assumes research evidence can and should influence health policy. Lomas has suggested that the model is viewed as “a retail store in which researchers are busy filling shelves of a shop-front with a comprehensive set of all possible relevant studies that a decision-maker might some day drop by to purchase.”

Discussion of the theory underlying evidence based policy might safely be consigned to an intellectual dustbin if it were not for the practical consequences. Accepting a linear relation, then the value of research will inevitably be judged

in terms of its impact on policy. Few would argue with “the need to show that public investment in research results in benefits for patients”, but politicians and managers take it a stage further, requiring “a substantial return from investment in health services research”. This implies that at least some aspects of the impact of research can and should be quantifiable, even in monetary terms.

So I conclude that there is no conflict between politicians views of an effective NHS and the views of NHS managers. That is because neither side accept nor set a consistent frame of reference. Both sides flip willingly between scientific and pragmatic analyses of the problem confronting them. Help! I thought I was going to be able to draw some conclusions and I seem to be in danger of simply taking a meandering journey. Perhaps the problem is the way that I thought I was framing and undertaking this journey itself. Perhaps the problem is that I am using fuzzy or qualitative material for the first time.

Methodology



Methodology approaches to this study identified by literature.

The use of qualitative material as a qualitative person

Accountants do not traditionally deal with qualitative data such as whether a patient was happy or sad or whether it looked like to him, that his father would die when a patient brought him to the emergency service. Qualitative data is not objective. It cannot be reliably verified. Quantitative data can often be verified – you can see the evidence on paper that it is correct. Accountants like myself, like things to be clear and unambiguous, for there to be no doubt, for the amounts presented to be clearly verifiable. In this document and throughout document 3 and document 4, I will be following a reflective journey concerned with the need to be more flexible, more willing to embrace new sources of data from qualitative sources. There is still a problem that I face through traditional research designs usually rely on a literature review leading to the formation of a hypothesis. The literature review (this document) has not, however, helped me to create a test capable of experimentation in the real world as I had hoped. I have read about grounded theory and discourse analysis and hope that they may prove appropriate tools to keep some discipline and structure in my thesis despite the problems I am facing.

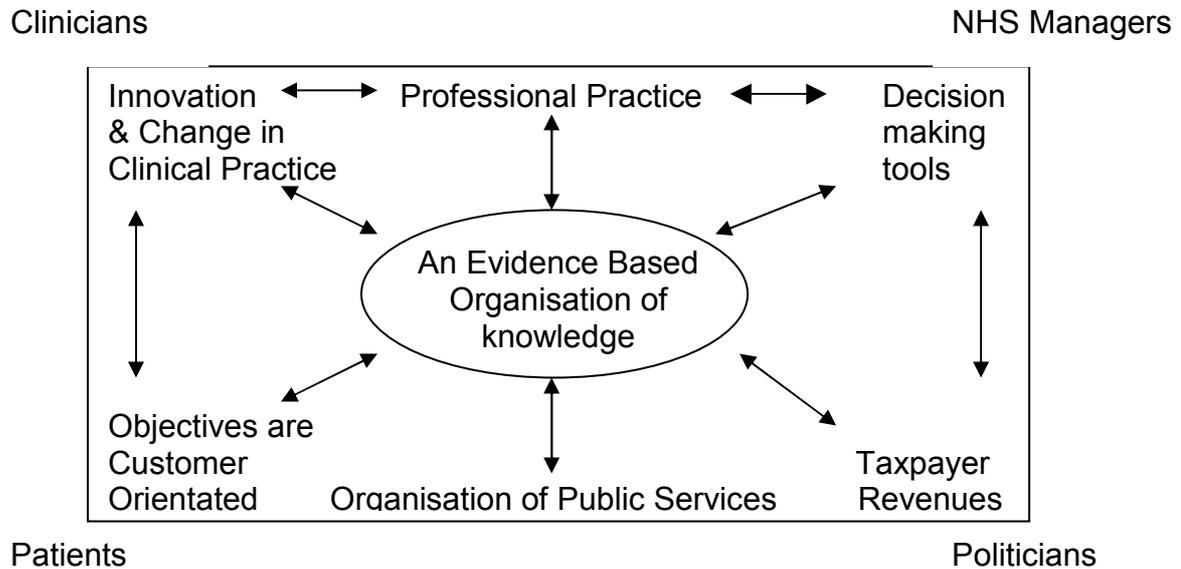
The literature review offers the following insights.

Discourse analysis is defined as “concerned with the interrelationships between language and societies and as concerned with the interactive or dialogic properties of everyday communication”. To this are added two subdivisions – genre and ideology. All of this is relevant in my study of management in the NHS because of genre and ideology. Genre is a communication which has a staged goal-oriented social process, it creates exclusivity and is therefore an

important part of the imposition of philosophy and professional behaviours critiqued by Learmonth as being inappropriate for the NHS. Language is used to exert authority over the NHS. Ideology accounts for the differences in meaning held by the participants in the dialogue. Thus “evidence based management in the NHS”, even within the same genre, is capable of creating tensions between doctors, patients and NHS managers because there is not an equal distribution of the meaning and what is enthralling and empowering to one group, may create systemic inertia in another group. Discourse analysis manages to get me back on track by helping me to review the giving, taking and sharing of power when I interview my participants in document 3 and further identifies the relationships between participants in the NHS as also being between ideologies negotiating.

In addition, what excites me about grounded theory is that it analyses the data with no pre-conceived hypothesis. Rather than searching for data that confirms or rejects my hypothesis, I can spend my time searching out the concepts behind “evidence based management” as they reveal themselves to my cohort of participants. Maybe the answer or question is unclear, but I can conduct a study on the nature of evidence based decision making as it is judged and participated in by NHS managers. A possible criticism of grounded theory is a lack of rigour due to careless interview techniques and the introduction of bias. On the other hand, a working awareness of bias is imperative in all interview research and as long as the researcher genuinely has discarded any preconceived ideas before collecting and analysing data then the interview technique is a neutral tool. For me, I have long gone past the point of wanting to introduce or reject evidence based management in the NHS – I simply wish to understand if, how, when and why it is used or rejected and to reflect that back to NHS managers themselves. For this reason, grounded theory is an appropriate tool.

Exploring the conceptual framework: The Evidence Based NHS Box



How does evidence affect innovation and change in clinical practice? What does the literature tell us about the top left hand of the box. The literature review and document one, make reference to evidence based medicine as a contextual juxtaposition for evidence based management in the NHS. What can the literature tell me about the development of a research supported decision making process for doctors/nurses in the NHS? When discussing an evidence based organisation of knowledge in the NHS it is necessary to consider at least in passing what a literature review says about how innovation and change in clinical practice is affected by evidence, professional practice and patient facing decision making. A summarised conclusion of evidence based medicine from the literature is as follows:

Medicine is a success story as the first domain to institutionalize evidence-based practice. Evidence based medicine is the integration of individual clinical expertise and the best external evidence. Its origins date back to 1847, when Ignaz Semmelweis discovered the role that infection played in childbirth fever. Semmelweis was vilified by physicians of the time for his assertion that it was doctors themselves who were infecting women by carrying germs between dead bodies and patients. Nonetheless, his work influenced the formulation of germ theory, which gained acceptance with the work of Lister and Pasteur forty years later (Wikipedia, 2005). Evidence-based-clinical care as a way of life in health care organizations is of relatively re-cent vintage, enjoying its greatest growth after 1990.

Let us consider a specimen and thought provoking piece of evidence based medicine. Using published resources about germ theory it is possible to understand what its counterpart in management might look like. By way of example, germ theory is widely understood by clinical care givers. It has led to broad application of infection control systems (gowns, sterile needles, and sterile instruments), medicines to avoid or cure infections, and supporting

practices (handwashing). Its application has led to radical but important interpretations of seemingly distant events. Incidence of heart attack, for example, increases immediately after having one's teeth cleaned. Reflecting on this correlation in light of germ theory led to recognition that teeth cleaning disperses mouth bacteria into the heart's arteries. Certain bacteria in these arteries create conditions that give rise to heart attacks. Recognizing this causal link led to a risk-reducing solution: giving heart patients antibiotics to take before dental treatments as a preventive. This application of medical evidence involved cause-and-effect connections - how dental practice can disperse mouth bacteria into the heart's arteries. It also required isolation of variations that affect desired out-comes, requiring knowledge of the mechanisms triggering heart attacks (and, in this case, knowledge that gum disease may itself trigger heart attacks [Desvarieux 2005]). Yet more than scientific insight is needed to create evidence based practice. In fact, only some physicians recommend this preventive action for their heart patients. Others may not see the risk as that great, are unaware of the finding, or merely have forgotten to make this preventive action part of their standard orders for cardiac patients. The involvement of other practitioners further complicates matters: dentists are not necessarily educated to inquire about heart conditions. Organizational factors affect whether evidence based practice occurs. In health care settings certain features increase the likelihood that an at-risk patient will get the preventive medication. Social networks and organizational culture matter. It helps if the patient's physician is part of a practice or a hospital where others recommend such preventive care. Similarly, impeding this evidence based practice is the fact that dentists are unlikely to be in the same professional networks as physicians. In a hospital where medical leadership promotes evidence-based medicine, more physicians are likely to be aware of the finding.

Given that the example of germ theory in teeth cleaning shows that the objective of practicing evidence based safe medicine is not universal. How does evidence determine whether NHS objectives are customer/patient orientated? The literature review, using the specimen example of germ theory alone, has managed to point out that the implementation of evidence based best practice is not the same as the creation of evidence based best practice. Presuming that patients want the most effective care, how should the organisation tailor its approach to implementation? The literature about this area gives clues to how managers implement successfully, evidence that is representative of best patient care. For later documents (3, 4) it is worth considering the methods used to improve concordance with medical and management policy.

Such settings are also likely to have staff in-services to update physician knowledge where this practice might be discussed. Participation in research increases the salience of the evidence base. It helps if physicians in the immediate environment have participated in clinical research and are engaged in one of the several online communities that review clinical evidence and then create and disseminate recommendations, which raises the next point: access to information on those practices the evidence supports. Physicians have online services that provide ready access to clinical practice best supported by research, based on the review and recommendation of health care experts (for

example the Cochrane Collaboration or Map of Medicine). Such services capitalize on the information explosion and internet connections to build communities of practice enabling experts to communicate their knowledge, identify the best quality evidence, and disseminate it broadly to care givers.

How does evidence affect the organisation of public services? To an extent this was referred to in the discussion about politicians and taxpayers, but there are also strands of the literature discourse about the area between Patients and Politicians on the Evidence Based NHS Box – namely the actual organisation of public services. The NHS management is involved in 2007 in structural re-alignments such as the devolution of resources to Primary Care Physicians (who are contracted to, but not employed by, the NHS), the creation of autonomous provider units known as Foundation Trusts and the introduction of non-NHS providers into the NHS ‘family’ of logo users. The literature tells us the following things about evidence for organisational structure.

The consequences of failure to properly organise are fairly clear. So, how successful have researchers been at facilitating evidence based structure? Is NHS structure evidence based? Several studies have been conducted on the relation between research and structure over the past five years. A useful distinction has been made between practice policies (use of resources by practitioners), service policies (resource allocation, pattern of services), and governance policies (organisational and financial structures).

The relation between research evidence and clinical practice has been thoroughly examined by practitioners of evidence based medicine. Clinical effectiveness should clearly play a large part in determining practice policy. Concern has focused on the delays observed in implementation of research findings.

The linear, rationalist model holds up quite well for practice policy, although it shows signs of strain in two ways. Firstly, policymakers differ in their interpretation of the evidence. For example, guidelines on cholesterol testing vary considerably both between and within countries. Such differences reflect variations in context (values) and in the background of the policymakers. Generally, the more clinicians are involved, the less the policy reflects the evidence.

An alternative view was proposed by Weiss in the 1970s, the enlightenment model. In this model, research provides a new way of conceptualising the world, mapping the decision making terrain, and challenging conventional assumptions. Research is seen as one of several knowledge sources and cannot speak for itself in policy terms.

How does an evidence based organisation of knowledge affect professional behaviour of clinicians? In my 20 years experience as an NHS Manager, the area in the ‘Evidence Based Box’ juxtaposing NHS managers professional practice where their decision making has been considered. What hasn’t been completely understood, is the congruence between doctors/clinicians *professional* practice and their use of evidence to affect change in clinical

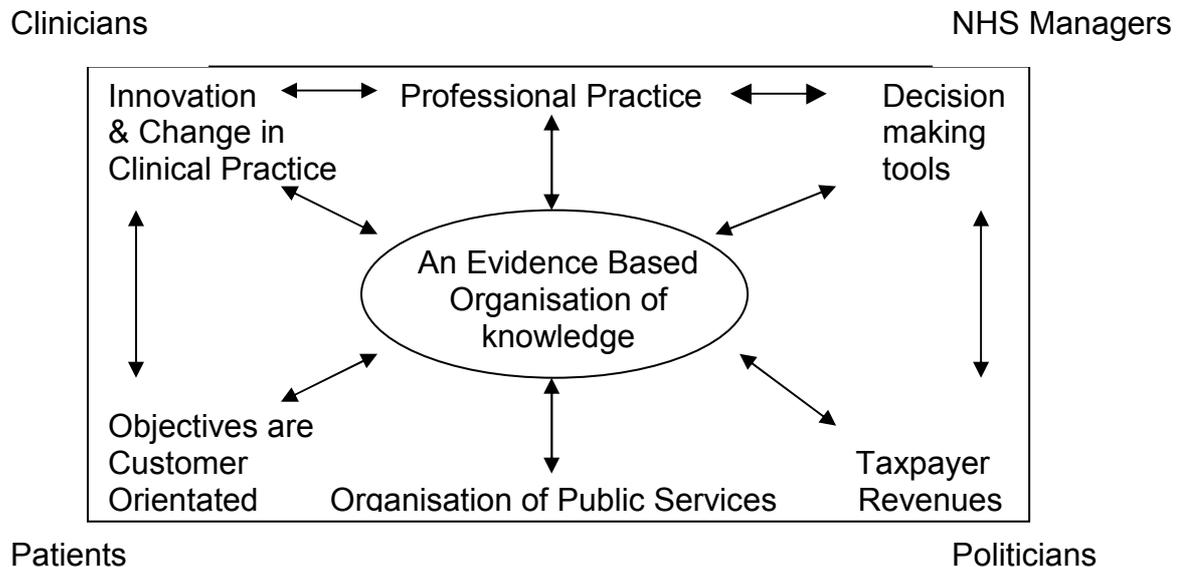
practices. This might seem like a semantic distinction but it must be remembered that clinicians are allowed to practice based upon admission to Royal Colleges of similarly trained and qualified professionals.

Dopson concluded that applying research findings about good practice into implemented clinical practice in the NHS is notoriously difficult in the fact of strong professional views and complex organisational culture. Further Aarons (2006) by correlating the views of 303 NHS clinicians working in children's mental health with management styles in successfully implementing evidence based practice. In outcomes of the regression analysis Aarons concluded that leadership in organisations is important in shaping workers perceptions and acceptance of evidence based practice.

In Malterud (2001) the author says that the tacit knowing of an experienced practitioner should, along with any evidence or scientific method, be investigated, shared and contested. As Malterud notes medical doctors claim their discipline is founded on scientific knowledge. Yet clinical knowledge consists of interpretation, communication, opinions and experiences. The traditional use of quantitative research methods to define clinical evidence ignores the cultural aspects of phenomena that cannot be measured, controlled and counted. Qualitative research, says Malterud, could lead to a broader understanding and inquiry of the culture of medicine Buxton (2006) echoed Malterud when pointed out that although in the NHS high-quality economic evaluation played a major role in decision making the process is far from perfect and is certainly not representative of the decision making by the NHS as a whole. Further, Buxton is happy with this situation and says that health economists need to engage with the public and the health service to better understand their perspectives rather than focusing on academic concerns relating to details of theory and analytical methods.

Therefore, I conclude that a falsehood or a myth has been perpetrated that goes to the heart of my question. The decision making box put clinicians and NHS managers at opposite corners. The presumption that "innovation and change in clinical practice" are consistently evidence based is not true. What is clear is that there is a bias towards trying to make such changes on the basis of best available evidence, but that the implementation of clinical change is subject itself to variability and in that way the clinicians – despite their explicit protestations – are no more evidence based than managers with their own decision making tools.

So what about Professional Practice – surely that is based on careful appraisal of the best evidence available?



Looking at the diagram above – it is the professional practice that links clinicians and managers. The very notion of being a professional is the source of both consistency and conflict. The emergence of evidence based medicine in the early 1990’s led to some clinicians challenging managers and policy makers to be equally evidence based in their policy making, that much literature has established. Writers such as Learmonth (again!) and Mello – the Chief Operating Officer at DaVita Inc, an American Healthcare Organisation, start to derive the inclusion or exclusion of some variables in the later research. Learmonth manages to add to the conceptual framework an additional concept of the prejudice of management language in the NHS to his other concerns about management ideology (managerialism). Mello, by contrast, says that the use of research evidence to affect decision making, must exclude a tendency to concentrate on the average (mean or median) performance as the norm. The evidence based organisation of knowledge must formally exclude a drive to ‘normal’ behaviour according to Mello.

Learmonth (2005) asks that the significance and implications of observations about management language are central to the study of Evidence Based Management. Drawing primarily on ideas in postcolonial theory, with the aim of bringing some insights from the apparent periphery of organizational life to disrupt the taken-for-grantedness of ‘teams’ – a central, apparently ‘natural’ category of management practice and organization theory. The writer says “ Just as postcolonial theory, for (Prasad 2003), is often concerned with “a project of the decolonization of the mind [which] is strongly committed to contesting and subverting the unquestioned sovereignty of Western categories” (see also Banerjee and Linstead (2004), so the aim in this talk is to contest the sovereignty of ‘teams’ as one of the unquestioned categories of organizational scholarship. An alternative from the field (‘the girls’) is also introduced, but not so that it might be appropriated, or used to facilitate control. Rather, in thinking

about alternatives to received terms, we have an opportunity for engaging critically with our established modes of knowing. In particular, I submit, the juxtaposition of contrasting categories (such as 'teams' and 'the girls') can encourage organizational scholars (and others, such as managers) to consider the interests served by their use of 'teams', as well as those interests its use might marginalize or deny “.

Joseph Mello presented in 2005 an idea about the preoccupation of management with norms and averages “Over the past number of months I have been in a quandary about something that I would love your opinions about. That is, “the myth of the mean”. In essence Mello believes that the mean/median/mode has only minimal power in true evidence based management. Increasingly the use of “average” data says Mello never gets to the essence of what is happening with any discrete population that drives performance.

Mello gives specific examples from his own organisation “In measuring clinical performance for DaVita we pay attention to lots of indicators. One of them is “average hematocrit level”. We’ve been patting ourselves on the back for moving this indicator higher over the past 3 years. I am certain that is a good thing. However, in any given month when that number goes up, I have no window on whether we really improved the aggregate population, we got the patients that were already high higher, or we got the low patients up - which of course would be the best thing”.

The rise of evidence based clinical practice in health care has caused some people to start questioning how health care managers and policymakers make decisions, and what role evidence plays in the process. Though managers and policymakers have been quick to encourage clinicians to adopt an evidence-based approach, they have been slower to apply the same ideas to their own practice.

Social factors that allow or prevent experiments with evidence of best practice. Rousseau as a writer, quotes from a wealth of resource available to guide effective execution of evidence based management “goal setting and feedback (Locke & Latham 1984); feedback and redesign (Goodman 2001); health care managements greater orientation towards scientific evidence (Lemseux-Charles & Champagne 2004)” and says that the continued wide variation that we observe in how organisations execute decisions is remarkable. I have written in tabular form, the nature of the discourse contained in Rousseau’s literature so that a wealth of writing can be synthesised.

After Rousseau: A synthesis from the literature of Rousseau on the practice of Evidence Based Management

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
The supervision of employees	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
Information available to managers on the consequences of their decisions	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
The delivery on promises to the public, employees, stakeholders/taxpayers customers and others	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
Management style	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
Approach to academic research	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work
Management culture	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors structured methods for improving efficiency were classified under scientific management	A belief that good management is an are - !the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implantation fail	Managers are prevented from real learning by fads and falsehoods

I would like to consider the writings of two new thinkers on how evidence based management might develop in industrial and customer orientated environments. These are Purdey Crawford and Bob Sutton. Crawford, an industrialist, and Sutton, an academic, have a wit and enthusiasm for the subject that moves the concept of evidence based management from the dusty pages of rhetoric and treatise to something that is exciting, permissive and rapid, rather than simply a caveat or a caution. Their writing is no less disciplined in the use of a careful appraisal of the best evidence available, but what it does is turn the philosophy into a search for new frontiers rather than a reason for tardiness and introspection.

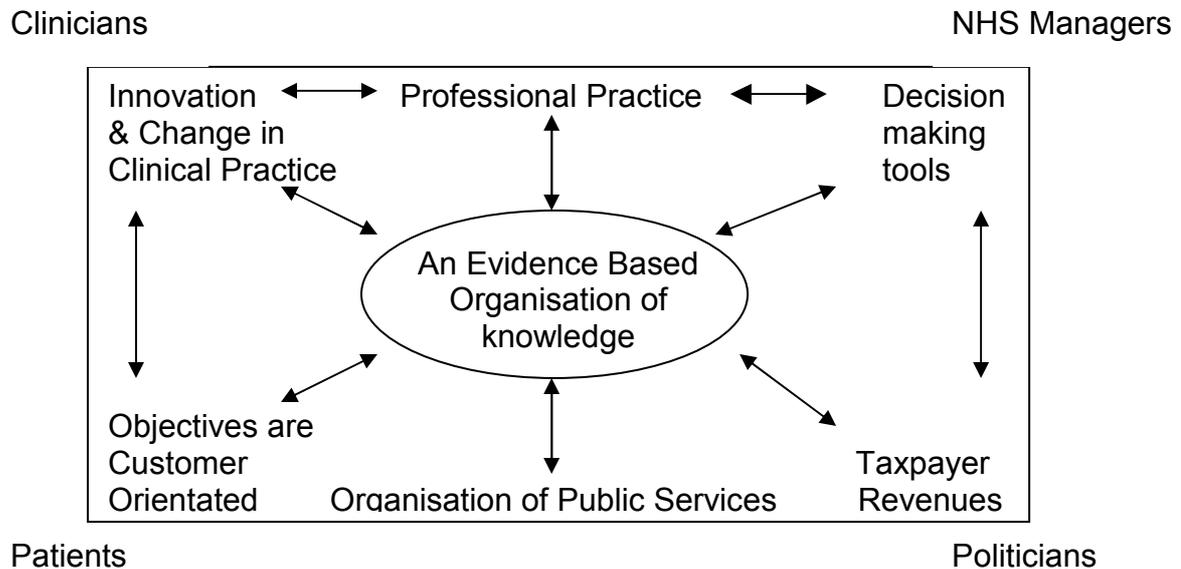
A company that embraces evidence-based management sees their company as a laboratory. Crawford ran an experiment to answer a specific question. Many businesses could do the same. Wherever there are multiple units - multiple stores, warehouses, production lines or branches - the company can run experiments to find out what works. This simple idea, "the company as a laboratory" is powerful one.

Bob Sutton on his Web blog says "Last week I spoke to a group of MBA students (the Santa Clara University Executive MBA class of 2007). Their comments and questions gave me food for thought. For starters, is evidence based management anything new? Is it a movement that should be enthusiastically promoted, or simply a day-to-day activity that people should be encouraged to do? And what should it be called (assuming it even needs a name)? Sutton wishes to avoid using "data-driven" as a substitute, because evidence doesn't always arrive in the form of hard data. Likewise, he says not to call it "fact-based" management, because not everything can be reduced to a set of objective facts. Sutton thinks "research-based" management is a decent description, but worries that it that might trigger "the dreaded MEGO (My Eyes Glaze Over) response".

Sutton continues. "Setting those questions aside, if your goal is to improve management outcomes, here are things you can do, starting now: Raise the bar. Expect people to gather facts and knowledge from a wide variety of sources; say explicitly what is the current, best evidence; and then show how they arrived at their judgments, proposals, and recommendations. Don't settle for remarks like "I don't think customers care about that product feature." Instead, gather some systematic intelligence: what are your customers doing and thinking? Use unknowns as guideposts, not roadblocks. One of the biggest payoffs from evidence-based management is discovering what you don't know: This can prevent people from hurriedly adopting poorly conceived plans. But formal acknowledgments of uncertainty can also draw people into a "paralysis of analysis" cycle that keeps them from doing anything, using comment periods, customer feedback, and evidence-gathering as delay tactics. So instead of casting shadows over new, potentially profitable ideas, try this: establish explicitly what it is you don't know, then figure out how you can gather more complete information as things unfold. Identify key unknowns and develop a plan for eliminating those unknowns - this will help you demonstrate whether your projects or products are performing, and where adjustments are needed".

What each of the writers in this chapter have done is provide a sense that evidence based management or “decision based on a careful appraisal of the best evidence available” is not only possible, but empowering. Whilst it has at its heart an inquiring style of management, it is not cautious in approach. If the manager were, say, the executive director in charge of twenty clinics, each with varied performance, the manager might reasonably conclude that the performance differences were due to something about the clinics or their administration. The executive director might even combine that presumption with a professional background in clinical or business disciplines to draw conclusions. What these writers have told the NHS manager to do instead, is to look for systematic attention to local facts (ie, the best evidence available) and plan their response accordingly which may mean looking at patients, building stock, transport or public health, but to look at them quickly! In that way at least it is possible to see professional by using evidence based management. At least the decision making box finds at least one successful home and refuge for an evidence based organisation of knowledge – the notion of professional practice. Rousseau has proven twice now (here, and earlier in the concept of little e evidence) to be a powerful tool for rescuing evidence based knowledge from challenge and despair.

At the heart of the decision making box – what does the literature say might be missing from this box?



I like to use this box, first seen in document 1, as a map of these areas within which my consideration of the evidence can be framed. It emanates from the “organisation of knowledge” at its heart and I do want to discuss some things I have read that confirm or reject my box/map. For example, a number of writers in recent years have written about the importance of staff morale and complex tribal instincts and power struggles that must be taken into My conceptual framework puts NHS managers and clinicians at opposite ends of the ‘professional practice’ part of the box and this in itself reflects and functionally separates within the NHS. This may identify a further research question about the nature of an organisation that is multidisciplinary. The NHS is not unique, but it is unusual in that the line of authority between ‘managers’ and ‘employees’ (clinician) is unclear. Were there to be a significant body of literature, I might have to re-think the model itself.

Dopson (2006) argued that in the NHS local professional groups work together in communities of practice that are frequently multiprofessional. Although Dopson studied the role of the middle managers in the implementation of evidence based healthcare, rather than the senior and executive management cohort of this study, the author adds a new dimension or question to the study. Dopson argues that if the quality of health care is to be improved, we need to understand the complex (historically and contextually informed) interactions between different professional groups and to design diffusion strategies that acknowledge this complexity. Dopson was preceded by Ruta (2005) who argued that because recent NHS reforms give doctors increased responsibility for efficient and fair use of resources techniques must be employed to ensure the views of all stakeholders are properly represented. Greener (2005) concludes by suggesting that much that occurs in manager-doctor relations is obscured by the two tribes practices, that there are gendered differences in the

behaviour of managers towards clinicians and that game playing in relation to the performance management regime is a function of its imposition. Guven-Uslu (2006) believes that strategic change in organisations is best supported by encouraging networks rather than imposing change bureaucratically. Guven-Uslu notes that in the NHS the government has been encouraging clinicians and managers to work together in network to improve performance. The author shows that this kind of networking is difficult to realise, the author explains where the main problems lie: clinical-management conflict, top-down approaches, the implementation of benchmarking initiatives: and the inadequacy of the evidence base for comparison.

Where policy makers value evidence over personal experience or prejudice, there is a bias towards incorporating evidence into decision making. This is by no means a consistent or expected method of policy making according to the literature. Having considered what the writers said about the rest of the conceptual framework, it is necessary to note that writers such as Kleen and Robinson are able to distinguish wisdom (or experimental evidence) from research evidence so that the 'evidence based' circle at the heart of my model is itself capable of being questioned. Both distinguish ideology from evidence, but are inconclusive about evidence itself.

Kleen goes further – saying that the NHS actively rejects the use of evidence in designing its own governance structures. Kleen says that the direct influence of research on governance policies has been negligible. This is illustrated by the reorganisations of the NHS in 1974 and 1989. In both cases research evidence was ignored but for different reasons. In 1974, there was a consensus—unification of services was necessary, as was coterminosity with local government. Therefore, no research evidence was needed. Instead working parties were set up in which decisions were based on experiential evidence. In contrast, in 1989 policy was largely influenced by ideology and electoral considerations. Ambiguous research evidence (such as on the merits of competition in the United States) was used selectively. A second example is the policy of introducing managed care to the NHS. Robinson (2000) Evidence from the United States has been used both by proponents and opponents. Opponents noted that of 81 published observations of outcomes, 68 showed no significant advantage for managed care. Meanwhile, proponents pointed out that in the other 13 observations, managed care organisations achieved lower use of services and of expensive tests and procedures (where alternatives existed) without compromising quality of care. In effect, research evidence has had little effect on the policy to introduce managed care.

Clearly, research has only a limited role because governance policies are driven by ideology, value judgments, financial stringency, economic theory, political expediency, and intellectual fashion. (Kleen) It would be naive and unrealistic to expect research to provide evidence to clinch arguments about governance policies.

Several conclusions can be drawn from the above discussion of practice, service, and governance policies. Research has little direct influence on service

and governance policy if we adopt those criteria set and accepted by researchers.

Maybe there is a problem at the heart of the model on the nature of evidence? When will we know we are seeing an evidence based approach rather than any other organisation of knowledge? Guven-Uslu was able to ask whether the nature of papers written upon the consideration of evidence based management were qualitatively different from those of other management disciplines. Moving through the literature, the writer concludes that "evidence based management" is not so much a tool of decision making, as it is a state of mind. The incorporation of evidence based management into decision making is not at the decision point – it is the entire continuum of the philosophy of management. It becomes a credo wherein all decisions are taken in a structured and methodical way, and to some extent, trading timeliness for accuracy. What does evidence-based management look like? It is a disciplined approach to decision making meetings where the team asks "What are the assumptions behind this?", "What evidence do we have that it will work?", and "What evidence do we have that things may go wrong?" Let me highlight two aspects of that last sentence. The first aspect is discipline. Evidence-based management is not as easy as opinion-based management. An organization committed to evidence-based management takes the time to approach decisions in a disciplined way. The second aspect is an attitude of inquiry, not of advocacy. In North America managers tend to come into a meeting with an opinion which they defend. In contrast, managers with an attitude of inquiry would come into a meeting asking, "What are the options?", "What do we know?", and "What do we need to find out?"

When Purdy Crawford was CEO of IMASCO there was a heated argument as to whether loss-leader items led to greater sales. As CEO he could have made the decision based on his own opinion but that's not what happened. Crawford said, "Let's not argue, let's find out." They proceeded to do an experiment to see if shoppers buying sale items also bought enough other items to justify the sale. (They didn't). This is a great example of the attitude of inquiry. Crawford had asserted the primacy of evidence over opinion or judgement based on experience.

In summary, I think the decision making box has shown itself to be worthwhile as a simplification (necessarily) of the real world. The box might have been drawn as a 3d venn diagram and the multiple overlapping relationships would be more faithfully represented, but for the purposes of helping with a rational approach to my discourse, I think Guven-Uslu and Crawford save the day in validating the model.

In Conclusion

Whilst I have written this paper in personal narrative style I would like to conclude by reframing the discussion in a way that answers the examination guidelines just to prove I knew there was a question that needed answering.

What is already known in this research area?

Learmonth, an academic and former NHS manager, suggests that in the long term the very study of evidence based management is likely to inhibit rather than encourage a fuller understanding of the nature of evidence based management. Pfeffer has managed to write a definition of evidence based management and says that this is not how managers make decisions but that they instead focus on their own thoughts. Rousseau is entirely supportive of Pfeffer and, after exploring the promise that research offers for improved practice concludes that at present, it falls short. Elliot in a study of NHS managers provides some explanations for the constraints upon managers that prevent the use of research evidence.

What each of these writers say, is that the most successful NHS organisations would share one common strength – outstanding use of knowledge acquired through research (evidence). They would produce evidence the way that they need in order to inform decision making by management. Using an expertise with evidence they would make the best decisions, minor and major, everyday.

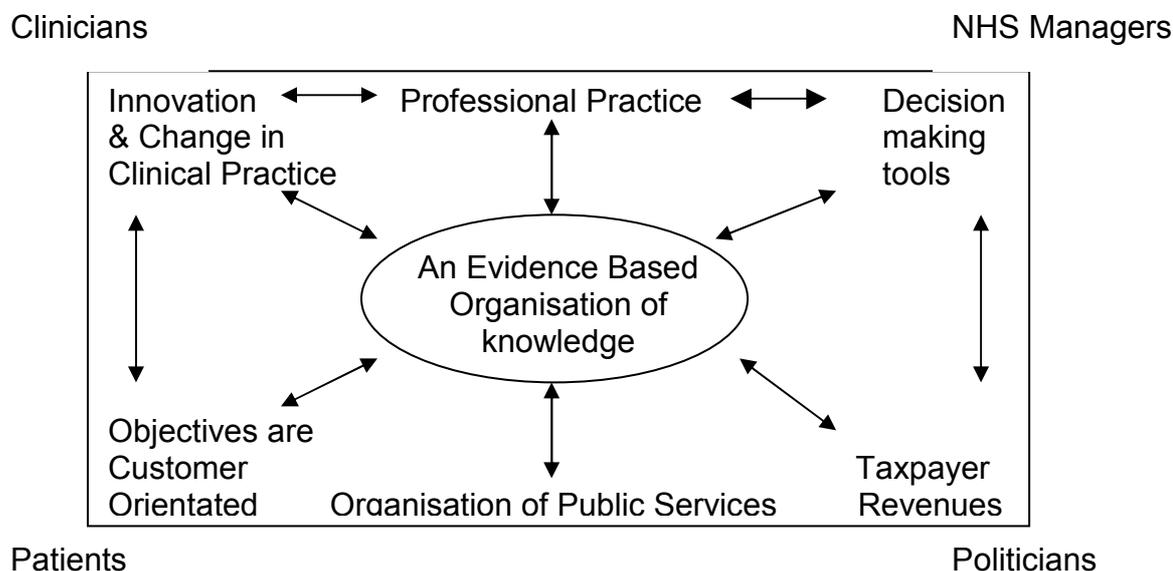
Opposing theoretical and methodological approaches to this research area?

Pearson takes issue with Learmonth and says that the whole concept of what constitutes evidence is itself, full of inequality and prejudice. Murphy, Mintzberg, Soltani may be taken as a direct challenge to the whole concept of evidence based management. In any case, they argue that there is a reason for the craft of management and personal experience to supplement evidence based management in context specific ways. Malterud manages to deconstruct the whole notion of a scientific approach to the knowledge of medicine.

Writers such as Delbanco, Davies, Dopson and Mitten propose that organisational effectiveness is not a result of effective management process or people but instead a combination of both. Issues such as organisational culture, leadership, total-quality management philosophies and innovative ways of budget setting are all claimed to have at least as great an impact on organisational outcomes as well researched decision making.

Karl suggests that in adversarial process advocates seek to prevail through the enjoyment of power, rather than through evidence based solutions and develops an alternative practical model of collaboration through joint fact finding is proposed. Smith supports the search for alternatives because, in the author's view, uncritical reliance on performance data can lead to a number of unintended and adverse consequences and Pearson says that evidence gathering is too slow to properly influence policy.

Arguments, Hypothesis and Techniques of other researchers not pursued further



Of the themes that I found out about, the following have been notes in the literature review but will not be followed further or added to the conceptual framework. Laurie makes explicit value/evaluated judgements about the impact of ignoring evidence on the health of the most vulnerable in poor countries. This is contextually important, but neither in the NHS nor near the top right hand corner of the evidence based NHS box which is the prime area for study. Hout poses a challenge that it is unclear whether cost savings arising from disease management would offset increases in running the system and whether sufficient analysis existed to synthesise the data to make it managerially meaningful even in the long term. This is a potent challenge to evidence based management, but more about the top left hand of the box, innovation in clinical practice which is supportive to but not central to this study. Marks said that strengthening the NHS's role in managing for health was welcomed but enthusiasm was tempered by concurrent NHS policy initiatives and incentives pulling in opposite directions. I will not be pursuing this further as it is more about the lower part of the conceptual framework – the organisation of public services as they are influenced by taxpayers and politicians.

What research methods and strategies have been employed in studying this area?

Learmonth used two quite innovative methods to study this area. Learmonth proposed the idea of 'radical critical management studies' which requires the researcher to take the null hypothesis that everything in the NHS orthodoxy is correct and therefore the tests are only those that challenge the orthodoxy.

Learmonth is, in effect, following this methodology in his framing of NHS managers as heroes in the style of ancient Greek literature and then ironically challenging this perspective in “an emancipating way”.

Elliot studied the paperwork of managers and clinicians in one region of the NHS and in depth interview and documentary analysis were used to collect evidence. Elliot used the ‘one region’ method favoured in my research proposal for reasons of practical concern – time, money, co-ordination – and also because the concept of the region was meaningful in the NHS. The region represented a natural cohort of NHS managers and a distinct area with a variable degree of autonomy from the Department of Health over how decisions about resource allocation are made.

Giddens posed the point that - policy makers have to get something out of research if they are to use it. Further, that it is necessary to consider which arguments are likely to be useful or gratifying to which policymakers. Giddens makes the point, significant for myself as an NHS employee studying the NHS, whilst part funded by the NHS to undertake the academic course and research, that it is still valid for the researcher to influence policy makers through an extended process of communication.

Inclusion of exclusion of variables in the research?

A synthesis from the literature of Rousseau proposes a juxtaposition of management decision making between systems that adopt evidence based management and those that avoid the use of research. The questions proposed by Rousseau are worthy of further discussion with practicing NHS managers. Some additional ideas were encountered in the literature review. Learmonth and Sambrook both say that the significance and implications of management language are an important part of this study, but it is difficult to continue to pursue this area within the conceptual framework. Conversely, Mello writes about the preoccupation of management with norms and averages and this “myth of the mean” is a particular branch of decision making tools that is possible to consider further. At the core of the conceptual framework is an evidence based organisation of knowledge, and supporters of this school of thought are sceptical about experience or wisdom. Sherman’s model of grading evidence from weak to strong, based on rules of scientific inference, would say that Mellow was correct. In Sherman’s view a manager who uses evidence but then ranks this evidence against normative performance/behaviour is guilty of weak decision making just the same.

Medicine is a success story as the first domain within the NHS to institutionalise evidence based practice. The literature says that more than scientific insight is needed to create evidence based practice. Guidelines do not of themselves, equate to evidence of implementation. An evidence base can only improve outcomes with adherence and therefore it is necessary to note that the heart of the conceptual framework (an evidence based organisation of knowledge) is only a partial proxy for applied evidence based decision making.

Further Research Questions identified?

To the key questions considered in the research objectives (which make up the chapter headings of this literature review and conceptual framework) some further research questions are identified. Sutton asks whether evidence based management is anything new or is it simply an extension of a century long debate about scientific management? Sutton also asks, if it is new discipline, what it should be called and asks whether a home can be found that doesn't cause readers to lose enthusiasm in any attempt to introduce it into an organisation? Dopson, Ruta, Greener and Guven-Uslu all considered the nature of the NHS as a multi-professional organisation. This is covered in the conceptual framework in that the phrase either separating or linking NHS managers and NHS clinicians is "Professional Practice". The further research question identified as a consequence, is whether evidence based decision making within the NHS, is best supported by encouraging multi-professional manager-doctor networks, rather than imposing change bureaucratically?

For the purposes of research governance, the NHS is of the opinion that this conceptual framework will need to be submitted for Research Ethics Committee. This is because it is not an audit of an existing standard of management practice or an evaluation of a specific organisational change, but a survey using multiple methods to test a thesis and generating new knowledge. Should this be true though given that my methodology will only access staff and I am already an NHS employee? If Research Ethics Committee submission is necessary, I intend to use a qualitative evaluation of the method and experience to gather evidence about the nature of applied evidence based decision making in the NHS.

Probably the most important research question identified by this paper is that conducting a literature review has, in a way my MBA never did, confront the use of qualitative material as a quantitative person. A plaintive "help!" half way through this paper was not staged...what if I have to face the problem that this literature review threw up? Namely that the journey may need some new tools such as discourse analysis and grounded theory to provide meaning and that these tools have rigour and power no matter what my instincts as an accountant said.

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**David Sharp
July 2008-07-29**

**Research Methodology for Non Survey Based
Research**

**Document 3 is submitted in part fulfilment of the
requirements at the Nottingham Trent University for
the degree of Doctorate of Business Administration**

**“A study of the response of NHS Chief Executives and
Senior Managers to Evidence Based Management”**

Cohort 8

Abstract

A decision making theory and process

I undertook a qualitative assessment of the use of evidence based decision making from real-world participants in the NHS. A qualitative approach was used because I wanted to develop a general categorisation of decision making that will enable me to develop topics for later thesis and qualitative study. The study is a selected sample of subjects representing a spectrum of Executives in the NHS from different professional backgrounds including doctor, accountant, academic professor, statistician and nurse. Subjects were recruited from the cohort of people working in the NHS in the East Midlands through personal contacts and in one case, referral by other subjects. A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort to test this method as well as the recording equipment.

Little in depth research has been done into the implications of the philosophical approach that a practicing group of senior executives in the NHS have to the work of the NHS itself and its bases in evidence based decision making. I wish to pursue the work of Rousseau on the difference in management response to management issues depending upon whether the decision maker was equipped with advanced knowledge of the effective implementation of Evidence Based Management or otherwise. Sample selection for this testing of Rousseau in a field environment was essentially pragmatic, based upon people who knew me well enough to give frank disclosure, but not well enough to have perceptions about what I thought the “correct answer” is. (I have no view on the “correct answer”).

Grounded theory and qualitative material

The overall aim of this research model is to enhance good practice in the craft of management in the NHS. To achieve this aim my objective in this piece of qualitative research is to conduct a systematic investigation into current perceptions of evidence based management including perceived barriers to its use and also including perceptions of good practice in the use of evidence based management. It was also necessary to begin to ascertain perceptions of skill deficits in this area and factors viewed as contributions to these deficits. The effect of the researcher as an observer is unknown. It could have an effect on the interviews and it may inhibit parties who participated in the review of meetings. A further limitation of the study is that I only included leaders from within the NHS East Midlands and it is possible that NHS regions may be more or less equipped to engage in a discourse about evidence based management. The strength of this study is that observation and participation with individuals and the groups by the researcher on an ongoing basis in the NHS in East Midlands increase the credibility and trustworthiness of the findings.

So in Summary

In the matter of the approach to academic research (Against!)

In the matter of supervision of employees (For!)

In the matter of the information available to managers on the consequences of their decisions (Against!)

In the matter of management style (No preference either way)

In the matter of the delivery of promises to the public, stakeholders and others (Against strongly!)

My Conclusion is

There is a bias against using academic research by NHS managers in the East Midlands. This is by no means universal, but is consistent in its presentation.

There is a very strong preference for using evidence based decision making amongst the cohort of East midlands managers and use an appropriately cultivated management approach to support evidence based decisions.

There is a bias against evidence based decisions. Decisions have insufficient data and evidence for decision making, and little value is attached to post implementation review. Some managers are neutral towards this subject but few, if any, show a preference for evidence based decision making informed by the consequences of their decisions.

There is only an inconclusive result in the area. There is no preference. Some managers have a preference for evidence it seems but equally some would discredit it as a viable and realistic approach.

Of all the areas this is the one where there is next to no examples of evidence based decision making, but there are multiple strong, lengthy and cross-referenced examples of decision making that is neither systematic nor developed by causal knowledge. Decision making is opaque to the public and frequently challenged.

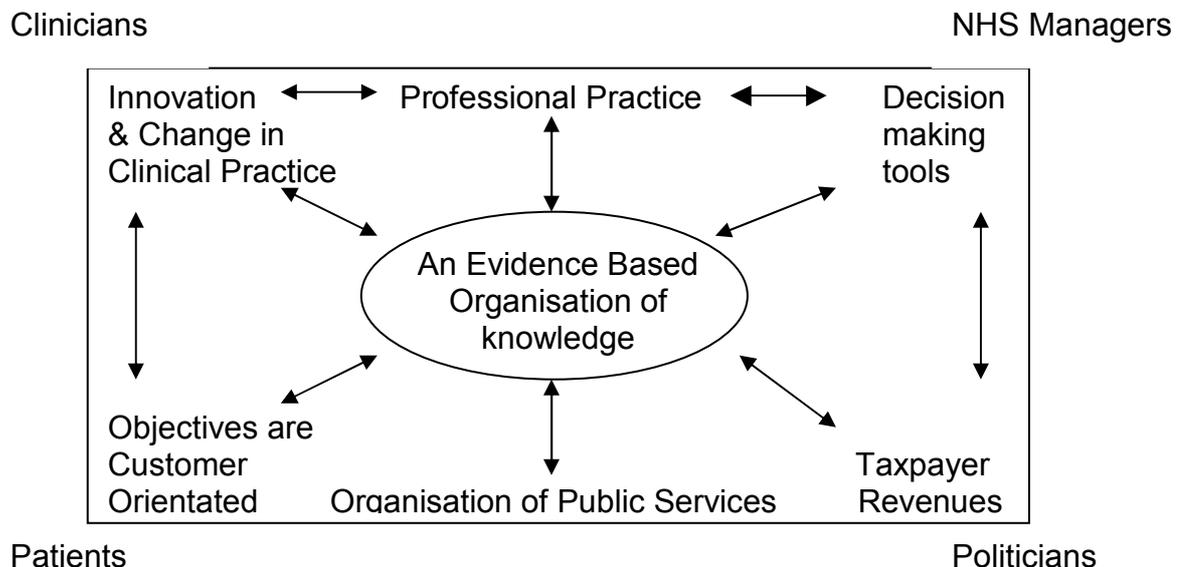
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THE DYNAMICS OF DECISION MAKING IN GROUPS AND BY INDIVIDUALS

A decision making theory and process

I undertook a qualitative assessment of the use of evidence based decision making from real-world participants in the NHS. A qualitative approach was used because I wanted to develop a general categorisation of decision making that will enable me to develop topics for later thesis and qualitative study. The study is a selected sample of subjects representing a spectrum of Executives in the NHS from different professional backgrounds including doctor, accountant, academic professor, statistician and nurse. Subjects were recruited from the cohort of people working in the NHS in the East Midlands through personal contacts and in one case, referral by other subjects. A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort to test this method as well as the recording equipment.



There are a few notes to say about the author. My own personal baggage about Evidence Based Management is that;

I have worked in services where EBM was a new or alien concept. Although the hierarchy of evidence is vaguely understood by most if not all NHS managers the sense that evidence should support or instruct decision makers, as proposed by distinguished leaders in the NHS management such as Muir Gray (1997), is not commonly accepted. To an extent the concept of evidence was mostly a binary rather than a linear concept. By that I mean that the Randomised Control Trial or RCT was seen to be "evidence" and that anything other than an RCT was not. In that way the concept of evidence was elevated to its most extreme version where an almost laboratory level of precision within its practice frightened lesser users. I have performed the role

of Director and Chief Executive in NHS organisations that were deemed to be successful. Although I am by no means a leading light amongst my peers the organisations I have lead either in the boardroom or as Accountable Officer (Chief Executive) have been surplus making, target hitting, award winning, highly credited by the auditors and demonstrably successful in the eyes of the regulators.

On a personal level I have tended to lead successful teams of high performing individuals and usually inherited maturing or well established teams but have rarely been asked to establish new organisations when the NHS goes through its periodic regular re-organisation. So a pattern emerges throughout my 20 year career in the NHS of being the director who succeeds the first Chief Executive in an organisation, the team player who replaces the first team leader when they leave and so on. I have worked in parts of the NHS that used EBM sparingly. For example the recruitment of leaders is supported by the evidence that it is possible to assess future leaders through competency based extrapolation of their past performance and also by evidence that emotional intelligence correlates with predictions of successful leadership. EBM has existed in three ways, as a self critique by managers that some of the decisions or assertions are just plain errors which would improve if based on evidence of what works, as an exploration of the differences in culture that exist between NHS doctors who are increasingly evidence based and HNS managers who are seen to make little progress in adopting the concept and finally in a way to stop the NHS re-inventing the wheel and making repeated mistakes or even worse employing management consultants to make the same mistakes.

I have worked high up and low down in the management hierarchy and my experience of EBM was that it faced/faces being squeezed by two forces that both oppose its very existence in the NHS management lexicon and toolbox. Unlike Medicine and Nursing in the NHS, management is not a profession. Put crudely, it is considered a task or an overhead. With the exception of Finance roles there is no established legal or cultural requirement regarding education or knowledge for an individual to become a manager the way there is for Doctor, Nurse, Physiotherapist, Podiatrist, etc. This does not mean that NHS managers are not legion in their BSC's, their MBA's, even their Doctoral qualifications but it does mean that no formal disciplinary body or professional pressure exists to promote use of evidence by any manager who refuses to do so.

Secondly, even some senior (former) NHS managers such as Learmonth (2000) oppose the scientific method and suggest that management is not an automatically good thing as it is believed to involve the exercise of power and the exploitation of others. These critics find some resonance in the media and popular cultural account that managers do not wish to consider the impact of their decisions on stakeholders. Ultimately, in my working life, I deal with these situations all the time, the adoption of evidence based practices is likely to be organisation specific where an NHS manager, typically an incoming Chief Executive or Director takes the initiative to build an evidence based culture. Fads, fashion and management consultancy are more often seen in

the design of a decision making or decision support system than problem-based reading and discussion of research summary.

Before I began, I was expecting to find that the Chief Executives would consider evidence based decision making to be a luxury. By luxury I meant that it was used sparingly and where a big decision/occasion merited detailed consideration. Implicitly a luxury would not be something they used every day. I also expected there to be a strong degree of convergence between the leaders given that they were working in the same health market, with the same policy framework and were using each other as reference points for acceptable norms of behaviour. I had considered this beforehand, probably as it matched my own practice when I had been a Chief Executive, and thought what a terrible waste this was. I declare that I remain neutral on the position of whether we should use evidence based decision making but with the amount of control we have as executives over risk, expenditures and investments it struck me as sad that we would not or could not practice an evidence based approach to these critical decisions.

Relevance and Rigour: the Hierarchy of evidence and the realist synthesis

Current schemes for evidence hierarchies were developed mainly for clinical research questions and therefore place major emphasis on randomised controlled trials as the main and most convincing evidence in the evaluation process. These types of study are rarely available for lifestyle-related factors and might even not be feasible to obtain. Arguments are advanced to support the notion that a modification of currently existing 'levels of evidence' as developed for clinical research questions might be necessary. Thereby, one might be able to accommodate the specific aspects of evidence-related issues of recommendations for primary prevention through lifestyle changes, like dietary changes. What I wanted to do in this study was to make sense of the evidence hierarchy for NHS managers to make sense of it, organise and follow their response to evidence given that the NHS is not a randomised control trial in total.

Levels of evidence have been used widely in evidence-based medicine. In this context, hierarchies of evidence have been further developed and modified. During the past few years, several organisations have created their own version of a hierarchy of evidence. Whilst in all these hierarchies the lowest level of evidence is given to expert opinion and the highest level of evidence to systematic reviews or meta-analyses of randomised controlled trials (RCTs), there is considerable variation among the categories in between. Common to all of these modifications is the emphasis on RCTs and meta-analyses thereof. But the question remains in the context of healthcare in England, how do the managerial leaders feel about this, is the meta-analysis believed to be the prime, the apex of decision making tools in non-clinical fields. Is it even respected by these people in clinical settings?

This (in the clinical context) well-founded grading system based on RCTs is now commonly regarded the one and only way to provide reliable answers to all medical questions. Even though it is stated in Cochrane Collaboration handbooks (2008) that reviews of other types of evidence can be helpful for decision-making, especially in areas where RCTs are either not available or not feasible, the stigma that everything else beyond RCTs is second – or even third-class evidence and therefore basically not credible is inherent to this not foreseen expansion. By making the manager come alive I wanted to understand whether there was a contradiction between the stigmatisation of everything but RCT in the medical and managerial parts of the same organisation.

A critical appraisal of the hierarchies of evidence and their application appears necessary, however, because a specific type of research question – mainly the evaluation of therapeutic effects – has driven the development of these hierarchies. This has led to the specific order and inclusion of certain study types. Only recently, levels of evidence have been published which take into account that different medical areas require different sets of levels of evidence. The Canadian Task Force on the Periodic Health Examination (1979) differentiated the following research categories and now presents separate hierarchies of evidence for each of these categories:

- Therapy/Prevention/Aetiology/Harm;
- Prognosis;
- Diagnosis; and
- Economic analysis.

In many of the grading schemes presented previously, observational research has been shifted to lower levels of evidence and/or the grading of recommendations attributed only second-or third-level grades to recommendations based on results from observational research. In addition, different types of observational study were often listed together in one group without differentiation of study designs, and often were not presented in their completeness. For example, several hierarchies of evidence do not even mention cohort studies at all.

The widespread notion that only RCTs are a valid basis for type A recommendations might delay or even stop decision-makers in the public health sector from devoting attention or resources to primary preventative measures just because, according to certain schemes, no 'grade A' evidence is available. If the sum of all evidence points in one direction and plausible alternative explanations are not present, the mere fact that 'only' observational studies are available should not automatically preclude one from deriving recommendations. So it is clear that the individual experience of the NHS manager can credibly be different to the RCT model. But by holding up a mirror to the people I talked to I wanted, in a non-judgemental way, to see where they sat on the spectrum of the credibility of evidence.

Individuals or the chairs of the groups to be recorded were initially contacted by email with a very prompt follow up by telephone. I outlined the nature of

the project and the contribution I felt the individual or group could make to my initial piece of qualitative research. I explained that all interviews would be taped, but that the material gathered would be considered confidential by me, with no identification of individuals except by some implicit membership of the taped group meetings. All of the individuals I approached were happy to help with this piece of the project, many suggesting this was an important discussion in the NHS that warranted further investigation. All of the interviews were conducted at the interviewees' work place. The meetings that were recorded happened at normal monthly meetings with the agenda of the previous months meeting including an explicit discussion about my authority to record the events verbatim.

I emphasise the mirror holding nature of this work and the questions this raises and the most suitable structural model for this is grounded theory (1967). In addition, what excites me about grounded theory is that it analyses the data with no pre-conceived hypothesis. Rather than searching for data that confirms or rejects my hypothesis, I can spend my time searching out the concepts behind "evidence based management" as they reveal themselves to my cohort of participants. Maybe the answer or question is unclear, but I can conduct a study on the nature of evidence based decision making as it is judged and participated in by NHS managers. A possible criticism of grounded theory is a lack of rigour due to careless interview techniques and the introduction of bias. On the other hand, a working awareness of bias is imperative in all interview research and as long as the researcher genuinely has discarded any preconceived ideas before collecting and analysing data then the interview technique is a neutral tool. For me, I have long gone past the point of wanting to introduce or reject evidence based management in the NHS – I simply wish to understand if, how, when and why it is used or rejected and to reflect that back to NHS managers themselves. For this reason, grounded theory is an appropriate tool.

After Rousseau

The UK government (funder of the NHS) proposes an approach to management that involves executives making decisions through the provision of increased access to information and this is, in itself, consistent with the philosophy of evidence based medicine which features strongly in the compliance and governance process of clinical/medical care. In practice the changing role of the executive in NHS management in this area is uncertain, despite being well researched as the literature review shows. Despite the accountability of executives being very clear and that managers in the NHS are ideally placed between the aspirations of the public/taxpayer and practicing clinicians, they are still ultimately viewed as an addition to the medical-patient relationship rather than integral to it.

Little in depth research has been done into the implications of the philosophical approach that a practicing group of senior executives in the NHS have to the work of the NHS itself and its bases in evidence based decision making. I wish to pursue the work of Rousseau (2006) on the difference in

management response to management issues depending upon whether the decision maker was equipped with advanced knowledge of the effective implementation of Evidence Based Management or otherwise. Sample selection for this testing of Rousseau in a field environment was essentially pragmatic, based upon people who knew me well enough to give frank disclosure, but not well enough to have perceptions about what I thought the “correct answer” is. (I have no view on the “correct answer”).

Elliot (2000) studied the paperwork of managers and clinicians in one region of the NHS and in depth interview and documentary analysis were used to collect evidence. Elliot used the ‘one region’ method favoured in my research proposal for reasons of practical concern – time, money, co-ordination – and also because the concept of the region was meaningful in the NHS. The region represented a natural cohort of NHS managers and a distinct area with a variable degree of autonomy from the Department of Health over how decisions about resource allocation are made.

Giddens (2003) posed the point that - policy makers have to get something out of research if they are to use it. Further, that it is necessary to consider which arguments are likely to be useful or gratifying to which policymakers. Giddens makes the point, significant for myself as an NHS employee studying the NHS, whilst part funded by the NHS to undertake the academic course and research, that it is still valid for the researcher to influence policy makers through an extended process of communication.

A synthesis from the literature of Rousseau proposes a juxtaposition of management decision making between systems that adopt evidence based management and those that avoid the use of research. The questions proposed by Rousseau are worthy of further discussion with practicing NHS managers. Some additional ideas were encountered in the literature review. Learmonth and Sambrook (2006) both say that the significance and implications of management language are an important part of this study, but it is difficult to continue to pursue this area within the conceptual framework. Conversely, Mello (2007) writes about the preoccupation of management with norms and averages and this “myth of the mean” is a particular branch of decision making tools that is possible to consider further. At the core of the conceptual framework is an evidence based organisation of knowledge, and supporters of this school of thought are sceptical about experience or wisdom. Sherman’s model of grading evidence from weak to strong, based on rules of scientific inference, would say that Mello was correct. In Sherman’s (2002) view a manager who uses evidence but then ranks this evidence against normative performance/behaviour is guilty of weak decision making just the same.

Medicine is a success story as the first domain within the NHS to institutionalise evidence based practice. The literature says that more than scientific insight is needed to create evidence based practice. Guidelines do not of themselves, equate to evidence of implementation. An evidence base

can only improve outcomes with adherence and therefore it is necessary to note that the heart of the conceptual framework (an evidence based organisation of knowledge) is only a partial proxy for applied evidence based decision making.

Tony Kovner (2008) commissioned 14 case studies on management interventions in health care organizations using an evidence-based approach. Kovner found the managers did not follow a rigid template but made significant attempts to properly frame research questions, obtain evidence with a balance of viewpoints represented, decide whether the intervention could be adapted to their organization, analyze what it took to make the intervention actionable, and consider whether further evidence was needed.

The interventions involved: emergency preparedness, leadership development, the chief learning officer, forming a corporate university, criteria for hospital evacuation, chronic care management, improving pain management, improving health of underserved children, the business case for a hospital palliative unit, state Medicaid management, quality management in home health, inpatient planning, and improved operating room scheduling. The authors and editors of these cases studies believe that managers in these context had better evidence than is customary in considering these management interventions.

Kovner concluded that evidence-based management is not widely used by health care managers for the following reasons; first, the business case for return on investment has not yet been reliably made. Second, widespread use would shift power away from senior toward junior managers. Third, hospital boards do not regularly review the quality of the managerial decision-making process. David Fine suggests that in the field of management, unlike clinical medicine, students are not taught to value and depend on studies as physicians are, and in part because of the lower priority, there are fewer studies done.

Whatever the merits of evidence-based medicine, it got off to a rocky start. When Guyatt began championing it back in the 1990's, he called it "scientific medicine," but he learned quickly that if you want to start a revolution, it helps to pick the right slogan. Many of his colleagues were outraged by the implied insult to their expertise. So he quickly went with "evidence-based", and tempers cooled.

Little in depth research has been done into the implications of the philosophical approach that a practicing group of senior executives in the NHS have to the work of the NHS itself and its bases in evidence based decision making. I wish to pursue the work of Rousseau on the difference in management response to management issues depending upon whether the decision maker was equipped with advanced knowledge of the effective implementation of Evidence Based Management or otherwise. Sample selection for this testing of Rousseau in a field environment was essentially pragmatic, based upon people who knew me well enough to give frank disclosure, but not well enough to have perceptions about what I thought the

“correct answer” is. (I have no view on the “correct answer”).

Grounded theory and qualitative material

The overall aim of this research model is to enhance good practice in the craft of management in the NHS. To achieve this aim my objective in this piece of qualitative research is to conduct a systematic investigation into current perceptions of evidence based management including perceived barriers to its use and also including perceptions of good practice in the use of evidence based management. It was also necessary to begin to ascertain perceptions of skill deficits in this area and factors viewed as contributions to these deficits. The effect of the researcher as an observer is unknown. It could have an effect on the interviews and it may inhibit parties who participated in the review of meetings. A further limitation of the study is that I only included leaders from within the NHS East Midlands and it is possible that NHS regions may be more or less equipped to engage in a discourse about evidence based management. The strength of this study is that observation and participation with individuals and the groups by the researcher on an ongoing basis in the NHS in East Midlands increase the credibility and trustworthiness of the findings.

Even champions of evidence-based practice acknowledge that the approach has limits. “Some things can’t be tested in randomized trials, and some things are so obvious, they don’t need it,” says Dr. Paul Glasziou, director of the Center for Evidence-Based Medicine in Oxford, England. (2007) There have never been randomized trials to show that giving electrical shocks to a heart that has stopped beating saves more lives than doing nothing, for example. Similarly, giving antibiotics to treat pneumonia has never been rigorously tested from a scientific point of view. It’s clear to everyone, however, that if you want to survive a bout of bacterial pneumonia, antibiotics are your best bet, and nobody would want to go into cardiac arrest without a crash cart handy. “Where randomized trials are most important is where you’re trying to affect a long-term condition, like stroke or cancer,” Glasziou says.

Finally, the very definition of evidence-based medicine is something of a moving target. Physicians who encouraged their female patients to take hormone-replacement therapy to prevent heart problems later on were practicing a kind of evidence-based medicine, since the best available evidence at the time – observational studies and the like suggested a benefit. Of course, when a randomized controlled trial showed otherwise, the advice changed. Even at that, the case is not entirely closed. Some researchers now believe there may be a window of opportunity right around the years of menopause during which hormone-replacement therapy could help the heart. Proving that would, naturally, require another study.

All the same, few people deny that the trend in medicine is increasingly to be guided, if not governed, by the data an idea that is spreading to other fields as well. Evidence-based practice is now being taught in nursing, general education and even philanthropy, thanks to the influence of the Bill and Melinda Gates Foundation, a results-based group if ever there was one. You

could see even the political fights over global warming as the birth pangs of the new practice of evidence-based policy.

But it is in medicine that the practice will have the most emotional impact. All patients would probably benefit if their doctors were abreast of the latest data, but none would benefit from being reduced to one of those statistical points. “You have to be able to take a good history and do a physical examination,” Guyatt says. “And you have to have an understanding of patients’ values and preferences.”, there is still as much art to medicine as there is science.

Revealing the role of the manager in the NHS

Five in depth interviews were held with leading managers in the NHS. Three meetings of senior NHS managers in the East Midlands were also recorded. Interviews were transcribed verbatim and interpreted with the aid of template analysis based on the Rousseau model as summarised above. The interviews and the meetings were structured around three major themes from this analysis concerning the extent to which the participant believed evidence based practice is a norm or an ideal, what tools they and other NHS managers actually used and whether public and politicians want decisions made on the basis of the best evidence possible. Let me start the reporting of this interview with two of the leaders who have been on both sides of the clinical and managerial debate, starting as clinicians but latterly attaining real top jobs as executives.

Right, well I think in medicine, it's sort of the norm in that there is a real status to understanding the evidence base in medicine, so the medical hierarchy is based on a sort of expert model, if you know the most, you're the most important and so they work very hard to demonstrate that they know the evidence base; you see it in junior doctors particularly, they are very keen to say, not just that they know what they're doing but that ...d...d...d....d – here's the evidence base to support it and therefore promote me! That's the sort of view you get. *(Respondent 5 is a doctor of some seniority working outside of the hospital environment who has transferred to a managerial role by career progression but is well respected by colleagues for technical understanding of medicine).*

For senior managers, oh I suppose consultants in the Health Service, it's a kind of expected thing, but that's all about the management of patients; and although people profess that, if you really pin them down on the evidence, a lot of the time the evidence is not what's supporting it, it's a sort of dogma around the subject that often isn't challenged very often, and I think that's one of the reasons we have lots of variations in clinical practice, because the evidence 20 years ago, is know very well by some consultants, and they've carried on doing the same thing regardless of what's happened. *(5 again, this time revealing one of the hidden aspects of this dispute between doctors and managers – whether evidence still counts as evidence over time or whether its value diminishes rapidly, more rapidly than career progression).*

*You write a letter to an MP and you can get an intervention tomorrow can't you so! But they don't want to intervene based on evidence though, they want to intervene based on electoral support. **Ok**. So if you look at the things that've been prioritised by Health Secretaries lately, they've all been around what the public say they want; the public say they want cleaner hospital, they're frightened, so that's top of the list; they want shorter waiting times, ok, so that's top of the list. And, what's the latest one, I don't know, but anyway, that's how it works – they haven't looked at the whole system, what does reducing the waiting time to a certain level do to the rest of the system, what things are not prioritised as a result? So they haven't taken a scientific approach to what would make things better. (5 in response to a question about whether there was any respect for evidence based decision making amongst political leaders).*

*I think that's a very narrow definition of management ...**carry on**.....to me, that's a definition of planning. My definition of planning is about ensuring that those who have responsibility for resource and allocation, do so in an informed manner, that's almost the same as what you've called management – the allocation of resources, scarce resources. To me, management is the function of achieving organisational, or achieving the objectives which are set for you, you do that by management, and that can be about resources, it can be about resource utilisation, it can be about service provision, it can be about moving the chair from one side to the other, moving 100 chairs, I think you need management tools, techniques and processes, and that to me is what management is about, it's about a set of tools, techniques and processes which achieve an objective. (Respondent 4 is a clinical who, though successful in that arena, decided to move into a more generalist managerial role rather than lead a team of clinicians. He is answering a question about whether their skill set acquired in clinical settings had benefited their managerial practice. The respondent disagrees with my concept of management).*

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The use of qualitative material as a quantitative person

Accountants do not traditionally deal with qualitative data such as whether a patient was happy or sad or whether it looked like to him, that his father would die when a patient brought him to the emergency service. Qualitative data is not objective. It cannot be reliably verified. Quantitative data can often be verified – you can see the evidence on paper that it is correct. Accountants like myself, like things to be clear and unambiguous, for there to be no doubt, for the amounts presented to be clearly verifiable. In this document and throughout document 3 and document 4, I will be following a reflective journey concerned with the need to be more flexible, more willing to embrace new sources of data from qualitative sources. There is still a problem that I face through traditional research designs usually rely on a literature review leading to the formation of a hypothesis. The literature review (this document) has not, however, helped me to create a test capable of experimentation in the real world as I had hoped. I have read about grounded theory and discourse analysis and hope that they may prove appropriate tools to keep some discipline and structure in my thesis despite the problems I am facing.

The literature review offers the following insights.

Discourse analysis (1952) is defined as “concerned with the interrelationships between language and societies and as concerned with the interactive or dialogic properties of everyday communication”. To this are added two subdivisions – genre and ideology. All of this is relevant in my study of management in the NHS because of genre and ideology. What is vital for the reader to understand as we progress on to the analysis of a specific decision, is that, without retro-fitting onto my material there was something that I hadn’t anticipated, that a real human narrative evolves and in the conclusion I use the Rousseau model to reveal that however the manager feels about ‘evidence’ as useful in their day to day behaviour they think they are playing a different game.

Through critical thinking or philosophy about the condition of management has existed throughout the study of NHS management, I find discourse analysis as created by Zellig Harris very useful in the analysis of the interviews I undertook. Harris was a true innovator because he maintained that the ‘sense making’ or classification system used is more subjective interpretation that is conditioned by social surroundings and the dominant ideas of its time. Alternative writers such as Poster (1990) or Steele (1997) say that discourse analysis is actually impossible to do with my level of training in the subject. Such alternative writers take a fundamentalist position, that with my interviews, discourse analysis cannot provide definitive answers and the best I can hope to achieve is an insight about any continuous debate but that it would lack conclusion or authority. For me though, what Harris offers is a useful low technology tool that can lead to a fundamental change in the “practice of an institution, a profession or even society as a whole” (Harris). I also like the Harris method because ultimately it showed that it could evolve from its low technology source. It was developed into a system for computer

analysis of natural language by New York University (NYU) and in particular applied to medical informatics. Known as the Medical Language Processor, it is widely used in the field of evidence based medicine which ignited my original concept of a study of evidence based management in the NHS.

ANALYSIS OF A PARTICULAR DECISION

How was the particular decision bounded?

Investigating the criteria used to assess the quality of a decision is a key objective of the research presented here. The way in which evidence is assessed is closely related to the perceived status and credibility of the evidence itself. It is possible to provide an idea of some broad areas the respondents seemed to take into account when assessing the quality of the evidence. The following comments reflect the extent to which the evidence reflects technical expertise in this area and also the neutrality of judgement when faced with the evidence. I chose to focus on a particular decision. The cohort being followed were charged with conducting a deep clean of clinical areas in the NHS in response to high profile media and political concerns about infection rates and the effect they were having on patients. The worst outcome for patients is for those with poor health and reduced immunity due to a range of factors (age, diet, morbidity) that proximate exposure to these infections would in fact kill them. That much was agreed by the cohort but the decision was around the way they approached the instructed solution of a 'deep clean', and the extent to which the assessment of the quality of evidence is used in that decision. A subset of this observation is the extent to which the use of evidence is seen as intuitive decision making rather than the systematic application of criteria.

Turning first to respondent 4 who is, you will remember, a clinician who moved to management early on in their career.

Who should determine the evidence, I mean, you used a very, almost, the answer's in the library approach, is that right, is it people who are skilled in research techniques, is it academics, who is it that gathers the evidence? Well I think the evidence does tend to be gathered by academics, but then there's a body of evidence which is experiential and gathered up by the individual. (4 what he is saying is that the answer to deep clean might be something that universities can be equipped to design solutions for there is something even more important in the role of the individuals that interprets and develops the academic model. Remember here we are talking about 'deep cleaning' to rid hospitals of deadly bacteria – a decision more closely related to laboratory control than most clinical interventions and yet the sense that it isn't quite the whole picture prevails).

*The bare below the elbows thing – **ok** – I was in a Board meeting with my Chairman, where he was adamant we'd got this letter from Alan Johnson saying that all hospital workers should be bare below the elbows, so they shouldn't have watches and rings on and things like that, so that it would*

promote hand washing and it would reduce infection, he was adamant that, this is what the Health Secretary says therefore it's policy, and we must do it, and he wanted us to write out to every clinician telling them that we're going to do this and we're going to come in and do spot checks in hospitals. (5, our eminent doctors, rebuts the policy that his own boss is using. 5 demonstrates a deep despondency with his bosses response to politicians and glumly reflects on the lack of evidence for the policy!).

Next, we turn to our first recording of a group response. Group responses are always bound by a box in this report to enable the reader to understand that such things were said in a meeting, rather than by one person. In a meeting, ideas diverge and converge and the linear pattern I give to the quote is a faithful representation of the idea, but that the people speaking may have been numerous.

3 is a group of people who meet monthly to review how their own organisational response to the NHS might work with other NHS organisations to smooth any avoidable conflicts and contradictions. Remember that, although all part of the NHS system, these people are executives in charge of statutorily independent authorities and accountable to the public as such.

And I went to the Chief Execs column ergo, seminar in London, David Nicholson (the Chief Officer of the NHS nationally) was up on his feet and he said, I go round the country, and he said, some people would rather have an argument with me about whether there is any evidence base about deep cleaning, than get on and do it, they need to just do it. I thought, what an arrogant pig that man is; well he isn't, because he's a great guy, but from their perspective, they have a different viewpoint on the world, their viewpoint is, the public have lost confidence in the NHS, the public must have their confidence restored in the NHS for their own good and for the good of the politicians. (What is of note here is that the whole group of 3 reflects what respondent 5 said that the policy was more important than the evidence. In fact, the de-facto top manager in the NHS was saying so and despite some initial disquiet about the personal motives of David Nicholson, even he is distanced from the politicians in the implementations of policy. Ultimately, the political imperative is and was respected though).

So you need to disentangle the means and the end, and focus on the end, so I guess the end in this case was restore public confidence, and it might have looked like strange move, like throwing money down the drain, strange way of improving the service, but in the eyes of the department, it was getting there, but what they sometimes fail to acknowledge is down at my level, the credibility is then so low. (6 – the same subject, but discussed at another meeting a week later, 6 are a different, but similar group to 3 and they reflect two things. One, that a week later the group are a lot calmer than 3 about the lack of evidence for the policy, but two, they demonstrate more concern that the level they are operating at – though still very high – is a level at which the politicians ‘just do it’ imperative is beginning to lack credibility).

Did the decision lend itself to evidence?

Different managers agreed that clinicians, their staff and indeed the politicians (perceived to be the source of this objective) needed to be exposed to multiple interpretations of why this decision was made. Conversations with politicians concentrated on what was going on ‘out there’ in the media and the public discourse of the problem/decision. Conversation with clinical staff often concentrated on the issue of the perception about what had caused this decision and differences between professionals interpretations of the solution/causes of the decision. The decision did lend itself to evidence, but the conclusion from the views expressed by the interviewees is that consideration of the evidence in making a decision was both vital and in fairly short supply. There was a thematic response that any evidence used in the decision should derive from both an outline theory of the nature of the problem, but relate closely to the practice of NHS management that means that given the potential lack of general management expertise in the area, any evidence ought to be accessible to NHS managers if they were to paint an organisational map that helped them to make decisions.

And that’s typical of a political response, and the medical view of that is absolutely damning, and the difference view is that the politicians are saying – look – we know this works it’s completely sensible, the politicians want it to happen, we know the public want it to be done; what’s so special about these doctors that they can’t wear short sleeved shirts and just do it for the patients’ benefit. And it’s not acceptable for them to say no, they should just do it, and we can manage this, we can make it happen. (1 returns to the earlier

concerns that 5 had about short sleeved shirts. 1 though, if not a doctor, but a practicing manager, who comes from a non-NHS background in industry, but one has been a ground breaking respected NHS executive/leader for 7 years now).

Well, it's an interesting thing, I mean, I guess I've learnt a bit over this, we all got it and went, how ridiculous is that, you know, do they think we don't deep clean areas, you deep clean it, and the minute somebody sets foot in it it's contaminated, it's stupid, witter, witter as you do. (7 is a group of people tasked with the actual implementation at the sharp end. They have roles that have given them accountability for operational delivery of this policy in clinical environments).

And it is clean, we threw some measures at it, we've increased our antibiotic prescribing policing, we put a half time post in there, we've made such a saving on the antibiotic prescribing alone, that we've made that up to full time now and it's still releasing cash which we are putting into cleaning; so I'm not looking to take money out, I'm looking to reinvest it, the place is a lot cleaner. (1 manages to take a pragmatic and organisationally beneficial response – a cleaner hospital – to a policy which, as a member of 3 (group) he would have accepted was flawed from an evidence base).

The uniforms are important, because that's about visibility, so that's what we are doing internally. (1 deliberately develops this opportunistic response. The public has in its mind a fixed view that dirty uniforms or uniforms worn outside of hospital, contribute to the spread of infection. Whilst disagreeing both individually and collectively as part of 3 with the evidence, respondent 1 is again willing to take the opportunity to make some pragmatic and necessary changes to maintain public confidence).

I asked the individual executives about how they had appointed the person to do this job. What were the characteristics of success they sought for this job. Respondent 2 is somebody who has occupied top executive roles in the NHS for the last 20 years and is, in this case, commenting upon somebody who is a member of group 7.

They all did their numeracy test, their verbal reasoning, and went through some 1:1 interviews, 15 minute talk when I told them what I wanted, and then they went through a formal interview. The person who scored the highest on the numeracy, never had a chance at the job because he didn't have the personality; the one who scored the highest on verbal reasoning, was ok, but would never have convinced people of the direction to go in; 'A' scored pretty badly on both, had a blazing interview and she got the job on personality and

potential. I only ever appoint people who can't do the job, because if they can do the job I won't appoint them because they have no where to go. (2, so it is very clear that personality is considered a vital attribute in carrying out this policy and that the individual who carries out the implementation must have developmental capacity. Worth noting is that 2 is pragmatic about how the leader for the task is chosen and whether evidence was of any relevance to the policy anyway).

Take infection control, because you mention that as being one of the greatest, ambitious gains be this government over the next six months to try and restore public confidence, but as you've said, no real evidence base, that anything we're doing is going to affect the world, how does that play out because you clearly identify yourself as wanting to give the public confidence in you being a good custodian of their health service, versus the method that would do that is not really evidence based. No it isn't, and what we've done is made, we've taken some decisions none of which were evidence based. (2)

In summary, I will leave my answer to whether the decision lent itself to evidence to my respondent 4 – the clinician in the past.

And we've seen that already, time after time, the decision on cleaning wards, deep cleans, is not an evidence based decision, it's a decision based around context as much as anything else. I agree, it's good, it's cheap actually, it improves the reputation of the NHS and gets the public off our back, around something that evidence will say will always be there called MRSA, it's actually not bad, the fact is a bad decision on one bit of evidence; so I think subjectivity and judgement of different evidence to make decisions is a real subtle art. (4, I emphasise again that bacteraemia are laboratory tested and counted. This is as near to medicine – by – numbers as it is possible to find in the NHS in 2008 and yet there was no agreement that evidence clinically backed the managerial response. But it was accepted as the right thing to do despite explicit knowledge by managers that this was the case).

Links back to Rousseau and my learning process are available in many ways:

This has changed the way I see things in the following ways. Rousseau starts from a principle that Evidence Based Management will enhance the overall quality of organisational decisions through deliberative use of relevant and available scientific evidence. What is omitted is that NHS managers have a vast behavioural science base relevant to effective management practice on which to draw and yet they choose or one forced to choose by politicians, experimentation and redesign of practices, structures and remuneration that reflect on ever changing (dynamic) social value and mission for the NHS. Therefore, what Rousseau overlooks for the NHS is that the single most important part of Evidence Based Management in the NHS is educating current and future managers and politicians in power and politicians in waiting about evidence-based practices applied in running the NHS. I am a clear supporter of the Rousseau method to describe the world with/without an evidence base but it is not sufficient in itself without using organisation such

as the NHS Institute and HHS Library as a repository of cares and tools that can inform the distribution of evidence based management in the NHS.

If anybody else takes on this research I would start with a tighter definition of the area to be considered. Whilst in an earlier literature review it was important to contextualise all of the players in the NHS using the “decision making box” it is clear from that work that evidence has different meaning to taxpayers – the media – patients – politicians and NHS managers. The Canadian Health Education and Research Foundation, the centre for Health Management Research and the Health Research and Educational Trust of the American Hospital Association all have structures to begin building management communities promoting Evidence Based Management. My recommendation is that a future researcher working with a similar cohort in this area asks the question of whether their study group has the characteristics of a receptiveness to EBM that would enable them to undertake just such an initiative.

It is possible to block out or be more blinkered about Rousseau in the following ways, like evidence based medicine the Rousseau model needs to consider that the professional is not a robot. Education about the method still requires judgement in its application. The NHS manager must also consider the circumstances of the decision and the ethical concern that the management decision may provoke. For example, immediately prior to a general election is not an easy time for an NHS manager to promote the idea that the NHS might improve its efficiency by paying cash incentives to drug users to attend Methadone clinics but to deny the ability of a woman to top-up her cancer treatment by co-payment for drugs. Whilst both decisions may be made by contemporary NHS Chief Executives on the basis of a developing evidence base relevant to effective management practice neither decision alone (and definitely not when they are juxtaposed) will be considered appropriate to the circumstances of an election nor ethically appropriate when portrayed by the media. So I would be more blinkered about finding out what parts of the ‘time’ horizon it is appropriate to take a Rousseau type decision in. In this way, it is important to remember that Rousseau is only describing an hypothetical NHS organisation that uses Evidence Based Management wildly in contrast to the same organisation as a hospital provider where Evidence Based Medicine will most likely actually exist.

What 5, the eminent doctor, brings to the discussion about evidence, is that it is bought into at one level but not implemented. 5 returns to a theme used earlier by him, that evidence needs not only to be relevant to the decision, but time sensitive as well. Here he discusses the causes of hospital acquired infection and whether it was preventable.

I know in several cases clinicians sat down with the architects and drew in what needed to be done, but of course, by the time the PFI arrives, it's all been taken out through cost savings, so the doctors' view is, so you managers are putting us in this position, in conditions which predispose to hospital acquired infection, you won't do any of the things of which there's a very good evidence base that it would make a difference, and so your first engagement

*with us, is to come and tell us to do something for which there is no evidence that any infection has been prevented, anywhere in the world – ever – by doing this, and you think that's the most important thing that we should do. Furthermore, you're effectively saying it's our fault, you're blaming us for the infections, when actually it's all your fault! (What 5 has done here is to draw together two ideas seen earlier – that an idea needs to use evidence, but evidence can be too early to be c** or too late to still be valid. 5 concurs with the idea that 3, 1 and 6 had that the politicians damage managerial credibility).*

Yes, I think the public as body public, would expect evidence based decision making, and quite rightly expect that, and would want it as well. I think the public as Joe-individual probably would expect, would want it, but when it came to them, would probably bring in other subjective assessment criteria. I think politicians are a bit different, and I don't think, whilst they would probably in a purer discussion say, of course we do, I think they will always, and evidence is always driven by context, they would always want their policy implemented – evidence or not. (1, the industry transfer to the NHS concurs with 5 – anybody can buy into the idea but nobody wants to deal with the inconvenient application. Further, I heard that:)

Ok. *So the black and white, the gold standard, the RCT's and so on, that is an academic gathering, and some of the big research studies, you know, we all go back to Mintzberg and all this sort of stuff don't we? So you look at some of the big bits of work that they've done, that is the academics, but I think there's also something about as you move up through a career, you gather experiential evidence, because the context in which we're all operating is continually changing, and none of us enjoy the context in which the research for x was done. So, you know, the operating of the context in the NHS from the political to the economic to the sociological, never mind the technological, the demographic and all the other bits of changes that are happening. (4 is saying that there are good reasons why the RCT basis for a solution to hospital acquired infection may be scientifically robust but organisationally naive).*

Mainly for the good of the politicians, but, it would help the public if they didn't feel scared to death every time they came into hospital. Therefore, we must do something to restore that confidence, what shall we do? (3, the group acknowledges that the public are concerned with confidence rather than evidence, but what group 7 conclude is that with a little more patience, we could have restored public confidence and been scientifically robust).

So, what worries me about that is, was it for the public or was it for the politicians? If it's for the public, I think they'd have thought about it a bit longer, a bit harder and picked a better thing! But then I'm just cynical!! (7)

Finally, this issue of buying into the evidence at one level but not implementing it, is given a humorous twist by 2. Maybe, evidence is only the retro-fitting of lunatics and prejudice after all.

The number of times, and as an accountant you can probably relate to this, the number of times when you look at something, and you come out with the answer, and then you spend time working it up to demonstrate the answer's right and question it, and when you get to the end of the process, you came up with the right number in the first place, and there is something inside people, I have this sort of belief that there is something inside your brain that assembles evidence (2)

The decision making structure

Managers demonstrated a world view in terms of their preference or otherwise for evidence-informed decision making. The decision making structure was seen to reflect a theme that analysing, presenting and delivering this task within the NHS required considerable charismatic management not just an evidence based focus. Occasionally the cohort singled out a specific group who in their eyes particularly needed help in understanding of and/or participating in the decision.

The doctors' view is, ok, 20 years ago, when you were building this hospital (because we've been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you've got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can't clean round the beds. Because there aren't enough beds, you've got too faster through put, so people with infections are moved around the hospital. (5)

I don't know who they asked, they picked the wrong things, but it kind of doesn't matter, do you know what I mean? If they are wanting to change perceptions, you know, if they said, paint your hospitals pink and it will deal with infection, we might have said what a load of crap, but if the public believed that pink hospitals were less likely to give them MRSA, it would have the desired effect. (3)

I mean, I had this very argument with my technical directors, look, I said, look, if people will believe painting the hospital pink will make them safer, then we'll do it. I don't care, that's what we'll do. (3, what is interesting here is that 'painting the hospital pink' has quickly and previously entered the groups language as a shorthand for any method chosen to deal with this problem that is organisationally robust, but evidence weak).

I'm a Chief Exec who is not one who will try to lead totally by charisma, I will try to do it by persuasion as well, and persuasion has a body of evidence behind it – even with my directors, when I want things to go different ways, I will often work with them on a 1:1 basis and show the evidence, so that I can get a quick decision later. You know, and there's something about, I think the evidence has got a role and responsibility. (4 manages to show that evidence takes time to consider and that a speedy decision making process may necessitate protected time to consider the evidence. That means implicitly that evidence does not inherently present to decision makers in an easily digestible form).

1 makes a vital distinction about the nature of decision making in the following quotation. When asked about who and who wouldn't use evidence he draws the answer towards whether you want to make a transformational change to the NHS or simply be a good leader in the mould of the NHS of that day.

It's interesting Nissan for an example, on their in-house college, they're very clear at saying to people, good leaders will keep this company afloat, great leaders will write a new chapter in the history of this company; do you want to be a good leader, or a great leader – because they will train you to be both, but they ask them very, because you know, are you willing to have an ambition for writing a new chapter in the history of Nissan, or do you just want to be the person who keeps the shareholders happy. (1)

THE APPLICATION OF A VALUE SET AND DISCOURSE

What part does blind prejudice play

The implication of blind prejudice for the objective of enhancing good practice in NHS management are profound. What we perceive as 'good practice' itself is called into question. This would imply that there was error in the NHS managers themselves rather than the context in which they find themselves. Whilst there will be a blurred distinction between heuristics and prejudice the term 'blind prejudice' might most usefully be applied to ignoring any conformity with accepted good practice where evidence to inform the decision is simply not sought out. The use of blind prejudice in this context is usually driven by a

desire to succeed in the political context – it is simply an exercise in power. There are many potential decision makers out there, but only so many posts, awards, organisations and years in a career and in the competition for resources and power, blind prejudice is simply a rejection of evidence where it does not enhance the standing of the individual decision maker. The individual is required to be a strong leader, not an evidenced decision maker.

And that's kind of inevitable, but the way I kind of play managing this Trust, you know, if I see a journey, the way policy works, it's seemingly, you know, I think we're going there, the government says we're going there, and all of a sudden, we're off up here, or we're off up there, or we're going down here, and we'll probably go back up there and then we'll go down here.

You know, my job I always think is to translate policies, a bit like a pendulum, know where it's going to settle, and it, you know, somebody keeps bashing it and it's swinging around, you know where it's going to settle, and the trick is I think, to describe what's happening, which may seem a little strange, you know, introducing competitions, subsidising competition. (3)

I can justify that to my organisation, in terms of it being the government wishing to give people choice, wishing to drive up quality, yes it's tough, yes it has very difficult set of issues for us to handle, but they're doing it because they want care to be better, and so you're always describing the end point, and trying to make sense of it and what's more trying to use it to get you to that point, and sometimes that means I sort of half ignore things I've been asked to do, or I throw myself at them with absolute huge enthusiasm because they seem to be going in the right direction.

How do you think you respond to oratory? *You know, if you see a great speech does it leave you cold, does it leave you questioning? I can be admiring of it, I can be motivated by it on a good day, although I tend to be quite analytical and I reflect on things. My nephew said the other day, we were going to see a film at the pictures, and he said he didn't want to go with anyone, he wanted to go on his own, because he didn't like talking about it afterwards, the way you all do, I think I'm a bit like that really, I like to kind of mull things over, and allow things to connect. (3)*

Do you read at all? *Hardly ever, only on holiday; I never read papers, never, I only open the pages quickly in the Health Service Journal. I used to read the Health Service Journal more than I do, but now I just sort of flick over the news and see what's in there, and put them in a pile to read until it falls over, and I throw them in the bin! – recycling, nowadays. (3)*

We had a doctor here say to us, we don't have to comply with the Health Care Commission standards because we're not a hospital! What's that about?

Yes. What end is that a means to? Certainly wasn't about better patient care. The trouble is I think, we half bake the rules and that's even worse than not having any at all because people can make things fit. (3)

Trillion times more complicated than a car engine, but there is no manual for the NHS, so I kind of take the view that there is no evidence on which you can call; when you evidence assess drugs, I mean there are lots of drugs you use for lots of different things, but it's only evidence when you've tested it in circumstances in which you want to draw a conclusion – ok – so it's got to be the drug in that category of patients, and not the same drug in a different category of patients, so it's very specific, and we never, ever have that. (3)

So as a reader I conclude that the cohort will use clinical evidence, I think managers are very much into the development of clinical pathways, working with clinicians and doing the best things in the best way. But as to how the NHS works, the sort of infrastructure, where services are located, how they're delivered, I don't conclude that they do use evidence, I observe there is some, scientific evidence in there, they'll look at journey times, and they'll look at volume, populations and the needs of that population (not been done very well until fairly recently). So they'll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based.

So what I as reader need to be careful on evidence of course, as always, is to make sure it doesn't just fit in with their own values and your own beliefs and actually be a bit more critical about that appraisal. That's one of the reasons for having a narrative conversation, is so that you don't have to pull all your sources out at the same time, but the method seems to have gained some understanding of the role of blind prejudice. To conclude from group 6.

I think in organisational change type evidence around management tools, techniques, where the evidence can often be seen to be quite a subjective set of evidence, or the context when it was developed, might have been different from today – yes you know, the evidence around change management is, there's lots of articles, lots of books and lots of research around change management, in my mind they come down to two things, one is it's like a pendulum, you push it bloody hard and it will finish up where you want it, or the other way you just gently nudge it to where you want it. Now, they are two total extremes, but you can find the evidence for both approaches. (6)

The acceptance or rejection of challenges that don't fit the value system

Let me start this section with a quotation from '4' who swapped between clinical and management roles.

I think my need for an evidence base would have been different at different stages in my career; the fact I've come up the clinical route, I hope I've use an evidence base for my clinical work previously. I've sought an evidence base for the interventions I've made to make things work and happen differently throughout my career, because it seems to me, if it's worked somewhere else, ie, there's evidence it's actually helped somebody else gain objective or reach an objective, it's probably worth trying here. So the evidence might not be gold standard evidence, but there is some evidence base to what I do. So I think that probably never peaked, but since I've been in management roles, I think I've always had, and considered evidence for the way I operate and what I do. (4)

Maybe a way to view this is that rather than viewing evidence based practice as squeezed out of the prevailing value set of NHS managers, it is anticipated that evidence based decision making may become the mainstream approach of the near future. There is a need therefore to review how the NHS managers recorded accept or reject challenges that don't fit the prevailing value system, how do values adapt? If the NHS is living through an era that does not favour one or more potential methods of decision making this may be temporary. How does NHS management introduce alternative approaches and consider whether they may become acceptable and even desirable. Can the NHA managers allow themselves to have a critical account of their own management? The record of the interviews says that this self critique is happening, but at the same time, the overall picture is one of the forces of orthodoxy maintaining the "status quo" (as portrayed in the Rousseau model). This, whilst it is possible to see that the NHS managers may be disposed to accept challenges that fit the value system, it is part of the natural balancing. None of the managers expressed a desire to explore the 'eccentric' (or abnormal) values that challenged the prevailing orthodoxy but they were willing to be flexible and accept challenges when they could point to something particular that prompted the change.

At a particular point in the conversation this rejection of the rules, this acceptance in the executive was becoming clear so I asked an explicit question.

Ok. Do you think we back off, from the implementation of the rules sometimes? *I think we do, yes. Well they are sort of political; some of it is a genuine means to an end, and I can see that: the reason we brought the private sector in and allowed them to be paid stupid amounts of money, is to get them in, and maybe the same as with practice based commissioning, now they're talking about paying them tariff, albeit the same tariff at the very low end complex work, I suppose it's a step in the right direction, but we usually do it because we've fallen flat on our face, rather than we ever had a grand plan. (8, who was an executive recently arrived in the NHS after 3 years away in the private sector, and a successful 20 year NHS career beforehand).*

So I asked the same question to 5 and there was broad agreement that sometimes the rules needed to be broken but because the rules themselves, although based on an orthodoxy were stupid!

There was something Melvin Brag was whittling on about on the radio whilst I was driving, about people who believe there was black blood and red blood and all about bloods being out of balance, and they used to bleed you, oh for Gods sake! But then we used to burn witches at the stake too didn't we! (4)

This wasn't the first time BBC radio 4 was used as a source of reference and this stimulated most noticeably a quotation I heard almost as an aside from 1 when we were just starting our talk together.

I'm just listening on audio, to the Blair Diaries from Alistair Campbell and I'm not so sure there, I haven't got far enough into it, so great leaders, I think, do have an evidence base and do consider the evidence, whether they - keep on going back to it, how they then fit that into the context of the situation of where they are, I think decides on how much credibility they give to the evidence. (1)

It became clear that these executives did not stand alone in their decision to accept or reject challenges to the prevailing orthodoxy, they were very concerned that 'we' (the cohort of NHS managers) had sometimes used the wrong benchmarks in assessing performance and evidence.

Another thing is, we get complacent about, we compare ourselves with ourselves, we talk about world class commissioning but we never look at what's happening in the world, we look at what's happening down the road, so if you look at Children's Services for example, our Children's Services, our best Children's Services are some of the best in the world, but our worst Children's Services are terrible. And if we look at outcomes compared to Europe, and the Unicef study compares us with most major economies, not just in Europe, and we're right at the bottom of the heap for Children's Services, why should that be, when we know that our best services are absolutely up there with the best. (5)

To that end the self-critique is not just of their own approach to evidence, but a critique of whether the group they identified as we had got their own orthodoxy wrong and that they were trying to evolve an answer or change from within rather than shouting from outside the team.

Finally, the conversations turned to people who were considered to be outside the value system. Firstly the politicians and their motivations were seen as a major challenge to whether evidence based decision making was welcome.

Politicians, do politicians want evidence based decision making for the NHS? No, they want to be elected, and that's the bottom line, and as long as you remember that, then everything they do is completely understandable! (5)

And then the public – who despite being patient, customer, taxpayer and friend to the NHS:

The public has very limited perceptions as to what the NHS is, and if you say to people, just list me the NHS from 1-10, it'll be ambulances, A&E, GPs, maybe surgery, and that's about it. Where's drug and alcohol abuse, where's mental health, where's learning disabilities, where's speech and language therapy, where's GUM, aren't anywhere to be seen, and that's because as a society we foster it, don't we, where are the bright lights, they're on an ambulance, they're outside A&E and the GP down the road, and of course on TV. (2 were considered to have little to add to the evidence based debate not because they couldn't cope with the debate, but that 'they', including it must be said, those who worked within the NHS in some cases, had a fundamental lack of insight into what the NHS down).

Lastly, and probably telling in this consideration of challenges that don't fit with the current system, is the sense that evidence based decision making cannot ever win the day by hegemony but it cannot be disregarded either.

*I'd expect them to do nothing which is contrary to the evidence.....**ok, I'm interested now**.....*firstly I'd not expect them to do anything that's contrary, I'd expect them, if they don't follow best practice, to have thought why not, and to be able to justify that to themselves, and therefore to the organisation. (2)**

The hegemony of organisational structure – reproduction and transformation

Managers in particular in this project, described a situation where their own control over the decision making process had been to some extent, lost through the requirements of audit and the promotion of certain themes consistently in the NHS. Executives have to be seen to be performing in an overt and accountable way and their work must be visible and subject to audit and inspection. A model of performance management is contrasted with maturity of thought and debate over the use of evidence. The external pressure for conformity and consistency is seen to result in high quality decision making tainted by group think. Managers cannot always dwell on particular topics or pursue the evidence base for what they are doing (or being told to do). There is a pressure to be overtly productive in the presentation of solutions rather than consideration of evidence. The interview and meetings material touches upon some of the complex relationships between established management culture, career needs of the managers themselves and the conduct of evidence based decision making. The pressure to obtain recognition for both themselves and their organisation may encourage a pursue of more credible 'target hitting' and leaves insufficient time for a consideration of the evidence in shaping organisational structure. In general, as described in this qualitative material, the current organisational form may discourage evidence based decision making and the need for reproduction will be perceived as less risky.

What I was really trying to say is, why I guess, why do we not have a think tank of credibility to have these debates, it always seems to come from a policy angle; no matter what the policy sub-group is called, you scratch below the surface and it's always either right wing, left wing, drug funded, you know. There doesn't seem to be an appetite for any environment within which this debate can actually happen. (5)

Fashion. The simple arcane practice of following the latest trend or idea, of importing behaviours from other societies was seen as damaging to an evidence based NHS. In a way it is believed that evidence is crucial to an acceptance of organic (internally generated) change within the NHS, but even higher than evidence in the hierarchy is novelty or importation from other systems.

I mean, we do have experience, we do have learning, we do have other places and other countries doing it differently to us, from which you can learn things, but it doesn't mean that you can straight forwardly apply them. And it fascinates me in a way, because we do the whole army of, the House of Commons is traipsing around the world visiting China and wherever. When ever I meet our local MPs, they've always been somewhere abroad to learn how to do something, and yet, when we do find things that work, it was all Kaiser, wasn't it? Which was an integrated primary and secondary care service, and did we learn from it? No! You know, we almost steadfastly refused to accept that it might possibly work and it was worth considering, because it didn't fit the positive framework of choice and competition. (8)

We put people in positions which are very difficult to back down from, and we've now exposed them in a way, and I think, the fear of world class commissioning will expose the leaders again, and that's why people sometimes abreact when it's suggested that we need to examine our own portfolios, our own evidence base, our own tool box, and actually check it's correct for world class commissioning. (4)

But there was one part of the organisational transformation from importation of ideas that was widely admired – the model of foundation (semi-autonomy) trusts imported from Spain.

One of the things that's happened of course to FTs is that they've attracted a different calibre and type of Chief Exec, arguably. I think, you know, we've advertised for two director posts lately and there are a lot of people who want to work for an FT.....ok.....there are a lot of people moving out of Trusts that wont make it to FT status, so you could say, what we've been doing is sapping the best management resource out of the non-FTs to maintain the performance of the FTs. We've also attracted, I think, some quite different people in Non-Executive roles and Chair roles; the Chairs of FTs, a lot of them are, like the freedom bit, like the get on and do run a business thing. (3)

The key distinction between a leader who had risen in confidence and therefore had the ability to avoid simple replication, is that they were given protected time to personally develop.

I think there would be nine very close opinions of what management is, because I think leaders, or people who have got to leadership positions at any part of the organisation with some development behind them, as opposed to just by natural progression, tend to have been on development programmes, where they have spend a lot of time considering leadership as opposed to management. Management is a tool and a technique, leadership is a bit more than that. (4)

Equally it was possible to distinguish a large amount of individual autonomy that would be given to and/or earned by people who worked even for some quite direct and authoritarian managers.

And if somebody passionately believes that the answer's right, then what I'll never do to them is say 'you're wrong'; what I'll say is, 'well, just go away and have a think about this again' and then sometimes you find they do come back and they've modified their view. But I'm a big believer that when you put somebody in a position of, you know, authority to deliver, as one of your senior managers, you've got to give them their head, what you can't allow them to do is to go off the edge, and I think one of the products about being at a place a reasonable amount of time, is that people know how to read you as well – this works both ways. (2)

So the question remains about whether the NHS approach to evidence is borne of a desire to reproduce by template expected behaviours or is capable of changing through transformational leadership. One answer is:

You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I've watched them do fantastic things, and I've watched them being stopped from doing fantastic things, because some rule book says it's not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps. (8)

But even 8, who looked for the transformational leader returns to the problem identified by 2 – you may want the manager to make transforming decisions but the executives wants them to be the same decisions they would have made.

Well, he reminded me what the end was, that's what he ultimately did, he kind of made me think about what they were trying to do, yes they did it in a cack-handed, stupid, I wouldn't have done it that way, kind of a way, but given that that's what they were trying to do, it was really not helpful for us to jump up and down and say 'there's no evidence for this', because it undermines the whole investment programme they've put in place, which wasn't adding any value to anybody, it was just making it wasted money, instead of possibly purposeful money. (8)

In summary, this section, whilst leading to few conclusions about the use of evidence does suggest that if evidence based management is to blossom in

managers in the NHS it will have to be given a foreign label, taught on management courses and lead to the same conclusions the boss wanted it to.

How the system could learn, this is what my study so far has said

Chief Executives and the elite managers of the NHS must be fellow travellers in the creation of the concept before they will be judged by it. Whether they trust anybody else to lead this type of NHS management evolution is debatable. Whilst it is not credible to say that the NHS is unique, and indeed none of the respondents said this, there is a particular refrain that it doesn't compare to any other business. Even if the manager or executive is relatively new to the NHS it does not take long for this cultural reference point to represent itself in their behaviour. There is an innate nervousness about introducing a concept such as EBM to the NHS management structure, with a worry about how it will be perceived in the press and no recognisable communication method to ensure that their credibility is maintained or enhanced by fulfilling a commitment to EBM. In order for a learning system to evolve around EBM the Chief Executive must engage with it emotionally displaying interest and pleasure in the message being cascaded. The type of incentives not only include a demonstrated generation of public service ethos but also an emotional attachment and pleasure in autonomy, applause, status and plaudits for their organisation where it achieves its targets. It is clear that money (personal or organisational) may help them to embrace an organisational approach to Evidence Based Management but that the benefits to patients makes them more responsive to system learning than money. If Evidence Based Management were to find itself imposed upon rather than developed by Chief Executives and locum? Managers it is clear that they are skilled enough at organisational cascade to make it look that they find it palatable without actually making it happen.

In order for the NHS managers to 'learn' then the contradictions and ambiguity that are thrown up need to be accepted without feelings of loss of status or embarrassment. The essential contradiction with reference to Evidence Based Management is that the Chief Executives do value somebody holding the detail, somebody having a handle with what is going on but they themselves like to set direction with autonomy, expressing their judgement and decisiveness even when they confess to having little idea what is going on. For example, the managerial response to policy may not be coherent when compared to the surplus or deficit financial position of the organisation. The managerial response from the Chief Executive need not take into account the best way to improve efficiency on an evidenced basis nor how to make investments on an evidenced basis (for example opportunity cost or Quality Adjusted Life Years QALY's) only that they have an active leadership role in the decision. So to the ambiguity inherent in adopting a learning approach to system development.

Whilst as a researcher I was able to ask for clarification of particular aspects of the application of EBM, the elite manager must feel that a codification of EBM is not just adulterated into a form of Pedantic Control. The traits that the Chief Executives and Senior Managers demonstrated were strong leadership,

setting a good example, negotiating and navigating the future and co-ordinating disparate strands of policy into one coherent whole. In order for EBM to rise above the change of pedantry into a system wide learning model it would have to enhance the ability to lead, negotiate, navigate and co-ordinate. The risks from adopting a learning system are to appear disengaged and not genuinely enthusiastic about looking at alternatives for each decision based only on best available evidence.

So from this section is it possible to conclude that such a change cannot come from internal experience based actions or managers sharing experience and evidence from current practice? To be honest, that is the only conclusion that can be drawn. Take this in the context for the introduction of a policy by a director that they know to be evidence based or the opposition for a policy known not to be evidence based by the same director. It is imperative that the manager is prepared to respond to challenges based upon a conviction that evidence is 'the best' policy not simply using an evidence-based-approach common to the team.

This result could be seen to be good from this perspective. The Chief Executives are demonstrating intelligence. The elite has shown the ability to interpret policy and understand the business but they are relying on heuristics to drive solutions. The reason this is good is that leadership is visible, to an extent charismatic and essentially a valued commodity. In order to portray this behaviour the executive or senior manager has shown the following competencies/behaviour.

In order to steer a successful course without recourse to evidence they need to be all or some alchemy of the following – politically astute, decisive, hardworking on networks to extend and share political authority. This demands in turn that they are perceived to be young in outlook, flexible/pragmatic, energetic and experienced. All of these are attributable characteristics that leaders cannot acquire themselves – they are by definition attributed by others. Crucially they are also consistent with the characteristics a Chief Executive or Senior Manager will want attributing. There is one characteristic that this rejection of the Evidence Based Approach will attribute and that is 'hard working'. There is no doubt that evidence based decision support is not seen to be 'hard work' but equally it is not clear whether 'hard working' is a positive or negative connotation for the managers and executives. On the other hand, a rejection of EBM could be seen to be bad from the following perspective.

Despite a range of data sources, the organisation will struggle to assert that it is a demonstrable learning system or entity. Given the complex/adaptive and evolutionary nature of organisational survival this inability to learn from the evidence is a drawback. Decisive management without Evidence Base can evolve easily into autocracy and egocentric leadership. Typically this will be bad in that decision making will essentially be short term as the time horizon without evidence about what works is at best 2/3 years (the possible time horizon of NHS organisation stability) but most likely the 12 months of the annual NHS planning and performance management cycle. Significantly the

leader will design systems without the ability to learn from failure or weakness. Charismatic management characteristics demand the rejection or re-interpretation of failures that deny the heroism of the leader. Similarly the inability to learn from failure sets the decision making system of the NHS manager at odds with the medical and nursing equivalents that are at the clinical core of the very same organisation that they lead. This will only continue communication and delegation and restrict decision making to an elite inner circle not a distributed evidence based allocation of power to different levels of decision makers.

When is fine detail important to the decision?

If evidence based practice is seen as something separate and distinctive from day to day decision making, then the prevailing management culture works against the objective of basing decisions on the basis of evidence. On the other hand, evidence based practice may entail rejecting the accepted management orthodoxy and creating a separate quasi-autonomous enclave of interested practitioners. The key to understanding this 'community wide' approach to evidence based decision making versus setting up evidence based practitioners as appellant micro communities, is the degree to which the cohort sample says fine detail is important to the decision. It is not 'evidence base' alone that determines the value set and the discourse – it is the extent to which the evidence base is taken down through organisational views to a granular level before a decision is made.

The first part of fine detail that is important to the decision is what we must ask: not 'do you understand the answer'? but 'do you even know what the question is'.

Because sixty thousand more people die each winter than in summer – why? At a journalistic level we'd say, well, of course they do it's winter – it's cold, so more people die in the cold, they don't die of hyperthermia, they die of respiratory disease, more heart attacks. We'd say, we can't change the weather, that's the way it is. But, they don't do that in Siberia, they don't do that in Norway, they don't do that in Sweden, Canada or Germany. So places which have a worse winter than we do don't have this, they have a little bit more mortality but not much, and it's all down to poor housing policy, benefits, insulation, social care, primary care access, all of those things. So if we were to look at it and say, ok, it's a really big health issue, we could save sixty thousand lives a year. I mean if sixty thousand people died in plane crashes a year what would we do? We'd throw billions at it. So it's happening and we're doing nothing, the answers are out there, other people are doing it – it's very easy. So that's one example. 5, so, let's compare that to the earlier discussion about deep cleaning of hospitals. Managers found peace with the need for a structured political response by David Nicholson but here, in the case of winter death, he was avoiding even asking the question because the public wasn't asking the question. I therefore asked if that meant they thought Nicholson rejected evidence where is said uncomfortable things about subjects the public weren't asking about. The response:

I would suggest that he uses an evidence base for what he's done and how he's moved things forward, along with a set of personal beliefs, so I feel comfortable with that. (4)

And further I was satisfied that 4 was clear that Nicholson had to respond to each decision differently with a fine level of distinction between each.

*So, I think you can use interventions which often conflict. **Ok.** (4)*

And in any case Nicholson was clearly not alone in using the public to get to the fine detail of a problem. Vox Pop even in its most rudimentary form was useful in focussing down on the detailed part of a decision.

And sometimes reading things, I prefer talking to people really, and I talk to a lot of management consultants who kind of say things, it's not that it tells you something new, it's just that it allows you to relate things in a different way. But so can stand in a queue at a supermarket, when you hear a conversation, in front of you, or behind you – you can just have one of those 'ah-ha' moments, that just kind of chrysalises something, and I think a lot of it is in your heritability to be able to relate things, and relate to people and put yourself in other people's positions, I don't think it's a learnt thing. (3)

Most fundamentally, detail and the use of detail in decision making was seen to be a product of where you were in the hierarchy in fact, detail was seen to positively inhibit the executive function.

*How much do you use email, phone, internet, you know, those sorts of media? Hardly ever, well, hardly ever at work and all the time at home.....**ok, tell me, that's an interesting one!**.....well I've worked out over the years, I mean, I did have a computer at one time, and I worked out, I can type about 20% of the rate of my PA, the very process of opening and closing, and looking for and finding – she can probably do twice as fast as me, and what I find it does is it fails to flag up priorities for me, particularly because I work on two sites. I'll go into my office, I haven't got one on my desk at the moment, because I dealt with them all up there, but there will be a file on the top of my tray that says urgent, and it might have an email from last week, I wasn't in, or I missed, or that's become urgent, because somebody's rung, it'll have a phone message, it'll have something that came in the post, it'll have a note from somebody who walked by, you know, a patient's just about to shoot me, and I'd better know, and, so I've got the ten things that I've got to deal with in the next five minutes, in that tray, there is no way on God's earth that I can process by hearing anything in that way; at home, I'm a shambles! I do it all myself, I do half my emails, and fall asleep and leave it, I've missed the one that said, 'can you let me know by tomorrow' and I didn't and.....**ok**.....so it's a kind of needs must thing, I mean I find it very tedious anyway, because it's very detailed. (1)*

And this was corroborated by the colleague executive when they said:

I think it's good theory, it probably makes good papers and I don't think it does the job, that doesn't mean that I totally rubbish it, but I think it depends on where you sit in an organisation very often, and I think the evidence becomes less important the higher up the tree you go. The higher up the more it becomes intuition and more it becomes esp, the more it becomes knowledge that you don't know you've got. (4)

So we can see that fine detail is important in defining the question, crafting an answer and showing an ethical management style in the NHS but is given little credence in the day to day practice of top executives.

WHAT CONSTITUTES EVIDENCE?

Key words or phrases that are most used

Discourse analysis is a methodological approach that can be used in the study of communication by NHS managers. Activity type analysis permits the identification of characteristic forms of talk in the use of evidence and decision making. It is possible to recognise patterns of awkward or critical moments/words. The transcripts have been selected for their representative nature and simplified for presentation and ease of reading in the 'Rousseau Box' style appendices of this report and in the conclusions.

What I want to do here is to focus on the use of the word 'evidence' and consider its nature.

Let's consider some key words or phrases that are quoted in the interviews and taped group meetings. To the left I have put them in their stated form and in the right, whether this was used frequently, infrequently, positively or largely negative. I have also been clear where the phrase is used more than once but with no clear agreement about its value between managers.

Evidence Based Management	Frequent positive associations. Seen as a good thing, but struggling for a consistent definition. Juxtaposition with Evidence Based Management easily understood.
Evidence Based Administration	Used only once. A potentially semantic definitional distinction but very powerful when used by the 1 respondent. This is a metaphor for an idea expressed by many that the freedom to stray from evidence increases the higher up the organisation you go. Distinguishes managers (higher) from administration (lower).
Evidence Based Leadership	Used occasionally. Very negative associations. Seen by some to be an oxymoron. Seen to be an expedient at best and part of a value set that evaporates when applied to politicians.
Evidence Based Decision Making	Used often, but not surprising given my questions. The phrase 'administration' in this

	table above is key to distinguishing its positive and negative usage. Seen to be cumbersome and more relevant to juniors than executives.
Evidence Based Resource Allocation	Occasional use. Very positive associations. Given that resource allocation is considered a rare, but significant strategic action by leaders the supportive evidence for this is seen as crucial. Most persuasively used in gaining autonomy from the DH.
Evidence Based Reporting	Occasional use. Mostly negative. Seen to be a by-product of 'administration' rather than 'management' and much less importance in performance management than policy targets.
Evidence Based Argument	Occasional use. Mostly negative. Seen to be an insufficient basis upon which to make an acceptable decision. Where it is used it is almost pejorative in its diminution of the quality of the argument.
Evidence Based Learning	Frequent positive association. A clear value exists in the attempt to learn from the evidence. To foster a culture with due regard to evidence is viewed as an overwhelming positive.
Evidence Based Knowledge	Frequent positive associations. The organisation, communication and maintenance of knowledge are all seen to be ways within which the hierarchy of evidence is vital.

These examples show most importantly the differences between managers in the way they respond to concepts. The following concepts have no agreed definition.

- Information: used to mean everything from public communication to a relevant set of managerial numerics.
- Data: seen as collected for purpose and objectively or the arcane desire to count by bureaucracies that generates meaningful information.
- Interpretation: seen by some as a meaningful contextualisation of the evidence or by otherwise savvy managers as a means to discredit the evidence or source.
- Protocol:
- Best Practice: From an attainable counsel of perfection to a normative standard for all.
- Culture: positive and enabling, stifling and disempowering transformations only allowing reproduction.
- NHS: An organised system of tax funded healthcare or just one big experiment in political authority and social cohesion. The backbone of the political offer or the basis of a random importation of foreign fractions in healthcare management without necessary debate or evaluation.

I'll leave the final comment in this section to group 3 and a quote from one individual in the group.

But what we tend to not have is enough rules, it's a bit like practice based commissioning you know, I mean, they invent it as a concept, because it seems to be a means to an end, the end being whatever it is we all want – better everything – and we haven't made up the rules, I mean to me there are three criteria, does it give a better service? Does it offer better value for money? And is it sustainable? (3, after a long meeting of fierce debate and intellect, the silence around this definition was telling).

How do you identify your outliers and what they are saying?

Conversational attempts by the outsiders or outliers included assertions of academic knowledge, professional training and experience. The extracts illustrate a sequence of the type that was common during the interviews and the meetings. The sequence begins with the chair asking if, prompted by me recording the interview, whether evidence would help at all. On discovering that the group is willing to accept that the NHS is far from an ideal organisation, he asks some questions that get a more radical response than some of the strategic platitudes normally classified by the same individuals as 'assurance'. The chair continues a light cross examination as well as inserting a supportive and friendly narrative throughout. The Chair's role was didactic – in order to get to what the people were saying the conversation was nurtured – on only one occasion did an individual specifically announce that he wanted to ask a question.

The following is an example of when an 'outsider' (an off protocol doctor) is encouraged to move back into the fold of the use of evidence. In the end, an absence of evidence was taken as a lack of legitimacy (by managers) to practice.

And there will be occasions, you know, medicine's instinctive, and there will be occasions, I think, where you don't follow the protocol, because you don't know why you don't follow it, but you must have seen a patient somewhere similar; you wouldn't expect it to be the norm, but you should be able to justify in your own mind why you've not followed best evidence, what you should never do is not follow best evidence. If I take an example, we had here an anaesthetist prescribing some pain relief some years ago, and the evidence on it was no where near conclusive, no where near conclusive at all, and this was in the early days of clinical movements, and we looked at all the pros and cons, we looked at all the evidence, and in the end, we said to the anaesthetist, you will not prescribe. (2)

But on the other hand, there is an explicit acceptance that the NHS cannot change without exploring the boundaries of the NHS. In the following quotation there is a direct challenge to a doctor who believes that the NHS has attained an evidenced optimum.

To what extent would evidence help you at all, or is it.....it does a lot, it does a lot, there's loads of things we use, I mean, to me, you know the job is a simple job, I always say to people, you know, that's where we are now, that's the NHS today, and that's where we're trying to get it, and I've only had one person in my whole life say 'it's perfect now', only one person – a pathology trainee I was talking to a Keele University, clearly, a strange man! (3)

Let's consider something that I want to reflect back to the managers. The following is an extract from a 10 minute journey where a senior group of executives are trying to find the way to speak the unthinkable. It is worth knowing from the start that this discussion starts with trying to find a way to consider the proposition that nurses in a particularly poorly performing hospital (on quality and economic performance) are not a solution to but a cause of the problem. The outsider nature of this debate, challenging years of acquired cultural parameters about nurses is revealing. What is interesting in the following quotation is that the outsiders in the following group meeting don't use evidence to describe the need for change. What they choose to explore are scenarios. Much like a health economist they start off with an assumption.

But let's assume there's a journey to be made, right, and you can begin to describe what's in this future NHS, it's less wasteful, there's no healthcare associated infections, shorter waits, greater satisfaction, more motivated, you know, nicer buildings, better equipment, all the new drugs, whatever. (3)

Further, this is picked up by the next person in the group. Again, what the outsiders are trying to explore.....or rather, what the NHS manager in a protected environment within which they can think of the future.....are scenarios.

And my job is to take this organisation on that journey, but it's not just a simple more, more, more thing, as I think we all understand, and we all do that

all the time at home, we're all trying to get the best for our family, we have a limited income, we have circumstances, we all live in England – it's cold! (3)

Scenarios are by definition, alternative, plausible pictures of the future. Scenarios are created that are definitely not forecasts but are free from organisational constraint.

You know, so you'll say, we'll have a holiday a year, and I'll make sure I have central heating, and I can afford to keep paying the gas bill, and keep buying trainers for the retched kids feet that grow six inches every week, you kind of make those decisions to make that journey at home. (3)

The scenarios are written in a deliberately provocative style to tease out the differences between the different pictures of the future. The previous speaker was describing steady interactive change. The following speaker, although using a comforting style and collegiate language is painting an alternative scenario which is clinically relevant but more challenging.

And we have just the same to do at work, and we've kind of coined the phrase at the moment particularly about best care and best value, it's not just one, and it's not just the other, it's not just saving money at the expense of quality, it's not pursuing quality, spending money we haven't got, it's got to be about best care and best value, and I think people can relate to that. (3)

Then another more detailed description is ventured by the next reader. Scenarios, as I said are alternative plausible pictures and the next readers picture should be read side-by-side with the others to understand the differences.

'With you so far' they'll say, as a tax payer, as a user of the service, of course I want it to be as good as it can get, if we're wasting money seeing ten patients in a clinic when we could be seeing 20, somebody is missing out on something aren't they – that's an opportunity cost in terms of health gain. (3)

Until finally, we craft an answer to the problem. The staff can accept the analysis when applied in the abstract the actual implementation of the answer struggles when “the light is shown” on the problem. Only at the very very last moment is the evidence stated.....’overpaid compared’.

So, people are with you there, I mean, I’ve done lots of staff briefings and they’ve all left happy, what’s got them is when you’ve then pointed the light from the two towers into their department and said what’s more, you’re all overpaid compared to grades in other Trusts. (3)

My understanding of this whole conversation is that the evidence that was there all the time is not used by the very people who need to use this evidence to win the ‘outsider’ debate!

The quantum of support and the critical single piece of evidence

Managers took every opportunity to offer advice and support. The advice was often resisted or rejected by one of the other participant(s) in the discussion and advice was often given in the absence of any stated problem by the manager. Active resistance was very rarely shown to the giving or receiving of advice and managers did not call on any higher authority such as “the law” or the Department of Health. There were times when the critical single piece of evidence was sought by all contestants. That is where the advice was felt to have the potential to undermine and threaten the managers assumed competence amongst their peers. As important as evidence, were questions of integrity and self regulation by the group.

The next quotation shown that policy makers and commissioners do try to rise above their entrenched positions to agree a joint plan aimed at making the health services safe and high quality in a cost effective fashion.

Yes, I think one of the problems is actually what we measure, and so the information that we have to deal with. I mean, when you think about health and the paradigm, the NHS where we have performance data about activity, and we have some health data. But the system looks a lot different if you actually focus on some of the outcome data which is not routinely known. And if we were to focus on that, and ask why the system is failing these particular bits, then we might get a different view. (5)

But when it came to the acceptance of clinicians to allow quality-based benchmarking and to take part in the specialisation of these databases this was seen to be damaged by the political and policy pressure to do something based on a single précis of evidence – about public attitudes to infection in this case – or even no evidence at all.

If I said to you, evidence based, does it elicit a reaction in you, does it make you go 'no' or 'yes', does it, is it a neutral phrase, is it a pejoratively bad phrase, is it a phrase that you would want to follow? I think it makes me feel, you know, chance would be a fine thing, but surely we ought to do our best, that's what I would say, because there is too much that isn't, you know, deep cleaning a case in point. (3)

Information about acquired infection is readily available to patients and has had a real impact on their choice of provider, but the general attitude to the quantum of support for evidence based decision making, was in total undermined by this pre-occupation with a limited evidence base. There was no doubt that this was made worse by the media spotlight focussed on healthcare.

The political, health and social care agenda shifted in 2007/08 to focus policies and accountabilities on patient experience. There is a telling desire though to still trust that there is an evidence based solution that is better than random political interactive and that, even given the political desire to make this policy, evidence might be the best way to allocate resources to the policy.

If they had looked at the evidence, they could have made the best choice about how to spend that money, and if we don't even try, it will be purely chance. (3)

Further there was an explicit request to use evidence locally. There was broad acceptance that the choice of policy might not be evidence based but its effective implementation should still use the evidence of the best way to proceed.

So, I have two feelings about it, one is that we shouldn't see it as the solution for all of our problems, because it will never be that well developed in this experiment that is the NHS, and two, we should acknowledge that in the absence of evidence, we should do our very best to get the approximation for best knowledge to drive our decisions, that's what I think. (3)

My understanding of what happened here is that the ambition is for joint planning to be devolved to regional level and the East Midlands to become a role model for implementation of a national policy through evidence of best method.

Then the media spotlight was discussed. The media spotlight was accepted as staying focussed on healthcare – indeed it was hoped that in the next five years the ‘diabesity’ (diabetes and obesity) epidemic could be curbed by being the most common topic of TV debates and cooking programmes focussed on healthy eating.

There was however, a sanguine response to the media. In total, the population was able to deal with complex issues, but the newspapers (as the next three quotes show) are seen to maintain an adversarial stance even when the readers of their own papers were more sophisticated.

The Editorial stance of the paper, is not the same as those people who comment, so for example, when we talked about scrapping the air ambulance. (3)

The Editorial stance of the newspaper was totally a terrible thing, this is a bureaucratic decision, the comments on the website, were broadly in support of our policy. (3)

In terms of, let’s have less flash, so it’s almost like the media was slightly out of step to the people it sells. (3)

So in total, we see a desire by the managers to gain competence and control even in the most trying of times and they did, consistently refer to evidence as the basis of authority and control.

How many times was something given negative or positive associations?

The project here tries to conceptualise the issue of credibility. Some concepts are judged by the participants to have poor credibility. If quantification, consistency, industrial level adoption and rigour are indicators of credibility then in our understanding of evidence based decision making it is possible to recognise items that have strong positive or negative responses. Credibility is

not validated by the researcher it is expressed as a judgement made by the participants. Judgements of credibility are also seen to be influenced by particular (political) contexts so that what constitutes credible may change from period to period so it is difficult to say that the evidence base is able to avoid the temporal nature of credibility. In the specific context of the evidence based manager, there was a strong correlation between credibility and one word/phrase – “NHS” and a strong correlation between “politics” and the absence of credibility. I have included one quotation also to illuminate that at the heart of this conflict between credibility and two words/ideas, is the role of the NHS executive and whether they are agreed to be system leaders or system managers.

Consider that since 2000/01 the government decided to increase public spending and the proportion of public spending spent on the NHS significantly, and this was sustained for 7/8 years and yet politicians were given lots of negative associations such as the politician below, who is considered to be motivated by electoral majority not the NHS role in ‘reduce inequalities’ or even the NHS managers role in ‘best value for money’.

He’s an MP like the ‘X’ guy, who isn’t local doesn’t know the area, he’s in for the ballet box, he’s in for the re-election; you take someone more local like ‘AB’, who’s a local lad, worked in one of the local schools, will always live in this town, he’s got the mix, because he’s precariously seated because of the ballet box, because despite the fact he’s been in twice, this is not a natural one party community, and at some stage it will move again. (1)

NHS East Midlands commissioners are occasionally taken to judicial review for restricting access to new drugs yet a request for Labour MPs to be collegiate with government policy results in the following frustration.

And then you’ve got Dennis, who’s Dennis! and Dennis will only ever do what Dennis thinks is right, irrespective of which Party’s suggested it. (2)

What the NHS managers are identifying are examples of how they feel disaffected because politicians, as seen earlier, are only too keen to dictate NHS policy, but are absent, even when in government, when the policy needs public support as it is conducted and implemented by managers. Further:

But it’s fostered by television, and if you look at all the newspaper coverage, where’s all the noise in the Health Service about, it’s either GPs or it’s hospitals? It isn’t anywhere else is it! It’s all a perception affair, that whole feeling of that perception is about hospitals, ambulances, GPs. (5)

Managers in that quote are noting that politicians know a vote-winning part of the NHS when they see it, and vote winning areas don’t often coincide or find congruence with the methods used by managers to optimise quality, share risk and deliver cost efficiency.

But the connotations of management and even the less valued ‘administration’ compared unfavourably with what was considered to be the (small p)

politically charged leadership. There was a general trend to emphasise leadership, but equate management with bureaucracy.

I'm interested you've chosen evidence based management and not evidence based leadership, because I think there's a difference between leadership and management. I suppose, there's something about management based around evidence and management decisions based around evidence, which might be different from evidence based management. It depends how you define management, and evidence probably as well. (4)

The question about why politicians behave in the way (to see if positive associations are possible) was considered and the NHS dilemma of policy being set by politicians who were weak in defence of the policies – was seen to be no better or worse than democracy itself.

It's a yes and no if I'm brutally honest on this, if you take them in an enclosed ecosphere, where there are no consequences to their decisions, then they will always go with the evidence, then you put them back in the real world, and there are all sorts of other pressures and constraints that come into play, and democracy is an imprecise science, but it's the best that we've got. (2)

The question was then put about the political closure of an unsafe hospital.

There will be the mother and father of a job to close it, the MP will be up, the population will be up in arms about it. (8)

And when the same issue came up in a group meeting, the managers could see only equivocation coming from the local MP even after a lengthy 1:1 with the NHS executive.

She's new, so first and only time I'll ever speak to her live, you know it was a bit like the André Previn bit on Morecombe and Wise, you know all the right notes, not in all the right order, I'm sure I said all those words, but did I put them together in that way, no I certainly did not! (3)

Due to lobbying and marketing from providers, drug companies and patient organisations, the population now expects the NHS to provide an extensive care package and, remembering that co-payments are minimal in the NHS, the media has become a key driver in setting the expectations of the population for the NHS and newspapers critique the role of the manager. Whilst the media are accepted or supported, there is a particular loathing of 'the local' paper by all the NHS managers. The quality of journalism is seen as low and overtly personal in their attacks.

And of course it's been hugely, you know, people saying, 'how dare she say this', not the first time that's happened to me, but, they kind of generated a level of, you know, misery that didn't exist before, and they're loving it, and they want me to enter into a conversation with my staff on their website, you know, more people are writing, you really ought to get on, and I'll go, 'no'. (6)

One Chief Executive even went so far as to say that local print media had lost all relevance and that the key task of talking to people was direct not through the print news.

I said I shall be writing my next Chief Execs column in the staff newspaper, urging them to write to me, and I will reply, and I will go and meet with them. (7)

The motivation for press participation in the NHS is importantly considered to be opportunistic and not driven by values.

I'm not doing it on your website. No doubt I'll get another rotten story out of that, but I really don't care! Chief Executive refuses....you know! So, but they do, that's what they're trying to do, they're trying to create the news that sells newspapers, even if they sometimes get it wrong. (7)

So, if politicians and the media have frequent negative associations who gained from positive credit by the NHS manager. In one word – Doctors! – are viewed favourably regularly and consistently. Although, as you can see from earlier readings there was a worry that nobody was willing to take on real clinical leadership or instigate innovative thinking the comment below is typical of a sympathetic attitude to doctors who are viewed to be in a predicament.

Well, I think we're not in a position where it would be true in any system because the potential demand on the NHS is limitless now because there's so much we can do, and it'll get worse and worse. (5)

East Midland's clinicians are praised for their clinical innovations. Noted examples were the Patients' Medical information is available on-line and that virtual communication has lowered the patient threshold for seeking consultation and is increasing demand. Doctors were praised for their swift adoption of new technologies.

But I think it's a cultural thing about the way doctors are trained, and they're sort of inducted into a system, very early on in medical school, whereby you're taught the important thing is the doctor patient relationship, so they work for the patient, they don't work for the NHS, and that's the difference. (3)

And the doctors association with the NHS was considered to be broadly altruistic as opposed to entrepreneurial and venal in their behaviours.

They'll buy into the idea of the NHS, because it's got egalitarian, utilitarian values, but they don't buy into that from a management point of view. (7)

The question even arose about GPs motivation to work for the NHS and managers could see a way clinicians could abandon NHS employment to work from Chambers like other professionals, but this was given a positive light and association.

I think most GPs would quite happily work privately outside the NHS, because they could still maintain their doctor patient relationship. (6)

The only worry in all this was that clinicians could drive the use of information technology as a method of achieving higher quality and effective care, but could not progress from excellence in the treatment of individuals to a wider treatment of the population more effectively using technology.

And the managers see the value of the NHS, in my mind the managers are more the champions of the peoples' health than the doctors are, but the doctors don't see that. (5)

How does a decision blossom and develop?

The responses indicate that the interviewees and meetings participants are not applying a consistent criteria when making a decision. The decision

blossoms and develops in a quite unexpected way. In contrast to the perception that a decision would be clear in its use of evidence the reality is that the decision must be evidence based but the decision point itself is iterative, nobody is really sure when the decision is made. The idea evolves, contorts, negotiates, makes decisions, re-checks expectations. Even within a single organisation there are different interpretations contingent upon issues of hierarchy in the organisational structure. Thus, for example, the same idea may be evaluated by different people in terms of the extent to which it makes a decision necessary or possible. It may be that as an executive becomes very experienced in organisational leadership, they develop their own list of criteria which although not formally written down, are used as a heuristic device to make sense of the decisions they have to make or even whether they need to make a decision at all.

You know, if somebody took a senior member of your team, if they came to you with an idea or a solution, would you rather they had it on paper or they were able to explain it to you in a conviction way. I'd rather they explained it to me, but I think, what I usually say to people, and there's a lot of people that kind of knock on your door and say ...neh, neh, neh I've been thinking and neh , neh, neh when you haven't got time to listen to it.....ok..... doesn't really help, I'd prefer things to be explained, but things like that are very difficult to move on in an organisation of 7000 people, if they don't very shortly afterwards appear on paper, so you can do something with it. So personally, I prefer the conversation, but practically to progress it, it needs to extend beyond jabbering on the corridor or whatever's going on. (3)

Note that the word evidence never appeared in the above quotation at all, but then the manager was talking about a member of their team. Conversely when another executive talks about their own decision making (below) the word evidence appears time and again.

I think to be successful, you've got to be instinctive, you've got to make the decisions, you can't think about it – right or wrong decision – any decision is better than no decision, you then have to back your decision to the hilt, you have to be big enough to say you've dropped a bollock if you've got it wrong and change it if necessary. And probably every decision I've made I could retro-fit on evidence, but I didn't make them on evidence at the time. (2)

I don't think you're ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it's good in scientific situations, when I was a chiropractor, when it came down to the amount of chemical I put on to destroy something – there were tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that's behind that decision, but if you don't understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that's there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was

denied a drug six weeks ago, and now you're spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high. (4)

Note that there was no consistent base for saying the decision was evidence based, but there is clear reference to 'evidence' being the field or environment within which personal decision making takes place. Now consider the same executive in response to another prompt.

I think evidence based administration, to me administration is the application of processes to achieve an end, to me, that's what an administrator is doing, with a small degree, often no degree of latitude or ability to make changes. Management, managers have the ability to make changes to those processes, and leadership I think, is different. I think leadership is about achieving an organisational goal, and taking the whole organisation forward to achieve corporate objectives. So I do, evidence based administration, I think I would struggle with that, because I think the processes that are used by administrators should have an evidence base for doing them, and a rational defined by evidence; evidence based management, I think managers should use evidence in reaching their decisions, and evidence based leadership I think would go the same as management. (4)

So what we see revealed is that evidence is a consistent part of the framework of executive leadership, but the latitudes to err from the evidence or to even create the evidence afresh is denied to lower levels of manager – deemed to be administrators.

The use of decision by individuals?

In considering the way that individuals rather than organisations apply evidence to the decision making process, of particular interest is the underlying assumptions about the career of the NHS manager and the life stages they go through with regard to autonomy. The way in which individuals define the use of evidence is important in that it shapes their perceptions about who should be free to use judgement and who needs to concur with the evidence base (and indeed seek out the evidence base) before making a decision. From the responses and the recordings it is clear that a variety of individual decision making methods are in use and there is no general consensus about the nature of evidence in decisions by individuals within the NHS. What is clear though is that rather than being a restrictive or indeed exclusionary practice of some NHS managers, there is a body of support for evidence based decisions, with the right evidence by the right individuals in the right context.

Can I explore one of those, and I'm not challenging what you say, it's just this - say the rule book, say the rule was the piece of evidence based practice, and the manager is just coming up against that, you know, the person that, are just not getting it as anything other than a limiting factor, what do they do with that? Do they respect the evidence and back off, or do they try and work round it, or.....my guess, I'd say it

depends on their capabilities, it's a bit like one of these things in this document they've sent me – if you want to be a manager, get yourself educated in something, then get a job, just don't pretend it will teach you to be a manager, I mean, it's a bit like, don't pretend that world class commissioning will teach you to be a commissioner. Ok. So, a good person would be able to see the sense in that situation, people without good sense had better just follow the rules 'cos they'll be safer, do you know what I mean? I don't know, it depends on the rules!.....it's interesting about that, that follow the rules, because I think, a lot of that is a proxy for evidence based medicine isn't it? It's the, you know, look, the vast majority of you will not be as good as the best, so follow the rules, and then the outcomes will be better for everyone. (3)

And I have no problem with that, because what it tends to do is it generates a coherent conversation, you know, I mean for us; a lot of the rule following is very wasteful, labour intensive, and there are plenty of people who know the answer, without having to follow the rules, but there are a lot of people who don't; and the good thing about rules is it encourages conversation, you know if we want to prescribe a drug that's not on the protocol or the pathway, someone says, hey, this is what I want to do, and this is why I want to do it, a few great minds come together and will probably make what is the right decision, whether it follows the rules or not. (3)

To the two quotations above which talk of a negotiated use of evidence is the concept of earned autonomy. Earned autonomy first through acquired years of experimental learning.

But I do think that you work up through your career, you have to be more and more evidence based because you haven't built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way. (2)

And earned autonomy through understanding the 'culturally correct' way to respond to the signals being given by operational managers.

Yes, well, depends how you set yourself up really, I mean, you know, I and other managers get criticised a lot for not being out on the shop-floor enough, and indeed I'm not, but you pick up limited information about what's going on on the shop-floor if you stay close to the people running the business, they can be clinical or managerial, they will, you know, they will tell you what they're fretting about, they will say, 'oh my goodness, we've now got five

vacant posts in A&E and when this lot leave I don't know what we're going to do', that's what you need to know, but you also need to create a culture in which that happens, because, we were talking about this the other day actually, we've imported some new managers from another trust not far from here, and they had this alarming habit of telling you everything's alright, when it isn't! (3)

But broadly a consensus is achieved that evidence/science applies predominantly to clinicians and is a luxury few managers can afford.

I think they'll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and that's fine, doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they're delivered, I don't think they do use evidence, I think there is some, some scientific evidence in there, they'll look at journey times, and they'll look at volume, populations and the needs of that population not been done very well until fairly recently, but they are doing that. So they'll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based. (5)

The making of decision by groups?

One of the objectives of this project is to hold a mirror up to the cohort (of which I am a member) to identify perceptions of good NHS management practice. Within this I wished to look at how the group (when it worked collectively) would make decisions. It is amusing that interviewees found it easier to identify bad practices in the working of the group than highlight aspects of good practice. The issue of the right environment within which to make an evidenced decision emerged as being something managers needed to 'get right' it does not exist as a natural state in the group. Rather than making a decision that focused on technical constraints, describing and reflecting on the appropriate place and circumstance to make an evidence based decision as a group was highlighted by many of the cohort. Good practice in relation to the presentation of evidence and the use of evidence involved on ability to engage this group/a group, to be persuasive and to be credible despite limitations of data and knowledge. There is a caveat however, in that the very diversity of group structures makes universal interpretation problematic.

Clinicians were widely reported as helping negotiate quid pro quo deals to consolidate services such as stroke, trauma and maternity across sites. But they did this for managers who had years of NHS experience more readily than newly introduced managers.

For a manager to be accepted as something other than an irritation, getting in the way of clinical work, they have to demonstrate that they're in it for the long haul themselves, and that's very hard, and after the first three or four managers have gone your chances of making it as number five are really quite small. But there's a down-side to this longevity thing as well, and it's this

sort of practice being entrenched, that once, you know, we've done it this way for the last ten years, so you're not going to change what we do, and also, the culture becomes quite unhealthy because of the longevity sometimes. (5)

But the very longevity of managers that enables clinical participation is seen by some as a limiting factor when getting clinicians across the East Midlands to lead and support required configuration and productivity improvements. Here is 5 again, talking about how a new to the NHS executive uses clinical evidence to provide an antidote to organisational inertia and antipathy towards him as an individual.

He just rolled his trousers up, put a knotted handkerchief on his head and said, 'look – what do you want? This is evidence based medicine, here's the evidence, what are you all talking about?' And still, it made a big impression, it got a lot of laughs, but it takes that, sort of real challenge, before a lot of that out of date evidence is discarded. So evidence base – it's sort of important, but it's almost a culture rather than a reality sometimes. (5)

It is clear that strong financial control over medical cost increases is valued by executives, but in the following discussion by a leader who is no longer in finance, two things are worthy of note: the absence of the word evidence in any reference to accountants in the NHS and despite appreciation of their corporate contribution a question mark hangs over their ability to influence group decision making.

*I think it depends on what sort of an accountant you are, I mean, I don't think it was my natural bent to be honest, and I was heartily glad to get rid of it, because it was too precise for me. But it taught me some things, it taught me a balance sheet is only balanced when it balances to zero. Which is a good discipline; these people who go.....well, that's about right! taught me you can approximate, but you need to know how you're approximating, you know, when you round to the nearest million, you know what you've lost don't you. It doesn't mean you have to mess around with pennies, it just means you need to know what you're not taking account of. It taught me some good practice around delving in the detail, which is not my natural bent, and for people that are, they do struggle to make good strategic decisions, and I have watched accountants struggle to do that; I'm not suggesting you're one for a minute, but I have an ability to get into detail when I need to, in a way some people just can't, and it's given me an understanding in money that's essential if you're trying to do my job, it really is. And there are many, many, many times, no disrespect to 'B' who's been a great Director of Finance here, there are many times when we're kicking numbers around, and it's me who goes, 'but hang on a minute, you know, if that's going to drive that, and that's that and that's got to go there, then surely we've got a problem here', and you can kind of see everyone going oh-yes! And I couldn't do that probably, if I'd been a Physiotherapist. **Ok, so your profession has been a tool that you've been able to use on an ongoing basis**.....yes, hugely. **Ok.** (3)*

But, the decision making by accountants was not the only one group to fail the executive test of reasonableness – so to the matrons.

I went in very, very hard with the matrons last April about their cleaning audits, because what they were telling me back in March/April was that we were going to fail the health care commission standards, when we had all the matrons in, I said, I know it's not like that, you know it's not like that, what are you playing at. (1)

Finally, let's consider two quotations about the apex 'group' of the organisation – the board itself. The decision making in the boardroom is expected to be, demonstrated to be, cognisant of evidence based decision making.

Imagine you're in a boardroom and it's one of those, where for some reason, you're still in there at seven o'clock at night, and you know you've got locked into something, and you need to make a decision before the morning, and somebody says, shall we have a look at what the evidence says – is that a good thing to do at that moment, because it is a distraction and the evidence isn't in the room; imagine, taking my scenario, the evidence isn't in the room, so there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don't need any evidence, what we need is a decision. I would be shocked if the evidence wasn't already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on certain decisions I would want the 'show-me test' as well. On big things I want to see it. So I would stop – go to the evidence, then consider the evidence in the wider context of the decision we're making. (4)

And, this is true even when the whole board might be agnostic about the approach.

*Oohh, I think one or two of them would react positively, I think one or two of them, would I think not understand what I meant...**ok**.....and the rest would be agnostic in the middle. But, I do think that self perception and review of one's performance is something which leaders sometimes get a bit blasé about, and don't do! (5)*

Is information collected and evaluated?

It is established by respondents that they have the technical skills to undertake evidence based decision making and to write a coherent 'evidence based' story. The managers were also able to demonstrate that they understood the importance of reflexivity as a management competence. What is less clear is that managers were happy that the collection and evaluation of data was sufficient to treat the data as information to help aid decision making. Given the political context (and the consequent implications of decision making) the collective and evaluated information may go some way to enhance the quality of NHS management. But the technical task of the assimilation of information may not be able to go far enough to convince NHS

managers to move without a sceptical evaluation. More generally it was also asserted that there will always need to be more resources in order to carry out training in the evaluation of information.

I think World Class Commissioning, if we're not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach, and I think that's actually quite dangerous, because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions. (4)

So somebody has done some research, however subjective, to actually say those who scored highest on health commission scores, those who had most financial balance, those who were actually achieving the most important government targets. What was common about them? (4)

So I pushed the respondents to explore this idea with the following question:

You know when they talk about ideas like balance scorecards or even the idea that you spin up your machine in the morning and there's like a dashboard of dials in front of you telling you – how does that type of model play with you?

And, the most illuminating quotations were as follows:

Well it works to a degree, I mean, you know, I have one on my car, and it says ok when I switch it on, and sometimes it says ok and I go down the road and it stops, or brakes or the tyre goes flat, or you know, it's not foolproof. But I think it lulls you into a false sense of security because, if I take one of my current pressures at the moment, A&E, not the wrong side of the line, but dangerously close! And it's, well its the right side of the line, my dashboard would say ok, but what I know is, I've got a whole middle grade rota missing down there, because we can't appoint middle grade staff, because of all the MMC debacle etc, etc, so I know, you know, we tried to fill a post, we shortlisted 14 people and one turned up, and that's telling me that my car's going to be breaking down some time in the future, and there's no point switching on my engine; it's not proactive enough again. (3)

But, soon within this discussion arose the spectre of the ill-informed politician again.

Have you seen that joke, it was in the Health Service Journal a couple of weeks ago, about'look minister, they look like they're achieving now, ok, time for a reorganisation!', so we're retrofitting the evidence to see what's failed, as opposed to it's working and let's destabilise it. (3)

And, to that was added a long narrative reconsideration, in great technical detail, of the case against politicians with regard to NRSAs. The information was collected and evaluated by the NHS it was ignored by politicians. Even worse, politicians used a partial dataset about hospital acquired infection upon which to determine their policy response.

And what we always find is every time they introduce one set of priorities, another set of priorities emerges because they've been ignored by the first set! Carry on with that, it's fascinating. Well, it's just the way of the world. I'll tell you what's going to happen next year if you like?! Yes. Yes, we're focusing on healthcare acquired infections, but we're only focusing on two, we're focusing on MRSA and Cdif, ok, which together account for about 25% of hospital acquired infections, so what's going to happen when we've sorted those two out? Well, all of a sudden, Pseudomonas is going to become an important infection. Vancamycin resistant enterococci are going to become, TB is going to become one. Because all of these infections are being ignored, because everyone's focusing on MRSA. And you may say, ok, but the measures we take to reduce hospital infections are generic, so if we take action against MRSA it'll work for every thing – but it doesn't, they're different, and what we already see is that the hospitals are doing well on MRSA and not doing well on Cdif and vice versa. I mean, MRSA bacteremia for an average hospital in this region, we're talking about 30 cases a year, of all the hundreds of thousand, or millions of patients we treat every year, we're trying to reduce 30 to 25, what the hell's that all about, you know, and yet that's the top of the priority. And we don't even look at the vast of MRSA infections, we don't look at all the MRSA infections that don't get bacteremia, all the joint infections, the skin infections, you know, the ulceration that people get, we don't look at the damage that that causes in the community. So we're looking at the tiniest tip of the smallest iceberg here, it's no way to do things, and yet that's the target, so the target culture enables then to say we're making progress against infection. Whereas we're sort of, it's like pushing the lumps down on the carpet you know, we're making progress on that one there, but this mound's appeared over here. (5)

And even more stringently the individual asserted that political policy without reference to the NHS clinician or manager was no more informal than that of a seven year old.

I asked a bunch of seven year olds, 'what do you think hospitals are for?' and they came up with pretty much the standard answer, it's where you go to when you're poorly so that you can get better. I thought, brilliant yes. So where in our performance management system is anything that tells us if that is actually happening. You know, when people go in with chronic obstructive airways disease, do we make them better than if they'd just stayed at home? Why aren't we measuring whether we make people better; we measure how many people die. (5)

At stages of the interview I asked whether the 7th of the stages of a system implementation (post implementation) was a feature of management policy.

Is the impact of a decision evaluated by post implementation review in the short and/or long term? Is empirical evidence used?

As stated in the introductory chapter of this project, one of the key objectives is to develop a narrative about evidence based management that encourages

informal and reflexive practice in NHS management research. To this end, the seventh stage of system implementation (post-implementation review) needs to be identified in the responses. Whilst the objectives of each of the participant managers may be different in content for each individual, the exercise of post-implementation review should be evaluated. The question is the degree to which participants and/or the wider NHS draw upon their own extant work to stimulate experimental learning.

The first negative response to the question of whether the NHS was appropriate evidence said:

That's fascinating, and nobody's mentioned, so, old evidence becomes dogma, so it's established on an evidence base, and this is not just relevant to medicine, so it's not just established on – it's established on an evidence base, but then that becomes dogma which in its self evaporates over time and then the evidence isn't refreshed, is that..... (5)

And even more telling was an acknowledgement that there was no post-imp limitation work done to evaluate the success of the initiative.

Which of all the measures here, we have introduced, has worked because our infection rate has reduced.....I don't know, if I'm honest, I don't much care so long as it's happened, it's a number of things we've thrown at it. I could play the experimental – I could take that one out and see if it makes a difference, but I'm not interested, it has had the desired effect. (1)

And 5 again returns to the sense that this is all irrelevant in a system determined by politicians and political favours.

Carry on with that, that's fascinating! *We work in a system where most of the levers that we've got were actually worked through with politicians in the first place, weren't they? **Yes.** NICE is a construct of a political approach to the NHS, by a government that hasn't changed political party in the last 11 years, and yet we don't seem to be any closer to political tolerance to this system than we were when we started; so that thing about, all they want to do is be elected. (5)*

The alternative is to give some well resourced people the time to plan, model and shape systems and more importantly, review what we have learned from what we have already done.

And I think everything else was left to – let's see what happens, we'll give some clever people and see if they come up with something, and that's what seems to happen with the NHS, the politicians either seem to go for a structural reform, on the grounds that it'll take a couple of years to do, and we can always claim – yes we know the system isn't working, we're doing this massive review, we're doing all this work to restructure, and it's going to work – just you wait and see, and then of course it takes three or four years to come through, doesn't work, and so they have to do it all over again! And if you look at the last three or four reorganisations, I don't think there's any

evidence that any of them have benefited the NHS at all. And certainly they didn't start off with any aspirations for that evidence. (5)

And then there are some direct and lengthy quotations given by an individual in a group situation that are worthy of inclusion as individual quotes. I like the one here that says the NHS is complex and cannot be easily modelled, but makes no reference to evidence.

I do believe that most people can understand that that's the world we work in, most people can understand that there isn't a text book on the shelf of how to do this job, and most people in my experience, if you spend the time talking to them, will understand that, all we're trying to do is what we believe to be the best, taking account of what everyone's telling us, and from my perspective, in my job, it's not opening holiday brochures, reading the small print and looking it up on the website, it's talking to people, and you know, should we regrade nurses in surgery they'd say no, you ask some of the surgeons they'd say no and if you do I'm going on strike, and you know, you ask some other nurses and they go, well yes, fair enough, whatever, you get a whole wide variety of views, and you somehow have to make sense of it. (3)

But the individual view is that there is sufficient evidence to make information and informed decisions that we can rely on.

I don't think evidence takes time to mature, evidence is there from when it's presentedit's then assessed, folk law, takes the time to mature, so I think evidence can come and be there, I think in management terms, new evidence rarely comes to light, but I think evidence itself, becomes evidence from the day it's presented, it's just a question of what category and what quality it is. (4)

The problem as ever, again quoted in a group context, is that politicians and information do not fit nicely together.

Yes, it is really, I said to my board, just the other day, you know, working in the NHS is like living the world's biggest experiment, and it is, you know, we'll twiddle this, and I always used to think, particularly when we had Alan Milburn, I used to imagine, you know, the man stood in front of this big complex machine with fan belts and nuts and bolts, and cogs and things, turning the spanner in his hand, just kind of diving in and just loosening a bit, or tightening a bit, taking a bit off or adding a bit on, and going, oh, that didn't work, we'll have another go, you know? (3)

And to the final observation on the use of information is a sense that however we focus on results – information – evidence and outcome, it will never be enough to identify the critical success factors in any post implementation review.

*But you don't know precisely what measure resulted in that success. **Ok.** I think it's probably a bit of all of those things. I think some of the writers say, you know, just give it up because you'll never be able to diagnose the causes,*

any one person can claim it's one thing, but it's a mixture of culture, ability and structure. This about hugely energetic capable people, do you think that, that almost gives them to reach an optimum outcome, irrespective of which path they follow? (3)

CONCLUSION

I would like to draw my conclusion back to the original concept of Rousseau. There has been a broad discussion in the paper of Rousseau and in amongst my hours of narrative I think it is most useful to classify my findings as follows:

First let me reproduce the table "After Rousseau" from my literature review.

After Rousseau: A synthesis from the literature of Rousseau on the practice of Evidence Based Management

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
A The supervision of employees	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
B Information available to managers on the consequences of their decisions	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
C The delivery on promises to the public, employees, stakeholders/taxpayers customers and others	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
D Management style	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
E Approach to academic research	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work

Management culture F	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors (1911) structured methods for improving efficiency were classified under scientific management	A belief that good management is an are - !the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion G	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implantation fail	Managers are prevented from real learning by fads and falsehoods

And this is what we find.

In the matter of:

So, in conclusion, using the Rousseau or After Rousseau model. This is what we conclude about the nature of evidence based decision making within the NHS in the East Midlands during 2007-08. I have notated a + to mean that the quotation favours an evidence based approach and a – to mean that the quotation means the lack of an evidence based approach to decision making or an = sign to say that it neither favours one conclusion or the other.

In the approach to academic research

An evidence based approach would conclude that managers read the academic literature regularly and the consultants who advise them are likely to do so also. The alternative conclusion is that few practicing managers access this work.

- “get yourself educated in something, then get a job, just don’t pretend it will teach you to be a manager”
- “it’s a bit like practice based commissioning, you know, I mean they invent it as a concept because it seems to be a means to an end, the end being whatever it is we all want”
- + “And sometimes reading things, I prefer talking to people really and I talk to a lot of management consultants who kind of say things, it’s not that it tells you something new, it’s just that it allows you to relate things in a different way”
- In conditions which predispose to hospital acquired infection “you wont do any of the things of which there’s a very good evidence base that it would make a difference, and so your first engagement with us, is to come and tell us to do something for which there is no evidence that any infection has been prevented, anywhere in the world – ever, by doing this and you think that’s the most important thing that we should do”
- “If I say to you academic evidence? I think it makes me feel, you know, chance would be a fine thing”
- “It will never be that developed in this experiment that is the NHS”
- + “So places which have a worse winter than we do don’t have this, they have a little bit more mortality but not much and it’s all down to poor

housing policy, benefits, insulation, social care, primary care access, all of these things”

- = “I think they’ll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they’re delivered, I don’t think they do use evidence”
- “No! We almost steadfastly refuse to accept that it might possibly work and it was worth considering because it didn’t fit the positive framework of choice and competition”

In the supervision of employees

An evidence based approach would conclude that managers acquire a systematic undertaking of what productivity gains are most appropriately cultivated from their staff, in the alternative a manager would have a style with no reference to its outcome or organisational performance.

- + “I went in very, very hard with the matrons about their cleaning audits, when we had all the matrons in, I said, I know it (the evidence) is not like that, you know its not like that, what are you playing at”
- + “We had a doctor here say to us, we don’t have to comply with the Health Care Commission standards because we’re not a hospital! What’s that about? Certainly wasn’t about better patient care”
- = “My next Chief Execs column in the staff newspaper, urging them to write to me, and I will reply, and I will go and meet them”
- + “You work up through your career (and to begin with) you have to be more and more evidence based because you haven’t built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way”
- + “I think the processes that are used by administrators should have an evidence base for doing them, and a rationale defined by evidence, I think managers should use evidence in reaching their decisions and evidence based leadership I think would go the same”

In the information available to managers on the consequences of their decisions

An evidence based approach would conclude that there was appropriate evidence and data, a significant reduction in perceptual gaps and post implementation review is valued. The opposite is, that information is poor and evidence is not collected.

- “Old evidence becomes dogma. So it’s established on an evidence base but then that becomes dogma which in itself evaporates over time and then the evidence isn’t refreshed”
- “Balanced scorecards. It’s not foolproof. I think it lulls you into a false sense of security. A&E, not the wrong side of the line, my dashboard would say ok, but we tried to fill a post there, we shortlisted the people and one turned up, and that means it’s going to be breaking down some time in

- the future, it (the balanced scorecard) is not proactive enough again”
- “I think world class commissioning, if we’re not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach. And I think that’s actually quite dangerous because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions”
 - = “I’d prefer things to be explained but things like that are very difficult to move in an organisation of 7,000 people, if they don’t very shortly afterwards appear on paper so you can do something with it”
 - = “Taught me you can approximate, but you need to know how you’re approximating, you know when you’re approximating you know what you’ve lost. But I have an ability to get into detail (the evidence and the data) when I need to in a way that some people just can’t”
 - = “I don’t think you’re ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it’s good in scientific situations, when I was a chiropractor, when it came down to the amount of chemical I put on to destroy something – there were tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that’s behind that decision, but if you don’t understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that’s there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was denied a drug six weeks ago, and now you’re spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high”
 - “The doctors’ view is, ok, 20 years ago, when you were building this hospital (because we’ve been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you’ve got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can’t clean round the beds. Because there aren’t enough beds, you’ve got too fast through put, so people with infections are moved around the hospital”

In the delivery on promises to the public, stakeholders and others

An evidence based decision making would conclude that decisions are based on systematic causal knowledge conditioned by expertise. Decisions in an evidence based conclusion would be systematic, informed and readily justifiable. In the opposite environment the public challenges decisions in the search for transparency and managers cannot learn why their decisions may have been wrong nor what alternatives would have been right.

- “Politicians, do politicians want evidence based decision making for the NHS? No, they want to be elected and that’s the bottom line and as long as you remember that, then everything they do is completely

- understandable!”
- “Nice (the National Institute for Clinical Excellence) is a construct of a political approach to the NHS by a government that hasn’t changed political party and yet we don’t seem to be any closer than we were when we started”
 - “And what we always find is every time they introduce one set of priorities, another set emerges because they’ve been ignored by the first set”
 - “Yes, I think the public as body public, would expect evidence based decision making, and quite rightly expect that, and would want it as well. I think the public as Joe-individual probably would expect, would want it, but when it came to them, would probably bring in other subjective assessment criteria. I think politicians are a bit different, and I don’t think, whilst they would probably in a purer discussion say, of course we do, I think they will always, and evidence is always driven by context, they would always want their policy implemented – evidence or not”
 - “Pseudomonas is going to become an important infection. Vancamycin resistant enterococci are going to become, TB is going to become one. Because all of these infections are being ignored, because everyone’s focusing on MRSA”
 - “And we don’t even look at the vast of MRSA infections, we don’t look at all the MRSA infections that don’t get bacteremia, all the joint infections, the skin infections, you know, the ulceration that people get, we don’t look at the damage that that causes in the community. So we’re looking at the tiniest tip of the smallest iceberg here”
 - “you clearly identify yourself as wanting to give the public confidence in you being a good custodian of their health service, versus the method that would do that is not really evidence based”

In the matter of management style

In a conclusion erring towards evidence based decision making about the NHS, managers would have an understanding of the powerful impact of their decisions and managerial competencies would be recognised as critical and scarce. The opposite conclusion would be that evidence based decision making seems to threaten managers personal freedom to run their organisations as they see fit.

- = “You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I’ve watched them do fantastic things, and I’ve watched them being stopped from doing fantastic things, because some rule book says it’s not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps”
- + “So there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don’t need any evidence, what we need is a decision. I would be shocked if the evidence wasn’t already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on

certain decisions I would want the 'show-me test' as well. On big things I want to see it. So I would stop – go to the evidence, then consider the evidence in the wider context of the decision we're making”

- = “One of the things that’s happened of course to FTs is that they’ve attracted a different calibre and type of Chief Exec, arguably. I think, you know, we’ve advertised for two director posts lately and there are a lot of people who want to work for an FT.....ok.....there are a lot of people moving out of Trusts that wont make it to FT status, so you could say, what we’ve been doing is sapping the best management resource out of the non-FTs to maintain the performance of the FTs. We’ve also attracted, I think, some quite different people in Non-Executive roles and Chair roles; the Chairs of FTs, a lot of them are, like the freedom bit, like the get on and do run a business thing”
- “I’m interested you’ve chosen evidence based management and not evidence based leadership, because I think there’s a difference between leadership and management. I suppose, there’s something about management based around evidence and management decisions based around evidence, which might be different from evidence based management. It depends how you define management, and evidence probably as well”
- “Well, he reminded me what the end was, that’s what he ultimately did, he kind of made me think about what they were trying to do, yes they did it in a cack-handed, stupid, I wouldn’t have done it that way, kind of a way, but given that that’s what they were trying to do, it was really not helpful for us to jump up and down and say ‘there’s no evidence for this’, because it undermines the whole investment programme they’ve put in place, which wasn’t adding any value to anybody, it was just making it wasted money, instead of possibly purposeful money”

So in Summary

In the matter of the approach to academic research (Against!)

In the matter of supervision of employees (For!)

In the matter of the information

My Conclusion is

There is a bias against using academic research by NHS managers in the East Midlands. This is by no means universal, but is consistent in its presentation.

There is a very strong preference for using evidence based decision making amongst the cohort of East midlands managers and use an appropriately cultivated management approach to support evidence based decisions.

There is a bias against evidence

available to managers on the consequences of their decisions (Against!)

based decisions. Decisions have insufficient data and evidence for decision making, and little value is attached to post implementation review. Some managers are neutral towards this subject but few, if any, show a preference for evidence based decision making informed by the consequences of their decisions.

In the matter of management style (No preference either way)

There is only an inconclusive result in the area. There is no preference. Some managers have a preference for evidence it seems but equally some would discredit it as a viable and realistic approach.

In the matter of the delivery of promises to the public, stakeholders and others (Against strongly!)

Of all the areas this is the one where there is next to no examples of evidence based decision making, but there are multiple strong, lengthy and cross-referenced examples of decision making that is neither systematic nor developed by causal knowledge. Decision making is opaque to the public and frequently challenged.

So how does this help in building up a grounded theory and how is the process of grounded theory working? The NHS is reflected by the cohort interviewed to be an industry whose growth is entirely government determined. It is not to say that it is a matter of ideology and indeed all three political parties support the NHS models in the provision of public healthcare but wherein lies the grounded theory of NHS management that emerges from these observations and interviews?

The following issues show that some similar concepts exist. All of the NHS executives interviewed and the group exercises recorded indicate that NHS managers in the east midlands are working for common, popular approaches to decision making that enable them to share and compare and to bargain and negotiate with each other or with politicians and the media. The public are a real challenge to their sense of comfort but there is no model or general methodology for generating theory to be tested out with the public and stakeholders. The group is numerate and the decisions by the individuals or bigger meetings are grounded in data that is collected and analysed even if that is never validated or best available evidence or best decision making tool. So in the round ideas are grouped into popularity – general application/applicability and – grounding in data. If and when public spending

growth in the NHS slows it is these grounded concepts – is the decision “popular, general and data driven” that emerge as a grounded theory.

Considering these examples, it is possible to form a collection of categories. The data used for decision making must have joint ownership between those collecting it and those being performance managed by it. This joint collection and analysis is a key to the evolution of a grounded theory of the relationship between NHS elites and the organisations, especially the clinical organisations that they lead. The data analysis is conducted in a system which seeks theoretical consistency no matter whether the evidence supports the theory. So for example data is compared against evidence about choice, competition, privatisation (plurality) and contracts (contestability) which is saturated imposition of neo-classical economics theory on the NHS even if there is no evidence for how it improves the organisational effectiveness of all or even part of the NHS. What is clear is that there is a constant desire for compassion.

Thinking about different ways to look at the evidence these are emerging themes and trends. It is clear that this piece of qualitative research was able to examine the individual and group behaviours of the current elite east midlands vision of the NHS manager. Other forms of qualitative research may have been applied. Ethnography might have lead to a way of understanding the daily life of NHS executives but there is a bias in this method to seek methods that improve the probability of success, conversation analysis may have explored the turn taking and power relationships at play and evaluation research applied would have lead to a consideration of the interests and values of NHS managers relative to the general and public welfare. Consistent with my position as a participant in the system and my desire to not only observe the cohort but to create a generalisable theory about us then grounded theory (the generation of theory from data has proven to be the most successful tool.

If the manager is a decision analyst then what do they count? All decision making, the direct costs of which are met by NHS funds collected by the taxpayer, should: provide new knowledge or direction needed to improve their performance and the performance by their part of the NHS. This should improve the health and/or healthcare of the population for which they are responsible.

If an NHS manager were to fill up a box that says ‘EBM’ what would they put in it and what would they throw out? Does this lead to the viable creation of a theory that can be concluded to arrive from grounded research?

The manager is willing to use evidence to argue their case and protect themselves. This in turn would mean that the findings of an EBM decision would be in the box only if they result from the following condition: The evidence was from a source that is generalisable for others in the NHS cohort to use – either by having adopted others sources or added to the commonwealth of resources. That the decision followed a protocol that was clear even to the layman/non-executive and was bounded by clear limits of its

applicability. An EBM box would include things that they were happy for everyone – their peers, their staff, politicians, taxpayers, patients to review for its evidential consistency. The box would have in it only those ideas that were ethically accepted as consistent with NHS values, rejecting those that are efficient but not effective in achieving organisational mission and goals. Given that the cohort in study are Chief Executives and senior managers, they will have demonstrated that these are clearly structured methods for implementation of their decision and that a cascade system exists for the dissemination of their decision.

How does this fit with my model and is it possible to create another diagram to show the relationship between these elements?

Let us consider the differences exhibited by groups and individuals, that groups were happier with evidence than individuals. Consider the definition of a pedant. A person who is overly concerned with formation and precision and who makes a show of learning. The corresponding notion is that the person is also a source of instruction or guidance. The term can typically be used with a negative connotation indicating someone overly concerned with minutiae and whose tone is perceived as condescending but when it was first used by Shakespeare in 1588 it simply meant teacher. Some people take pride in being pedantic and may preface a sentence as such. Therefore I believe there is a boundary where pedantry is an accepted form of evidence based decision making and that this is consistent with the amount of authority and status the individual has.

From the conversation I think through grounded theory, I can say that;

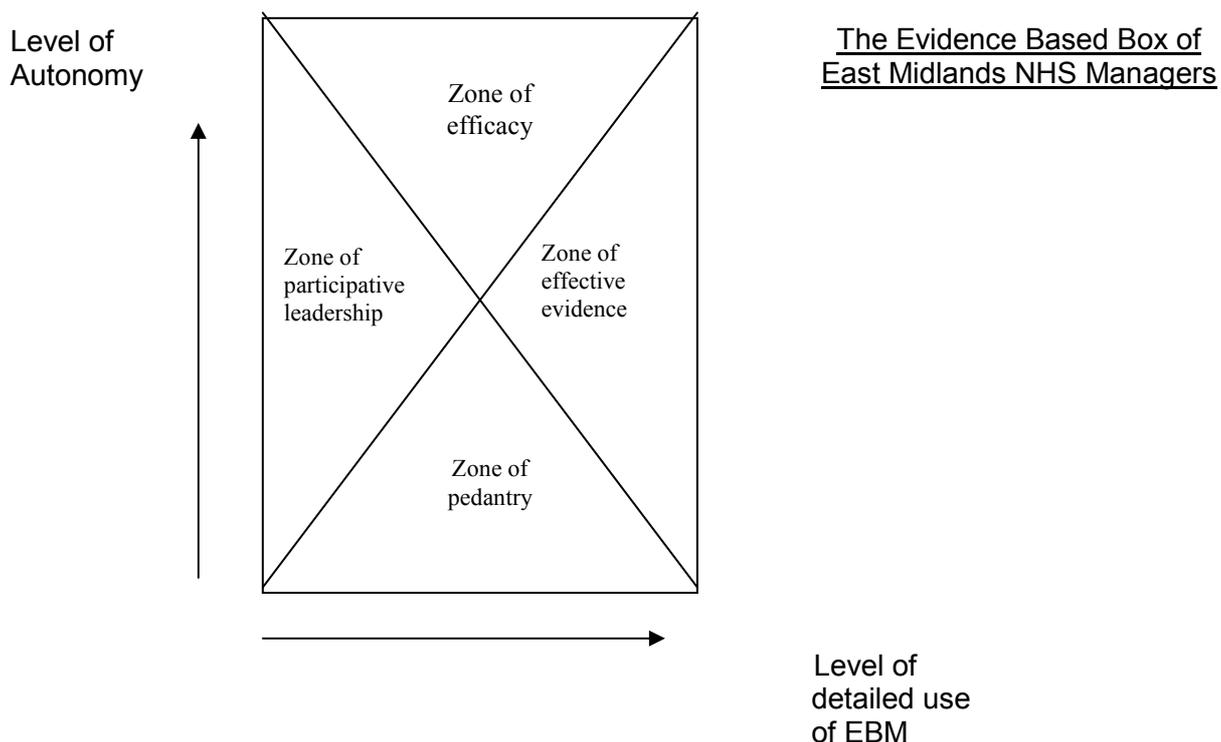
The cohort treats EBM in the following ways to display that the cohort itself is efficacious. By efficacy I mean that the effect of a given managerial intervention has to not only be economically efficient it must be 'acceptable'. Acceptable in that the political and public context of the NHS means that the impact of an intervention by the Chief Executive or senior manager has been thought through in an evidence based way before the decision has been unleashed in the real world NHS. Acceptable in that there is concerns that this decision is at least as good as any other.

That EBM in the cohort is alive in the following ways. If you consider the diagram below it is clear that there are some places where EBM is effective. Referring back to earlier conversations we see quotations that talk of a negotiated use of evidence through acquired years of experiential and experimental learning. This leads to the oft sought for "earned autonomy". The best quote was the one that said "because you haven't built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way".

But that EBM is dead to the cohort when you consider that managers in particular in this project, described a situation where their own control over the decision making process had been to some extent lost through the requirements of audit. At low levels of autonomy you use evidence a lot and

at high levels of autonomy you use evidence a lot again but somewhere in between it gets much more difficult. The best two quotations to summarise why EBM might be dead to the cohort are “It’s a yes and no if I am brutally honest, if you take them in an enclosed ecosphere when there are no consequences to their decisions. Then they will always go with the evidence, then you put them back in the real world and ...” plus “a lot of decisions that are made, seem to be based more on history and on the views of politicians and key stakeholders, which are often not really evidence based.

So in later study I would take the following defined tool and go back to the cohort in a challenging way.



This model is emergent rather than solid and concrete and how I can look at it and define it is something like this. I have quartered the box not by quadrants but by triangles to show that this model to an extent overlaps and is about occupying different zones of the autonomy/detail axis. The key is that there are four zones.

1. “Participative leadership”. Experienced at all levels of autonomy, NHS managers try to use some degree of Evidence Based Management but they never explore it to its full extent. The best they ever get is a ‘halfway’ experimentation with evidence. Indeed it is possible to make decisions without evidence at all.
2. “Zone of pedantry”. Evidence is used to develop and control the organisation but the manager never rises above the middle tier of autonomy and authority. Note the use of phrase autonomy rather than “authority” or “power” as even a powerful individual may find themselves in the zone of pedantry when working in a group because

their autonomy is diminished in the meeting. In this zone a very detailed application of evidence based decision making coreless negatively was autonomy – if you have to use a lot of detail to make a decision you don't have much autonomy.

3. "Zone of efficacy". The decision will use varying degrees of evidence in getting things done. What is effective is not necessarily efficacious. The efficacious decision is the one that produces a desired amount of the desired effect and the success in achieving a given goal. It is imperative to note that in this zone, the complete acceptance of rejection of evidence based decision making are polar opposites but exist in their purest form where the manager has the ultimate autonomy.

Finally from my increased understanding and interpretation of findings it is possible to say that evidence based management has an identified and discernible impact on NHS management but it is not common and is certainly not in good health as a prevailing philosophy. It is not the managers who will keep it alive and any implementation of evidence based management on a wide scale will require the importation of external skills and political will to implement.

Given that my intent way to hold up a part of the mirror to the "us" that I belong to (NHS managers in the East Midlands) this makes me feel that we are using a body of care that draws upon our own experiences and the experience of generations of practitioners. The sad thing is that much of it has no real evidence base on which to justify various things that we do in the name of leadership and decision making. This only diminishes the sense that we are engaged in professional practice, that we have a gathered body of well organised knowledge that on a personal level nothing can be identified that eliminates unsound or excessively risky practices in favour of those that have better outcomes except my training as an accountant. Throughout this process I decided to slow the mirror in a way that enabled a true reflection not to study the effect of an evidence based intervention. Using the question of an "evidence based approach: does it exist? Had a number of advantages because it enabled all of the NHS managers to avoid truisms that are socially acceptable but which would prove not to be true when I sought the corroboration. For example the demand to provide evidence can simply be used as an excuse to avoid options and scenario's which have not yet been evaluated or which because of their nature are very difficult to evaluate.

Whatever my conclusions it was possible to say that I defined the mirror as the method by which our productivity as NHS managers might be enhanced in our own eyes. There is no doubt that a lack of an evidence base for a profession has left the door open to amateurish practice by charlatans and rogues. Therefore what I found fascinating (and led to the reused diagram) is that the evidence base is widely recognised as the means to provide sound validation for the work of middle managers. The Chief Executives and senior managers were not supportive of an imposed evidence based methodology but did acknowledge and support the control of junior staff to preserve the

integrity of the NHS management profession. My own personal observation of what this means to “us” is that we should like evidence based decision making but remember that EBM is a philosophical approach that denies the true value of experience and heuristics. I take comfort that examples of reliance on the “way it has always been done” can be found in almost every profession – including medicine and nursing – even when those practices are contradicted by new and better information. I admire that the NHS leaders I met remembered that no evidence can be better than the use of poor quality, contradicting or incomplete evidence, so ultimately making sense of what I see in the mirror for the reader is: the model is considered valid by elite people but for control and direction not for personal accountability because they see themselves being their own person. They don’t want evidence to be the concrete block that holds the elite down, they want freedom.

The discussion of evidence based management is a valid question but it is not liked in the higher echelons of management, linked as it is to the notation that management can easily merge into administration when considering white collar tasks.

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**David Sharp
February 2009**

**“A Quantitative Analysis of East Midlands Ambulance Service
Referrals”**

**Document 4 is submitted in part fulfilment of the requirements at
the Nottingham Trent University for the degree of Doctorate of
Business Administration**

Cohort 8

A Quantitative Analysis of East Midlands Ambulance Service Referrals

Schedule

- 1 **Introduction to the problem**
 - 1.1 Why this is worthwhile to me as a matter to study.
 - 1.2 Why does this matter to the study of evidence based decision making in NHS Management.
 - 1.3 The collection and storage, or use of data.
 - 1.4 How does this fit with the evidence based box argument?

- 2 **Subjects under study**
 - 2.1 A brief introduction to EMAS.
 - 2.2 A brief introduction to the studied population.
 - 2.3 A brief introduction to the problem.

- 3 **Patterns of Data**
 - 3.1 Presentation of the Data.
 - 3.2 Analysis of the Data.
 - 3.3 Validation of the results.
 - 3.4 Significance of the results.
 - 3.5 How the results answer the problem.

- 4 **Implications for NHS Policy and Practice**
 - 4.1 Practical implications for leaders in the NHS.
 - 4.2 Clinical Practice and managerial practice.
 - 4.3 Patient behaviour.
 - 4.4 Needs for training and change.
 - 4.5 A checklist of evidence based conclusions.

- 5 **Conclusions**
 - 5.1 How this data has stretched our body of knowledge about EBM in the NHS.
 - 5.2 Did this match what I thought in the introduction (1.1/1.2)?
 - 5.3 What the picture looks like at the end of the analysis.

- 6 **Limitations of the approach**
 - 6.1 Methodological limitations.
 - 6.2 Data Capture.
 - 6.3 Deliberate boundaries on the question.

- 7 **Implications for further research**
 - 7.1 Topics to be studied.
 - 7.2 Different regions or countries.
 - 7.3 Foundation for further study of EMAS.

1 An Introduction to the problem

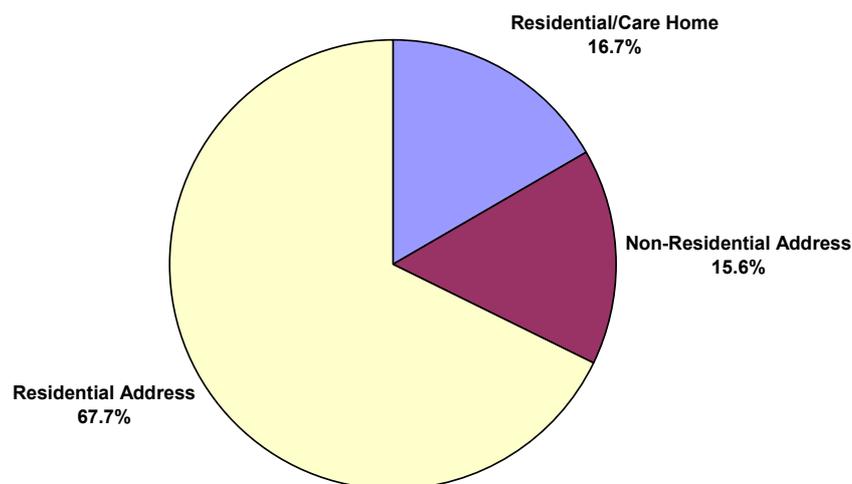
1.1 Why this is worthwhile to me as a matter to study

In my professional life I am a planner and purchaser of Emergency Ambulance Services. So I spend a great degree of time analysing and considering data about performance of ambulance responses to emergencies, the most efficient ways to do things and looking for insights that will either improve quality for the same price, or get me the same quality for a lower price. What I buy is affected by the reasons that people call for ambulances – dangerous personal behaviours, the frailty of the human body in times of extreme weather (heat and cold), biological factors such as disease or the contra-indicators of drugs, age and disability. In the response to a particularly difficult performance period it becomes clear that “falls” were a key reason for the despatch of ambulances. Although few trials have been carried out in the UK, the prevention and management of falls in the older population is a key government target in reducing ill health. This is a key target of the national service framework for older people. “Reduce the number of falls which result in serious injury and ensure effective treatment and rehabilitation for those who had fallen”. (NSF 2001).

So I asked for a simple binary analysis of the response to falls in the over 65 population. Using the previous 12 months data the query was asked – was the person you picked up as a result of a fall and if so, where did you pick them up from? The received wisdom was that residential care homes were prone to call for ambulances to avoid picking up fallen clients for reasons of potential hazardous injury to the care staff and that the older population – particularly in cold weather – was prone to fall in the street. So a simple analysis of the results was carried out and that is given in the figure below.

Figure 1

EMAS Responses to Falls in Over 65s: Type of Pick up Location
Sample of data from 2006/7



The sample set was 2700 records taken randomly from all EMAS calls received and non-residential address includes things such as “outside”, “shops”, “pub”, as identified by the caller and where the location was clearly non-residential, such as outside a named business or

factory. What fascinated me was that people fell in their own homes. Consistently and evidentially people fall in their own homes. As a proportion of the population who live in residential care homes more people may be falling than those who live in their own home but, as an organiser of ambulance services, the evidence tells me we should start with what people are doing in their own homes not anywhere else. So why the pre-occupation with everywhere else in the study of falls? It became clear that the study of falls was time and again about the reason for falling or the avoidance of admission to Accident and Emergency Departments. Close (1999) analysed individuals presenting at A&E following a fall; Crotty (2002) looked at the best medicine and treatment to get fallers home quickly; Tinetti (1999) looked at improved daily living skills to prevent falls and developed work done by Ebrahim (1997) and only Pardessus (2002) considered the modification of environmental hazards that might affect the propensity of an individual to fall. I was therefore presented with a very simple piece of evidence that mattered in the planning of ambulance services, specific to the actual rather than theoretical experience and it told me something that we weren't considering. Whilst undoubtedly there was an issue with homes and people falling in the street, if we wanted to look at the reasons that the ambulance was called – in absolute rather than proportionate terms at least – then the answer for falls lay in peoples own homes.

1.2 Why does this matter to the study of evidence based decision making in NHS management?

Let me begin with two more data queries that were run on the same sample data, almost immediately after the first query. Ambulance calls are triaged from Category A (see immediately, danger to life and the individual) to Category C (traumatic to the person but requiring quick rather than immediate attention). There is also an acknowledgement in the work that NHS Direct do that communicating in a way that is sensitive to gender norms may also facilitate adherence to interventions that improve health or avoid ill health. So two reports were run as below.

Figure 2

EMAS Responses to Falls in Over 65's by Call Category
April 2006 to March 2007

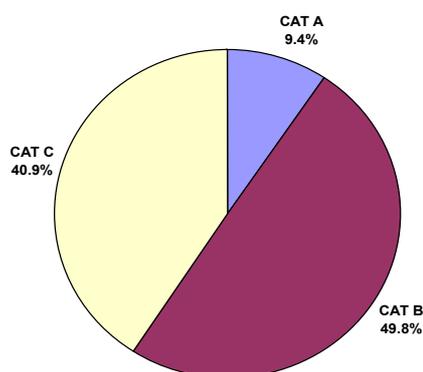
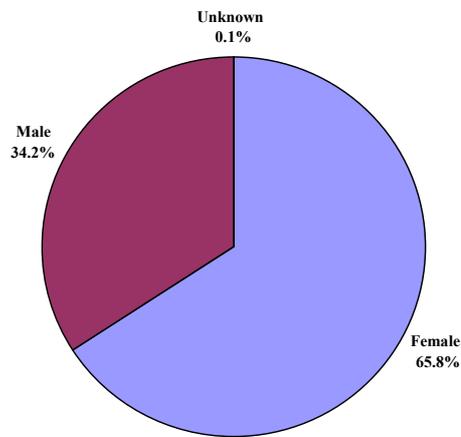


Figure 3

EMAS Responses to Falls in Over 65's: Gender
April 2006 to March 2007



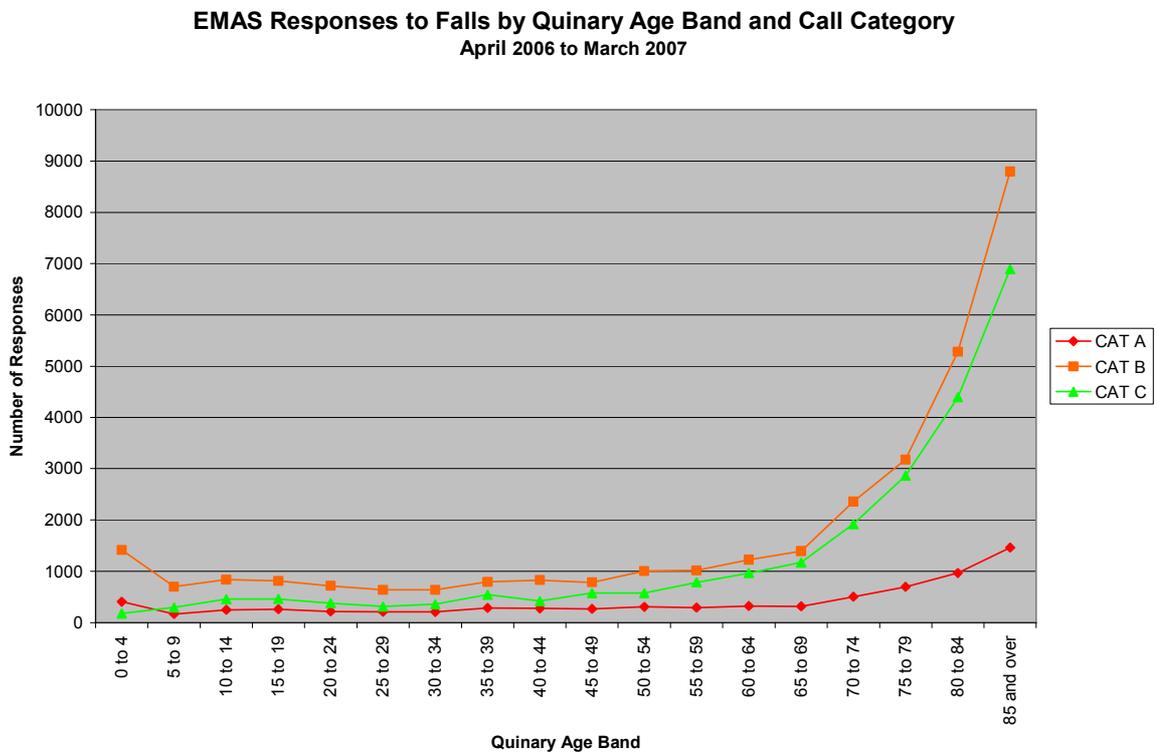
These two pieces of data turned into information are really important because the context here is ambulance services not the general planning of falls. Consider this quote from the NHS Direct website, (so this is the NHS talking about itself). “Falls often result in serious injury, often to bones and joints and there are many fatalities particularly amongst older people an estimated 1000 older people die each year from a fall on stairs. Falls cause the most deaths and long-term health problems amongst older people”. But for emergency ambulances as part of the NHS less than 10% of the work collecting falls is Category A (NOW!) and Category C (quick, but okay to wait) is over 40%. However important falls are to the NHS, the Ambulance Service needs a different gradient to policy response for falls to other parts of the NHS. An evidence based response to falls in the East Midlands Ambulance Service in 2006/07 would be – to paraphrase the NHS direct quotation above – “Falls often result in serious injury, often to bones and joints but in most cases this will not require or receive a blue light response of a fast ambulance once we have assessed the comfort and risk of the fallen patient”. I then engaged the question about whether this was a gender issue. Were there any issues that affected falls related to sex? The figures showed that 2/3 of the responses were to women. In an NHS where gender equality affects the general consideration of health status in the population the simple use of data analysed and identified a service with a specific gender bias and yet little or nothing was being done to identify this as a “women’s issue” in the say that, say, breast cancer was (predominantly but not exclusively a female condition).

This all matters to the wider use of NHS policy. Some very rudimentary queries using data coding, already available in the minimum data set for ambulance call outs, was throwing up evidence for one region in one year that lead to different conclusions about the nature of service delivery than a planner might have had based on national policy alone. Let me consider for a moment five truly admirable things that NHS Direct tell us about falls as they affect the NHS:

1. Physical activity improves balance and prevents falls.
2. Older people respond to life events such as retirement or becoming a grandparent in adjusting their perception of the need to manage risk to prevent falling.
3. People like to work in groups on falls prevention, but these can be demanding if your hearing, sight or short-term memory isn't the best.
4. Self-management is better than dependence on professionals.
5. Advice can be tailored using websites.

Of these five, only one really mattered in the analysis of the EMAS response to falls, that in the over 65's the effects of aging are critical. As the next graph shows this is a material issue for EMAS.

Figure 4



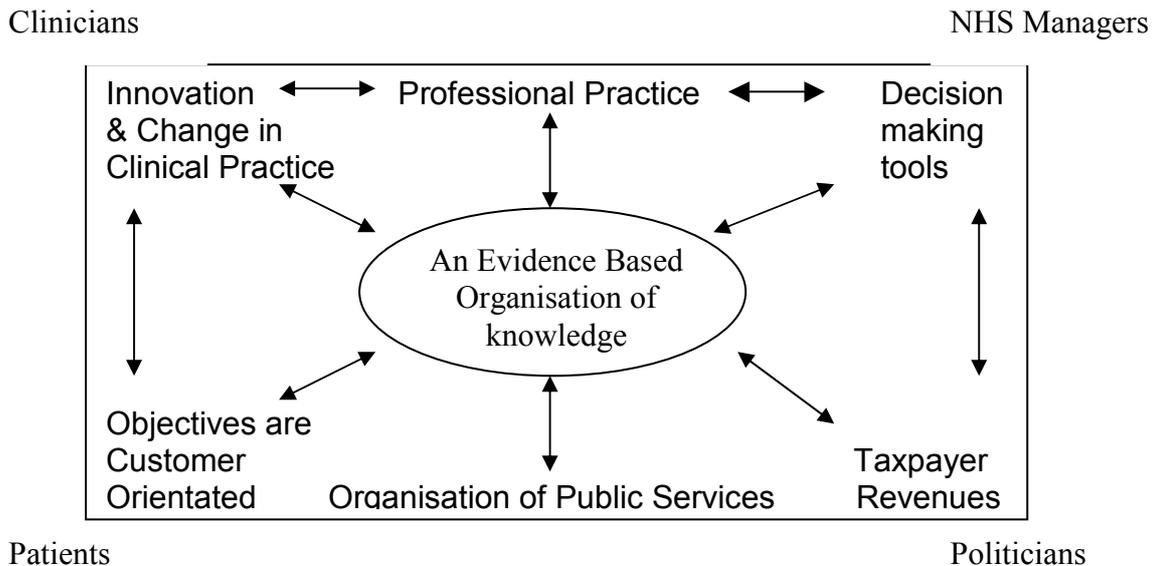
The response by quinary age band and call category tells us that in the over 65's the call category is also related to age. Responses to older people who have fallen are more likely to be coded as less urgent responses. The frequency of Category B and C responses to falls increases exponentially in the older age groups. In contrast, Category A responses increase only slightly in the older age groups. As the human condition becomes frailer with age the urgency of the response by EMAS diminishes – more people fall as they get older but they fall in less traumatic ways – requiring a measured, rather than a “NOW!” response.

1.3 The collection and storage, or use of data

‘Performance’ has long been the NHS – including EMAS – term coined to the task of extracting useful information from the clinical data collected. As new despatch and call handling methods have been introduced to ambulance services progressively since the 1980's the increasing volume of data that is collected has led to computer-based approaches for the storage of this data. The degree and method for applying query software to this data for

information, discovery and knowledge can be obscured by the drive for ‘performance’ in the NHS. ‘Performance’ in effect is a very specific set of numerical responses to NHS policy and targets that extracts the data and compares/juxtaposes it with plans in a very structured way. What my first couple of introductory paragraphs have shown though is the dominance of performance can limit the use of simple algorithms to identify attributes of the NHS and identify opportunities to improve processes that we might have got from the same data.

Let us consider the “Evidence Based Box”.



Starting with the principle that the ambulance data set has already given us four pieces of knowledge that we didn’t have before – the location where falls happen, that falls happen to women rather than men, that most calls are not critically urgent and that the older you are the more likely it is that you will fall but it won’t be a fall requiring a “NOW!” response from the ambulance crew. Asking the four corners of the evidence based box about why they didn’t know this says some important thing to the use of evidence based management based on quantitative data in the NHS.

“Politicians” – The NHS is an exercise in political power. The politician will identify trends in public policy that go beyond simple analysis. The politician is naturally distrustful of ever more detailed algorithms about delivery for a part of the NHS, being concerned with the ‘National’ nature of the NHS and consistency of policy application. As an avoider of data the politician can still have the opportunity to identify key business processes and target opportunities but will not be able to push for a multivariate analysis of the data. Ultimately the problem is that the politician is concerned that abdicating control over the usefulness of data to the statistician to explore knowledge in this way may result in contradictions with policy, false-positives or results that are good for the NHS but no use for the politician at all.

“Public” – Ambulances are an emergency service. The call for an ambulance is 999. The same as for Fire or the Police. The public want their police visible and their fire service quick. It follows that the public want ambulances – glamorised by the media portrayal – to be there quickly whatever the circumstances. The public has made the ambulance service part of the taxpayers compact with the NHS and a forecast or predictive modelling based approach to the use of EMAS data is of low regard for the public. The same data – mining and prediction techniques puts ambulances and modern response vehicles on road sides rather than ambulance stations and the public may be distrustful of the road-side ambulance

opined to be “doing nothing”, when it has actually been statically placed. Data is, in effect, linked to targets – themselves a perceived corruption of a clinically lead NHS.

“Clinicians” – The clinician, as has been seen in the short literature search identified in paragraph 1.1, is most concerned with the nature of the fall. The ambulance service is seen as a scoop and run service, bringing the patient efficiently to the trauma centre. To the clinician the policy response of the NHS is consistent with the patient experience. Falls are ubiquitous and deadly, require immediate response and palliation for pain. EMAS will transport patients who require moving to the centre for excellence in this area. Continuous innovation in the clinical pathway, dramatically increasing the accuracy of diagnosis and prediction of likely outcomes for patients for different interventions makes them satisfied they are doing the best for falls: that the ambulance is likely to be the first responder; that falls are rarely life threatening; that there is a gender bias in those who fall and that getting to people at home before they fall, not in the street after they have fallen, would be economically sensible; none of this will matter to the clinician.

“Managers” – Managers rely on the use of data. But they are unlikely to be happy with data that has unknown interrelations. An unavoidable weakness of asking the sort of what-if questions posed about the EMAS data is that it can lead to two adverse reactions amongst managers. Unlike performance data it may expose uncomfortable relationships to be observed between perceptions of excellence in the NHS target performance (attributed by others) and real questions about operational policy and superior operational delivery. Secondly it can expose the pursuit of an information data source that has never been observed and leads to the torment of the professional administrator – a request for more form filling and data capture. Managers are also concerned about issues of data security given that significant data loss in the NHS is now a dismissible offence for all grades of NHS manager.

2 Subjects under study

2.1 A brief introduction to East Midlands Ambulance Service (EMAS)

I wanted to complete the analytical quantitative part of my study of evidence based management by looking at EMAS, as the only clinical service organisation that covered the whole of the East Midlands. EMAS also provides services in the South Humber areas of North and North East Lincolnshire which is outside the definition of East Midlands used elsewhere in this project. When I talk of the East Midlands in regards to ambulance service I will be talking about the area co-terminus with the East Midlands Strategic Health Authority and the Government Office for the East Midlands, not the whole of the service area covered by EMAS including South Humber. EMAS provided emergency and urgent care, patient transport, call handling and clinical triage services. EMAS employ 3000 staff and have 70 locations they operate from and an annual budget of £137 million in financial year 2008/09.

Accident and Emergency crews responded to over 500,000 calls this year. In addition, patient transport and volunteer ambulance car drivers provide care and transport on 5000 journeys to and from routine NHS appointments each day. Community Paramedics and Emergency Care Practitioners treat people in their own homes following an emergency response if a hospital visit is not required.

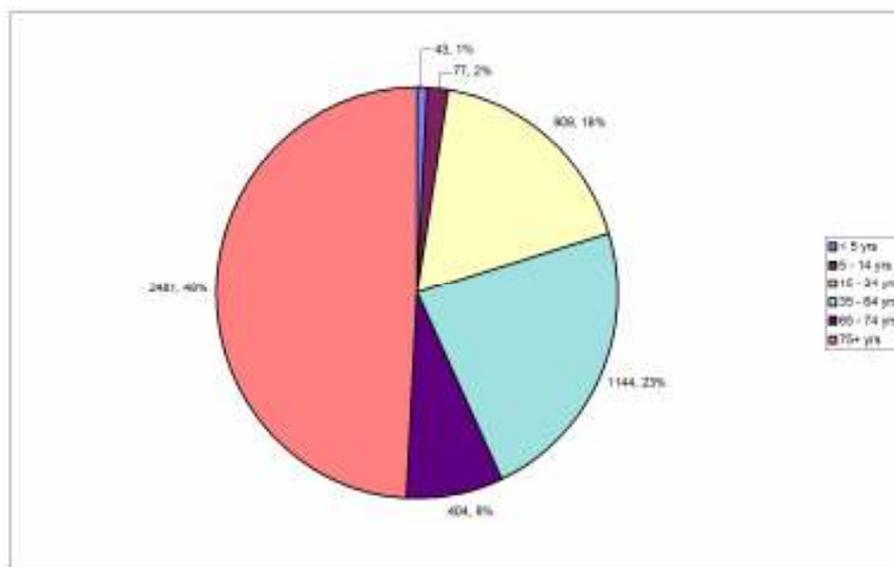
The requirement is for all NHS ambulance services to respond to the most serious and life threatening injuries (what was called Category A earlier) within eight minutes. Ambulance Trusts must also arrive at the home of patients within 15 minutes if requested by a GP. The publication of “Taking Healthcare to the Patient – transferring NHS Ambulance Services”

(2005) also started a process of change which shifted the focus from simply response times to the quality of clinical care when response staff from EMAS reach a patient. So measures are monitored for example: how many heart attack patients have been given clot busting drugs (for heart attack and stroke patients this is vital to be given as quickly as possible to prevent long term damage); how well pain has been managed for patients by the use of scales and EMAS performance also includes an active duty to make referrals under child protection guidelines as a first responder to families in varying degrees of distress.

EMAS is organised as an NHS Trust and the ultimate objective of the organisation would be to sustain a sufficient track record of financial and quality performance over a number of years that they were authorised to be an NHS Foundation Trust. They receive their annual income from Primary Care Trusts. In that way EMAS can only be paid in competition/opportunity cost with every other possible disbursement of NHS resources. The amount that EMAS receives is settled in exchange for services provided but will be in the same way exclude GPs, urgent care centres, some private providers and other NHS hospitals who might have thought they could use that money for the same patients in a better way. To that extent, EMAS must constantly improve and re-prove itself to maintain the contract income it receives as well as place itself in the contest for additional resources within the NHS by way of innovation and good clinical quality. EMAS has grown both organically and by merger from previous ambulance service that served the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland. Before 2000 these would have been separate organisations.

2.2 A brief introduction to the studied population

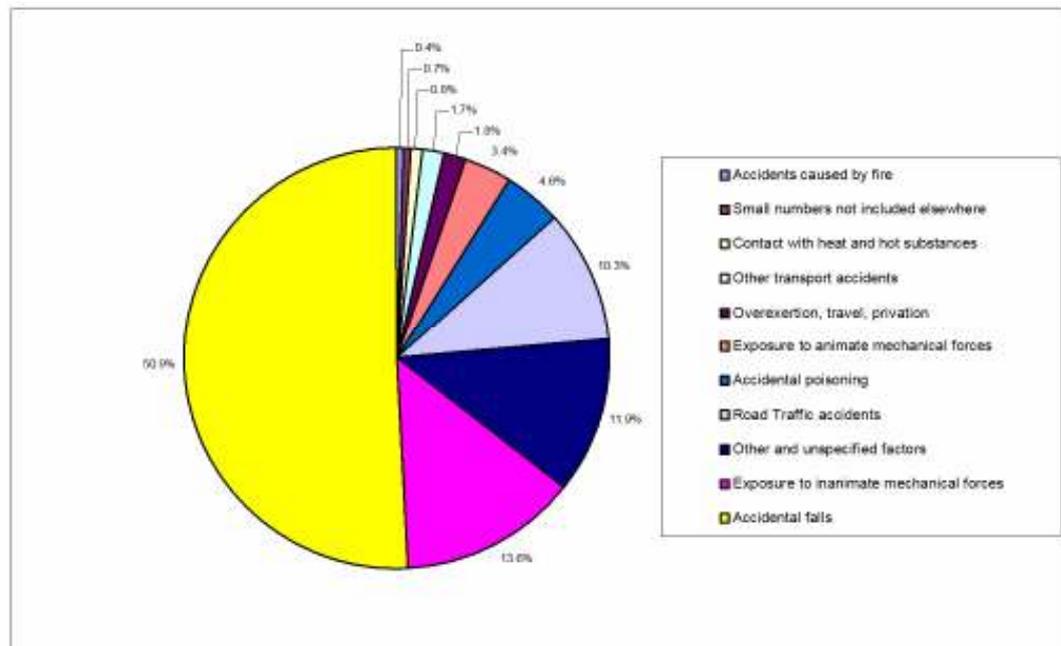
Figure 5: Deaths from avoidable injury by age group in the East Midlands (2001-2005)ⁱ



With a population of nearly 4.2 million, 7% of the UK total, the East Midlands is geographically the third largest region in England. The area faces diverse challenges including dependence on manufacturing industries and ongoing problems of urban deprivation. The south of the region is more prosperous due to close links with the South East but there are parts of the region affected by rural deprivation and isolation. Specifically, the East Midlands is the third most rural region in England with 29% of the population living in rural areas. The region has a similar age structure to the England average with 18% of residents of school age, 63% of working age and 19% of pensionable age. The population is projected to increase between 2003 and 2028, with the principal driver of this growth being the group of pensionable age. In the East Midlands there are slightly more women than men at 51% compared to 49%. In the 2001 Census, 9% of the region's population classified themselves as having an ethnic minority background. Residents of Indian origin make up the largest group in the East Midlands accounting for 3% of the total population. There is considerable sub-regional variation with ethnic minority communities making up 39% of the population of Leicester City, but only 3% in Derbyshire. A statistical overview of the East Midlands region shows that it is the second smallest region in terms of population. 29.5% of the population is resident in rural areas, which is 10 percentage points higher than the England average. In 2004, 19.8% of the East Midlands working age population self-described themselves as having a disability, which is one percentage point higher than the UK average. According to the 2001 Census of Population 72% of the population self-identified as Christian. 1.7% of the population described themselves as Muslim and 1.6% as Hindus. The Government estimates that between 5-7% of the UK population is gay, lesbian or bisexual. In June 2007 76.2% of the working age population of the East Midlands was in employment. This compares favourably with the average UK rate of 75.8%. The employment rate was higher in rural areas than urban areas. The regional NVQ3 rate for working age adults is 48.8% compared with the UK average of 50.5%.

2.3 A brief introduction to the falls problem

Figure 6: Main causes of avoidable injury admissions in 2005/6 (all ages) - East Midlands residentsⁱⁱ



Falls in the elderly population represent a serious and increasing issue in the UK and the subject area is attracting increased attention in current government policy development across different departments including health, social care and housing. In January 2008 the Department for Communities and Local Government released a report entitled “Lifetime Homes, Lifetime Neighbourhoods” (2008). This report highlights the following statistics:

- One older person dies every five hours as a result of a fall
- Falls in older people cost the NHS around three quarters of a billion pounds each year
- 1.25 million falls a year result in hospital admissions.

Ambulance services have a key part to play in tackling this issue. The recent Department of Health guidance on Urgent Care Pathways for Older people with Complex needs states that:

“The importance of the ambulance response to older people who have fallen has historically been poorly recognised within the wider NHS. Ambulance clinicians are in a unique position of attending this group of patients in their own home and as a result are able to observe, not only the condition of the patients, but also their living conditions (hygiene, food etc).”

“Lifetime Homes, Lifetime Neighbourhoods” commits the government to the following action:

- “We will improve joined-up assessment, service provision and commissioning across these three sectors (health, housing and social care) in order to deliver better outcomes for older people.”

Falls in the East Midlands

Against this national back drop it is important to understand the ‘picture’ of falls in our area and what we can do as a service to reduce the number of falls, through partnership working or by managing our response to them more effectively. The East Midlands falls data reinforces the national view and therefore there is a need to pay particular attention to falls.

3 Patterns of data

3.1 Presentation of the data

Several types of statistical/data presentation tools exist, including: charts displaying frequencies (bar, pie charts); charts displaying distributions (histograms) and charts displaying associations on an x-y scale (scatter or frequency diagrams). Throughout this paper I will try to use the simplest diagram available to enable the data to be understood, with summary values and graphical presentation. I have limited my presentation to summary values to illuminate the discussion for the reader. It is important if a deeper understanding of this data were to be had, to look not only at absolutes and means, but also to look at distribution, median, mode, range and standard deviation. It is important too to look at summary statistics along with the whole data set to understand the entire picture. Descriptive statistics can be illustrated though in an understandable fashion by presenting them graphically. It is important to note that this paper is an exercise in a consideration of evidence based management and the NHS management response not a classification of attribute and variable data so the data analysis is presented here with the following questions in mind. What am I trying to communicate? Who is my audience? What might prevent them from understanding this display? Does the display tell the entire story?

I am trying to communicate that even a simple analysis of data readily available at source from a clinical service – in this case – EMAS provides evidence that the NHS find it complicated to respond to, so to that extent, I want the conclusions presented simply and to be quickly understood.

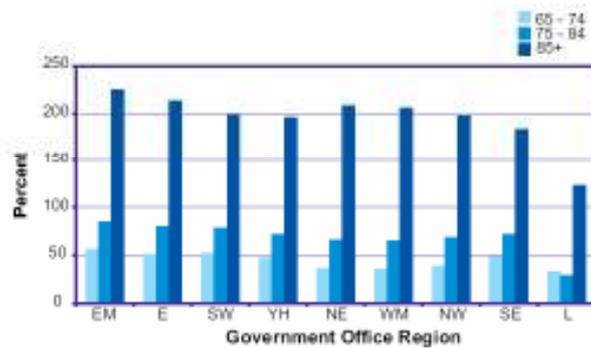
The audience is the reader of a senior management level paper who can be presumed to be able to manipulate and interpret data but is not working in this circumstance to a high degree of technical specification and will not necessarily need to know confidence intervals in the data to draw conclusion about its usefulness as evidence. What might prevent them from understanding the display is if the scale or origin of the data was skewed in presentation. Bar and pie charts are particularly useful to compare the sizes, amounts, quantities or proportion of various items or groupings of items. When I have presented data I can be confident it tells the entire story. Bar and pie charts (which predominate in this paper) can be used in defining or choosing problems to work on, analysing problems, verifying causes or judging solutions. Bar and pie charts are particularly helpful in presenting results to peers and managers, mixed in as they are with a written narrative. As part of the presentation here they can be particularly useful with variable data that have been grouped. Bar charts work best when showing comparisons among categories, while pie charts are used for showing relative proportions of various items making up the whole.

3.2 An analysis of the data

Consider the following table:

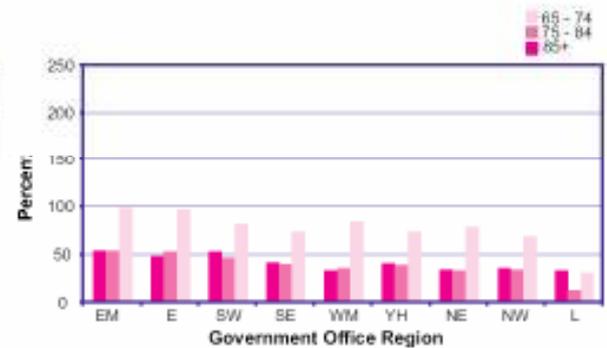
Figure 7: Population Changes by Government Regionⁱⁱⁱ

Figure 2.17a Projected population change 2004-2029 in males, age 65+, England



Source: ONS Projected population change 2004-2029

Figure 2.17b Projected population change 2004-2029 in females, age 65+, England



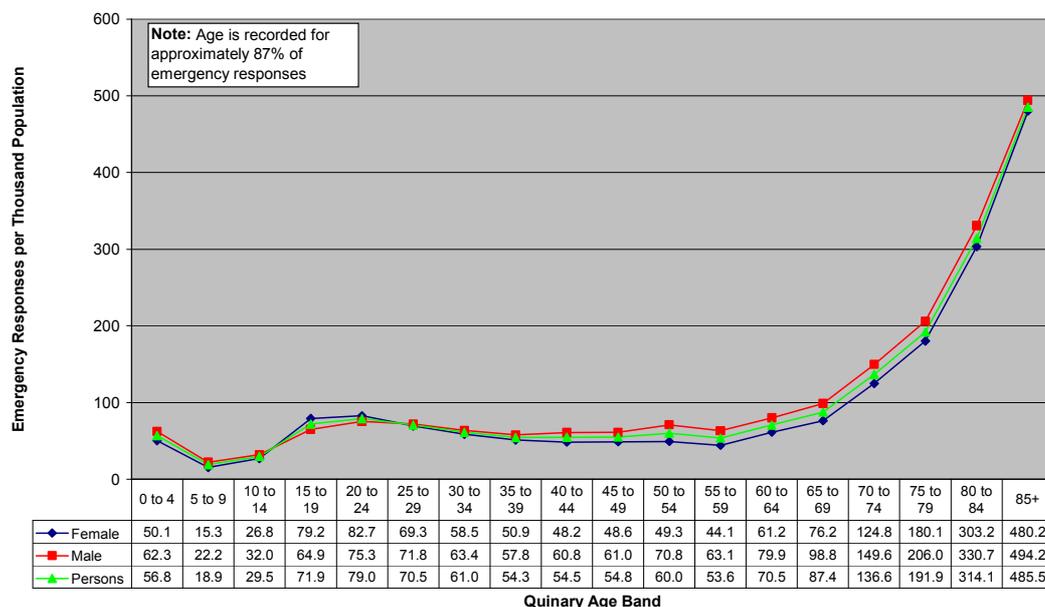
Source: ONS Projected population change 2004-2029

The office for national statistics predicts that the East Midlands will be the government region that experiences the greatest growth in its elderly population in the next 25 years. The regions male population over 85% years is expected to increase by over 200% in the same 25 year period. So we have an ageing population.

Now consider the next table:

Figure 8

EMAS Unadjusted Emergency Response Rates by Age and Sex
April 2006 to March 2007



Falls in the elderly have a significant impact on EMAS service provision. Different age groups use the ambulance service in different ways. This can be seen in the unadjusted emergency response rates for intervals of five-year age groups. The unadjusted rate of EMAS responses to females in the 85 and over age group is 480.2 responses per thousand population. This is over 6 times the response rates to teenage females which in itself is 5 times more than the response rate to females who are of primary school age. Any sense that the risk taking behaviours of school children in playgrounds or the lifestyles of teenagers are more dangerous than simply being elderly, are not borne out by the data at all. So, in this data rich area what is it possible to say about the data and not just the results? The first point is about the source of the data: each and every ambulance call is collected, coded and despatched by a team of trained handlers who complete a minimum summary data set of the transaction. This can be supplemented with other data but it does represent the same data used to provide published performance data, operational planning data for EMAS and contract (invoice) settlement data for the payers, the Primary Care Trusts. The data from which the sample is drawn is used for planning and performance of EMAS services. The queries may not always be the same as in the study, but the data is. There is no question of bias in the data capture, as this is not trial data it is a random sample of the whole database (subject of course to type 1 and type 2 errors as all samples are). The sample represents about 0.5 of 1 percent of the whole database of journeys over a financial year. The data and the results have not been peer reviewed by other professionals. Nevertheless, the data has been audited by external and internal auditors and is used in the publication of Healthcare Commission scores by the independent Healthcare Commission each year. Manipulation or falsification of data is a breach of the code of conduct for NHS managers. The combination of ethical, performance and legal controls combined with the use of the same data set for internal and external reporting gives confidence that EMAS do not have an incentive to hide data that contradicts their organisations position. This paper is part of a whole research project that works within the NHS framework on ethical and peer reviewing of research, governed by the NRES. The data used here is not an audit of an existing standard of management practice or an evaluation of a specific organisational changes but makes up part of a survey using multiple methods to test a thesis and generate new knowledge. To that extend the data has been accessed rather than created and can be treated as a sound base upon which to draw conclusions.

3.3 Validation of the results

There are a number of possible limitations to the validity of the results despite the unequivocal analysis of the quality of the data. This will be discussed further in paragraphs 6.1-6.3 but before drawing conclusions and considering the implications for NHS policy and practice, I want to be clear about the range within which these results are valid. First of all the data is a self-selected sample. It is made up of people who called the East Midlands Ambulance Service in the 2006/07 year. True, there were 500,000 + calls for an emergency response that year, but the population is of people who called the EMAS emergency numbers. The conclusions are only valid in responding to evidence about the use of EMAS services therefore. As an exercise in understanding the response wider of NHS management and NHS policy, it is valid but the conclusions are drawn from evidence that is valid only about EMAS. In simple epidemiological terms this is a study about 'disease' (emergency medicine and nursing) that didn't go out and collect data itself I have used source data that already existed and looked for meaningful patterns in the data to find something interesting or revealing about the nature of management by evidence in the NHS. In order to avoid doubt this study, which sampled data for 2006/07, would need to redraw boundaries to check that the conclusions were true for periods less than a year and in other years before and after the same year too. This type of meta-analysis of all the years would increase the validity of

my conclusions drawn from a longitudinal study of only one year. I chose the year 2006/07 as this was the last full year available when I undertook the literature review and the qualitative interviews of NHS executives so there is consistency of methodology. I have tried to avoid regression analysis despite the attractiveness of correlation because I do not have a null hypothesis about causation that that I want to test – and in the act I have also excluded ‘spurious correlation’ as a problem. Finally, the entire study has tried to draw conclusions using EMAS data about the nature of EMAS services. Only in forecasting population growth have I had to go to another data source (the East Midlands Government Office). What must be acknowledged about the validity of the results, is that it is not possible to have a ‘double-blind’ sample of people who did NOT call EMAS over the calendar year 2006/07. Let me draw an illustrative conclusion. EMAS has been sharing data with Nottingham City PCT in order to improve services for older people who have fallen. EMAS drew a pictorial representation of responses to falls in the over 65’s. The local acute teaching hospital (Nottingham University Hospital) drew a similar map which demonstrates the residential address for hospital admissions due to falls. Because the transport rates for falls varies between 30 to 50 percent of EMAS calls in response to a fall we have two similar but different populations. The percentage of people over 65 who have fallen and the percentage of people over 65 who have fallen who require transport to hospital. Add to this the cohort of people who fell but did not call EMAS, either because the incident was trivial or self-managed or they were transported independently or privately and we have four possible cohorts. All people who fell, were over 65 and used NHS services and/or EMAS. With ALL of this data – prohibitive if not possible to collect – not all extrapolation of the results I have found will be valid.

3.4 Significance of the results

A number of interventions exist that address the problem of falls. Home assessment and modification reduces the risk of falling by adapting homes of individuals at risk (introducing grab rails and ramps, removing loose rugs). Pharmacy reviews can address the pharmacological risk factors for falls. Other interventions soften the impact of falls – hip protectors are shields worn over the hip designed to distribute impact forces away from the hip into the soft tissues. Hip fracture appears to be a rare event when hip protectors are worn at the time of the fall.

Whilst the above interventions are effective against falls, they are expensive to administer. Resources are limited and therefore must be allocated to those interventions that bring the greater benefit. Currently we have a significant understanding of the magnitude of the problems that falls amongst the elderly creates, in terms of acute and long term needs. So what does an evidence based approach to the numbers we have seen so far mean to the ever growing knowledge of falls in the NHS. We have seen seven pieces of data so far. The evidence based significance of the results in a responsive NHS would be:

Pie chart, graph or table already displayed	Significance of the results to the debate about on NHS management that is evidence lead (+) and (-) not evidence based and ✓ to show which is most likely
EMAS response to falls in over 65's: by call category	+ Work with family and friends to develop a minimal lifting policy to differentiate recovery from traumatic injury. -Treat all falls as traumatic irrespective of carer (✓)
EMAS response to falls in over 65's by call category	+ Ambulance staff are recognised as normally the health and social care 'first contact' with fallers and triage is scaled appropriately. - PCTs invest in falls managers to fulfil the older people's national service framework only. No work with EMAS. No work with EMAS (✓)
EMAS responses to falls in over 65's by gender	+ Implement falls initiatives that positively impact on falls preventative issues recognising this is a major female use. - Undifferentiated service leads to low quality patient experience (✓)
EMAS response to falls in the population that is over 80 years old	+ Following transportation to hospital the support networks including family are continually engaged around the patient. - Admission to hospital the norm (✓)
Population changes by government region 2004-2029 (male)	+ Recognise gender is an issue in that the service mix changes from predominantly female. - Fail to tailor information on hop protectors to a male audience(✓)
Population changes by government region 2004-2029 (female)	+ Implement commercial policing of alarms systems or alert systems to cope with prevalence of low impact falling (✓) - Despatch ambulances to aging female population
EMAS unadjusted emergency response rates by age and sex	+ Ultimately reduce ambulance responses to those who fall. - Despatch ambulance as only source of care (✓)

So in only one area do we see anything like a positive likely evidence based outcome.

3.5 How do the results answer the problem?

As with much of the discussion about evidence based management in the NHS, I find two things to be true. 1 – using the Rousseau model (below) it is quite clear, quite quickly that the evidence based response can be differentiated from the non-evidence based response. It is also quite clear, quite quickly that the non-evidence based response is sub-optimal in the opportunity cost of patient care and wasted resources. 2 – that somebody somewhere will have drawn the conclusion and be implementing a pilot or innovative local solution but that this will not be normalised behaviour for the NHS.

After Rousseau: A synthesis from the literature of Rousseau on the practice of Evidence Based Management.

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
The supervision of employees	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
Information available to managers on the consequences of their decisions	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
The delivery on promises to the public, employees, stakeholders/taxpayers customers and others	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
Management style	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
Approach to academic research	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work

Management culture	Supervisors and managers respond	A belief that good
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	to a belief system probably 100 years old, as far back as Fredrick Taylors structured methods for improving efficiency were classified under scientific management	management is an art – “the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implantation fail	Managers are prevented from real learning by fads and falsehoods

Let me consider again the table in 3.4. In summary, evidence suggests that a significant percentage of those who fall are elderly and that following transportation to hospital their support networks and infrastructures are switched off – hence they tend to be admitted to hospital. On a practical level, the falls co-ordination services provided and commissioned by PCTs do not co-ordinate well with EMAS and fail to recognise that a) EMAS is the first responder in most cases, b) fewer of these cases are Category A calls. So the evidence based solution would be to adjust NHS policy and operational response to this issue. Which is just what the NHS in Plymouth did. In one ambulance station; this innovative team who have access to a specialist clinical support vehicle and access to the most modern lifting equipment, prevent other emergency vehicles and resources being sent to non-injury falls patients who do not need to be conveyed to hospital. In a 20 day period during December 2006 the method was used to respond to 24 falls and 95 GP urgent admissions.

Unfortunately the NHS response is NOT to industrialise this good practice on a larger scale. The pilot in the ambulance station was nominated for a prestigious award by the Ambulance Service Institute and beat off national tough competition to win the ‘Award for Innovation’ which was marked by a ceremony at the House of Commons on 3 May 2008. An MP presented the awards. This year coming (2009/10 financial year), some moves will be made to introduce this pilot to Bournemouth, Yeovil, Exeter and Truro. I will try to introduce it to EMAS for the East Midlands, but they have said, quite frankly, that they want to see the four pilots of the South West completed before they consider a change. Falls just aren’t that influential it seems.

Compare this to Ambulance Crew Reading to Cardiac Unit. A new system for treating patients who have suffered from heart attacks is to be rolled out across Scotland after the success of a pilot project at Edinburgh Royal Infirmary. In conjunction with the Ambulance Service for Scotland the hospital has been giving patients an automatic admission to operating theatres where on-call surgeons unblock the heart’s arteries. Timing is very fast. Ironically, this is done by the ambulance crew sending an ECG reading straight to the cardiac care unit. The Medical Director of EMAS advises that EMAS stopped doing this 3 years ago as the decision was to trust ambulance staff to read and therefore no need to transmit.

In summary, a proven method of preventing falls being a drain on ambulance resources is struggling to get beyond pilot stage, despite evidence (and awards and acclaim) whilst an unproven pilot, the evidence of which is patchy for the East Midlands, is being rolled out across the whole of the NHS in Scotland. The answer to the problem is that evidence is less important than policy.

4 Implications for NHS Policy and Practice

4.1 Practical Implications for Leaders in the NHS

Who does what? In the organisation and planning of ambulance services in the East Midlands there is an inextricable link between organisational performance, organisational effectiveness and leadership. Ambulance services and the importance of the ambulance response to older people who have fallen, has historically been poorly recognised within the wider NHS. Ambulance clinicians are in a unique position of attending this group of patients in their own home and as a result, are able to observe not only the condition of the patients, but also their living conditions including hygiene, diet etc. In order to transform the service that EMAS provides to falls victims and those at risk of fall, the Chief Executives of both EMAS and their Commissioning Primary Care Trusts, the transformational leaders, need to adopt an evidence based approach to the data collected by EMAS itself. Instead of a total focus on specific organisation objectives that is typical of the existing contractual relationship with EMAS, the management style should place an emphasis on evidence as a basis for innovation and a rationale use of resources.

How do they do it? The NHS is the name of the Government policy not just a service. The NHS identify can help patients and public access and understand this new system and the NHS can provide continuity of pathway planning. By using the evidence available about how falls should best be managed, how the use of ambulance resources can be maximised and the effects that an aging population will have on calls to ambulances the leaders in the NHS can help the public to navigate the system in a different way, but still be confident that the system will be delivered in line with NHS standards and values. The key is to respond to the evidence that has been collected, to park the targets of today as their assistant directors and operational managers will achieve this, and to shape the targets of the next decade in line with the Ambulance clinicians.

When do they do it? This paper has explored literature and data on evidence based decision making. As we have seen in earlier papers, the rhetoric of evidence based management serves an essentially ideological function, obscuring the real difficulty in securing effective and sustainable change. As considered earlier in this paper, the data exists, even with a simplistic analysis like mine to point to changing policy imperatives and a different prioritisation by age/sex/location of ambulance services. In organisations with deeply engrained power structures and as complex and intransigent in-year performance function as the NHS the executive of the East Midlands – particularly the PCTs – must only attempt to implement the evidence based approaches to EMAS when they meet collectively on a monthly basis. Otherwise these ‘numbers’ I have found will not survive the challenge of an NHS hierarchy in a climate of turbulent change created by the volatility of government policy.

Why do they do it? Falls in the elderly population represent a serious and increasing issue in the UK. This is gaining increased recognition in current government policy across different parts of government including social care and housing as well as the NHS. The reason the executives in the NHS respond to this is because it is NHS Policy and Practice. The key though is that at the very strategic level the NHS response via policy is, in this case, evidence based. The report by the Department for Communities and Local Government released in January 2008, named “Lifetime Homes, Lifetime Neighbourhoods” highlighted the following statistics: one older person dies every five hours as a result of a fall; older peoples falls cost the NHS around three quarters of a billion pounds each year and 1.25 million falls a year result in hospital admissions. The role of the NHS executive in respect to evidence based management in the East Midlands NHS and with respect to EMAS in particular should be to ensure that however big these absolute numbers seem they should elicit an evidence based and proportionate share of resources to their answer.

4.2 Clinical Practice and Managerial Practice

Let me consider what the implications of quantitative analysis of East Midlands Ambulance Service referrals says about the development of evidence-based approaches to NHS management and policy.

Cultural and attitudinal change

Researchers and academics should be invited in to the commissioning cycle. At the moment there is strong participation from clinicians, executives and accountants in setting a robust planning and contract negotiation framework. There is some preference expressed for the use of data analysis – including to do some data mining – but the application of best management practice, knowledge management (or even a structured response to the research questions that the data throws up) is very difficult within the current make-up of the EMAS contract.

Look for evidence based enablers of the ‘central targets’ hitting should also be pursued. The key is here that the central targets for Category A response times, falls and patient transport are not going to disappear. My pie-charts say some interesting things, even that we may be missing the strategic overview of the direction for EMAS services by hitting central targets. Nevertheless, we should not use this as an excuse to avoid evidence based culture and attitudes. We should instead be looking for evidence of what works to do the most optimal things based upon ambulance resource usage and hitting the targets not making them mutually exclusive.

Invest in developing the infrastructure to support evidence-based decision making

Organise contract management boards that focus on clinical quality rather than adversarial performance assurance. The debate about what works from an evidence point of view will be enhanced by putting clinicians into the commissioning/planning arrangement. This is stimulated by the use of evidence based knowledge. If this is called “Therapeutic knowledge” then the use of management evidence is moved to that which makes best use of scarce resources for EMAS in pursuit of the optimal therapeutic interventions. Reducing waste is very good for EMAS and the NHS and patient education and communication being enhanced will make it better for patients to. This infrastructure would necessarily mean that the summary monitoring information (necessary for assurance about central target hitting) moves from weekly to monthly collection to free up the time for the saved intellectual and data processing to be applied to evidence based decision making.

Develop a cadre of managers with the skills needed to use evidence more effectively

Epidemiology and the patterns of population, falls, diseases that affect ageing (hearing, eye sight, bone density), age-sex ratios, population growth, morality and morbidity underlie a good use of data. This does not obviate the need for Financial Planning which has tended to be used for EMAS previously but it does mean an alternative from cost to a detailed understanding, not only of efficiency and economy to include effectiveness too. Evidence might be called the economic (opportunity cost) of the current solutions we use. A lack of managers ability to use epidemiology 'outcomes measurement' is probably a big leap but the use of evidence based prompts in longitudinal studies would only be possible were the competence of managers to use this evidence effectively also developed. Should plan whether something is feasible before we begin to do it. This looks at the probability of success, risks, timescales and critical paths. By simply saying that the data I have found about falls and EMAS should be applied to a feasibility analysis of an evidence based solution versus a policy solution to each project the cadre of skilled managers increases.

Look for evidence of success of evidence based decision making as an innovation itself

Managers and policy makers have been prominent advocates of evidence based clinical practice, but have not been quick to apply the same principles to their own decision making. In terms of the best commissioner performance, there is a post-hoc rationalisation of what was successful and what was not successful (normally in response to published performance ratings) but the key would be to show that by applying evidence based decision making, this lead to an evidence based increased in the performance and planning of EMAS. An early proxy such as "Increased interest in the area from other planners and providers of ambulance services" could be taken to mean that the data for EMAS has been successfully data-mined to improve performance in such a way that use greater appreciation of the value of management and its role in patient care. The key here is that the management role is enhanced by the use of evidence based management and in such a way the credibility and development of the subject area is enhanced.

4.3 Patient Behaviour

Consider the following pie charts.

Figure 9

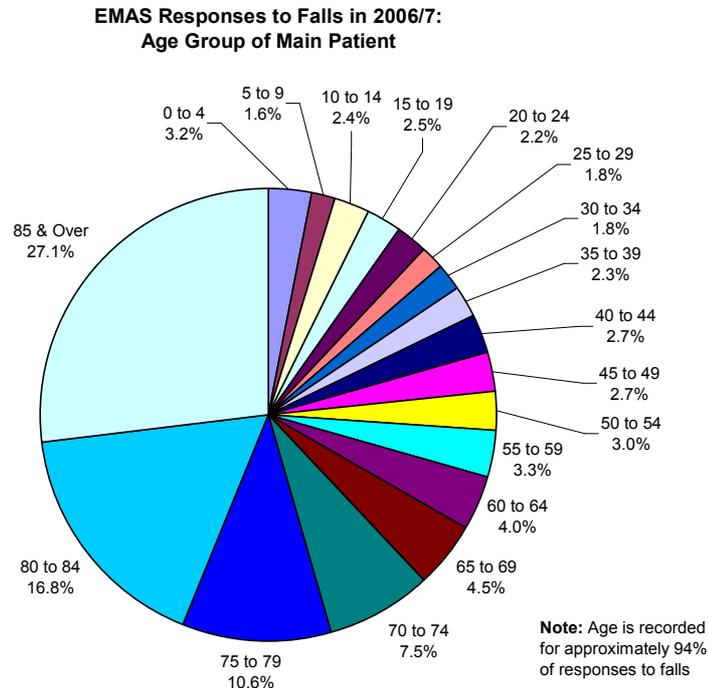
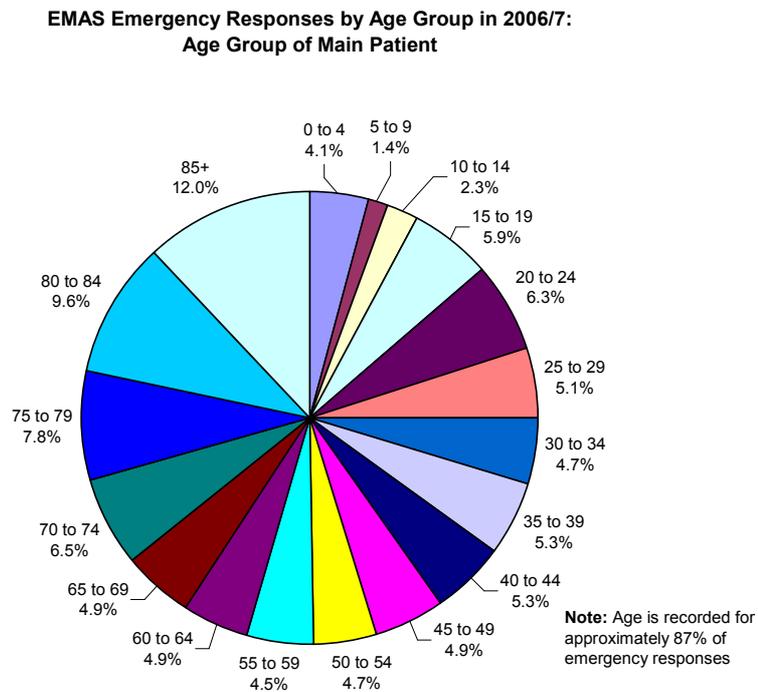


Figure 10



Whilst it is true that in both charts the use of the EMAS service increases with age, this is much more pronounced when it comes to falls than when the wider set of emergency

response is looked at. That therefore means the patient behaviour that needs to be developed is not the same for falls as it is for EMAS as a whole. The key here is to enhance communication between planners like myself, ambulance clinicians, control room dispatchers and most importantly patients. In the planning of EMAS the policy for Category A responses should be explored to understand in the East Midlands, how older people view and respond to the challenges of independent living. As earlier graphs have shown – without this communication about patient behaviour, the elderly will call EMAS but the very senior age-group, of 75+, will have a diminishing proportion of their falls treated as Category A. The commissioning policy for EMAS should collect information from the public about what they view as a successful outcome to their 999 call, but the data source should skew heavily towards the proportions outlined in the age - profile of falls – not the age profile of the population as a whole nor even the age population for which EMAS responds in a wider sense. Note that further work is required on the effectiveness of tailoring health advice in changing patient behaviour for the better is nevertheless clear that the normal sense of tailoring to address inequalities in access by ethnicity and location, overlook the tailoring that is required here to address age and very senior aging. The policy response for EMAS is not whether tailoring works as a model, but what the evidence tells us about when it is most effective, given the pie charts above. For example, large advertising campaigns need to be using technology and environments appropriate to the population at risk. Thus, the increasing vogue for mobile technology as opposed to traditional billboards on public transport and in supermarkets may not reach the target population. It is also true as noted before, that as hearing and eye-sight weakens with advanced age, video and one to one in-person interventions could be more successful. As the very least, the EMAS and PCT response to this dilemma should be to check that written materials designed to encourage participation by the very senior age group(s) are usable and address the basic needs for autonomy and competence that motivates us all.

4.4 A checklist of Evidence Based conclusion

Frank Blackler of the University of Lancaster in 2006, published in a media interview in the Guardian newspaper, his synopsis of what was good/bad and hard in the political and managerial models of control of the NHS. Taking that as a template it is possible to draw something of a framework for how the evidence based conclusions can be accommodated. I will specifically address what this means for the subject I am studying, EMAS, and the response to falls.

Blackler's Contentions (My comments)	What I observe as the Evidence Based Conclusion of my data on EMAS and falls 2006/07
1. Central controls have eroded the capacity of managers to lead (I disagree – central controls mean we now use our data better).	1. The evidence collected shows that in 2006/07 just under half of all deaths from avoidable injury are in people who are 75 or older. Prior to national policy setting the role of ambulances in this area has been poorly recognised.
2. The present system of politically lead target setting is wasteful. (I agree).	2. Our evidence indicates that the call category of emergency responses is also related to age. Responses

	to older people who have fallen are less likely to be coded as Category A.
3. Targets represent an instruction to manager and are based on a mistrust of managerial autonomy (I disagree – the requirements to deal with over 85 year old females is neither promoted by nor limited by national targets).	3. Falls in the elderly population have a significant impact on EMAS service provision. Different age groups use ambulance services in different ways. For example, the adjusted rate of EMAS responses to females in the 85 and over age group is 480 responses per thousand population.
4. The NHS has enjoyed substantial increases in public funding and politicians are anxious about how this money is used (I agree).	4. The office for national statistics predicts that the regions male population over 85 years is expected to increase by over 200% between 2004 and 2029. Therefore the unequivocal substantial increases in public funding may be overtaken by an ageing growing population.
5. Targets are a conduit for politicians that negates local prioritization (I agree).	5. The data collected shows that 51% of all avoidable injury admissions in the East Midlands are due to falls. This has little to do with government policy that requires more joined-up assessment and service provision.
6. Managers need to be treated with and behave with confidence (I agree).	6. If the managers use the evidence drawn from the data sample, then confidence is increased. Evidence rather than opinion will increase confidence in decisions.
7. It is difficult to distinguish the strategic objective of a policy from its day to day working (I disagree).	7. The national policy reflects that falls are more common in the older population. The EMAS response to falls in over 65s by type of pick-up location is a day to day tactical East Midlands issue alone.
8. Targets should be fashioned locally (I agree).	8. EMAS has been sharing data with Nottingham City PCT in order to improve services for older people who have fallen.
9. The difficult shift in the NHS doesn't make management in the NHS hard – it is why we have NHS management (I agree).	9. In 2006/07 EMAS made approximately 42,000 responses to a person of 65 years or over who had fallen at an average cost of £193. This requires both increased recognition in policy <u>and</u> management action.
10. “Go towards the gunfire” (I agree).	10. Responses to falls in the 65 and over age group during 2006/07 cost approximately £8.1 million – this is worthy of getting involved in an evidence debate about.

5 Conclusions

5.1 How this data has stretched our body of knowledge about EBM in the NHS

- a. It has not been difficult to get access to a “body of knowledge” for East Midlands Ambulance Service. A years data is stored and easy to access and operational procedures are clear. It is clear from the EMAS dataset that much of what the NHS says about information and choice for the millennial generation that require power and choice itself – doubts the power and authority of myself and calls itself a customer. That governs much policy and planning of the NHS. EMAS on the other hand is a 10% glamour Category A service, but by majority it is a senior lady who has fallen and calls 999 because she did, but can wait.
- b. In our efforts to continually and refine the body of knowledge, guidelines exists for where evidence is and is not appropriate. There is a culture of target hitting, self-regulation and rooting out dangerous clinical practice that has it’s origins in criminal and unsafe clinicians such as Harold Shipman. But there is also a fear of evidence that pervades any hope of a structural response to the issue. There is also as we have seen far more complexity in the NHS. We have pressures to avoid all clinical hazard whatever the opportunity cost is we have pressures and incentives for institutional growth over best patient care. We have consumerism and we have pre-occupation with financial costs over economics or ‘whole system/whole life’ costs.
- c. It soon became clear that the challenge for evidence based management is both simple and complex at the same time. Quite quickly, data can be manipulated to draw evidence based conclusions but these are multiple sub-tests. Our patients whom we are analysing are also the patients whose behaviour we must modify and adapt if the changes are to be made to a more evidence based planning and funding of services. Above all, what has changed in this report about EBM in the NHS, is that nobody can do it on their own. The tasks of responding, collecting and treating the population of the East Midlands with Ambulances and Paramedics have passed the capacity of any single human mind to plan the service, no matter how skilled or altruistic or self monitoring they are.
- d. Our knowledge base is changing. A definition of a ‘profession’ such as ambulance clinicians including paramedics as people reserving the right to judge the quality and appropriateness of their services is over. It is clear that the politicians believe the bond of public trust to be broken. The reason we get politicians using evidence based numerics in a heavy and dogmatic way is that the assumption of professionalism amongst paramedics has lost the confidence of politicians. Transparency about data has shown itself to benefit the management of falls in the over 65’s in the East Midlands region, but at the same time the complexity of the NHS system means that simple-easy to communicate – policies are seen as the antidote to complexity not the use of evidence.
- e. Our best effort to date would look like this: the evidence would be generated to pose questions for negotiated change in EMAS services. The work I do as a funder/commissioner of services has not stopped, fraying confidence in the public at large, of politicians and people like myself. Who, neither of us are immune to the charge that we use data and targets to peddle the untruths of politicians and the half-truths of managers like myself advertising success from data.

- f. NHS Direct said a lot about falls, but too much has been made about boundaries and who owns the body ‘body of knowledge’ about falls and the area is replete with professional rivalry. Organisations like NHS Direct and EMAS cannot thrive alone, but will thrive only in interdependency. The parts of the NHS – acute trust – EMAS – NHS Direct – PCT – politician – clinician, can only use evidence properly if they ask less about ‘what do I do?’ and more about ‘what am I part of?’

5.2 **Did this match what I thought in the introduction**

- a. I spend a great degree of time analysing and considering data about performance of ambulance responses to emergencies, but the question of ‘how do we know what we know’ keeps coming up. I – and the patients for who I buy services – have now become irrevocably part of something far larger than myself. The craft of care has transformed into the machinery of a supply system. By simply returning again and again to the question of what the evidence is telling us, will we answer the question of how we “know”. In earlier papers it has been shown that leaders in the NHS prefer judgement to evidence, but in the matter of East Midlands Ambulance Service, I am not as clear as I was at the introduction, that craft of management can explain the totality of the machinery of care simply by judgement. Data throws up some counter intuitive truths for us to act on.
- b. People fall in their own homes, but it is still not clear with whom do we share our knowledge. Nobody has doubled my data, but the problem is the fact that there is a clash of prerogatives between Chief Executives and Doctors. Political knowledge and policy may be more about power and influence than it is about distribution and seeking the wisdom of leaders. The thing that I didn’t realise at the introduction, was that it was less about the data than it is about what happens when the evidence shines a spotlight on something. It is not the evidence that will effect clinical change, it is what the funder (me) and the clinician does when the light is shone on the data and what I do is visible to myself, to others, to strangers even, even when I don’t want it to be visible.
- c. Despite all the writers about falls, it is clear that knowledge does not equate to value. Maybe nobody knew that night-time was less dangerous for falling than Saturday morning? Maybe everybody knew you were more likely to suffer a fall in your own home than outside a pub? But now we do know and so too do the clinicians delivering the service. But it seems that without political support or the glare of media publicity, the gap between evidence and action is still large. There is no altruistic reason for EMAS to respond to the data creatively. I had expected altruism and care paramount but it became clear that the targets were a shield against deeper engagement with the public and although I have generated new knowledge, the value was being questioned. People in EMAS do not trust me or the politicians to use the data without prejudice or manipulation.
- d. Ambulances use clinical best practice to categorise patients from A (high need) to C (low need) but in many ways I saw knowledge differ in education and practice. There is evidence of unexplained variations in the pattern of treatment, evidence that was easily generated. Why do so many more women than men fall – is this merely the age/sex ratio being played out in a harsher analytical gaze or is it that nobody has used the data before. The conclusions are not stark, but eh implications for service delivery are quite profound. If I thought that clinicians and politicians would respond positively to data based evidence, I misread the effect that a loss of control would

have for them. Combining this data with the literature and my qualitative research about NHS managers attitudes to evidence, it is clear that what I thought at the introduction – those who define themselves by control over simple date – will not like the loss of control.

- e. ‘Evidence’ suggests that what I am engaged in is an exercise to control knowledge and choices and patient pathways that before only the politician and the paramedic controlled. The reality is that I too cannot control the situation any more than they can. I have some weakness of mind – of any mind – that means my response to evidence can only add value if I and the same team know what I need to know in order to help.

5.3 What the picture looks like at the end of the analysis

Figure 11

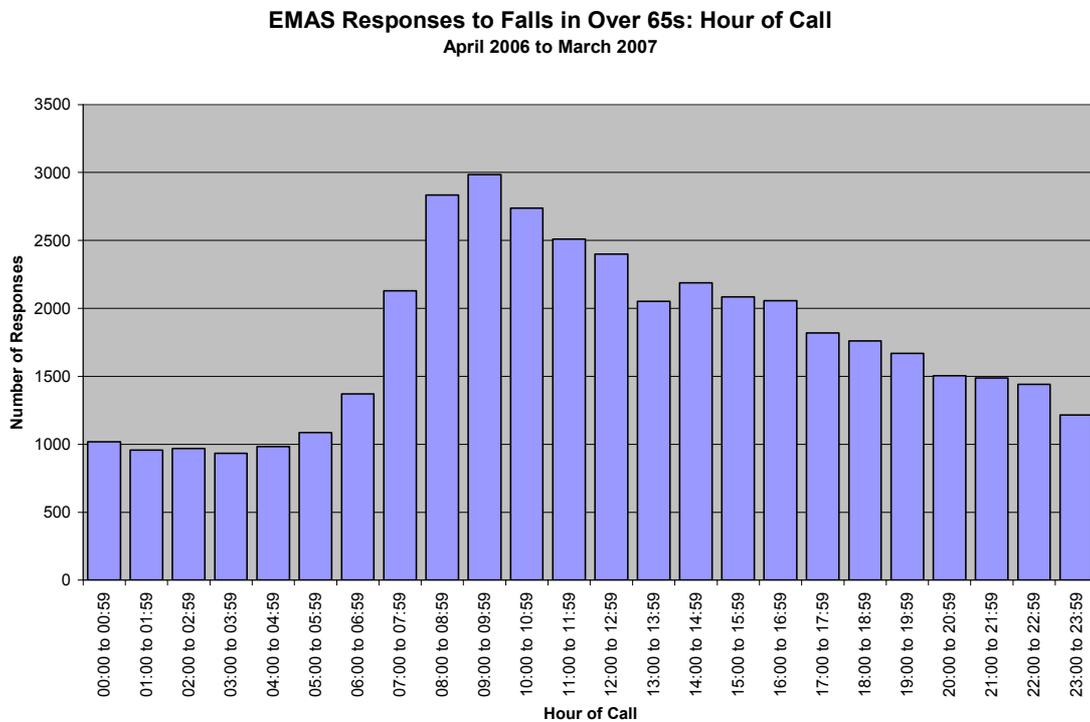
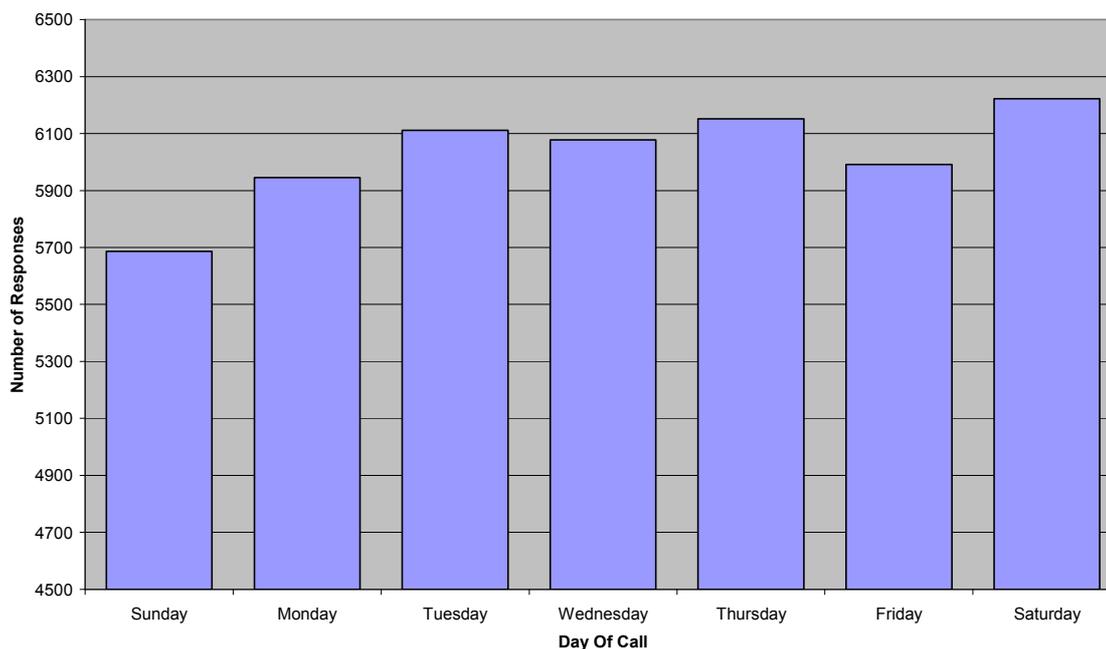


Figure 12

EMAS Responses to Falls in Over 65s: Day of Week
April 2006 to March 2007



If we take the tables above. We can say that the EMAS responses to falls in the over 65's is likely to be by a woman at 9.30 on a Saturday and the call is not very likely to result in a Category A call, but will be made as a result of a fall in the home. This in no way negates the importance that one older person dies every five hours as a result of a fall, but it does obviate the thought that this should be the most pressing and uppermost thought of the ambulance clinician. Simple methodical application of data using pie charts and bar charts has given us a much, much richer analysis of the organisation of East Midlands Ambulance than the 'blue light fallen trauma' cliché that exists in the public imagination.

It is clear that we cannot conclude with any clear consensus about what constitutes a body of evidence for the East Midlands Ambulance Service, but we can agree that decision making is improved by the context of using evidence based judgements. It is true that a body of evidence or knowledge is multi-faceted and depends on one's perspective. Government policy may be based on evidence, but it can be alarmist and distorting of local prioritisation unless the Primary Care Trust takes a measured and evidence based response to the problems that EMAS face in implementing national policy. The definition of evidence likely changes when we use it to regulate the delivery of a particular clinical service for a particular community – even one as big as the East Midlands.

Sometimes a problem under consideration is advanced not by answering a question, but by better defining the question. At this level the data analysis has been successful and I will consider in Chapter 7 the implications for further research.

6 Limitations of the approach

6.1 Methodological limitations

All of my conclusions about evidence depend upon good quality data. The first problem is that I have used a secondary database. I have asserted that this data is both relevant and complete and that has been audited as such. I chose a random sample from the source data set. Nevertheless, in the absence of good primary data collection, my method would be improved by repeated sampling to gain greater confidence that there is no inherent bias in the data I am sampling. The method would be improved by panel studies or group consideration to validate in the absence of primary data.

The indicators that I selected were fields already in existence in the data set (age/sex/time of call/category of response/location of incident) and the evidence gain came from the juxtaposition of the data against existing policy – including where no policy existed. In selecting these indicators, I did not check the completeness of these data fields and whether there was any inherent bias towards that or this classification because of simple administrative routine.

I have also used pie charts and histograms rather than regression analysis and it may be true that in a multifactorial situation, the relationships I have recorded are not, in actual fact, relationships between two variables, but reflect their variability when compared to a third (as yet hidden) variable. I do not, therefore, attest to having detected statistically significant results and if they do exist I have not sought to prove any significant correlation. The choice of simple presentation methods means that different risk factors play different roles in the evidence collected. I have not tried to seek the major or determining variable around which the correlation of the ‘most efficient ambulance service’ should be organised. Similarly, I have not tested this longitudinally using a ‘traditional’ surveillance model that public health would use. I draw the conclusions from 2006/07 only, but presume generalisable conclusions across different time periods and this may be questioned.

To improve the results I would also have tried to organise comparison with other samples from other ambulance services. This is an NHS (National health system) about which we are trying to make conclusions without reference to habits and behaviours that are valid only in the East Midlands. I have also, in respect to the same habits and behaviours, made the case that in response to evidence, the habit (for example of senior women over 75) to call 999 when they fall, rather than their GP before they fall) can be changed so that the patient behaviour is the most favourable for patient and EMAS.

The last thing is that a lack of cross-sectional studies means that, although I have used population data going forward 25 years, the effect of short-term exposures such as a particularly mild winter or a flu outbreak, can distort the numbers, despite other more significant variables (clinician behaviour, family and carer response or training of paramedics in first response) heading in a different direction. In epidemiological terms the effect of environment fluctuations can affect population behaviour in the short, but rarely the long term.

6.2 Data Capture

Let us consider what high quality data would be: it would be accurate, up-to-date, quick and easy to find and free from duplication. As I have said previously, this is true for the EMAS dataset that I have used. Similarly the data was free from fragmentation (where different parts of the patient's records are held in different formats).

There are however some limits in the data that was captured. Firstly, the patient unique identifier is too weak to make a consistent electronic patient record by individual patient. So the data set is built around the 'event' of the ambulance journey, call and despatch. The NHS Care Records Service (NCRS), part of the NHS National Programme for IT in the NHS being delivered by NHS Connecting for Health will create a care record for every one of England's 50 million plus patients and allow information to be shared securely between all NHS organisations.

This will mean that whenever and wherever a patient seeks an ambulance including, out of hours and away from home elsewhere in England, the people caring for them will have access to their health information 24 hours a day, seven days a week. That means that files, scans, x-rays and general patient information that was traditionally 'fragmented or found in different places' will now/then be available to somebody repeating my research. This will include demographic data such as name, address, NHS number and date of birth and clinical information such as allergies, adverse reactions to drugs and basic details of any visits to hospital. This will provide an opportunity to put the EMAS data through the Information Assurance Quality Programme (IQAP) which has produced guidance to help with migration to a care records data service.

The NHS number is important as a unique identifier; in that it will be possible to trace and verify patients using the NHS number which is specific to them. At the moment, it would not be possible to build up a pattern of information where an individual seeks medical help at two different sites without the NHS number. Creation of duplicate records for the same fall is a problem of data capture. This is a particular problem for data capture without an NHS record as patients do not identify themselves in a consistent way when they use NHS services. For example, EMAS may know that an individual can be linked to a certain address, but data matching to use the consistent record of address field if you are looking for a person called William, who is sometimes also known as Bill, to check that this is the same patient each time. At the moment, without the NHS number, EMAS care for falls is not based on a complete, accurate and up to date record.

6.3 Deliberate boundaries on the question

I have defined the scope of the research to generate new and novel insights to an area that is compatible with my work as an NHS Commissioner. I have attempted to make it reasonably comprehensive within the study of falls collected by EMAS. The study of falls or emergency ambulance service is a much wider field than would be appropriate, given the limits of this particular study. This problem is bounded by being about the use of, and response to, evidence by decision makers in the East Midlands of the NHS. The question was whether using some very rudimentary queries using data coding, it was possible to make different decisions using the evidence that these data queries threw up, than decisions that would be made using national prescribed policy alone. To that extent the deliberate boundary on the question was that it had to be so complicated that only sophisticated data management techniques could solve the calculation. More could have been made about how national policy changes have affected the treatment of fallers favourably or unfavourably, how these

changes have or have not affected the elderly differentially and how East Midlands Ambulance Service have responded to legal developments in the training for lifting and handling in homes that the elderly have fallen in. This would have strayed outside of my essential concept of using only that data which has been generated from the day to day delivery of emergency ambulance services by EMAS. I did not want to look for data that was available in academic books and journal articles, because they would not have covered the same operational period – remember what I was trying to review was something relevant to recent decision making by EMAS. I did not want to be concerned with articles from the popular press as they were pre-occupied with service delivery failure, not the upper decile of service delivery successes. I did not wish to conduct a longitudinal study over too great a length of time as this was about primary sources of data still affecting service delivery today, not primary historical sources about the changing role of ambulances in the delivery of emergency patient care. In the end the answers to the questions are aided by the use of essential data from the source of operational management by EMAS. These deliberate boundaries on the question do not, I believe, limit the usefulness of the conclusions.

7 Implications for further research

7.1 Topics to be studied

There are some interesting topics to be studied as a result of this research. There is no doubt that falls and the integration of effective clinical strategies (in hospital and out) expands the range of successful services, but little is understood about how EMAS fit into this framework. In particular, because there is a social norm to dial 999 upon the occurrence of a fall, it would be worth studying the extent to which EMAS are the appropriate organisation within the NHS system to most easily influence the behaviour of individuals. If the key is falls avoidance and falls management, it would be worthy of study to understand the level of influence that EMAS have to make the utilization of all available services most effective compared to the existing community based approach to falls management.

A further development of this study would be to pilot the linking of hospital and EMAS and community systems by computer such that referrals are automatically made from the hospital to EMAS as well as vice-versa, so that individuals at risk of falling are tracked by EMAS in the community prior to falling.

Another combination of effective interventions would be to combine our knowledge of effective strategies for dietary management in the elderly, with the categories of call that are affected (A-B-C) by the quality of diet in an over 65 faller (in effect the ability of diet to give resilience to the consequence of falls). This leads to the interesting work that could be done using “integrated care” models that put falls management by EMAS, the acute hospitals, community NHS providers and some GPs into the same organisational and operational structure. This would be less passive in response to the evidence than this study indicated would be the case where only EMAS can respond fully. If this were to be attached to a study about cost-effectiveness and magnitude-of-impact of EMAS interventions in falls, then this could rank the effect of EMAS utilization upon the total cost of falls management in the East Midlands NHS region.

A similar intervention initiative that compares the value of EMAS’ treatment and patient delivery services after a fall with the cost effectiveness of interventions from Adult Social Services could help. By looking at commissioning PCTs to determine the appropriate mix of NHS and population (Social Service) based support to improve the outcome for the patient, the NHS could be moving further along the evidence-based spectrum.

7.2 Different regions or countries

There would be nothing to prevent this study being repeated in other regions of the National Health Service and would throw in further relevant factors to improve the applicability of the outcomes of this project. What could be added to this study were it to be conducted in another country would be; the establishment of reimbursement methods to suppliers that benefited from better use of this data for example as an income generation activity, increasingly possible as the NHS moves towards the use of an individual patient tariff; the development of suitable organisational arrangements in the private sector that can respond to evidence more quickly than, and in preference to, prescribed national policy; the development of environmental and ecological factors that stop ambulances being despatched on unnecessary journeys where the personal pain of NHS treatment (or treatment foregone) could be compared with the ecological aspects of responding to distress quickly, but in fossil fuel burning vehicles; the enlistment of the elderly communities in co-production solutions that do not use expensive emergency ambulance services without being aware of the opportunity cost of using specialised health services, essentially for a transport-to-health solutions for the elderly.

7.3 Foundation for further study of EMAS

In terms of further study of EMAS, it would be useful to do a study of documents pertaining to the treatment, transportation, classification and prevention of people having falls/fallen. Documents could be letters, memoranda, agendas, administrative documents, newspaper articles and would all be used to triangulate/corroborate the evidence found in this study. The use of documents to test the evidence in this study rather than to draw new hypothesis, would prevent or at least severely reduce the falls leads that could arise from an unstructured document review. It would be possible also, to repeat this study, supplemented by archival records and/or using structured interviews with executives and paramedics in EMAS themselves. Finally, this study of EMAS could be improved by direct observation in the field over a limited period and even when the researcher or a member of the family has a fall, to keep a diary of the period of the contact with EMAS in a detailed way from beginning to end!

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David Sharp
July 2010

**Exploring evidence based management in the National Health
Service**

**Document 5 is submitted in part fulfilment of the requirements at
the Nottingham Trent University for the degree of Doctorate of
Business Administration**

Cohort 8

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ABSTRACT

Purpose and Aims of the study

To contribute to the on-going debate over whether the use of evidence could and should improve organisational effectiveness. This is especially important in the context of the health service that has, since (May 1997) enthusiastically adopted evidence based medicine as its method of health delivery. To develop a practical explanation for policy makers and managers on how and where evidence based management is used appropriately.

Justification

Kovner and Rundall (2006 p3) said “the sense of urgency associated with improving the quality of medical care does not exist with respect to improving the quality of management decision making. A more evidence based approach would improve the competence of the decision makers and their motivation to use more scientific methods when making a decision”. The paper reviews the conclusion of Kovner and Rundall (2006) (an American study) within the context of the UK National Health Service. There is a need to develop a theoretical framework of how and why evidence is (or is not) used by managers in the NHS.

Motivation

The author holds a senior management position in the National Health Service. The author has performed the role of Director and Chief Executive in NHS organisations since 2000. These organisations have been surplus making, target hitting, award winning, credited by the auditors and successful in the eyes of the regulators. Unfortunately over the last few years the author has been in a quandary about something. Are NHS managers as a group of professionals, using policies that solved the wrong problem or solving the right problem, but still in the wrong way? Following this line of thought, the author wanted to ask “why don’t executives in the NHS make evidence based decisions?”

Methodology

A survey was conducted of the most senior NHS managers in the East Midlands. A set of interviews and participant observations of senior managers when making key decisions around current policy initiatives was recorded. This explored how the concept of evidence based management is perceived by the managers. The studied group were taken to have had career success and to be taken to be leaders in their field. The researcher was a senior manager within the same region of the NHS. The method additionally studied the effect of a discrete, but accepted piece of data upon the NHS as it struggled to adopt an evidence based response to the operational issue the data highlighted. The researcher was a planner within the same region that this data was being used and was responsible for responding to the data. The ontology used Bryman (2004) and Morgan (2007) to attach meaning to the views that members of that part of the NHS had of their world.

Methods

Through taped recordings of meetings and verbatim transcripts of 1 to 1 interviews with senior managers the study recorded the awareness of a need for evidence (or not) and also analysed the collection and evaluation of evidence where such awareness did exist. Using a model developed by Rousseau (2006) the study classified the responses. Interpretation of the responses was shared with the participant and conclusions drawn against the Rousseau based model.

Findings

Senior managers approve of evidence as it gives them a systematic view of what their staff are qualified to do and a requirement for evidence based decision making is part of the scheme of delegation.

Adoption of innovation and research is a complex and often drawn out process. The adoption of research evidence is not a single discrete event. Managers will only use research if it improves the organisations standing. Finally, it is shown that there are credible and complex reasons for the failure in NHS managers to use evidence very often, despite the prevailing orthodoxy of evidence based medicine. The researcher agrees with McDaniel (2009) that evidence should be used to start new creative methods of working. Although Arndt and Bigelow (2009) raise objections against evidence based decision making as “decisions do not necessarily lead to expected outcomes” The researcher finds their work cautionary rather than impeding to what Banaszak-Holl says are “compelling arguments for moving forward with developing EBM”.

CHAPTER 1

Introduction

Purpose

This work explains why an ethnographic account was used to record and then classify the conversations and decisions of current NHS managers. To develop an understanding of the NHS that is enhanced by professional insight from working in the NHS.

Key arguments and Conclusions

1.1 The research is exploratory in an emerging field

The nature of exploratory research is to provide an insight into and comprehension of an issue or situation. This research is exploratory because a problem has not been clearly defined, nor can it even be shown that a perceived problem (managers should/should not use evidence in the NHS) really exists. The study holds up a mirror to the cohort I work in. Components of this exploratory research will include a thorough literature review, informal discussions and in-depth interviews. It is to be hoped by the exploration, that a research design, data collection method and subject selection will arise. That would further the study of management in the National Health Service. This issue of the mirror being held up to the cohort itself is important because exploratory research is not typically generalisable to the population at large. The cohort of managers should be able to reveal what is going on with management in the health service during the period 2007 to 2010 and is investigated without explicit expectations. This methodology is sometimes referred to as a grounded theory and is an attempt to unearth a theory from the data itself, rather than from a pre-disposed hypothesis. The overall aim of this research is to enhance good practice in a craft of management in the NHS. The study will spend time searching out the concepts behind “evidence based management” as they reveal themselves to the participants.

The Department of Health (2009 a and Appendix E) note that this is an emerging field when they say that “many of the research studies commissioned by the SDO over the last eight years have direct relevance to healthcare managers. However, rather less of our past research has been directly focused on exploring the roles, work, performance, effectiveness and development of healthcare managers and healthcare management itself. At the same time there is increasing recognition of the potential for research evidence to improve managerial practice and decision making (Shortell, Rundall and HSU 2007)”. Further they say that “the rise of the evidence-based healthcare movement, the increasingly explicit use of research evidence...have all helped to focus attention on the way that healthcare managers and leaders use evidence in their decision making”. Additionally one might say this is an emerging field because there are important differences between the culture, research base and decision-making processes of clinicians and managers so that the ideas of evidence-based medicine whilst relevant need to be translated for management rather than simply transferred.

1.2 Why a specific research question would be inappropriate

To emphasise the mirror holding nature of this work and the questions this raises. What excites in this research is to analyse the data with no pre-conceived hypothesis. Rather than searching for data that confirms or rejects my hypothesis, a template analysis can search out

the concepts behind “evidence based management” as they reveal themselves to my participants. Maybe the question is unclear, but by conducting a study on the nature of evidence based decision making as it is judged and participated in by NHS managers questions will appear. A working awareness of bias is imperative, but the author has long gone past the point of wanting to introduce or reject evidence based management in the NHS – so the paper simply wishes to understand if, how, when and why it is used or rejected and to reflect that back to NHS managers themselves. In early stages the document also avoided using such questions as “does an evidence based approach exist?” because inherent in that question is a narrowing down of options and scenarios that the executives have not yet evaluated or which, because of their nature, are very difficult to evaluate. This was because the evaluation did not want to impose a question that implied a thesis that was supportive of an evidence based methodology. The reader should remember that evidence based management is a philosophical approach that denies the true value of experience and heuristics. There had to be scope for the NHS leaders interviewed and recorded to say that they remembered, for example, that “no evidence” in decision making can be better than the use of poor quality, contradicting or incomplete evidence. The discussion of evidence based management is a valid research area, but whether there is a single valid research question is uncertain. There are undoubtedly key questions that arise in the research. The paper does ask whether evidence based practice is a norm or an ideal for daily professional management in the National Health Service? To what extent do practicing NHS managers think evidence based healthcare management is an appropriate tool to resolve problems and what do they actually use? Is there a conflict between politicians’ views of an effective National Health Service and the view of NHS managers? If so, where is the conflict and would application of evidence based healthcare management resolve the conflict? What is intended to be gained from these questions though, is a understanding of and to draw conclusions about, the nature of the preferences and decisions expressed by the cohort. Ultimately, the reason why the specific research question would be inappropriate, therefore, is that a question that implies best practice would typically only uncover case studies related to that practice and all other experiences would be under reported. The mirror is much more use if it reveals things about the cohort (the nature of relationships, power, eagerness to learn etc) than if it was a didactic about best practice case studies.

1.3 Why an ethnographic account was used

In April 2009 the NHS created a web portal, NHS Evidence (Department of Health 2009a), “to provide online access to high quality information about health and social care to all staff who are making decisions about care they provide to patients”. The objective is to help to make informed decisions about treatments and resources. A key differentiation is made between ‘evidence’, clinical and public health ‘guidance’, and government ‘policy’. This differentiation is at the heart of document 5. According to Walshe and Rundall (2001 p 429), “the rise of evidence based clinical practice in health care has caused some people to start questioning how health care managers and policy makers make decisions and what role evidence plays in the process”. Further, Walshe and Rundall say that (p 431) “though managers and policy makers have been quick to encourage clinicians to adopt an evidence-based approach, they have been slower to apply the same ideas to their own practice”. Yet, there is evidence that the same problems (of the under use of effective interventions and the over use of ineffective ones) are as widespread in health care management as they are in clinical practice. According to the NHS, surveys done by the Department (Department of Health 2009 a, b) went on to say that the NHS had spent (08/09) £912 million on clinical research, £350 million on management consultants and yet had spent only £4 million on research and disseminating knowledge about the organisation and delivery of health care.

Pfeffer (2006, p 6) says that “evidence based management is a commitment to finding and using the best theory and data available at the time, to make decisions”. This definition arose from study by Pfeffer (2006) of the “knowing-doing” gap and why managers “do things that were at odds with the best evidence of what works”. This is the definition that I am settled on for this paper.

My own personal baggage about Evidence Based Management is that; I have worked in services where EBM was a new or alien concept. Although the hierarchy of evidence is vaguely understood by most if not all NHS managers the sense that evidence should support or instruct decision makers, as proposed by distinguished leaders in the NHS management such as Muir Gray (1997), is not commonly accepted. To an extent the concept of evidence is mostly a binary rather than a linear concept. By that I mean that the Randomised Control Trial (RCT) is seen to be “evidence” and that anything other than an RCT is not. In that way the concept of evidence is elevated to its most extreme version where an almost laboratory level of precision within its practice frightens lesser users.

I have performed the role of Director and Chief Executive in NHS organisations. It is significant that as a qualified accountant with a masters degree I should put an emphasis on craft knowledge. The use of evidence was seen not as a tool, but part of the ‘craft’ of a few researchers who could cope with the rigours of the RCT. The study of what other health systems outside the NHS could offer in terms of evidence was seen to be the role of specialised divisions of the health system, not mainstream NHS management. I broke into this through visits to Europe and to America. I was able to discuss the concepts of evidence based management with leading advocates of the idea, such as Dave Knutson at Minnesota, Tony Kovner and Jon Billings at NYU, Johanna Brared-Christensson at Sahlgrenska and James Roosevelt Jr at Tufts Medical.

Young (2005), Mitton (2003) and Wait (2005) have all presented models that allow for an international analysis of health outcomes, responsiveness and financing. This is not a crude league tabling, but a mixture of simulations and benchmarking, that allow for managers to not only understand how much is spent on health care, but how the resources are being applied. Indifference to such work typified the use of international comparative data by NHS management. Mitton (2003) considers the problem of applying a “rationing process” based on national allocation judgements, as opposed to the crude application of private sector management concepts from alternative health systems.

On the other hand, this baggage had the bonus that I could negotiate a quite privileged level of direct access to senior managers within my region of the NHS. Professional experience within that region over the last 10 years, plus my engaged discussions (socially) with these managers about me studying for a doctoral level qualification, gave me confidence that I had a cohort to study. But there needed to be a method of study and implicitly a preceding methodology to gather the best data from this research. I was drawn to the work of Frankfort-Nachmias (1996, pp12-13) that said “logical empiricists take the position that social scientists can attain objective knowledge in the study of the social as well as the natural world. Social and natural sciences can be investigated by the same scientific methodology. Furthermore, logical empiricism sees empathic understanding as a helpful route to discovery”. As I worked through the methodology – one thing troubled me about the method. Under Frankfort-Nachmias (1996) the research process starts with a hypothesis. “But discoveries must still be validated by empirical observations if they are to be integrated into the scientific body of knowledge”. So I carried on with the methodology and was more

easily reconciled to a method when I read Atkinson (1990, page 9). Atkinson talks of ethnography as a “method and a genre” but just as importantly, Atkinson writes about the “poetics of authoritative accounts”. Under method and genre, he said “it is therefore necessary to perform the equivalent of a ‘phenomenological reduction’; that is, to step back and bracket or suspend our taken-for-granted assumptions about how ‘facts’ and ‘realities’ come to be represented as they are in our monographs and papers”. This appealed as it spoke to me of the way to observe my world as if I were an outsider despite being an actor in the system. Then Atkinson added “everyday commonsense tends to make a radical distraction between facts at one extreme and at the other subjectivity. If anyone were to adopt such a perspective then they would be guilty of gross over-simplification. Science is itself a rhetorical activity”.

For these reasons, I used an ethnographic account. Although I was concerned about the validity of the method as I had not used the method in previous studies at Masters or professional examination levels it did seem the appropriate tool. I did not want to observe a separate reality from the one I was working in as an executive in the NHS. I did also want to avoid historical research as the longitudinal nature of the study had to, as much as possible, concentrate not on who we had been as NHS managers in the past, but to look at who we are now and why. I accept that the ethnographic account is necessarily pragmatic and based on my values, but as I was trying to draw some general assumptions from explaining the behaviour of my peers, I believe it would be a valid research method. The key reason that this method was useful as well as valid for me, is that the realism of the record made the account most contemporary and subject to audit by the people being observed.

But what sort of ethnographic account to use? Ethnography; ethno as in people, graph as in to write. I am clear that I am writing about a people from my perspective. My people. NHS managers. In my region of the NHS. Denzin (1997) encouraged a creative study of human behaviour with lots of experimental texts and designs. This form of inquiry did not appear to be one I could credibly reproduce. In reference to Bryman (2004) I was able to gain a better idea of the structure of my ethnography. It would include participant observation, but I could say to all participants that my exploration was not testing a hypothesis. I simply wanted to record unstructured data, to find a particular case study within this unstructured data (in my case it turned out to be cleanliness in hospitals) and to add some interpretation to the decisions being taken. Watson (1994) considered an ethnographic study that gave an insight into the way that managers worked, their thoughts and concerns. Watson (1994) contrasted this approach to the numerate and standardising work that he saw typified much managerial research. The key method that Watson (1994) had was to discover what management is like by understanding identity rather than observing the managerial task as if it was meant only to help to deliver a successful organisation.

1.4 The effect of the patient and the politician upon NHS managers

I was aware from my literature review that part of the ethnography would most likely observe the effect of the patient and the politician on managerial autonomy in the NHS manager. I therefore mapped out key players in the NHS and the links to evidence based management as shown in table 1 (paragraph 2.4). So, in this dynamic environment what else was it legitimate to add to my ethnography to make sure it passed the ultimate test of an ethnography; that you should be able to recognise the place at that point in time once you have read it? Myers (1999, p2) who wrote an advisory note on ethnographic research in information systems, gave a helpful distinction “in a case study, the primary source of data is interviews, supplemented by documentary evidence such as annual reports, minutes of

meetings and so forth. In an ethnography these data sources are supplemented by data collected through participant and non-participant observation. Ethnography usually require the researcher to spend a long period in the field". The ethnography had to produce something meaningful not only to the reader though, but also to this group of NHS managers who were having to react quickly to patients and politicians. Morgan (2007, p48) was helpful in adding to Bryman (2004) by saying that what I interpreted could be "from the perspective of the meaning, members of that society attach to their social world". Importantly, in this unstable environment of reactive management, Morgan gave permission to "render the collected data intelligible and significant to fellow academics and other readers".

The ethnographic account was also seen as a useful way to improve the performance of current and future NHS managers by feeding back and discussing the way decisions were made. Establishing a link between individual organisational effectiveness (and individual executive effectiveness) and the quality of evidence used by managers in the East Midlands was problematic. On the other hand, the cohort studies were consistently assertive (about themselves and others) that individuals leadership and effective individual performance would make a substantial (differential) impact on organisational delivery. This delivery would cover compliances with the metrics used by inspectors and the Government, but also better clinical performance. There was little opportunity to reflect on the effectiveness of their behaviour as individuals or to share learning as a group, however. Therefore this ethnographic study was welcomed to audit and articulate what worked today and also to see whether generalisable themes could be found to plan for future good performance (Yin 2008).

Some senior (former) NHS managers such as Learmonth (2000) oppose the scientific method and suggest that management is not an automatically good thing as it is believed to involve the exercise of power and the exploitation of others.

Swan (2005, p920) said "the majority of studies in this field (of the politics of networked innovation) have tended to focus on the more overt forms of political influence, including the role of managerial coalitions political tactics and the micro-politics of self-interest amongst decision makers (Pettigrew, 1973; Brass and Burkhardt, 1992; Jones et al, 2001). The emphasis has been on the ability to develop power over other groups, through the mobilization of resources (eg financial resources, information, and staff). The negative connotations of a focus on hierarchically coercive power have tended to steer research of innovation away from deeper analysis of the dynamics of power (Hardy, 1996)". Swan concludes (2005, p938) "Dougherty and Hardy (1996 p1146) argue that for organisations to become innovative they must 'reconfigure the power embedded in the organisational system – in its resources, processes and meanings'. The findings reported here provide support for the view of the politicality of innovation processes".

Learmonth (2000) discourages the use of the scientific method due to exclusivity, but he needs not worry if managers themselves cannot or will not use the scientific approaches. Perhaps the answer is less about what numerics to use and more about what research can tell us about successful leaders in successful organisations and the management tools that they used.

The links between the better use of research and improved organisational performance are key to answering the question of 'why don't we use more evidence more often?!' So why does this link prove so elusive to find within this paper? The DBA itself includes a literature

search – not quite a meta analysis, but thorough and completed as document 2 before any quantitative or qualitative analysis is done. The conclusions were that evidence is rarely objective, rarely is it widely available to all NHS managers simultaneously and it is never free (requiring either cash or significant opportunity cost to trawl). Worst of all, it is usually contextually created within the market for management consultancy within the NHS that was, in 2008/09 worth £350 million or 0.3% of the total NHS budget (Department of Health 2009 b). In summary, there is not yet any empirical evidence about evidence itself that demonstrates without prejudice its effectiveness.

The following quotation from Giddens (1987, p310) explains how policy is related to research: “Evidence based policy is not simply an extension of evidence based medicine: it is qualitatively different. Research is considered less as problem solving than as a process of argument or debate to create concern and set the agenda. During the 1980s and 1990s this view was extended to a more interactive model based on a close dialogue between researchers and policymakers in which knowledge is considered to be inherently contestable”.

The implication of accepting this is that policymakers have to get something out of research if they are to use it. It is necessary, therefore, to consider which arguments are likely to be useful or gratifying to which policymakers. Researchers have to accept that their work may be ignored because policymakers have to take the full complexity of any situation into account. They need to recognise that the other legitimate influences on policy (social, electoral, ethical, cultural, and economic) must be accommodated and that research is most likely to influence policymakers through an extended process of communication.

In this section it is possible to conclude that there is a tension between politicians and managers in the running of the National Health Service. It is possible to conclude that a similar tension exists between taxpayers, patients and politicians in the running and funding of the NHS. None of the parties are inherently trusting of a link between research and improved organisational performance. An ethnographic account will help the reader and researcher to understand why this is.

1.5 A changing definition of management and professionalism

Our knowledge base is changing. A definition of a ‘profession’ as people reserving the right to judge the quality and appropriateness of their services is over. (Bonnell 1999). It is clear that the politicians believe the bond of public trust to be broken. The reason we get politicians using targets and based numerics in a heavy and dogmatic way is that the assumption of professionalism has lost the confidence of politicians. (Morris, 2002). At the same time the complexity of the NHS system means that simple-easy to communicate – policies are seen as the antidote to complexity. Not the use of evidence! (Paniagua, 2009).

The linkages between research and other forms of knowledge are important to understanding ‘who’ the NHS manager is and how this affects the production and use of evidence. Senior NHS executives must – according to their job descriptions – have a professional qualification, a masters degree level education (or equivalent) and at least five years significant NHS experience at Board level (Appendix G). This collective experience means a starting point for research and scientific enquiry that cannot only be forensic and analytical, but will also be experimental and, to an extent, based on story-telling and anecdote. Secondly, the leader will have won the post at a meritocratic interview within a public

domain following advertisement of the post and an extended competition. This means that the structural analysis of who they are and how they use evidence, must consider that the process of arriving at being a leader is within a social/political context. That their skills make them capable of using evidence is clear from the competence requirements of their job description – but there is every chance this skill will atrophy after appointment as other attributes are developed.

1.6 Using my professional role to validate academic insight

In my professional life I am a planner and purchaser of Emergency Ambulance Services. So I spend a great degree of time analysing and considering data about performance of ambulance responses to emergencies, the most efficient ways to do things and looking for insights that will either improve quality for the same price, or get me the same quality for a lower price. What I buy is affected by the reasons that people call for ambulances – dangerous personal behaviours, the frailty of the human body in times of extreme weather (heat and cold), biological factors such as disease or the contra-indicators of drugs, age and disability. In the response to a particularly difficult performance period it became clear that “falls” were a key reason for the despatch of ambulances. Although few trials have been carried out in the UK, the prevention and management of falls in the older population is a key government target in reducing ill health. This is a key target of the national service framework for older people (2001). “Reduce the number of falls which result in serious injury and ensure effective treatment and rehabilitation for those who had fallen”. (Department of Health 2001) is the direct mission statement of this particular national service framework.

My professional roles gave me validity and made it acceptable to be an explorer. When an academic explores the NHS and attempts to codify behaviour or establish a theoretical schema, their study may exhibit a certain formality and quality. But the ultimate product is not useful to practicing NHS leaders in proportion to the resource deployed. (Baker, 2009). The implementation of conclusions fully is unlikely. This is not some problem with the epistemology that the academic displays. It is that their exploration is that of a tourist within the NHS. My validity means that any generality I observe will have to be tested in the challenges we as a cohort of NHS managers face in the future.

Two academics explored this problem. (Gill 2002 and Yin 2008). Gill (2002, p5) said that “research in the United Kingdom comparing attitudes towards research of managers revealed that managers believed research was initiated by academic researchers often insufficiently familiar with the managerial culture and so lacked credibility. For the most part, managers seemed to believe that management research was not cost effective but also, more critically, largely irrelevant to the problems they faced. Many managers confessed that they did not know how to use research findings and that clearly utilisable research would be more helpful to them”. Yin (2008) broadens this helpfully, by saying that if the researcher intensively studies one or a few entries a case researcher is likely to develop deep insights of a phenomenon from which hypotheses may be generated. Following Yin (2008), my ethnography may lead to conclusions about the NHS in the East Midlands that are credible hypothesis in other parts of the NHS.

I wanted to complete the analytical quantitative part of my study of evidence based management by looking at East Midlands Ambulance Service (EMAS), as the only clinical service organisation that covered the whole of the East Midlands. EMAS also provides services in the South Humber areas of North and North East Lincolnshire which is outside

the definition of East Midlands used elsewhere in this project. When I talk of the East Midlands in regards to ambulance service I will be talking about the area co-terminus with the East Midlands Strategic Health Authority and the Government Office for the East Midlands, not the whole of the service area covered by EMAS including South Humber. EMAS provided emergency and urgent care, patient transport, call handling and clinical triage services. EMAS employ 3000 staff and have 70 locations they operate from and an annual budget of £137 million in financial year 2008/09.

As well as the quantitative study of EMAS, I wished to do an in depth qualitative study. Investigating the criteria used to assess the quality of a decision is a key objective of the research presented here. The way in which evidence is assessed is closely related to the perceived status and credibility of the evidence itself. It is possible to provide an idea of some broad areas the respondents seemed to take into account when assessing the quality of the evidence. I chose to focus on a particular decision. The cohort being followed were charged with conducting a deep clean of clinical areas in the NHS in response to high profile media and political concerns about infection rates and the effect they were having on patients. For those with poor health and reduced immunity due to a range of factors (age, diet, morbidity) proximate exposure to these infections would in fact kill them. That much was agreed by the cohort but the decision was around the way they approached the instructed solution of a 'deep clean', and the extent to which the assessment of the quality of evidence is used in that decision. A subset of this observation is the extent to which the use of evidence is seen as intuitive decision making rather than the systematic application of criteria.

1.7 Conclusion

I wanted a better understanding of the NHS that lead to better management (and especially executive) performance. The key was to have an intelligent system that was also simple to read and understand. I wanted to observe the most actively used algorithms for decision making by these managers (even if they didn't recognise it as being something as sophisticated as an algorithm) and to understand which algorithms they thought most deeply about before applying them to their decision. The codification of all of this needed to be something that would make sense to the participants in meetings and boards, not simply in an abstraction of their day to day experience.

CHAPTER 2

Context

Purpose

To represent schematically the relationship between policy makers, managers, clinicians and patients with respect to the use of evidence. To represent diagrammatically the reasons evidence is (or is not) used by managers in the NHS and by those who fund, provide and receive NHS care.

Key Arguments and Conclusions

2.1 Evidence encompasses codified and non-codified sources of knowledge

Kovner and Rundall (2006 p3) said “The sense of urgency associated with improving the quality of medical care does not exist with respect to improving the quality of management decision making. A more evidence based approach would improve the competence of the decision makers and their motivation to use more scientific methods when making a decision”. Kovner (2006, pp3-22) conducted a study of 68 US based health service managers and found a low level of evidence based management behaviours. From the findings, Kovner (2006) suggested that evidence based decision making should focus on strategically important issues and to build a management culture that values research. What I find compelling about Kovner’s study is that it understands that there is a bias in terms of describing ‘good’ management in health care in terms of what individuals know about their jobs, rather than describing a ‘good manager’ as one who uses research. Against all of the good work to improve the use of evidence, are pre-existing management cultures and scepticism about the transferability of findings of research.

Evidence based healthcare management (EBHM) refers to using research evidence in making management decisions. Defined narrowly it describes using evidence from randomised controlled trials investigating the effectiveness of management decisions. For example evidence about the effectiveness of representations of service (case management or team work), or about changes to organisation (changing skill mix or merging two organisations) or about new financing arrangements (e.g. primary care purchasing), or about public health or health promotion programmes. This accommodates a more flexible concept of evidence of effectiveness which can include the opinions of stakeholders if gathered using accepted systematic methods.

In its broadest sense EBHM describes using any “acceptable evidence” to make better informed management and policy decisions. Such evidence could be a survey of opinions about the likely value of a change or new policy, or an internal data gathering project to collect service statistics and assess their validity for informing a decision. An example of this concept is research informed management or “Evaluation-informed management” defined as “making more informed management decisions by using research evidence and evidence from research”.

In considering the way that individuals apply evidence to the decision making process, of particular interest is the underlying assumptions about the career of the NHS manager and the life stages they go through with regard to autonomy. The

way in which individuals define the use of evidence is important in that it shapes their perceptions about who should be free to use judgement and who needs to concur with the evidence base (and indeed seek out the evidence base) before making a decision. From the responses and the recordings (described in depth in Chapers 5 and 6) it is clear that a variety of individual decision making methods are in use and there is no general consensus about the nature of evidence in decisions by individuals within the NHS. What is clear though is that rather than being a restrictive or indeed exclusionary practice of some NHS managers, there is a body of support for evidence based decisions, with the right evidence by the right individuals in the right context.

Even champions of evidence-based practice acknowledge that the approach has limits. “Some things can’t be tested in randomized trials, and some things are so obvious, they don’t need it”, says Dr. Paul Glasziou, director of the Centre for Evidence-Based Medicine in Oxford, England. (2007 p3) “There have never been randomized trials to show that giving electrical shocks to a heart that has stopped beating saves more lives than doing nothing, for example. Similarly, giving antibiotics to treat pneumonia has never been rigorously tested from a scientific point of view. It’s clear to everyone, however, that if you want to survive a bout of bacterial pneumonia, antibiotics are your best bet, and nobody would want to go into cardiac arrest without a crash cart handy”.

2.2 There is a recognised corpus of knowledge for NHS managers

There is a managerial challenge, somewhere at the axis between clinicians and the NHS manager, that is about somebody making a decision about what the facts are going to be. The dialogue is between a claim for example about speedier recovery and the research evidence that confirms or denies this. This will inevitably clash with custom and practice. Equally, it will clash with entrepreneurs/innovators who have a penchant for change and experimentation that is not evidenced. Such entrepreneurs can be clinical or managerial. (Littlejohns, 2003 p862). “Most new interventions in health care are driven by entrepreneurs who have great faith in their project. They may not be capable of standing back and taking a dispassionate view of the cost effectiveness of the interventions. In this case, the implications of an emerging policy that was encouraging modular systems – that is, pharmacy and radiology that could be linked rather than fully integrated – were not fully assimilated”.

Muir Gray (1997 p615) has said “management in health care is a young discipline without the trappings and traditions of medicine. Is it, though, more of an art than a science? Resistance to change may be less, but the increased rigor required could be much greater. Furthermore, in management and policy making the anatomy of a decision is very different from a clinical intervention. Deciding whether to invest in a further cardiothoracic centre in a health region or to move five vascular surgical units to one site, even if evidence were available, is a complex process. It can involve managers, professionals, local interest groups, politicians, the media, and the public. At times, social systems will undermine the science. For example, how often have we seen a decision changed late in the day by a bravura performance in committee, based on emotion?” The National Institute for Clinical Effectiveness (NICE) has been created to help to create a more evidence based climate and to avoid the emotive response noted by Gray. The work that NICE is involved in attracts the attention of many groups, including doctors, the pharmaceutical industry, and patients. NICE is often associated with controversy, (politics.co.uk, 2010) because the need to make decisions at a national level can conflict with what is (or is believed to be) in the best

interests of an individual patient, and because there is an inherent need for rationing in the NHS. From an individual's perspective it can sometimes seem that NICE is denying access to a potentially life-saving treatment. NICE has been criticised for its over-reliance on evidence-based medicine, which it is argued privileges certain kinds of econometrically derived types of studies over others. NICE has also been criticised for being too slow to reach decisions. Some of the more controversial NICE decisions have concerned beta-interferon for multiple sclerosis, imatinib (Glivec) for leukaemia, and trastuzumab (Herceptin) for breast cancer. The process aims to be fully independent of government and lobbying power, basing decisions fully on clinical and cost-effectiveness. There have been concerns that lobbying by pharmaceutical companies to mobilise media attention and influence public opinion are attempts to influence the decision making process. A fast-track assessment system has been introduced to reach decisions where there is most pressure for a conclusion.

There are obviously a number of other ways that this management task of resource gathering and allocation can take place. I would like to continue with the theme of the Learmonth approach to NHS management before moving on to other studies. Learmonth (2003) returns to the areas he had covered previously in suggesting that much of the established work in health services management research takes for granted managerial assumptions that are not consequently subjected to sustained critical examination. Learmonth maintains that this veneer of research credibility reinforces a view of management in the NHS that appears to be neutral and disinterested, but actually supports elite interests.

Harries (1999) on the other hand acknowledges the importance of developing an NHS where practice and policy is more evidence based. Harries' paper is based on a qualitative study which aimed to identify factors which facilitate or impede evidence based policy making at a local, rather than, national level in the NHS. Harries drew conclusions about the importance of influences and commitment in facilitating evidence based change. Harries actually did what Learmonth accuses the NHS of not doing and moved beyond the rhetoric of evidence based policy by conducting a series of in depth interviews with lead policy makers and analysis of project documents to see if and where and why evidence based management exists in the NHS.

Further to Harries; Pearson (2007) took on Learmonth by conducting a re-consideration of what constitutes evidence in healthcare. Pearson offers the Joanna Briggs Institute version to illustrate the broader definition of what works as evidence and therefore challenges Learmonth. Pearson (2007) says that the whole concept of evidence can be described fairly and without prejudice. This is not to say that Learmonth is entirely without foundation in his belief that management styles can be imported without evaluation. Enthoven (2000) says that previous reforms of the NHS were quite limited in effect because the essential conditions for a market to operate were not fulfilled. Enthoven ascribes the management tasks of innovation, improving efficiency and driving good customer service as absent from NHS management and recommends the market as the best stimuli to improve the quality of management in the NHS with little or no evidence other than replication of what Enthoven saw elsewhere.

Hamlin (2001) presents arguments in support of evidence-based healthcare management, drawing on organisationally based empirical research, set within an NHS Trust Hospital in the UK. The research focuses on identifying the criteria of managerial effectiveness applying at the middle and front line management levels of the organisation, using critical incident technique and factor analysis methods. The findings suggest the existence of generalised

criteria of managerial effectiveness, supporting the notion of the ‘universally effective manager’.

Davis (2007) has made comparison studies of the functioning of health policy in Denmark, Germany, the Netherlands and the United Kingdom, to understand the incentives, rewards and penalties that might make players in a health system allocate resources efficiently. Boufford (2002) has written about the importance of teaching evidence based healthcare in universities to pre and post qualification healthcare managers.

There is a structure, albeit an informal one, for the implementation of management research in the National Health Service. The National Institute for Health Research (NIHR) was created in 2006 “to create a health research system in which the NHS supports outstanding individuals, working in world class facilities, conducting leading edge research focused on the needs of patients and the public” (Department of Health 2008). The NIHR is a virtual organisation, which provides a new framework for the Department of Health to work with its key partners involved in the different elements of NHS research. Also noteworthy is the West Midlands Health Technology Assessment Collaboration between universities and academic groups mostly based at the University of Birmingham, United Kingdom. It produces reviews and evaluations for a variety of national and regional clients, undertakes methodological research on health technology assessment, and provides training in systematic reviews and health technology assessment. The Service Delivery and Organisation (SDO) Research and Development Programme aims to produce research evidence directed at improving the organisation and delivery of health services, and to promote the uptake and application of that evidence in policy and practice. The SDO Programme is one of NIHR Programmes.

The Cochrane Collaboration is an international not-for-profit organisation that helps people make well informed decisions by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health care interventions. The major product of the Cochrane Collaboration is its database of systematic reviews. Most reviews are prepared by health care professionals and published in the Cochrane Library. The activities are supported by staff in Cochrane Centres (Department of Health 2005 a) around the world. Centre for Reviews and Dissemination (CRD) was established in 1994 to provide the United Kingdom's National Health Service (NHS) with important information on effectiveness of treatments, delivery and organization of health care. CRD is a sibling organization of the United Kingdom Cochrane Centre and is part of a network of academic departments and research centres at the University of York concerned with teaching, research and consultancy in health and public policy.

Evidence-based medicine categorises different types of clinical evidence and ranks them according to the strength of their freedom from the various biases that beset medical research. For example, the strongest evidence for therapeutic interventions is provided by randomised, double-blind, placebo-controlled trials involving a homogeneous patient population and medical condition. In contrast, patient testimonials, case reports, and even expert opinion have little value as proof because of the placebo effect, the biases inherent in observation and reporting of cases, difficulties in ascertaining who are an expert, and more. Evidence-based healthcare management is an emerging movement to explicitly use the current, best evidence in management decision-making. Its roots are in evidence-based medicine and as such is a quality movement to apply the scientific method to management practice.

2.3 Those who comment on the NHS don't use evidence to do so

Strathern (1997) says that any economic relationship which is used for policy purposes ceases to be valid. The paper gives an anthropological comment on what the writer calls the 'audit explosion' meaning the proliferation of procedures for evaluating performance. Strathern (1997) notes that audit does more than monitor, it actually has an effect on the behaviour and performance of the organisation that is being audited.

Recent Institute for Public Policy Research/Ipsos Mori survey work indicates that only around a quarter of the public thinks that the availability of drugs and treatments should be determined by cost and effectiveness (Brooks 2006). There are legitimate concerns about the cost and effectiveness of new drugs and treatments, and about the role of private companies in stimulating demand for their products, and these require a robust and transparent regulatory response. We certainly need a system that allows a rational pattern of expenditure rather than focusing disproportionate resources on specific treatments when they hit the headlines.

Conversely Clarke (2004, p28), Director of Finance at the Homerton University Hospital NHS Foundation Trust, has insisted that 'most people running hospitals know how to run them, and there is no universal solution available from the commercial sector'. In any case, with around 70% of costs set nationally, hospital management teams have only limited discretion – something the government's 'turnaround teams' have been finding out. Parker (2004, p29), chair of the King's College Hospital NHS Trust, stressed that NHS managers are often being asked to manage 'dysfunctional systems', with a lot of perverse incentives. 'We are managers but we're being asked to act like civil servants, each time the government screws things up.'

Crawford (2009) wrote of a time when, in the role of Chief Executive Officer there was a heated argument as to whether loss-leader items led to greater sales. As CEO he could have made the decision based on his own opinion but that's not what happened. Crawford said, "Let's not argue, let's find out." They proceeded to do an experiment to see if shoppers buying sale items also bought enough other items to justify the sale. (They didn't). This is a great example of the attitude of inquiry. Crawford, (2009).

An attitude of enquiry would include questions such as "what are the assumptions behind this?" "what evidence do we have that things may go wrong?" Advocates come into a meeting with an opinion they wish to defend. Bertelli (2008) employed count regression techniques to find out what MPs said about issues of wait times and resource allocation in the NHS. Bertelli (2008) showed that political careerism goes a long way to show whether MPs tabled any questions in this area. Advocacy was consistently used in the defence of high risk individuals, but MPs showed no appetite for discussion about more general health risks that may be a clue to an attitude of enquiry.

2.4 A way to represent this as a diagram

The decision to use evidence to distribute the resources of the NHS would be, of itself, a political act. Clinicians, patients, politicians, all use Politics to distribute the NHS resource. Derbyshire PCT, where I work, is only the eight largest PCT in the country, and yet still distributes £1.1 billion of taxpayer's money on healthcare. (Department of Health, 2009c). The problem is not with the evidence based approach itself. The problem is that good

evidence based decision making with an evidence based organisation of knowledge at its heart can be slow. Decisions based on evidence can be full of checks-and-balances and be open ended. The calm evidence based approach gets overtaken by an urgent desire to claim and distribute a significant part of this huge economic resource available from the NHS. It will be helpful to draw this issue diagrammatically. This way the researcher can frame within one picture or table the reasons why evidence is (or is not) used by managers in the NHS and by those who fund, provide and receive NHS care.

I conclude that the cohort will use clinical evidence, I think managers are very much into the development of clinical pathways, working with clinicians and doing the best things in the best way. But as to how the NHS works, the sort of infrastructure, where services are located, how they're delivered, I don't conclude that they do use evidence. I observe there is some, scientific evidence in there, they'll look at journey times, and they'll look at volume, populations and the needs of that population (not been done very well until fairly recently). So they'll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based.

In our efforts to continually refine the body of knowledge, guidelines exists for where evidence is and is not appropriate. There is a culture of target hitting, self-regulation and rooting out dangerous clinical practice that has it's origins in criminal and unsafe clinicians such as Harold Shipman. But there is also a fear of evidence that pervades any hope of a structural response to the issue. There is also as we have seen far more complexity in the NHS. We have pressures to avoid all clinical hazard whatever the opportunity cost is. We have pressures and incentives for institutional growth over best patient care. We have consumerism and we have pre-occupation with financial costs over economics or 'whole system/whole life' costs.

Part of the problem in the discussion about evidence is that the players in the National Health Service can be difficult to follow if your primary perspective is the flow of patient pathways through the clinical experience. This gives a sense that there is a linear NHS with one purpose and a clear objective. Consider the diagram of the NHS as it is represented and it is possible to see a complex multivariate organisation within which each player has a different requirement of and/or rejection of the opportunities afforded by an evidence based approach. (Table 1, below).

Clinicians NHS Managers



Patients

Politicians

An alternative diagram considered was the structured system analysis and design method (SSADM) piloted by Downs (1992). This is a registered trade mark of the UK treasury and therefore deeply embedded within the UK public sector. This type of modelling involves recording and documenting how data moves around an information system. This also involves significant dialogue with users and complex mapping and is a pinnacle of the rigorous document approach to system design. Although the investigative nature of this diagram is helpful in constructing a diagram it has two drawbacks that mean I favour my alternative. Primarily it is that SSADM is a waterfall method in which progress is steady through the phases of conception to construction and use. It is also problematic in that whilst SSADM may be useful in implementing evidence in a single organisation, it is contextually limited for those influencing, but not part of, the NHS.

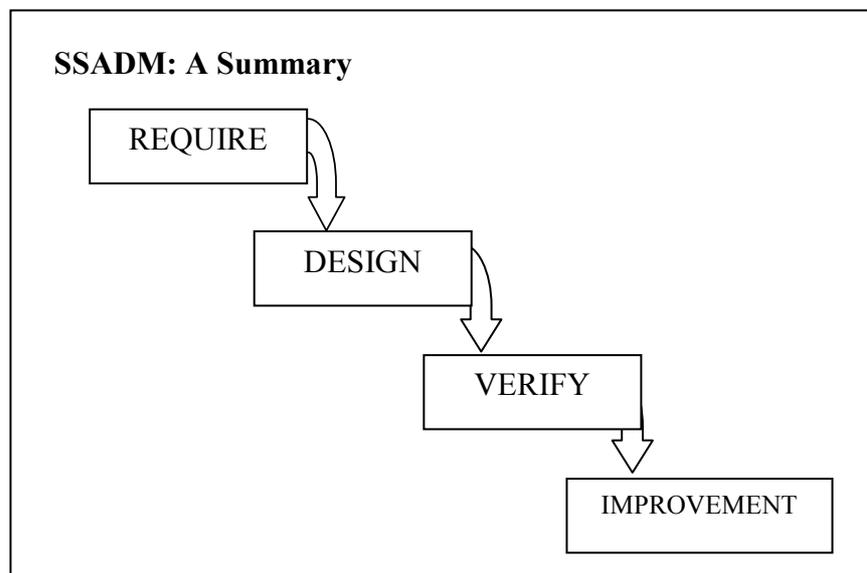


Table 2

The rational decision making diagram amongst its many assumptions assumes a single optimal solution. If, however, we opt for a diagram of ‘bounded’ rationality then my diagram makes sense. The decision maker takes the decision or is assumed to choose a solution that is good enough within the limited freedom and autonomy they have. All of the agents in the box makes assumptions about their perfect knowledge but all are aware that alternatives are limited by the other players in the box. Document 2 of the DBA (the literature review) discussed this point in more detail.

SSADM highlights that my diagram, as a faithful representation of the NHS, has a static nature and it may be that SSADM should be thought as the best way to enhance the “evidence based organisation of knowledge” at its core. This links with the next section in that I have so far described the existence of evidence as if it were a given, and the only question is therefore, whether or not it is used. Chapter 3 will discuss in more depth this issue of a “high quality knowledge base” and whether – if a decision was taken to be evidence based – the manager/politician/patient would find an “evidence based organisation of knowledge waiting to be tapped into”.

Knowles (2008) says: Although the term “command and control” is used negatively in the current target-driven healthcare environment there is a coherent case for it being a more valid

diagram than my evidence based approach. “Commonly held views about command-and-control are that it smacks of everything that is bad about those at the top telling everybody else what to do. However, with many years of ‘shared situational awareness’ (within the NHS) we may think of this as being clear about what is expected of oneself and one’s colleagues and using one’s initiative. It is about communicating a plan and ensuring it is understood”.

CHAPTER 3

Concepts and Conceptual Framework

Purpose

To understand the on-going debate over whether the use of evidence should improve organisational effectiveness.

Key Arguments and Conclusions

3.1 The primary use of research is in shaping ideas not in the solution of immediate problems.

The National Institute for Health and Clinical Evidence (NICE) is a division of the NHS set up to consider not only the comparative clinical benefits, but also the cost-effectiveness of alternative technologies and services. Unfortunately, as Chalkidou (2009b, pp4-8) says “NICE typically does not, however, encourage evidence generation through prospective research into existing uncertainties. To the extent that evidence for new technologies is more readily available than for old. (Existing) Service-delivery models are much less frequently the subject of economic analyses, which further biases the whole process to new technologies. Local systems often lack the analytical capacity, resources, time and information and may overlook any resource use implications beyond the marginal pricing cost”.

Chalkidou (2009a) studied the experience of senior technical and administrative staff in setting up what she called ‘comparative effectiveness research’ centres in Britain, France, Australia and Germany. Chalkidou was a member of NICE (the NHS version of these ‘comparative effectiveness research’ centres. Using website access and informal interviews with key stakeholders, she was able to determine the mechanisms that typified their operation. She concluded “they have adopted a core structural, technical and procedural principles. Including mechanisms for engaging with stakeholders, governance and oversight arrangements and ‘explicit methodologies for analysing evidence’ to ensure a high-quality product that is relevant to their system” (my emphasis points).

What do writers conclude about evidence and the nature of evidence? Guven-Uslu (2006) was able to ask whether the nature of papers written upon the consideration of evidence based management were qualitatively different from those of other management disciplines. Guven-Uslu (2006) reviewed the literature of the NHS at a time when it was encouraging clinicians and managers to work together in networks to improve performance and the writer concludes that “evidence based management” is not so much a tool of decision making, as it is a state of mind. The incorporation of evidence based management into decision making is not at the decision point – it is the entire continuum of the philosophy of management. It becomes a credo wherein all decisions are taken in a structured and methodical way, and to some extent, trading timeliness for accuracy.

Rousseau (2006, p256) quotes from a wealth of resource available to guide effective execution of evidence based management “goal setting and feedback (Locke & Latham 1984); feedback and redesign (Goodman 2001); health care managements greater orientation towards scientific evidence (Lemieux-Charles & Champagne 2004)” and says that the

continued wide variation that we observe in how organisations execute decisions is remarkable. I have written in tabular form, the nature of the discourse contained in Rousseau's literature so that a wealth of writing can be synthesised, in paragraph 3.3 and again in 5.9.

The Cochrane Centre was established as part of funding in 1992 by the NHS 'to facilitate and co-ordinate the preparation and maintenance of systematic reviews of randomised control trials of health care'. The national level institution has been supplemented in the intervening years by National Service Frameworks (2000) and the National Institute for Health and Clinical Excellence (NICE) (2001). Other bodies such as Kings Fund, Nuffield Trust and the US Institute for Healthcare Improvement have been active in producing research and disseminating knowledge about the organisation and delivery of health care.

A company that embraces evidence-based management sees their company as a laboratory. Crawford (2009) ran an experiment to answer a specific question. Many businesses could do the same. Wherever there are multiple units – multiple stores, warehouses, production lines or branches – the company can run experiments to find out what works. This simple idea, "the company as a laboratory" is powerful one.

Sutton (2009) says "Last week I spoke to a group of MBA students (the Santa Clara University Executive MBA class of 2007). Their comments and questions gave me food for thought. For starters, is evidence based management anything new? Is it a movement that should be enthusiastically promoted, or simply a day-to-day activity that people should be encouraged to do? And what should it be called (assuming it even needs a name)? Sutton (2009) wishes to avoid using "data-driven" as a substitute, because evidence doesn't always arrive in the form of hard data. Likewise, he says not to call it "fact-based" management, because not everything can be reduced to a set of objective facts. Sutton (2009) thinks "research-based" management is a decent description, but worries that it that might trigger "the dreaded MEGO (My Eyes Glaze Over) response".

What each of the writers in paragraph 3.1 have done is provide a sense that evidence based management or "decision based on a careful appraisal of the best evidence available" is not only possible, but empowering. Whilst it has at its heart an inquiring style of management, it is not cautious in approach. If the manager were, say, the executive director in charge of twenty clinics, each with varied performance, the manager might reasonably conclude that the performance differences were due to something about the clinics or their administration. The executive director might even combine that presumption with a professional background in clinical or business disciplines to draw conclusions. What these writers have told the NHS manager to do instead, is to look for systematic attention to local facts (ie, the best evidence available) and plan their response accordingly which may mean looking at patients, building stock, transport or public health, but to look at them quickly!

The debate is evolving from managers use of 'knowledge about knowledge' in the private sector (Bailey and Clarke, 2000) to a broader NHS and health care discussion (Kovner 2006, 2009). The debate is also evolving from one about managers strategic uses of knowledge to secure competitive advantage for the organisation (Hamblin 2001) to an alignment between researchers and managers to apply evidence to a broad range of other uses (Alexander 2007). There is as yet, little empirical research evidence to inform efforts to develop models in real world settings and the debate is typified by academic rather than practitioner dispute (Learmonth, 2006 and Rousseau, 2006).

We can observe the substance and discipline behind the evidence based culture; two writers Lomas and Rist are found in the literature with a number of lessons that they prescribe for anybody wishing to understand whether the public actually want their decisions to be made on the basis of best evidence. As a simple rule book this part of academic practice can be helpful in shaping an understanding for the later documents of how policy, public preference and management decision making come together. The writers make some bold statements as follows:

The relation between research and policy depends on the arena and, thus, the policymakers. Research evidence is more influential in central policy than local policy, where policymaking is marked by negotiation and uncertainty. Thirdly, the use of research depends on the degree of consensus on the policy goal. It is used if it supports the consensus and is used selectively if there is a lack of consensus. Fourthly, many researchers are politically naive. They have a poor understanding of how policy is made and have unrealistic expectations about what research can achieve. And, fifthly, policy-making is not an event but is “ethereal, diffuse, haphazard and somewhat volatile”. (Lomas 2006, p1-6). The consequences of failing to understand this are clear: “So long as researchers presume that research findings must be brought to bear upon a single event, a discrete act of decision making, they will be missing those circumstances and processes where, in fact, research can be useful”. (Rist 1994, p546).

3.2 Managers integrate data with other forms of knowledge

In the NHS in the East Midlands senior managers can embrace a dialogue about evidence and, at the same time, lead organisations that actually perform well. They are genuinely more interested in improving health care and organisational success than in power, prestige and being right. Unfortunately, despite their penchant for inquiry and observation the decision making box (2.4), the Rousseau model (3.3) and the critical single piece of evidence (4.3) show that their acceptance of evidence based decision making does not translate into practicing it. They feel compelled to act quickly and with direction in response to policy and the opportunity to consider evidence is ignored or lost.

Williamson (2000) acknowledges that knowing seems to be “highly sensitive” to such factors as justification and reliability. Taking each of these factors into consideration.

Justification: the meetings of the Senior Managers (Appendix C) took on board the empirical experience of the room, the authority of the speakers and logical deduction. Unfortunately, where evidence did occur within this rational sphere, it would be immediately discounted. If the evidence does not improve the organisations standing – suppose for example that the evidence was that accountants cost more than they save in terms of the opportunity cost of health care foregone it was ignored.

Reliability: the managers do attempt to make generalisable conclusions that will be reliable across many scenarios and organisations – for example, that the public want quicker and safer health care – but chose these scenarios in a culturally biased manner. So evidence that staff need to work flexible hours to achieve this is discarded in favour of having more staff in the NHS.

So it is possible to see an NHS that does use knowledge, but could still discount evidence.

Rousseau (2006 a, p1091) continues to address why evidence-based management is timely and practical. An “evidence orientation” according to Rousseau shows that decision quality is a direct function of available facts, creating a demand for reliable and valid information when making managerial and organisational decisions. Improving information continues a trend begun in the quality movement giving systematic attention to discrete facts, indicative of quality (Rousseau 2006, p1091). “This trend continues in recent developments regarding open-book management (Case,1995; Ferrante & Rousseau, 2001) and the use of organizational fact finding and experimentation to improve decision quality (Pfeffer & Sutton 2006). In all the attention we now give to evidence, it helps to differentiate what might be called Big E Evidence from little e evidence. Big E Evidence refers to generalisable knowledge regarding cause-effect connections derived from scientific methods. Little e evidence is local or organisation specific, as exemplified by root cause analysis and other fact-based approaches the total quality movement introduced for organisational decision”.

Evidence, according to Rousseau (2006, p1093) refers to data systematically gathered in a particular setting to inform local decisions. “As the saying goes, “facts are our friends,” when local efforts to accumulate information relevant to a particular problem lead to more effective solutions. Rousseau distinguishes evidence with a little e from Evidence with a big E. Although decision makers who rely on scientific principles are more likely to gather facts systematically in order to choose an appropriate course of action fact gathering (“evidence”) doesn’t necessarily lead decision makers to use social science knowledge (“Evidence”) in interpreting these facts”.

There are commentators on EBHM (Steward (2002), Paton (1999), Walshe (2001)) who say lack of evidence and lack of benefit are not the same, and that the more data are pooled and aggregated, the more difficult it is to compare the patients in the studies with the patient in front of the doctor — that is, EBHM applies to populations, not necessarily to individuals. In *The limits of evidence-based medicine* Tonelli (2001, p1435) argues that “the knowledge gained from clinical research does not directly answer the primary clinical question of what is best for the patient at hand.” Tonelli suggests that proponents of evidence-based medicine discount the value of clinical experience.

The emergence of evidence based medicine in the early 1990’s led to some clinicians challenging managers and policymakers to be equally evidence based in their policymaking. (Black (2001), Haines (1998), Raine (1998)). This demand was shared by some health policy analysts: “At a time when ministers are arguing that medicine should be evidence based, is it not reasonable to suggest that this should also apply to health policy? If doctors are expected to base their decisions on the findings of research surely politicians should do the same The case for evidence based policymaking is difficult to refute” (Ham, 1995, p71).

The need to be seen to be making evidence based decisions has permeated all areas of British public policy. The government has proclaimed the need for evidence based policing, and the 1998 strategic defence review introduced evidence based defence. In the health sector, the concept of evidence based policy has gained ground, and a journal has been launched devoted to this challenge (journal of Evidence Based Health Policy and Management).

Walter (2004) is committed to developing and promoting evidence-based knowledge about good practice in social care. Understanding how research is used and how to improve its use is crucial for our work and the work of other organisations. This knowledge review focuses on the use of research by social care staff and how the use of research can be promoted in social care practice. It examines effective ways of promoting research use in social care, explores models of research use that

include staff at different levels and settings in social care, and looks at what organisational structures are needed to realise the aim of using research to improve practice.

Four key conclusions emerged from the review Walter (2004) conducted on using knowledge to support social care:

- There is much activity to promote the use of research in social care, but this needs to be coordinated to avoid duplication and to ensure best practice is shared.
- The diversity of the social care sector, in terms of service delivery organisations, client groups and the workforce, demands that a variety of actions are used to promote the use of research. These actions also need to take into account multiagency and multidisciplinary working.
- Robust evidence of what works in promoting research use in social care is limited and tends to focus on the professionally qualified workforce.
- A whole systems approach, where the use of research involves a collaborative effort between organisations and individuals, would be a positive way forward.

Ham (2007) said that “Experience and available evidence from Europe, New Zealand and the US indicates that in no system is commissioning done consistently well. To be sure, there are examples of innovation in all systems, but equally there are examples of the limits to effective commissioning and the barriers that have inhibited commissioners from negotiating on equal terms with providers. As a review of New Zealand experience noted: Purchasing health services is inherently difficult in publicly financed health systems since purchasers are continually faced with the multiple and frequently conflicting explicit and implicit expectations of politicians, central government officials, managers, clinicians, patients and the public for the health system”, which indicates how little of the NHS management task is understood in its international context.

I have a paper by David Transfield and Ken Starkey (1988, p341-353) that emphasises the link between theory and practice and links to a craft versus engineering view of management. A quote they have is from Whitley (1984).

‘the nature of management problems, as distinct from some manager’s problems, receives little attention...yet if management research is to be more than technical trouble shooting for current incumbents of dominant positions this distinction needs sustained analysis. Considering management research as the study and improvement of co-ordination and control of human activities necessitates taking current structures and goals as problematic. This view implies some framework in which existing arrangements can be conceived as needing improvement and some conception of what constitutes improvement. It therefore has to transcend current beliefs and practices rather than reproduce them in formulating its problems and intellectual goals’ (p369).

The need for evidence to shape organisational structure was promoted by Ham (2009) when he said “because of the importance of local context, the CQC should focus on the outcomes achieved by NHS organisations and local authorities and then use its leverage to stimulate partnership working where it can help to improve outcomes. Organisations that achieve poor or modest outcomes, and which function independently, should be challenged to work in partnership. The outcomes used to assess the effectiveness of local public services can be drawn from the comprehensive area assessment framework developed by the Audit

Commission and the Vital Signs approach promulgated by the Department of Health. Improvements in health and wellbeing, and in the quality of health and social care services, are the outcomes that matter most, and the regulator should focus on these in its assessments of performance”; and in this he is consistent with Transfield and Starkey. Ham has offered real leadership in this area by leading a detailed publicly funded study of the role of Medics in Management, Ham (2008) said in the research proposal “the research will provide practitioners and policy makers with a better understanding of:

- 1) The types of structures which exist across England for engaging medical professionals in management and leadership;
- 2) How different structures are associated with different patterns of working and relationships between doctors, nurses and managers in the triumvirate; and
- 3) How different structures, roles and behaviours relate to organisational and directorate performance.

3.3 A Model to frame this narrative

So the problem is, how do I frame this rich narrative resource in a meaningful way? I propose to use a synthesis of the Rousseau model.

In paragraph 1.2 I quoted Morgan (2007, p48) who said that ethnography should also “render the collected data intelligible and significant to follow academics and other readers”. My reasoning for selecting the Rousseau model as method is as follows. It explains why managers might feel unable to move to an advanced state of evidence based manager. It then says clearly that such an adherence to the status quo will stop the manager being a great manager in a great company. The conclusion of the Rousseau model is that managers using evidence based decisions are better managers. I am not accepting that conclusion by using this method. I am using the tool to make the data intelligible.

After Rousseau: A synthesis from the literature of Rousseau (2006 a, 2006 b) on the practice of Evidence Based Management.

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
<i>The supervision of employees</i>	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
<i>Information available to managers on the consequences of their decisions</i>	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
<i>The delivery on promises to the public, employees, stakeholders/taxpayers customers and others</i>	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
<i>Management style</i>	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
<i>Approach to academic research</i>	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work
<i>Management culture</i>	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors structured methods for improving efficiency were classified under scientific management	A belief that good management is an art - !the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implementation fail	Managers are prevented from real learning by fads and falsehoods

3.4 Conclusion

The NHS manager must also consider the circumstances of the decision and the ethical concern that the management decision may provoke. For example, immediately prior to a general election is not an easy time for an NHS manager to promote the idea that the NHS might improve its efficiency by paying cash incentives to drug users to attend Methadone clinics but to deny the ability of a woman to top-up her cancer treatment by co-payment for drugs. Whilst both decisions may be made by contemporary NHS Chief Executives on the basis of a developing evidence base relevant to effective management practice neither decision alone (and definitely not when they are juxtaposed) will be considered appropriate to the circumstances of an election nor ethically appropriate when portrayed by the media. So I would be more blinkered about finding out what parts of the ‘time’ horizon it is

appropriate to take a Rousseau type decision in. In this way, it is important to remember that my “After Rousseau Model” is only describing an hypothetical NHS organisation that uses Evidence Based Management. Wildly in contrast to the same organisation as a hospital provider where Evidence Based Medicine will most likely actually exist.

Is the method replicable but in a different situation? It is important to ask the question as this document does not have a tightly controlled experimental design but the method should be generalisable to the wider NHS otherwise the conclusions cannot be tested again. In all parts of the NHS there will be a cohort that can be reviewed individually and in groups to observe the use of evidence in decision making. Critically there will always be a number that is accepted without refute – the single piece of evidence – that is applied differentially, not at all or even wrongly (in contravention of the evidence) and it will be possible to conduct a field study of why that is so. Successful policies from repeated application of the method necessitate an NHS archive of the type typified by NHS evidence (www.evidence.nhs.uk).

Would the model need to be different if considering a different part of the public sector? I am not so confident that it could be considered ‘best practice’ and used again in, say, Adult Services of the local authority. There are two reasons. First, evidence based management is possible to juxtapose within the NHS with a prevailing demand for evidence based medicine. In this way there is some prior organisational support for the principles and methods. Second, the NHS has a unique governance structure within which there is no elected political representation at a locality level. All managers may understand best practice – not all have the NHS freedom to experiment with evidence.

CHAPTER 4

Research Methods

Purpose

To explain why I have chosen both a qualitative and a quantitative method of study. To identify two possible bias in the method – literature questioning the nature of the NHS manager and the potential scenarios within which managers answers may be vulnerable to gaming.

Key Arguments and Conclusions

4.1 The production of evidence to support my findings will include participant observation

In paragraphs 1.1 and 1.2 I quoted Frankfort-Nachmias (1996), Denzin (1997), Byrman (2004) and Morgan (2007) to explain my method of participant observation, that I classified as an ethnography. The method will include a large amount of qualitative data about managers. Swan (2002, p494) said that “when confronted by the demands of a radical, networked innovation process. Lacking the power to direct such a process, managers at (the PCT) adopted instead, the role of systems builder, working in an improvisational way across professional and organisational boundaries”. The key thing I believe Swan is pointing out here, is that my research method may be susceptible to bias from managers who adapt their behaviour in response to being watched. The key will be to classify as per Rousseau (2006) (paragraph 3.3) but mindful in reference to Swan (2002) of the “shift in management strategies and practice associated with innovation” during the observation. Swan (2002, p477).

Alexander (2007, p152) said that “evidence based management assumes that available research is consistent with the problems and decision making conditions faced by those who will use the evidence in practice”. This method explores without hypothesis, the studied environment of NHS management. The observer is part of the studied environment – having the same experiences as those being observed, but at the same time, taking a record (sometimes recorded by machine) of the process being undertaken. The problem with this method is that it produced a large amount of data which is difficult to analyse in an unbiased way.

I tested this assumption out by participant observation. An additional method would be to take a single hypothesis about a single decision – for example the implementation of an instruction that is nationally mandated simultaneously and to review the effectiveness of the response to that instruction at all places in the NHS at the same time. It would not be possible to have a randomised control trial of those who chose to implement the decision without evidence and to look at the harm/benefit that ensued because of the constraints of politics and time, but it has been possible to find a proxy for that task in the East Midlands. So I did that as well. This aspect of participant observation is explained further in 4.3.

The cohort I have studied; I conducted interviews and group observations in 2007 and 2008 with (Appendix A and B) Chief Executives, Strategic Health Authority Directors, Directors and Managing Directors of organisations within the East Midlands NHS. Notes were not

taken in the meetings, but a recording machine was left on the to take a verbatim transcript of the meetings. Structured, but limited questions were used in the interviews and all respondents were encouraged to engage in a free discussion of the subjects without being re-directed. Observations normally took two to three hours as did interviews, although no strict time limits were set.

The East Midlands is one of the regions of England and consists of most of the eastern half of the traditional region of the Midlands. It consists of the combined area of Derbyshire, Leicestershire, Rutland, Northamptonshire, Nottinghamshire and most of Lincolnshire. Its main settlements are Nottingham, Leicester, Lincoln, Derby, Northampton, Mansfield and Chesterfield. Leicester is officially the largest city in the region, although the largest conurbation is the Nottingham Urban Area. For the purposes of this study the East Midlands represents a significant border for the division of delegated responsibility of the Department of Health. NHS East Midlands provides strategic leadership to NHS organisations in the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland. These organisations have a total NHS budget of £4.1bn, and serve a combined population of 4.3 million. This study will concentrate the practical elements of the research on the East Midlands NHS.

The writer is a participant in the National Health Service, the author holds a senior management position in the National Health Service. The National Health Service being under transition affects the individual philosophically, professionally and individually, therefore there is a subjective bias in the analysis of change in the NHS.

The study is a selected sample of subjects representing a spectrum of Executives in the NHS from different professional backgrounds including doctor, accountant, academic professor, statistician and nurse. Subjects were recruited from the cohort of people working in the NHS in the East Midlands through personal contacts and in one case, referral by other subjects. A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort to test this method.

The overall aim of this research is to enhance good practice in the craft of management in the NHS. To achieve this aim my objective in this piece of qualitative research is to conduct a systematic investigation into current perceptions of evidence based management including perceived barriers to its use and also including perceptions of good practice in the use of evidence based management. It was also necessary to begin to ascertain perceptions of skill deficits in this area and factors viewed as contributions to these deficits. The effect of the researcher as an observer is unknown. It could have an effect on the interviews and it may inhibit parties who participated in the review of meetings. A further limitation of the study is that I only included leaders from within the NHS East Midlands and it is possible that NHS regions may be more or less equipped to engage in a discourse about evidence based management. The strength of this study is that observation and participation with individuals and the groups by the researcher on an ongoing basis in the NHS in East Midlands increase the credibility and trustworthiness of the findings. Bryman (2009, page 3-4) says of the usefulness of triangulation “do not deny the potential of triangulation, instead they depict its utility in terms of adding a sense of richness and complexity to an inquiry. As such, triangulation becomes a device for enhancing the credibility and persuasiveness of a research account”. Although Bryman does acknowledge that “it (triangulation) is sometimes accused of subscribing to as naive realism that implies there can be a single definitive account of the social world”. I am happy that my results can be triangulated and that this does not imply a single definitive account.

Individuals or the chairs of the groups to be recorded were initially contacted by email with a very prompt follow up by telephone. I outlined the nature of the project and the contribution I felt the individual or group could make to my initial piece of qualitative research. I explained that all interviews would be taped, but that the material gathered would be considered confidential by me, with no identification of individuals except by some implicit membership of the taped group meetings. All of the individuals I approached were happy to help with this piece of the project, many suggesting this was an important discussion in the NHS that warranted further investigation. All of the interviews were conducted at the interviewees' work place. The meetings that were recorded happened at normal monthly meetings with the agenda of the previous months meeting including an explicit discussion about my authority to record the events verbatim.

4.2 The Interviewees, the groups and the meetings

A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort. The meetings that were recorded happened at normal monthly meetings with the agenda of the previous months meeting including an explicit discussion about what I was doing and my authority to record the events verbatim. Five in-depth interviews were held with leading managers in the NHS and three meetings of senior managers in the East Midlands were also recorded. Four focus group meetings were held (three of them prior to the main meetings) as part of the process to understand the nature of the study I was involved in and any pre-conceived notions or approaches to evidence based management. The results were triangulated by feeding back to the original five interviewees. Seven people who were senior managers in the NHS, but not part of the original interviews read the results to test for reasonableness. Finally, I fed back to five group meetings the preliminary results to test for reasonableness.

	For the purpose of pilot	For the purpose of data collection	For the purpose of checking my understanding
Interviews	2	5	7
Focus Groups	-	4	-
Recorded Meetings	-	3	5

Table 3

4.3 The method must be aware that in the literature review, some writers would question whether the studied cohort are managers or autocrats

Collins (2001) labels 'level 5 leadership' as the ability to combine individual competence with unwavering resolve to confront the facts head on, fierce ambition (for the organisation) and personal modesty. All these are needed because once the evidence is assembled, the only way of creating a customer-orientated organisation is to make it face the customer, not the leader. Paradoxically, the only way for leaders to gain control of the system is to give up the idea of controlling people through authority and hierarchy (the leader-facing organisation) and enable customers and frontline workers to jointly reconfigure the system to deliver what customers want rather than what politicians specify. As Robert Pfeffer and Jeffrey Sutton note in *Hard Facts, Dangerous Half-Truths and Total Nonsense: Profiting from Evidence-Based Management* (2006, page 187), if decision are made on facts, then everyone's facts must be equal, but you don't need 'transformational leaders' to do it.

In a 2006 work informed by the work of French geographer Henri Lefebvre Learmonth (2006) suggests that in the long term the very study of evidence based management is likely

to inhibit rather than encourage, a fuller understanding of the nature of public services. The author critically evaluates the phenomenon of ‘evidence based management’. He goes on to suggest that the current approach, broadly informed by the pursuit of evidence based medicine, is misguided. The reasoning behind this approach from Learmonth is that there is a weakness at the heart of evidence based management. There is, quite simply, a deep debate to be had about the nature of ‘evidence’ within the discipline of management studies. Ultimately Learmonth moves to the conclusion that the pursuit of evidence based management has less to do with improving organisational effectiveness than it has to do with the transfer of certain management styles to the public service in spite of theoretical problems with their derivation.

Learmonth is important not only because he is an academic and former NHS Manager, but because work like his 2006 piece are part of a continuum of investigations by the author into managerialism and NHS managers stretching back to his own doctoral thesis soon after leaving the NHS. Learmonth (1997) presents the results of empirical work examining public attitudes towards UK NHS managers, with the author discussing possible explanations for the findings that there is a strong lack of sympathy for managers. The preferred explanation is that NHS managers as a group, tend to share an ideology about the nature of the NHS and the role of management within the NHS which is at odds with the belief held by most members of the public on these matters. Learmonth explores the origins and nature of managerial ideology (managerialism) in the NHS. In both his 2006 and 1997 papers, Learmonth suggests that management styles are being imported to the NHS, based on little effectiveness and that his 2006 identification of the symptom is evidence based management. Winyard (2003) agreed with Learmonth and further added that the introduction of general management in 1984 created new fault lines between doctors, managers and politicians.

Midway between these two dates of Learmonth lay the 2002 introduction of a code of conduct for NHS managers (Department of Health, 2002). The idea of the code was developed in the aftermath of high profile scandals around the management of clinical safety (Bristol) and dignity of the treatment of the body parts of deceased children (Alder Hey). The code set out the ethical and behavioural standards expected of managers. Breaches were to be viewed as gross misconduct leading to dismissal. Serious breaches such as financial fraud, supplying false information and negligence towards patient safety would result in the offender never being employed in the NHS again. Nigel Crisp, the then NHS Chief Executive said “the vast majority of managers in the NHS are highly principled and value driven people who will welcome the code. But we must deal with failure”.

4.4 Using a critical single piece of evidence as managers to undertake a quantitative study

The organisation within the NHS that the manager works in will be a variable construct of the history of rebuilding and redefining the NHS that will vary region to region and even county to county. Despite this limit it is possible to ask the question, “faced with a verifiable piece of peer reviewed evidence that is relevant and significant to your organisations context and is nationally constant – what do you do with this as a manager?”

Consider the following table and graph.

Falls in the Elderly Population

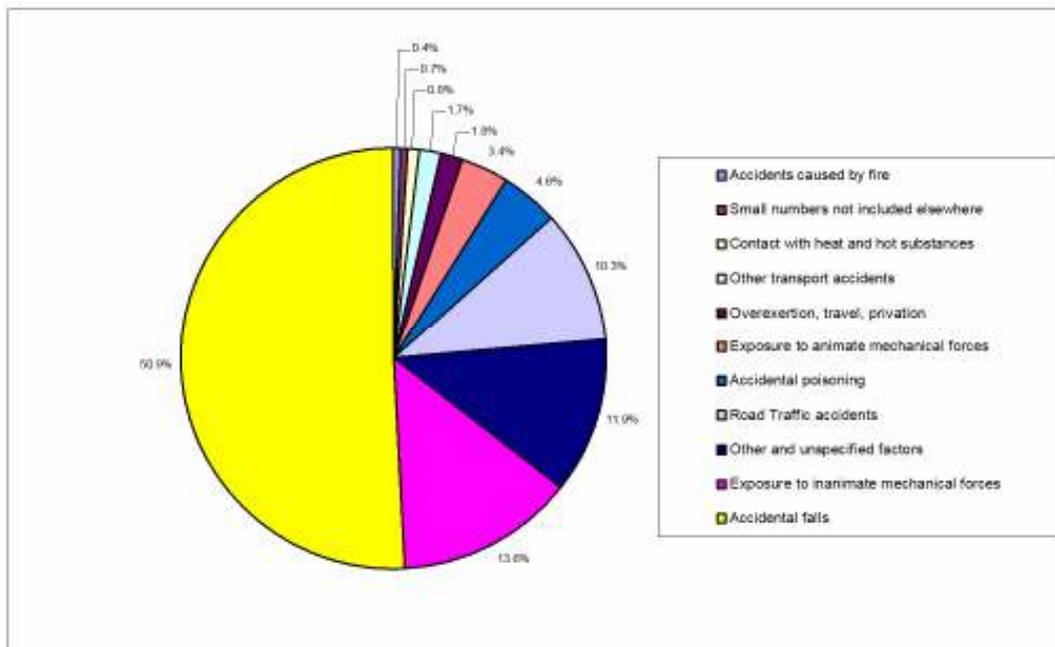


Table 4

Falls in the elderly population represent a serious and increasing issue in the UK and the subject area is attracting increased attention in current government policy development across different departments including health, social care and housing. In January 2008 the Department for Communities and Local Government released a report entitled “Lifetime Homes, Lifetime Neighbourhoods” (2008). This report highlights the following statistics:

- One older person dies every five hours as a result of a fall
- Falls in older people cost the NHS around three quarters of a billion pounds each year
- 1.25 million falls a year result in hospital admissions.

Ambulance services have a key part to play in tackling this issue. The Department of Health Pathways for Older people with Complex needs (2007) states that:

In summary, evidence suggests that a significant percentage of those who fall are elderly and that following transportation to hospital their support networks and infrastructures are switched off – hence they tend to be admitted to hospital. On a practical level, the falls co-ordination services provided and commissioned by PCTs do not co-ordinate well with EMAS and fail to recognise that a) EMAS is the first responder in most cases, b) fewer of these cases are Category A calls. The method will study the context within which a response to this evidence data is possible for NHS managers.

4.5 The method must be aware of a bias possible in responses because some outcomes of the study may be perceived as less fortunate than others

The NHS likes to league table. Organisations are scored and re-ranked, then ranked against different criteria and all of this makes the validation of what is working difficult to say within the business cycle of a given year. The key role of the performance and accountability framework in ensuring that this is used to explain why the bottom of the table finished bottom, rather than why the top finished top. The reality is that within the performance framework (that holds that the complex organisational reasons for failure can be attributed to one Chief Executive) there is a tendency to use evidence to criticise others rather than to understand the success of leading (league tabled) organisations.

So what would happen if I came out clearly in favour of more evidence based decision making? The effect on operational management of this would be: not all NHS organisations would be successful. Failures of delivery occur within all organisations within all sectors of the economy. The consequences range from minor inconveniences (a surgery opening late) to major catastrophe (the failure to vaccinate an entire population). On the other hand, accepting that evidence and the iterative application of evidence, refreshed by trial and context, would prevent repeated service failures of the same type. There will be an improvement in management.

This would effect a medium term review of resource allocation. A key part of public expenditure (fiscal) control is congruence between policy priorities and money given to priorities. Implied is the sense that evidence would take place in a lengthy (continual) process in which the treasury is engaged in funding a range of policies aimed at meeting the health needs of the population: more significantly, the Department of Health would recognise that all of their policies for the NHS have financial implications and that the evidence base to back up these policies has to be justified and monitored.

This would lead to a new evaluation of strategy. Evidence would enable the debate about the NHS to mature. Are the goals set by the department being achieved or not? If the evidence suggests they are, then decision makers should be acknowledged and applauded. If the evidence suggests this is as a result of using evidence then this should be communicated to public media and in the weekly Chief Executives bulletin. If the evidence being collected suggests that strategy implementation is struggling, the traditional NHS response has been continual organisational and structural change. The problem has been that the solution itself was not evidenced, piloted or given a priori evaluation that it would solve the diagnosed problem. The transformational leap would be for senior NHS managers to see a shift that meant that what could be learned from strategic planning was always discussed and written down to make the next strategic plan more evidence based and efficient.

4.6 The analytical methods used to provide a robust and valid interpretation of the data

Waring (2008) says that “Template Analysis makes use of codes and coding of data. The complete analysis process of organising, connecting and corroborating/ legitimising is used to analyse large quantities of rich data collected from qualitative research using semi-structured, unstructured interviews or story telling data collection methods”. The process involves; creating a code manual, hand or computer coding the text, sorting segments to get all similar text in one place and reading the segments and making the connections that are subsequently corroborated and legitimised.

Template Analysis normally starts with some pre-defined codes to help guide analysis. In my case, the code was the use of the Rousseau model and the conversion of the management issues in the Rousseau model to letters A to E. The code also included letters F and G for management culture and conclusions respectively, although it soon became clear that these letters in the scheme were redundant or repetitious (paragraph 5.10 explains further). Rousseau was useful, not only as a synthesis of literature themes, but because it contained neither too many codes (blinking the data) nor too few codes (which would lead to an overwhelming classification and coding of all of the rich and unstructured data).

Waring (2008) notes that “Template analysis is now well embedded in healthcare qualitative research (Kind, 2004; Crabtree and Miller, 1999). However, it is not so well established in Business Management research and this is innovative yet challenging in itself, when applied to this different context. Traditionally business research has emerged a positivist paradigm”. The reason this project uses Template Analysis can be found in a deep dissatisfaction with the NVivo software package. As Waring (2008) says “(although) the software might allow a more comprehensive approach, we would argue that immersion in the data is an essential part of the interpretive process and use of technology can often act as a substantial barrier”. That is not to say that NVivo did not have some merits; in the discussion on neuro-semantics (paragraph 6.3) and conclusions (9.4), some useful correlations were made, but in the heart of the data interpretation Template Analysis using the Rousseau model gave a richer, more complex and ultimately more useful tool than NVivo.

The benefit of using Template Analysis – with a highlighter pen and post-it’s, reading, re-reading and cross referencing lengthy transcripts – is that it recognises that the Rousseau themes were not hiding in the qualitative data waiting to be “discovered” the way the NVivo tool suggested. The coding arose from my engagement as a researcher with those texts. As such, it enabled the Rousseau model to act as a pragmatic tool to give a classified account of the data. The classification would be meaningful to external readers and, just as importantly, to the cohort who participated in the data collection themselves.

Having completed the first stages of Template Analysis (creating a Rousseau code, hand coding the text and sorting the segments) the ultimate state is corroboration to independently verify the relationship between the data and the coding. Independent scrutiny of the data was used when directors and assistant directors of NHS Derbyshire County were formed into an “expert panel” to challenge different readings and aspects of the data over their own conclusions. Further the classified data was returned to the five in-depth interviewees, not for correction of transcript but to acknowledge the consistency of what they had said with the Rousseau classification. The Rousseau model, as well as being a coding system, also enabled the material to be presented in a reader-friendly form.

Template Analysis was a useful analytical method that encouraged reflexivity. Comments from the independent scrutinisers helped to reflect on the questions or assumptions being made by the researcher (me, especially as I am also a part of the population being reviewed). Keeping an audit trail of the highlighted documents, their annotations and the unused text, forced me to be explicit about the conclusions being made. Template Analysis was particularly useful in moving data from Document 3 of the DBA to Document 5, when it had to be re-read and re-checked prior to inclusion again in Document 5. Waring (2008) concludes that “I firmly believe that writing-up (using Template Analysis) should be seen as a continuation of the interpretative process. In my experience the process of accounting for your analysis to your readers deepens your own understanding of your data”.

CHAPTER 5

Research Findings

Purpose

To record the awareness of a need for evidence and the collection and evaluation of such evidence. Where an interview is quoted, I have put a notation in the corner of the box denoting the letter in Appendix F. Appendix F says more about who these people are.

Key Arguments and Conclusions

5.1 How to use evidence to enable staff

Jbilou (2007, p185) concluded that “decision making in the health sector is affected by general elements such as economic constraints, political agendas, epidemiology, managers values and public environment”. The paper explored the determinants of “research-based-decision-making” as a personal behaviour among managers and professionals in health administration in Canada. The results suggested that “further research is needed to identify and evaluate effective incentives and strategies to implement so as to enhance RBDM adoption”.

I framed a direct question to a Chief Executive of an Acute Hospital to try and get some specific answers to the question of how to use evidence in a way that is not threatening or coercive. The responses indicate that sometimes leadership has to determine whether the individual has the capacity to understand.

Can I explore one of those, and I'm not challenging what you say, it's just this - say the rule book, say the rule was the piece of evidence based practice, and the manager is just coming up against that, you know, the person that, are just not getting it as anything other than a limiting factor, what do they do with that? Do they respect the evidence and back off, or do they try and work round it, or.....my guess, I'd say it depends on their capabilities, it's a bit like one of these things in this document they've sent me – if you want to be a manager, get yourself educated in something, then get a job, just don't pretend it will teach you to be a manager, I mean, it's a bit like, don't pretend that world class commissioning will teach you to be a commissioner. Ok. So, a good person would be able to see the sense in that situation, people without good sense had better just follow the rules 'cos they'll be safer, do you know what I mean? I don't know, it depends on the rules!.....it's interesting about that, that follow the rules, because I think, a lot of that is a proxy for evidence based medicine isn't it? It's the, you know, look, the vast majority of you will not be as good as the best, so follow the rules, and then the outcomes will be better for everyone. RESPONDENT A

Returning to the theme of the need for evidence. The macroeconomic environment and political context for the NHS is changing. Growth (in excess of GDP growth) for the NHS will not be able to be afforded without some changes (Wanless, 2008 b). So, if change is necessary, then the task is to identify new evidence and new information upon which to base management practice and management education. The National Institute for Health Research's Service Delivery and Organisation

Programme (part of the NHS) is undertaking primary research (ref NIHR, Km 259) which will inform and extend knowledge about management practice to facilitate best practice and best use of resources. Working within the programme, observers and researchers seek to generate creative processes for identifying, representing and accessing evidence of what evidence based practice is used. The objective is to ensure that management practice remains responsive to the changing financial and economic situation.

But there must be a limit to the extent within which a rule becomes an end in itself. As the following statement from a clinically trained leader says, the key is to develop dialogue and understanding.

And I have no problem with that, because what it tends to do is it generates a coherent conversation, you know, I mean for us; a lot of the rule following is very wasteful, labour intensive, and there are plenty of people who know the answer, without having to follow the rules, but there are a lot of people who don't; and the good thing about rules is it encourages conversation, you know if we want to prescribe a drug that's not on the protocol or the pathway, someone says, hey, this is what I want to do, and this is why I want to do it, a few great minds come together and will probably make what is the right decision, whether it follows the rules or not.

RESPONDENT B

5.2 The need to quantify risks and benefits of using evidence

Some blocks to shared understanding about the usefulness of evidence are the blocks to a shared quantification of the risks and benefits. The key here is that the accountants, the board, the matrons, everyone, must have some shared understanding that there is a risk to not using evidence and a shared understanding of the benefit of being evidence driven. The Chief Executive of a Acute Trust, the same trust for many years gives an explanation of the importance of a shared understanding.

For a manager to be accepted as something other than an irritation, getting in the way of clinical work, they have to demonstrate that they're in it for the long haul themselves, and that's very hard, and after the first three or four managers have gone your chances of making it as number five are really quite small. But there's a down-side to this longevity thing as well, and it's this sort of practice being entrenched, that once, you know, we've done it this way for the last ten years, so you're not going to change what we do, and also, the culture becomes quite unhealthy because of the longevity sometimes.

RESPONDENT C

So the very longevity of managers that enables clinical participation is seen as a limiting factor when getting clinicians across the East Midlands to lead and support required configuration and productivity improvements. Here is the same Chief Executive again, talking about how a new to the NHS executive uses clinical evidence to provide an antidote to organisational inertia and antipathy towards him as an individual.

He just rolled his trousers up, put a knotted handkerchief on his head and said, 'look – what do you want? This is evidence based medicine, here's the evidence, what are you all talking about?' And still, it made a big impression, it got a lot of laughs, but it takes that, sort of real challenge, before a lot of that out of date evidence is discarded. So evidence base – it's sort of important, but it's almost a culture rather than a reality sometimes.

RESPONDENT D

That's fascinating, and nobody's mentioned, so, old evidence becomes dogma, so it's established on an evidence base, and this is not just relevant to medicine, so it's not just established on – it's established on an evidence base, but then that becomes dogma which in its self evaporates over time and then the evidence isn't refreshed, is that.....

RESPONDENT B

And even more telling was an acknowledgement that there was no post-implementation work done to evaluate the success of the initiative.

Which of all the measures here, we have introduced, has worked because our infection rate has reduced.....I don't know, if I'm honest, I don't much care so long as it's happened, it's a number of things we've thrown at it. I could play the experimental – I could take that one out and see if it makes a difference, but I'm not interested, it has had the desired effect.

RESPONDENT A

5.3 The NHS is a complex structure that makes informed decisions difficult to make

And then there are some direct and lengthy quotations given by an individual in a group situation that are worthy of inclusion as individual quotes. I like the one here that says the NHS is complex and cannot be easily modelled, but makes no reference to evidence.

I do believe that most people can understand that that's the world we work in, most people can understand that there isn't a text book on the shelf of how to do this job, and most people in my experience, if you spend the time talking to them, will understand that, all we're trying to do is what we believe to be the best, taking account of what everyone's telling us, and from my perspective, in my job, it's not opening holiday brochures, reading the small print and looking it up on the website, it's talking to people, and you know, should we regrade nurses in surgery they'd say no, you ask some of the surgeons they'd say no and if you do I'm going on strike, and you know, you ask some other nurses and they go, well yes, fair enough, whatever, you get a whole wide variety of views, and you somehow have to make sense of it.

RESPONDENT E

But the individual view is that there is sufficient evidence to make information and informed decisions that we can rely on.

I don't think evidence takes time to mature, evidence is there from when it's presentedit's then assessed, folk law, takes the time to mature, so I think evidence can come and be there, I think in management terms, new evidence rarely comes to light, but I think evidence itself, becomes evidence from the day it's presented, it's just a question of what category and what quality it is.

RESPONDENT F

The problem as ever, again quoted in a group context, is that politicians and information do not fit nicely together.

Yes, it is really, I said to my board, just the other day, you know, working in the NHS is like living the world's biggest experiment, and it is, you know, we'll twiddle this, and I always used to think, particularly when we had Alan Milburn, I used to imagine, you know, the man stood in front of this big complex machine with fan belts and nuts and bolts, and cogs and things, turning the spanner in his hand, just kind of diving in and just loosening a bit, or tightening a bit, taking a bit off or adding a bit on, and going, oh, that didn't work, we'll have another go, you know?

RESPONDENT C

5.4 The use of evidence to improve financial management

It is clear that strong financial control is valued by executives, but in the following discussion by a leader who is no longer in finance, two things are worthy of note: the absence of the word evidence in any reference to accountants in the NHS and (despite appreciation of their corporate contribution) a question mark hangs over their ability to influence group decision making.

*I think it depends on what sort of an accountant you are, I mean, I don't think it was my natural bent to be honest, and I was heartily glad to get rid of it, because it was too precise for me. But it taught me some things, it taught me a balance sheet is only balanced when it balances to zero. Which is a good discipline; these people who go.....well, that's about right! taught me you can approximate, but you need to know how you're approximating, you know, when you round to the nearest million, you know what you've lost don't you. It doesn't mean you have to mess around with pennies, it just means you need to know what you're not taking account of. It taught me some good practice around delving in the detail, which is not my natural bent, and for people that are, they do struggle to make good strategic decisions, and I have watched accountants struggle to do that; I'm not suggesting you're one for a minute, but I have an ability to get into detail when I need to, in a way some people just can't, and it's given me an understanding in money that's essential if you're trying to do my job, it really is. And there are many, many, many times, no disrespect to 'B' who's been a great Director of Finance here, there are many times when we're kicking numbers around, and it's me who goes, 'but hang on a minute, you know, if that's going to drive that, and that's that and that's got to go there, then surely we've got a problem here', and you can kind of see everyone going oh-yes! And I couldn't do that probably, if I'd been a Physiotherapist. **Ok, so your profession has been a tool that you've been able to use on an ongoing basis**.....yes, hugely. **Ok.***

RESPONDENT C

But, the decision making by accountants was not the only one group to fail the executive test of reasonableness – so to the matrons. Consider this Chief Executive of an Acute Trust.

I went in very, very hard with the matrons last April about their cleaning audits, because what they were telling me back in March/April was that we were going to fail the health care commission standards, when we had all the matrons in, I said, I know it's not like that, you know it's not like that, what are you playing at.

RESPONDENT A

Sacket (1996) said that some fear that evidence based medicine will be hijacked by purchasers and managers to cut the costs of health care, McKeon (2009) said that nurses and doctors need to understand how NHS finance works, and Nolan (2006) says we must deal with funding the balances between quality and cost in healthcare. What section 5.4 says, to juxtapose the literature, is that without an evidence based attitude towards costs and quality, the clinical model will be insufficient to deliver the sustainable cost and quality improvements required. Instead of systems to improve the quality and reduce the cost of care, what is missing is an evidence based approach to improve the value of care.

5.5 The effect on organisational performance

The effect of evidence on organisational performance was considered by Hovmand (2008). They started their discussion by reference to administrators of mental health services who “may expect evidence based practices to offer strategic benefits”. Concentrating on clinical research and randomised control trials, they drew a conceptual framework for considering how implementation affects organisational performance. Although not strictly with the context of evidence based management, so much as organisational compliance with evidence based medicine, they still draw a useful conclusion. That: “results from the simulations shows how gains in performance depended on organisations initial inertia and initial efficiency and that only the most efficient organisations may see benefits in organisational performance from implementing EBP”.

Although Hovmand (2008) is referring to efficient organisations, I believe the quotation is still relevant for my study of effective management behaviour. This is because in a publicly funded, cash limited, health system the output (efficiency) of number of patients treated is differentiated from outcome (effectiveness) of the number of patients for whom health improves after treatment. The difference is a result of short term versus long term attitudes to evidence. The difference between efficient and effective is not semantic – the former being concerned with performing tasks with reasonable resource, the latter with the extent to which objectives are met. On the other hand, they are two of the three legs of value-for-money (economy being the other) and the inclusion of this quotation is still valid.

So finally, two quotations should be examined about the apex ‘group’ of the organisation: the board itself. The decision making in the boardroom is expected to be, demonstrated to be, cognisant of evidence based decision making. Both of the quotations below are from organisations that would be efficient (according to published ratings) and we can apply the Hovmand (2008) criteria.

Imagine you're in a boardroom and it's one of those, where for some reason, you're still in there at seven o'clock at night, and you know you've got locked into something, and you need to make a decision before the morning, and somebody says, shall we have a look at what the evidence says – is that a good thing to do at that moment, because it is a distraction and the evidence isn't in the room; imagine, taking my scenario, the evidence isn't in the room, so there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don't need any evidence, what we need is a decision. I would be shocked if the evidence wasn't already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on certain decisions I would want the 'show-me test' as well. On big things I want to see it. So I would stop – go to the evidence, then consider the

evidence in the wider context of the decision we're making.

RESPONDENT D

And, this is true even when the whole board might be agnostic about the approach.

*Oohh, I think one or two of them would react positively, I think one or two of them, would I think not understand what I meant...**ok**.....and the rest would be agnostic in the middle. But, I do think that self perception and review of one's performance is something which leaders sometimes get a bit blasé about, and don't do!*

RESPONDENT C

At a particular point in the conversation this rejection of the rules, this acceptance in the executive that rebellion was a tool in the chief Executive's armour, was becoming clear so I asked an explicit question.

Ok. Do you think we back off, from the implementation of the rules sometimes? *I think we do, yes. Well they are sort of political; some of it is a genuine means to an end, and I can see that: the reason we brought the private sector in and allowed them to be paid stupid amounts of money, is to get them in, and maybe the same as with practice based commissioning, now they're talking about paying them tariff, albeit the same tariff at the very low end complex work, I suppose it's a step in the right direction, but we usually do it because we've fallen flat on our face, rather than we ever had a grand plan.*

RESPONDENT D

5.6 The next part of these findings is to consider those who see "risk", who aren't insiders - how does the NHS identify these outliers and what they are saying?

The sequence begins with the chair asking, prompted by me recording the interview, whether evidence would help at all. On discovering that the group is willing to accept that the NHS is far from an ideal organisation, he asks some questions that get a more radical response than some of the strategic platitudes normally classified by the same individuals as 'assurance'. The chair continues a light cross examination as well as inserting a supportive and friendly narrative throughout. The Chair's role was didactic – in order to get to what the people were saying the conversation was nurtured – on only one occasion did an individual specifically announce that he wanted to ask a question.

The following is an example of when an 'outsider' (an off protocol doctor) is encouraged to move back into the fold of the use of evidence. In the end, an absence of evidence was taken as a lack of legitimacy (by managers) to practice.

And there will be occasions, you know, medicine's instinctive, and there will be occasions, I think, where you don't follow the protocol, because you don't know why you don't follow it, but you must have seen a patient somewhere similar; you wouldn't expect it to be the norm, but you should be able to justify in your own mind why you've not followed best evidence, what you should never do is not follow best evidence. If I take an example, we had here an anaesthetist prescribing some pain relief some years ago, and the evidence on it was no where near conclusive, no where near conclusive at all, and this was in the early days of clinical movements, and we looked at all the pros and cons, we looked at all the evidence, and in the end, we said to the anaesthetist, you will not prescribe.

RESPONDENT G

The effect of evidence on individual and group decision making. Evidence at the individual level can be sufficient or insufficient and the conversations showed that this affected perceptions and motivations about the use of evidence based decision making. It was not possible to say whether this had any direct effect on individual performance. It is reported though, that perceptions of the task of senior leadership did not correlate with high use of evidence. On the other hand, where a group was making a decision based upon a joint co-operation of members (rather than simply attempting to provide confirmation to a recommendation) there was a strong desire to work with evidence and perception that group performance outperformed what it would have been without evidence.

There is an explicit acceptance that the NHS cannot change without exploring the boundaries of the NHS. In the following quotation there is a direct challenge to a doctor who believes that the NHS has attained an evidenced optimum.

To what extent would evidence help you at all, or is it.....it does a lot, it does a lot, there's loads of things we use, I mean, to me, you know the job is a simple job, I always say to people, you know, that's where we are now, that's the NHS today, and that's where we're trying to get it, and I've only had one person in my whole life say 'it's perfect now', only one person – a pathology trainee I was talking to a Keele University, clearly, a strange man!
RESPONDENT H

Let's consider something that I want to reflect back to the managers. The following is an extract from a 10 minute journey where a senior group of executives are trying to find the way to speak the unthinkable. It is worth knowing from the start that this discussion starts with trying to find a way to consider the proposition that nurses in a particularly poorly performing hospital (on quality and economic performance) are not a solution to but a cause of the problem. The outsider nature of this debate, challenging years of acquired cultural parameters about nurses is revealing. What is interesting in the following quotation is that the outsiders in the following group meeting don't use evidence to describe the need for change. What they choose to explore are scenarios. Much like a health economist they start off with an assumption.

But let's assume there's a journey to be made, right, and you can begin to describe what's in this future NHS, it's less wasteful, there's no healthcare associated infections, shorter waits, greater satisfaction, more motivated, you know, nicer buildings, better equipment, all the new drugs, whatever.
RESPONDENT I

Further, this is picked up by the next person in the group. Again, what the outsiders are trying to explore.....or rather, what the NHS manager in a protected environment within which they can think of the future.....are scenarios.

And my job is to take this organisation on that journey, but it's not just a simple more, more, more thing, as I think we all understand, and we all do that all the time at home, we're all trying to get the best for our family, we have a limited income, we have circumstances, we all live in England – it's cold!
RESPONDENT J

Scenarios are by definition, alternative, plausible pictures of the future. Scenarios are created that are definitely not forecasts but are free from organisational constraint.

You know, so you'll say, we'll have a holiday a year, and I'll make sure I have central heating, and I can afford to keep paying the gas bill, and keep buying trainers for the retched kids feet that grow six inches every week, you kind of make those decisions to make that journey at home.

RESPONDENT K

The scenarios are written in a deliberately provocative style to tease out the differences between the different pictures of the future. The previous speaker was describing steady interactive change. The following speaker, although using a comforting style and collegiate language is painting an alternative scenario which is clinically relevant but more challenging.

And we have just the same to do at work, and we've kind of coined the phrase at the moment particularly about best care and best value, it's not just one, and it's not just the other, it's not just saving money at the expense of quality, it's not pursuing quality, spending money we haven't got, it's got to be about best care and best value, and I think people can relate to that.

RESPONDENT J

Then another more detailed description is ventured by the next reader. Scenarios, as I said are alternative plausible pictures and the next readers picture should be read side-by-side with the others to understand the differences.

'With you so far' they'll say, as a tax payer, as a user of the service, of course I want it to be as good as it can get, if we're wasting money seeing ten patients in a clinic when we could be seeing 20, somebody is missing out on something aren't they – that's an opportunity cost in terms of health gain.

RESPONDENT H

Until finally, we craft an answer to the problem. The staff can accept the analysis when applied in the abstract the actual implementation of the answer struggles when “the light is shown” on the problem. Only at the very very last moment is the evidence stated.....'overpaid compared'.

So, people are with you there, I mean, I've done lots of staff briefings and they've all left happy, what's got them is when you've then pointed the light from the two towers into their department and said what's more, you're all overpaid compared to grades in other Trusts.

RESPONDENT I

My understanding of this whole conversation is that the evidence that was there all the time is not used by the very people who need to use this evidence to win the 'outsider' debate!

5.7 Managers will only use evidence if it is persuasive

To start with consider three responses from the interviewed cohort that show that evidence based decision making must not only be factually correct, it must also move people to a response based not only on fact, but also emotion. To an extent persuasion is more important than evidence.

The doctors' view is, ok, 20 years ago, when you were building this hospital (because we've been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you've got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can't clean round the beds. Because

there aren't enough beds, you've got too faster through put, so people with infections are moved around the hospital.

RESPONDENT E

I don't know who they asked, they picked the wrong things, but it kind of doesn't matter, do you know what I mean? If they are wanting to change perceptions, you know, if they said, paint your hospitals pink and it will deal with infection, we might have said what a load of crap, but if the public believed that pink hospitals were less likely to give them MRSA, it would have the desired effect.

RESPONDENT A

I mean, I had this very argument with my technical directors, look, I said, look, if people will believe painting the hospital pink will make them safer, then we'll do it. I don't care, that's what we'll do. (What is interesting here is that 'painting the hospital pink' has quickly and previously entered the groups language as a shorthand for any method chosen to deal with this problem that is organisationally robust, but evidence weak).

RESPONDENT C

In the following quotation the use of a term pendulum is slightly confusing, as the respondent is making a point about the effort taken to persuade about the benefits of evidence being closely correlated to the impact of the change. The metaphor pendulum may also be taken to be a subtle reference that once the persuasion stops the centre of gravity is the same in all cases.

I think in organisational change type evidence around management tools, techniques, where the evidence can often be seen to be quite a subjective set of evidence, or the context when it was developed, might have been different from today – yes you know, the evidence around change management is, there's lots of articles, lots of books and lots of research around change management, in my mind they come down to two things, one is it's like a pendulum, you push it bloody hard and it will finish up where you want it, or the other way you just gently nudge it to where you want it. Now, they are two total extremes, but you can find the evidence for both approaches.

RESPONDENT D

5.8 A practical example of the difference that using evidence would make in the NHS

Consider this single piece of data: the EMAS response to falls

EMAS Responses to Falls in Over 65s: Type of Pick up Location
Sample of data from 2006/7

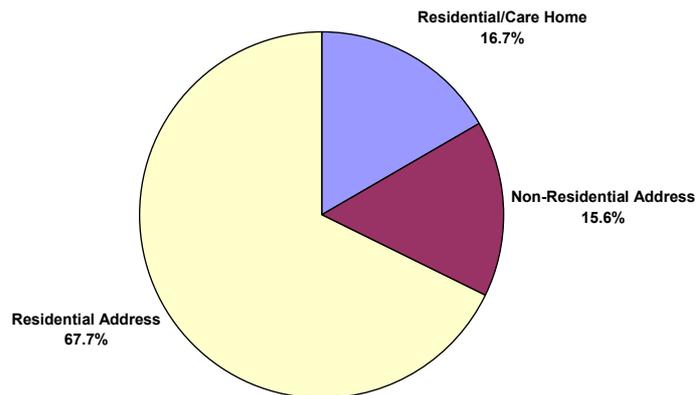


Table 5

The sample set was 2700 records taken randomly from all EMAS calls received and non-residential address includes things such as “outside”, “shops”, “pub”, as identified by the caller and where the location was clearly non-residential, such as outside a named business or factory. What fascinated me was that people fell in their own homes. Consistently and evidentially people fall in their own homes. As a proportion of the population who live in residential care homes more people may be falling than those who live in their own home but, as an organiser of ambulance services, the evidence tells me we should start with what people are doing in their own homes not anywhere else. So why the pre-occupation with everywhere else in the study of falls? It became clear that the study of falls was time and again about the reason for falling or the avoidance of admission to Accident and Emergency Departments. Close (1999) analysed individuals presenting at A&E following a fall; Crotty (2002) looked at the best medicine and treatment to get fallers home quickly; Tinetti (1999) looked at improved daily living skills to prevent falls and developed work done by Ebrahim (1997) and only Pardessus (2002) considered the modification of environmental hazards that might affect the propensity of an individual to fall. I was therefore presented with a very simple piece of evidence that mattered in the planning of ambulance services, specific to the actual rather than theoretical experience and it told me something that we weren’t considering. Whilst undoubtedly there was an issue of people falling in the street, if we wanted to look at the reasons that the ambulance was called – in absolute rather than proportionate terms at least – then the answer for falls lay in peoples own homes.

Ambulance calls are triaged from Category A (see immediately, danger to life and the individual) to Category C (traumatic to the person but requiring quick rather than immediate attention). There is also an acknowledgement in the work that NHS Direct do that communicating in a way that is sensitive to gender norms may also facilitate adherence to interventions that improve health or avoid ill health. So two reports were run as below.

EMAS Responses to Falls in Over 65's by Call Category
 April 2006 to March 2007

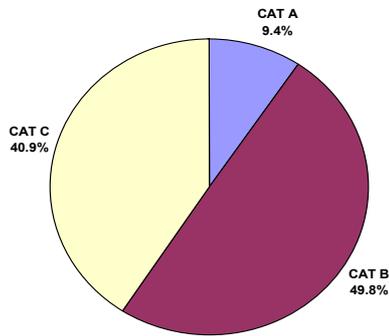


Table 6

EMAS Responses to Falls in Over 65's: Gender
 April 2006 to March 2007

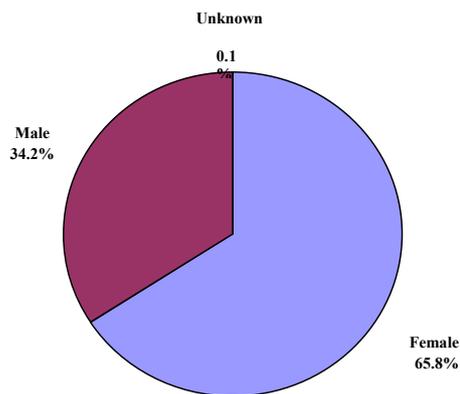


Table 7

These two pieces of data turned into information are really important because the context here is ambulance services not the general planning of falls. Consider this quote from the NHS Direct website, (so this is the NHS talking about itself). “Falls often result in serious injury, often to bones and joints and there are many fatalities particularly amongst older people An estimated 1000 older people die each year from a fall on stairs. Falls cause the most deaths and long-term health problems amongst older people”. But for emergency ambulances as part of the NHS less than 10% of the work collecting falls is Category A (NOW!) and Category C (quick, but okay to wait) is over 40%. However important falls are to the NHS, the Ambulance Service needs a different gradient to policy response for falls to other parts of the NHS. An evidence based response to falls in the East Midlands Ambulance Service in 2006/07 would be – to paraphrase the NHS direct quotation above – “Falls often result in serious injury, often to bones and joints but in most cases this will not require or receive a blue light response of a fast ambulance once we have assessed the comfort and risk of the fallen patient”. I then engaged the question about whether this was a gender issue. Were there any issues that affected falls related to sex? The figures showed that 2/3 of the responses were to women. In an NHS where gender equality affects the general consideration of health status in the population the simple use of data analysed and identified

a service with a specific gender bias and yet little or nothing was being done to identify this as a “women’s issue” in the say that, say, breast cancer was (predominantly but not exclusively a female condition).

This all matters to the wider use of NHS policy. Some very rudimentary queries using data coding, already available in the minimum data set for ambulance call outs, was throwing up evidence for one region in one year that lead to different conclusions about the nature of service delivery than a planner might have had based on national policy alone. Let me consider for a moment five truly admirable things that NHS Direct tell us about falls as they affect the NHS:

6. Physical activity improves balance and prevents falls.
7. Older people respond to life events such as retirement or becoming a grandparent in adjusting their perception of the need to manage risk to prevent falling.
8. People like to work in groups on falls prevention, but these can be demanding if your hearing, sight or short-term memory isn’t the best.
9. Self-management is better than dependence on professionals.
10. Advice can be tailored using websites.

Of these five, only one really mattered in the analysis of the EMAS response to falls, that in the over 65’s the effects of aging are critical.

It has not been difficult to get access to a “body of knowledge” for East Midlands Ambulance Service. A years data is stored and easy to access and operational procedures are clear. It is clear from the EMAS dataset that concepts such as ‘choice’ and ‘customer’ do not easily fit into falls management. Unfortunately, choice and a speedy response govern much policy and planning of the NHS. EMAS on the other hand is a 10% glamour Category A service, but by majority it is an old lady who has fallen and calls 999 because she did, but can wait.

5.9 Using the Rousseau model to classify the responses received from Managers in a systematic way

My intent was to hold up a part of the mirror to the “us” that I belong to (NHS managers in the East Midlands). I see that we draw upon our own experiences and the experience of generations of practitioners. The sad thing is that much of our decision making has no real evidence base on which to justify various things that we do in the name of leadership. This diminishes the sense that we are engaged in professional practice. We do not have a gathered body of well organised knowledge. On a personal level nothing can be identified that eliminates unsound or excessively risky practices in favour of those that have better outcomes except my training as an accountant.

The discussion of evidence based management is a valid question but it is not liked in the higher echelons of management, linked as it is to the notation that management can easily merge into administration when considering white collar tasks.

5.10 I will not be considering management culture in my Rousseau classification because it would only be a synthesis and repetition of points made elsewhere

Management culture would be a synthesis or repetition of points made against the other Rousseau criteria. Before I began this study, I was interested to know whether Chief Executives would consider evidence based decision making to be a luxury or an indulgence. This is consistent with what I call Management Issue F (a belief that good management is an art) so the intention would have been to look also at culture. During the interviews however, I noted that there was not necessarily a degree of convergence between the leaders *despite* the fact that they were working in the same health market, with the same policy framework and were using each other as reference points for acceptable norms of behaviour.

Let me explain why I will not be considering management culture because it is a synthesis of Issues A to E: whilst it is not credible to say that the NHS is unique, and indeed none of the respondents said this, there is a particular refrain that it does not compare to any other business. Even if this manager or executive is relatively new to the NHS, it does not take long for this cultural reference point to represent itself in their behaviour. The essential contradiction with reference to evidence based management is that, for example, the Chief Executives do value somebody holding the detail (Issue B), somebody having a handle on what is going on (Issue A, Issue C); but they themselves like to set direction with autonomy (Issue D). Each of these issues – delegation, attitude to details, management discretion – are the elements of culture, so it is possible to say that Issue F (culture) will be seen in the analysis of results A to E rather than separately.

I also consider management culture would be a repetition of points made under Issue A to E: Chief Executives and managers make it clear that they are skilled enough at organisational cascade to make it look like the final evidence based management is palatable, without making it happen. In order to steer a successful course without recourse to evidence they need to be all or some alchemy of the following – politically astute, decisive and networked. All of these are attributable characteristics that are by definition attributed by others. They are also a repetition of the elements of culture so again it is possible to say that Issue F (culture) will be seen in the analysis of the results A to E rather than separately.

First let me reproduce the table “After Rousseau” from Chapter 3.

After Rousseau: A synthesis from the literature of Rousseau on the practice of Evidence Based Management

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
<i>The supervision of employees</i> <i>A</i>	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
<i>Information available to managers on the consequences of their decisions</i> <i>B</i>	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
<i>The delivery on promises to the public, employees, stakeholders/taxpayers customers and others</i> <i>C</i>	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
<i>Management style</i> <i>D</i>	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
<i>Approach to academic research</i> <i>E</i>	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work
<i>Management culture</i> <i>F</i>	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors (1911) structured methods for improving efficiency were classified under scientific management	A belief that good management is an art - !the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion G	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implementation fail	Managers are prevented from real learning by fads and falsehoods

And this is what we find.

In the matter of:

Using the Rousseau or After Rousseau model. This is what we conclude about the nature of evidence based decision making within the NHS in the East Midlands during 2007-08. I have notated a + to mean that the quotation favours an evidence based approach and a – to mean that the quotation means the lack of an evidence based approach to decision making or an = sign to say that it neither favours one conclusion or the other.

In the approach to academic research

An evidence based approach would conclude that managers read the academic literature regularly and the consultants who advise them are likely to do so also. The alternative conclusion is that few practicing managers access this work.

- “get yourself educated in something, then get a job, just don’t pretend it will teach you to be a manager”
- “it’s a bit like practice based commissioning, you know, I mean they invent it as a concept because it seems to be a means to an end, the end being whatever it is we all want”
- + “And sometimes reading things, I prefer talking to people really and I talk to a lot of management consultants who kind of say things, it’s not that it tells you something new, it’s just that it allows you to relate things in a different way”
- In conditions which predispose to hospital acquired infection “you wont do any of the things of which there’s a very good evidence base that it would make a difference, and so your first engagement with us, is to come and tell us to do something for which there is no evidence that any infection has been prevented, anywhere in the world – ever, by doing this and you think that’s the most important thing that we should do”
- “If I say to you academic evidence? I think it makes me feel, you know, chance would be a fine thing”
- “It will never be that developed in this experiment that is the NHS”
- + “So places which have a worse winter than we do don’t have this, they have a little bit more mortality but not much and it’s all down to poor housing policy, benefits, insulation, social care, primary care access, all of these things”
- = “I think they’ll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they’re delivered, I don’t think they do use evidence”
- “No! We almost steadfastly refuse to accept that it might possibly work and it was worth considering because it didn’t fit the positive framework of choice and competition”

In the supervision of employees

An evidence based approach would conclude that managers acquire a systematic undertaking of what productivity gains are most appropriately cultivated from their staff, in the alternative a manager would have a style with no reference to its outcome or organisational performance.

- + “I went in very, very hard with the matrons about their cleaning audits, when we

- had all the matrons in, I said, I know it (the evidence) is not like that, you know its not like that, what are you playing at”
- + “We had a doctor here say to us, we don’t have to comply with the Health Care Commission standards because we’re not a hospital! What’s that about? Certainly wasn’t about better patient care”
 - = “My next Chief Execs column in the staff newspaper, urging them to write to me, and I will reply, and I will go and meet them”
 - + “You work up through your career (and to begin with) you have to be more and more evidence based because you haven’t built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way”
 - + “I think the processes that are used by administrators should have an evidence base for doing them, and a rationale defined by evidence, I think managers should use evidence in reaching their decisions and evidence based leadership I think would go the same”

In the information available to managers on the consequences of their decisions

An evidence based approach would conclude that there was appropriate evidence and data, a significant reduction in perceptual gaps and post implementation review is valued. The opposite is, that information is poor and evidence is not collected.

- “Old evidence becomes dogma. So it’s established on an evidence base but then that becomes dogma which in itself evaporates over time and then the evidence isn’t refreshed”
- “Balanced scorecards. It’s not foolproof. I think it lulls you into a false sense of security. A&E, not the wrong side of the line, my dashboard would say ok, but we tried to fill a post there, we shortlisted the people and one turned up, and that means it’s going to be breaking down some time in the future, it (the balanced scorecard) is not proactive enough again”
- “I think world class commissioning, if we’re not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach. And I think that’s actually quite dangerous because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions”
- = “I’d prefer things to be explained but things like that are very difficult to move in an organisation of 7,000 people, if they don’t very shortly afterwards appear on paper so you can do something with it”
- = “Taught me you can approximate, but you need to know how you’re approximating, you know when you’re approximating you know what you’ve lost. But I have an ability to get into detail (the evidence and the data) when I need to in a way that some people just can’t”
- = “I don’t think you’re ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it’s good in scientific situations, when I was a chiropodist, when it came down to the amount of chemical I put on to destroy something – there were tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that’s behind that decision, but if you don’t understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment

decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that's there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was denied a drug six weeks ago, and now you're spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high”

- “The doctors’ view is, ok, 20 years ago, when you were building this hospital (because we’ve been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you’ve got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can’t clean round the beds. Because there aren’t enough beds, you’ve got too faster through put, so people with infections are moved around the hospital”

In the delivery on promises to the public, stakeholders and others

An evidence based decision making would conclude that decisions are based on systematic causal knowledge conditioned by expertise. Decisions in an evidence based conclusion would be systematic, informed and readily justifiable. In the opposite environment the public challenges decisions in the search for transparency and managers cannot learn why their decisions may have been wrong nor what alternatives would have been right.

- “Politicians, do politicians want evidence based decision making for the NHS? No, they want to be elected and that’s the bottom line and as long as you remember that, then everything they do is completely understandable!”
- “Nice (the National Institute for Clinical Excellence) is a construct of a political approach to the NHS by a government that hasn’t changed political party and yet we don’t seem to be any closer than we were when we started”
- “And what we always find is every time they introduce one set of priorities, another set emerges because they’ve been ignored by the first set”
- “Yes, I think the public as body public, would expect evidence based decision making, and quite rightly expect that, and would want it as well. I think the public as Joe-individual probably would expect, would want it, but when it came to them, would probably bring in other subjective assessment criteria. I think politicians are a bit different, and I don’t think, whilst they would probably in a purer discussion say, of course we do, I think they will always, and evidence is always driven by context, they would always want their policy implemented – evidence or not”
- “Pseudomonas is going to become an important infection. Vancamycin resistant enterococci are going to become, TB is going to become one. Because all of these infections are being ignored, because everyone’s focusing on MRSA”
- “And we don’t even look at the vast of MRSA infections, we don’t look at all the MRSA infections that don’t get bacteremia, all the joint infections, the skin infections, you know, the ulceration that people get, we don’t look at the damage that that causes in the community. So we’re looking at the tiniest tip of the smallest iceberg here”
- “you clearly identify yourself as wanting to give the public confidence in you being a good custodian of their health service, versus the method that would do that is not really evidence based”

In the matter of management style

In a conclusion erring towards evidence based decision making about the NHS, managers would have an understanding of the powerful impact of their decisions and managerial competencies would be recognised as critical and scarce. The opposite conclusion would be that evidence based decision making seems to threaten managers personal freedom to run their organisations as they see fit.

- = “You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I’ve watched them do fantastic things, and I’ve watched them being stopped from doing fantastic things, because some rule book says it’s not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps”
- + “So there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don’t need any evidence, what we need is a decision. I would be shocked if the evidence wasn’t already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on certain decisions I would want the ‘show-me test’ as well. On big things I want to see it. So I would stop – go to the evidence, then consider the evidence in the wider context of the decision we’re making”
- = “One of the things that’s happened of course to FTs is that they’ve attracted a different calibre and type of Chief Exec, arguably. I think, you know, we’ve advertised for two director posts lately and there are a lot of people who want to work for an FT.....**ok**.....there are a lot of people moving out of Trusts that won’t make it to FT status, so you could say, what we’ve been doing is sapping the best management resource out of the non-FTs to maintain the performance of the FTs. We’ve also attracted, I think, some quite different people in Non-Executive roles and Chair roles; the Chairs of FTs, a lot of them are, like the freedom bit, like the get on and do run a business thing”
- “I’m interested you’ve chosen evidence based management and not evidence based leadership, because I think there’s a difference between leadership and management. I suppose, there’s something about management based around evidence and management decisions based around evidence, which might be different from evidence based management. It depends how you define management, and evidence probably as well”
- “Well, he reminded me what the end was, that’s what he ultimately did, he kind of made me think about what they were trying to do, yes they did it in a cack-handed, stupid, I wouldn’t have done it that way, kind of a way, but given that that’s what they were trying to do, it was really not helpful for us to jump up and down and say ‘there’s no evidence for this’, because it undermines the whole investment programme they’ve put in place, which wasn’t adding any value to anybody, it was just making it wasted money, instead of possibly purposeful money”

So in Summary

In the matter of the approach to academic research (Against!)

In the matter of supervision of employees

My Conclusion is

There is a bias against using academic research by NHS managers in the East Midlands. This is by no means universal, but is consistent in its presentation.

There is a very strong preference for using

(For!)

evidence based decision making amongst the cohort of East midlands managers and use an appropriately cultivated management approach to support evidence based decisions.

In the matter of the information available to managers on the consequences of their decisions (Against!)

There is a bias against evidence based decisions. Decisions have insufficient data and evidence for decision making, and little value is attached to post implementation review. Some managers are neutral towards this subject but few, if any, show a preference for evidence based decision making informed by the consequences of their decisions.

In the matter of management style (No preference either way)

There is only an inconclusive result in the area. There is no preference. Some managers have a preference for evidence it seems but equally some would discredit it as a viable and realistic approach.

In the matter of the delivery of promises to the public, stakeholders and others (Against strongly!)

Of all the areas this is the one where there is next to no examples of evidence based decision making, but there are multiple strong, lengthy and cross-referenced examples of decision making that is neither systematic nor developed by causal knowledge. Decision making is opaque to the public and frequently challenged.

CHAPTER 6

Research discussion

Purpose

To understand how the research fits with what is happening in this field of study, the policy context of the study and the message that comes from this research.

Key Arguments and Conclusions

6.1 Adoption of innovation and research is a complex and often drawn out process

An American (Stanford University) website in this field www.evidence-basedmanagement.com exists with categories of “academic research”, “management practice” and “beliefs and assumptions”, attracting regular bloggers (contributors) to an on-going discussion about evidence based management. Run by Jeff Pfeffer and Bob Sutton, it includes five principles of evidence-based management in its homepage/masthead that encourages people to tell the truth even if it is unpleasant and being committed to getting the best evidence and using it to guide actions. This site also includes a research and practice archive which is accessible and lengthy, but a couple of years out of date – an unfavourable comparison with the bloggers – and useful hyperlinks to relevant material and other evidence based movements.

Maybe a way to view this is that rather than viewing evidence based practice as squeezed out of the prevailing value set of NHS managers, it is anticipated that evidence based decision making may become the mainstream approach of the near future. There is a need therefore to review how the NHS managers accept or reject challenges that don't fit the prevailing value system, how do values adapt? If the NHS is living through an era that does not favour one or more potential methods of decision making this may be temporary. How does NHS management introduce alternative approaches and consider whether they may become acceptable and even desirable? Can the NHS managers allow themselves to have a critical account of their own management? The record of the interviews says that this self critique is happening, but at the same time, the overall picture is one of the forces of orthodoxy maintaining the “status quo” (as portrayed in the Rousseau model). Whilst it is possible to see that the NHS managers may be disposed to accept challenges that fit the value system, it is part of the natural balancing. None of the managers expressed a desire to explore the ‘eccentric’ (or abnormal) values that challenged the prevailing orthodoxy but they were willing to be flexible and accept challenges when they could point to something particular that prompted the change.

The policy context of the study; I described the NHS in the East Midlands as if it was a single coherent organisation. The point is that it is fractured into an internal market that splits the buyers and providers of health care from each other – and providers themselves are organised into a range of devolved and legally autonomous governance models that give them independence and usually some form of monopoly within a single urban area or county. So where we talk of ‘joined-up’ application of evidence and management recognising that complex problems transcend organisational boundaries, we are expecting a cross-sectional response at odds with the financial incentives of the payment by results regime. This is the

main problem when trying to look at the general phenomena of evidence in NHS East Midlands – that the policy is predicated on unstable organisational competition and local monopolies.

Falls in the elderly population (EMAS 2008) represent a serious and increasing issue in the UK. This is gaining increased recognition in current government policy across different parts of government including social care and housing as well as the NHS. The reason the executives in the NHS respond to this is because it is NHS Policy and Practice. The key though is that at the very strategic level the NHS response via policy is, in this case, evidence based. The report by the Department for Communities and Local Government released in January 2008, named “Lifetime Homes, Lifetime Neighbourhoods” highlighted the following statistics: one older person dies every five hours as a result of a fall; older peoples falls cost the NHS around three quarters of a billion pounds each year and 1.25 million falls a year result in hospital admissions. The role of the individual executive in respect to evidence and with respect to EMAS in particular should be to ensure that however big these absolute numbers seem they should get an evidence based and proportionate share of resources.

There is an implied pattern of policy making in all of this. The essence of which is that evidence based management for the NHS is in conflict with policy making. The nature of this conflict is essentially one between an NHS based solution founded on evidence and the politicians decision made in the context of taxpayer revenues, the maintenance of electoral authority (not losing votes) and consistency/precedent. In order to resolve whether there is a conflict between politicians and managers view of an effective National Health Service the literature seems to direct us not to whether the conflict exists, but the extent to which this conflict is played out.

What is the implied pattern of policymaking? In essence, protagonists assume that the relation between research evidence and policy is linear; a problem is defined and research provides policy options. Research is used to fill an identified gap in knowledge. This is consistent with both a positivist pattern of science and professional dominance, in which the views and priorities of healthcare professionals (and doctors in particular) dominate healthcare policies. It assumes research evidence can and should influence health policy. Lomas has suggested that the pattern is viewed as “a retail store in which researchers are busy filling shelves of a shop-front with a comprehensive set of all possible relevant studies that a decision-maker might some day drop by to purchase.”

Turning to a respondent who is a clinician who moved to management early on in their career, talking about whether infection control should be governed by policy or evidence.

Who should determine the evidence, I mean, you used a very, almost, the answer's in the library approach, is that right, is it people who are skilled in research techniques, is it academics, who is it that gathers the evidence? Well I think the evidence does tend to be gathered by academics, but then there's a body of evidence which is experiential and gathered up by the individual. RESPONDENT B

What he is saying is that the answer to deep clean might be something that universities can be equipped to design solutions for. Remember here we are talking about ‘deep cleaning’ to rid hospitals of deadly bacteria – a decision more closely related to laboratory control than most clinical interventions and yet the sense that it isn’t quite the whole picture prevails.

6.2 The adoption of research evidence is not a single discrete event

One of the objectives of this project is to hold a mirror up to the cohort (of which I am a member) to identify perceptions of good NHS management practice. Within this I wished to look at how the group (when it worked collectively) would make decisions. It is amusing that interviewees found it easier to identify bad practices in the working of the group than highlight aspects of good practice. The issue of the right environment within which to make an evidenced decision emerged as being something managers needed to 'get right'. It does not exist as a natural state in the group. Describing and reflecting on the appropriate place and circumstance to make an evidence based decision as a group was highlighted by many of the cohort. Good practice in relation to the presentation of evidence and the use of evidence involved on ability to engage this group, to be persuasive and to be credible despite limitations of data and knowledge. There is a caveat however, in that the very diversity of group structures makes universal interpretation problematic.

Clinicians were widely reported as helping negotiate quid pro quo deals to consolidate services such as stroke, trauma and maternity across sites. But they did this for managers who had years of NHS experience more readily than newly introduced managers.

*You know, if somebody took a senior member of your team, if they came to you with an idea or a solution, would you rather they had it on paper or they were able to explain it to you in a conviction way. I'd rather they explained it to me, but I think, what I usually say to people, and there's a lot of people that kind of knock on your door and say ...neh, neh, neh I've been thinking and neh , neh, neh when you haven't got time to listen to it.....**ok**..... doesn't really help, I'd prefer things to be explained, but things like that are very difficult to move on in an organisation of 7000 people, if they don't very shortly afterwards appear on paper, so you can do something with it. So personally, I prefer the conversation, but practically to progress it, it needs to extend beyond jabbering on the corridor or whatever's going on.*

RESPONDENT C

Note that the word evidence never appeared in the above quotation at all, but then the manager was talking about a member of their team. Conversely when another executive talks about their own decision making (below) the word evidence appears time and again.

I think to be successful, you've got to be instinctive, you've got to make the decisions, you can't think about it – right or wrong decision – any decision is better than no decision, you then have to back your decision to the hilt, you have to be big enough to say you've dropped a mulluck if you've got it wrong and change it if necessary. And probably every decision I've made I could retro-fit on evidence, but I didn't make them on evidence at the time.

I don't think you're ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it's good in scientific situations, when I was a chiropodist, when it came down to the amount of chemical I put on to destroy something – there were tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that's behind that decision, but if you don't understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that's there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was denied a drug six weeks ago, and now you're spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high.

RESPONDENT D

Note that there was no consistent base for saying the decision was evidence based, but there is clear reference to 'evidence' being the field or environment within which personal decision making takes place.

6.3 Managers will only use research that improves the organisation's standing

The message that comes from this research is that the use of evidence has to, in some way, improve the organisation's standing. It may be a function of the negotiated use of evidence. Earned autonomy is a function of years of experimental learning that means the executive can trust the judgement call of the individual. The hierarchical nature of the organisation and the relative distance from politicians will affect the use or flow of research evidence. If you are junior and/or new and/or clinical you have less earned autonomy. This organisational demarcation reflects the sharing of evidence.

But I do think that you work up through your career, you have to be more and more evidence based because you haven't built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way.

RESPONDENT D

And earned autonomy through understanding the 'culturally correct' way to respond to the signals being given by operational managers.

Yes, well, depends how you set yourself up really, I mean, you know, I and other managers get criticised a lot for not being out on the shop-floor enough, and indeed I'm not, but you pick up limited information about what's going on on the shop-floor if you stay close to the people running the business, they can be clinical or managerial, they will, you know, they will tell you what they're fretting about, they will say, 'oh my goodness, we've now got five vacant posts in A&E and when this lot leave I don't know what we're going to do', that's what you need to know, but you

also need to create a culture in which that happens, because, we were talking about this the other day actually, we've imported some new managers from another trust not far from here, and they had this alarming habit of telling you everything's alright, when it isn't!

RESPONDENT C

But broadly a consensus is achieved that evidence/science applies predominantly to clinicians and is a luxury few managers can afford.

I think they'll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and that's fine, doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they're delivered, I don't think they do use evidence, I think there is some, some scientific evidence in there, they'll look at journey times, and they'll look at volume, populations and the needs of that population not been done very well until fairly recently, but they are doing that. So they'll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based.

RESPONDENT A

Equally it was possible to distinguish a large amount of individual autonomy that would be given to and/or earned by people who worked even for some quite direct and authoritarian managers.

And if somebody passionately believes that the answer's right, then what I'll never do to them is say 'you're wrong'; what I'll say is, 'well, just go away and have a think about this again' and then sometimes you find they do come back and they've modified their view. But I'm a big believer that when you put somebody in a position of, you know, authority to deliver, as one of your senior managers, you've got to give them their head, what you can't allow them to do is to go off the edge, and I think one of the products about being at a place a reasonable amount of time, is that people know how to read you as well – this works both ways.

RESPONDENT B

So the question remains about whether the NHS approach to evidence is borne of a desire to reproduce by template expected behaviours or is capable of changing through transformational leadership. One answer is:

You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I've watched them do fantastic things, and I've watched them being stopped from doing fantastic things, because some rule book says it's not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps.

RESPONDENT L

In summary, this section, whilst leading to few conclusions about the use of evidence does suggest that if evidence based management is to blossom in managers in the NHS it will have to be given a foreign label, taught on management courses and lead to the same conclusions the boss wanted it to.

*The bare below the elbows thing – **ok** – I was in a Board meeting with my Chairman, where he was adamant we'd got this letter from Alan Johnson saying that all hospital workers should be bare below the elbows, so they shouldn't have watches and rings on and things like that, so that it would promote hand washing and it would reduce infection, he was adamant that, this is what the Health Secretary says therefore it's policy, and we must do it, and he wanted us to write out to every clinician telling them that we're going to do this and we're going to come in and do spot checks in hospitals. (Our eminent doctor (Respondent B), rebuts the policy that his own boss is using, demonstrates a deep despondency with his bosses response to politicians and glumly reflects on the lack of evidence for the policy!).*

This paper has explored literature and data on evidence based decision making. The rhetoric of evidence based management serves an essentially ideological function, obscuring the real difficulty in securing effective and sustainable change. As considered earlier in this paper, the data exists, even with a simplistic analysis like mine to point to changing policy imperatives and a different prioritisation by age/sex/location of ambulance services. In organisations with deeply engrained power structures the PCTs must only attempt to implement the evidence based approaches to EMAS when they meet collectively on a monthly basis. Otherwise these 'numbers' I have found will not survive the challenge of an NHS hierarchy in a climate of turbulent change.

To conclude this research discussion and its overall message, I would like to consider some neuro-semantics.

Let's consider some key words or phrases that are quoted in the interviews and taped group meetings. To the left I have put them in their stated form and in the right, whether this was used frequently, infrequently, positively or largely negative. I have also been clear where the phrase is used more than once but with no clear agreement about its value between managers.

Evidence Based Management	Frequent positive associations. Seen as a good thing, but struggling for a consistent definition. Juxtaposition with Evidence Based Management easily understood.
Evidence Based Administration	Used only once. A potentially semantic definitional distinction but very powerful when used by the 1 respondent. This is a metaphor for an idea expressed by many that the freedom to stray from evidence increases the higher up the organisation you go. Distinguishes managers (higher) from administration (lower).
Evidence Based Leadership	Used occasionally. Very negative associations. Seen by some to be an oxymoron. Seen to be an expedient at best and part of a value set that evaporates when applied to politicians.

Evidence Based Decision Making	Used often, but not surprising given my questions. The phrase ‘administration’ in this table above is key to distinguishing its positive and negative usage. Seen to be cumbersome and more relevant to juniors than executives.
Evidence Based Resource Allocation	Occasional use. Very positive associations. Given that resource allocation is considered a rare, but significant strategic action by leaders the supportive evidence for this is seen as crucial. Most persuasively used in gaining autonomy from the DH.
Evidence Based Reporting	Occasional use. Mostly negative. Seen to be a by-product of ‘administration’ rather than ‘management’ and much less importance in performance management than policy targets.
Evidence Based Argument	Occasional use. Mostly negative. Seen to be an insufficient basis upon which to make an acceptable decision. Where it is used it is almost pejorative in its diminution of the quality of the argument.
Evidence Based Learning	Frequent positive association. A clear value exists in the attempt to learn from the evidence. To foster a culture with due regard to evidence is viewed as an overwhelming positive.
Evidence Based Knowledge	Frequent positive associations. The organisation, communication and maintenance of knowledge are all seen to be ways within which the hierarchy of evidence is vital.

These examples show most importantly the differences between managers in the way they respond to concepts. The following concepts have no agreed definition.

Information: used to mean everything from public communication to a relevant set of managerial numerics.

Data: seen as collected for purpose and objectively or the arcane desire to count by bureaucracies that generates meaningful information.

Interpretation: seen by some as a meaningful contextualisation of the evidence or by otherwise savvy managers as a means to discredit the evidence or source.

Protocol:

Best Practice: From an attainable counsel of perfection to a normative standard for all.

Culture: positive and enabling, stifling and disempowering transformations only allowing reproduction.

NHS: An organised system of tax funded healthcare or just one big experiment in political authority and social cohesion. The backbone of the political offer or the basis of a random importation of foreign fractions in healthcare management without necessary debate or evaluation.

6.4 Sharing the theory in a calm and authoritative way

Subject to examination crediting this method, then I will take the following steps. In the spring of 2010 I will present the results to the East Midlands Chief Executives Forum (EMLET) with summary and graphical information and a hard/full copy stored on an accessible sharepoint drive. I will then follow the reactions wherever they take me – reacting to who is intrigued or dismissive by/of the conclusions. I have already shared drafts with my peer directors in the East Midlands and tested the methodology and theory with the rest of the Executive Team in Derbyshire and my seven direct reports. All have suggested modifications along the way.

In this paper I have tried to convey accurate detail to influence the credibility of my arguments. There are no superlatives about this paper – it is meant to be subdued in tone to give a quiet confidence that the tentative conclusions are neither obvious nor extreme, but worthwhile of consideration all the same. If I had believed that I had found something extravagant and remarkable, I would have said so, but I do believe that my proofs do justice to the conclusions. I wish to persuade, rather than excite, about the possibilities that arise from studying a small community of NHS managers.

When I started this doctorate in 2006 the field of evidence based management was evolving, but had been growing out of the field of behavioural science for about seven years (taking Harries (1999) as the starting of a distinctly NHS management consideration of the subject). Indeed, the first Wikipedia reference in 2006 was a simple paragraph with one or two references that were three or four years old. The page now has reference to two dozen references. On the other hand, this is not an area of ferocious and dynamic debate. The authors, Learmonth, Rousseau, Kovner, Pfeffer, Sutton and Rundall are still the same people who were actively engaged in 2006, so the statements made in this doctorate are sufficiently contemporaneous with the debate as it is today.

The issues this had raised for managers is to open up the dialogue. Who asks the “why” question if it is not the managers themselves? Especially in a field such as the NHS where management and simple ‘administration’ of public policy can become increasingly blurred. What the debate about evidence based decision making says is that we need a vision about who we want to be in the NHS. Do we want to be leaders in health policy and leave a distinct legacy – and do we want the decisions we made to be remembered? If evidence and the use of informed data represents a characteristic we aspire to – and I think we do, even when we don’t practice it – then we need to remember that things like my study stop us from straying from who we want to be.

An overview of the governance of the NHS has been shown diagrammatically (2.4, table 1) and this shows that evidence cannot exist without influencing the governance model in all its corners. Without serious effort to address the social, economic and political aspects of the NHS, then the managerial consideration of evidence will amount, even at its best, to a form of patching-up of the quality of decisions made. At the moment, there does not appear to be an effective arena for discussion between politicians – the public – medics – managers over how and whether we can be evidence based managers. This is a governance weakness.

The effect on NHS policy will be negligible unless there is a listening exercise. This cannot be the traditional castigation of opposite ends of the management structure as bigots or with the rendition of the “how can we get them to listen”. The problem is that all too often, the debate concentrates on the ‘them’ in the phrase rather than the listen. Managers talk of

doctors as ‘them’, politicians talk of managers as ‘them’. This is no way to consider the implementation of evidence on a system wide basis. The environment of the NHS provides its own set of tensions between participants. So the listening exercise must cover three areas: do doctors believe that managers are using appropriate language to advance evidence based management. Is the language inclusive or a barrier to interpretation?; is the message being delivered to the public in the right context – do the public tell you they hear this as part of a compelling and consistent message that evidence is used to improve patient care; and do you listen to or dismiss the politicians understanding of the NHS? Politicians know the NHS as a parliamentary funded system where evidence must accommodate their mandate to govern.

6.5 Conclusions of the field study and published material since I completed the field study

So what is evidence based management? The short answer, is the belief that it makes sense for managers to act primarily on the facts about what works out there. It is an explicit relegation of other forms of knowledge and a rejection of memory and ideology as management styles. It is alien to the National Health Service. In the NHS in the East Midlands, it is only part of the decision making process. “I would want to have the evidence if there was some evidence around, I would certainly want to know it was there on certain decisions” and the telling “I’m interested you’ve chosen evidence based management and not evidence based leadership, because I think there’s a difference between leadership and management” – the closing remarks of two of the most experienced Chief Executives in the East Midlands.

When and where is evidence based management used?

There is a belief that up to middle management levels, evidence based decision making is useful, but not at more senior levels. Senior managers approve of evidence as it gives them a systematic view of what their staff are qualified to do and a requirement for evidence based decision making is part of the scheme of delegation. As the best quote said “you work up through your career (and to begin with) you have to be more evidence based because you haven’t (learned) to make the judgement call in the same way”, said a Chief Executive who started as a clinician.

How is evidence based management perceived?

There is a bias against using academic research by NHS managers in the East Midlands. Even where academic research can be found to recommend and justify an alternative course of action, and this evidence is supported by a senior clinical manager the forces of conservatism limited implementation opportunities. In the matter of the information available to managers on the consequences of their decisions, there is a bias against evidence based decision support and little value is attached to post implementation review. Within the NHS East Midlands there is no preference – some managers would value an evidence based approach, but the same numbers would not see it as viable or useful. The craft of management is valued more through creativity and autonomy than in a response to evidence. “No! we almost steadfastly refuse to accept that it might possibly work and it was worth considering because it didn’t fit with the positive framework of choice and competition” was my favourite quotation.

I recognise this: If the question was written not as ‘Why should we use evidence’, but “why shouldn’t we use evidence?” then we are nearer to the heart of this thesis.

Evidence based medicine is a prevailing organisational culture so in the study of the management culture of the same organisation, it is reasonable to see whether we are following fad or fashion. The key is not to be swept along or swamped by this – let me use a surfing metaphor of “riding the wave”. Instead of being drowned by the energy of the sea, you use a simple tool (a surfboard) to harness the energy of the ocean to transport you quickly. The key is to see whether evidence based management is a surfboard that is harnessing the energy of the prevailing evidence culture in the NHS. McDaniel (2009) says that “Facilitating meaningful conversation in health care organisations is often difficult, but it is important for making effective change (Jordan et al 2009). Rather than applying evidence as indicated per an EBM model of organisational change, health care managers should rely on evidence to start creative, locally relevant dialogue. Evidence from management research should be used to open the door to new conversations that can be used to propel organisations along positive paths of managerial action. This would be significant if we want managers to make a difference”. Paragraph 2.4 (table 1) suggested that managers have a limited opportunity to make a difference, bounded as they are by those who fund, use and provide clinical care in the NHS. To facilitate meaningful conversation would enable the managers to talk coherently with politicians and the public about the best way to make difficult decisions and whether evidence would improve the acceptance of, and satisfaction with, the decision in the public domain. There is a prevailing evidence based medicine culture, the conversation would be whether management can take the opportunity this creates to be more evidence based too.

Some additional reading on the subject highlights the following since I completed the field study – Arndt and Bigelow (2009) say that caution should be expressed about the use of evidence based management in healthcare. In an illuminating discussion they say that “We raise a cautionary note about the assumptions underlying the calls for evidence-based management. Given the complexity of decision making and of the health care environment, as well as differences among health care organisations, decisions do not necessarily lead to expected outcomes, and results may not be replicable across organisations. Moreover, evidence is an artefact of social interactions and limited by the difficulties inherent in studying complex organisational phenomena. Research is needed into the diffusion of evidence-based management in health care and into the results achieved by organisations that used the practice compared with organisations that did not. Managers should use all available information and data when planning and implementing decisions, and evidence from research should play a role in that. At the same time, in a turbulent and uncertain environment, creativity and risk taking also will be important, and unanticipated outcomes may result from, among other factors, limits on human cognition, unknowable differences in initial conditions in organisations, and adaptive responses to change as it is implemented”.

What I fundamentally disagree with Arndt and Bigelow (2009) about is that they claim their note for caution to be unique against a prevailing orthodoxy that “urges” us to adopt evidence based management as new and exemplary. I think they overstate the ground of support for evidence based management and they ignore that writers such as Kovner and Rousseau were aware of the same caveats when they wrote. So we see a developing debate in 2009 between the scale and pace of implementation. Also, this study is not just happening in the NHS. Nutley (2009) writes about how important this is for research utilisation in social care – “This article draws on both a cross-sector literature review of mechanisms to promote

evidence-based practice and a specific review of ways of improving research use in social care. At the heart of the article is a discussion of three models of evidence-based practice: the research-based practitioner model, the embedded research model, and the organisational excellence model. The article concludes that the ideas contained within each of these models are likely to be appropriate at different times and for different service settings. There is a need to build on such models to develop a coherent framework for strategies to promote research use.” She says that this needs supporters and intermediaries to make it happen “developing a culture that supports research use – these kinds of activities might include developing appropriate leadership and management practices; collaborations between researchers and research users; the creation of specific research brokering posts; and membership of intermediary organisations that aim to get research into practice.” Ultimately, Banaszak-Holl (2009) is able to both commend and critique Arndt and Bigelow and say that although Arndt/Bigelow offer some useful caveats, they are actually providing arguments to progress, rather than halt, the debate about EBM in healthcare. “Hence, the authors of Evidence-Based Management in Health Care Organisations: A Cautionary Note (Arndt and Bigelow, 2009) should be applauded for their timely contribution to raising critical issues in how to advance the field of evidence-based management in health care organisations (HCOs) while the evidence base is still in the early stages of evolution. At this point, such criticisms should be raised because they help inform plans for systematically analysing, disseminating, and applying management evidence. We, however, believe that the issue raised in the cautionary note provide compelling arguments for moving forward with developing EBM albeit in a manner that leads to the formalisation of both a better framework for discourse about our evidence base and a public knowledge library allowing greater sharing of management evidence across HCOs”.

CHAPTER 7

Issues for practice

Purpose

To develop a practical model for policy makers and managers on how and where evidence is used appropriately.

Key Arguments and Conclusions

7.1 Senior managers are close to department policies and use evidence less

Senior managers are concerned about a volatile policy framework – where policy is either unclear strategically or unclear in the operational impact within the 12 month business cycle. Uncertainty in this context negates a primary use of evidence to inform decision making.

And that's kind of inevitable, but the way I kind of play managing this Trust, you know, if I see a journey, the way policy works, it's seemingly, you know, I think we're going there, the government says we're going there, and all of a sudden, we're off up here, or we're off up there, or we're going down here, and we'll probably go back up there and then we'll go down here.

RESPONDENT H

You know, my job I always think is to translate policies, a bit like a pendulum, know where it's going to settle, and it, you know, somebody keeps bashing it and it's swinging around, you know where it's going to settle, and the trick is I think, to describe what's happening, which may seem a little strange, you know, introducing competitions, subsidising competition.

RESPONDENT E

I can justify that to my organisation, in terms of it being the government wishing to give people choice, wishing to drive up quality, yes it's tough, yes it has very difficult set of issues for us to handle, but they're doing it because they want care to be better, and so you're always describing the end point, and trying to make sense of it and what's more trying to use it to get you to that point, and sometimes that means I sort of half ignore things I've been asked to do, or I throw myself at them with absolute huge enthusiasm because they seem to be going in the right direction.

RESPONDENT C

According to supporting documentation from the NHS issued at this time, this would be consistent with an evidence based culture. This code of conduct could be contrasted with how models for organisation and management in health care over the last 20 years had been based on popular trends and fads rather than research on organisational and management practice. Strategic decisions, it was maintained, typically follow the recommendations of consultants with the information upon which these are based remaining unchallenged. As evidence based healthcare was popularized among health care professionals there would be increasing recognition that these ideas should be adopted in management. Management innovations that were not evidence-based included the use of organisational mergers in tackling service quality; decisions on the optimal size of organizations for capacity or financial viability; substitution of doctors with other health professionals and the move

towards home care as an alternative to hospital inpatient care.

Managers in particular in this project, described a situation where their own control over the decision making process had been to some extent, lost through the requirements of audit and the promotion of certain themes consistently in the NHS. Executives have to be seen to be performing in an overt and accountable way and their work must be visible and subject to audit and inspection. A model of performance management is contrasted with maturity of thought and debate over the use of evidence. The external pressure for conformity and consistency is seen to result in high quality decision making tainted by group think. Managers cannot always dwell on particular topics or pursue the evidence base for what they are doing (or being told to do). There is a pressure to be overtly productive in the presentation of solutions rather than consideration of evidence. The interview and meetings material touches upon some of the complex relationships between established management culture, career needs of the managers themselves and the conduct of evidence based decision making. The pressure to obtain recognition for both themselves and their organisation may encourage a pursuit of more credible ‘target hitting’ and leaves insufficient time for a consideration of the evidence in shaping organisational structure. In general, as described in this qualitative material, the current organisational form may discourage evidence based decision making and the need for reproduction will be perceived as less risky.

Fashion. The simple arcane practice of following the latest trend or idea, of importing behaviours from other societies was seen as damaging to an evidence based NHS. In a way it is believed that evidence is crucial to an acceptance of organic (internally generated) change within the NHS, but even higher than evidence in the hierarchy is novelty or importation from other systems.

7.2 Middle managers are more directly involved in supporting the uptake of research on effective management

Let me start this section with a quotation from somebody who swapped between clinical and management roles.

I think my need for an evidence base would have been different at different stages in my career; the fact I've come up the clinical route, I hope I've use an evidence base for my clinical work previously. I've sought an evidence base for the interventions I've made to make things work and happen differently throughout my career, because it seems to me, if it's worked somewhere else, ie, there's evidence it's actually helped somebody else gain objective or reach an objective, it's probably worth trying here. So the evidence might not be gold standard evidence, but there is some evidence base to what I do. So I think that probably never peaked, but since I've been in management roles, I think I've always had, and considered evidence for the way I operate and what I do.

RESPONDENT G

I think evidence based administration, to me administration is the application of processes to achieve an end, to me, that's what an administrator is doing, with a small degree, often no degree of latitude or ability to make changes. Management, managers have the ability to make changes to those processes, and leadership I think, is different. I think leadership is about achieving an organisational goal, and taking the whole organisation forward to achieve corporate objectives. So I do, evidence based administration, I think I would struggle with that, because I think the processes that are used by administrators should have an evidence base for doing

them, and a rational defined by evidence; evidence based management, I think managers should use evidence in reaching their decisions, and evidence based leadership I think would go the same as management.

RESPONDENT D

So what we see revealed is that evidence is a consistent part of the framework of executive leadership, but the latitudes to err from the evidence or to even create the evidence afresh is denied to lower levels of manager – deemed to be administrators.

Most fundamentally, detail and the use of detail in decision making was seen to be a product of where you were in the hierarchy. In fact, detail was seen to positively inhibit the executive function.

Different managers agreed that clinicians, their staff and indeed the politicians (perceived to be the source of this objective) needed to be exposed to multiple interpretations of why this decision was made. Conversations with politicians concentrated on what was going on ‘out there’ in the media and the public discourse of the problem/decision. Conversation with clinical staff often concentrated on the issue of the perception about what had caused this decision and differences between professionals interpretations of the solution/causes of the decision. The decision did lend itself to evidence, but the conclusion from the views expressed is that consideration of the evidence was both vital and in fairly short supply. There was a thematic response that any evidence used in the decision should derive from both an outline theory of the nature of the problem, but relate closely to the practice of NHS management. That means that given the potential lack of general management expertise in the area, any evidence ought to be accessible to NHS managers.

7.3 The relationship between autonomy, pedantry and the use of evidence

Referring back to earlier conversations it is possible to see quotations that talk of a negotiated use of evidence through acquired years of experiential and experimental learning. This leads to the oft sought for “earned autonomy”. The best quote to demonstrate this was the one that said “because you haven’t built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way”. One of the conclusions of the project has been that at low levels of autonomy you use evidence a lot and at high levels of autonomy you use evidence a lot again if you can avoid the politicians (table 1 refers) but somewhere in between it gets much more difficult. The two quotations which summarise this are “it’s a yes and no. If I am brutally honest, if you take them in an enclosed ecosphere when there are no consequences to their decisions. Then they will always go with the evidence, then you put them back in the real world and...” Plus “a lot of decisions that are made, seem to be based more on history and on the views of politicians and key stakeholders, which are often not really evidence based”.

Consider the definition of a pedant. A person who is overly concerned with formation and precision and who makes a show of learning. The corresponding notion is that the person is also a source of instruction or guidance. The term can typically be used with a negative connotation indicating someone overly concerned with minutiae and whose tone is perceived as condescending but when it was first used by Shakespeare in 1588 it simply meant teacher. Some people take pride in being pedantic and may preface a sentence as such. Therefore I believe there is a boundary where pedantry is an accepted form of evidence based decision making and that this is consistent with the amount of autonomy and status the individual has.

So if a table is drawn to show the relationship between pedantry, earned autonomy and a detailed use of evidence based management it would look something like this:

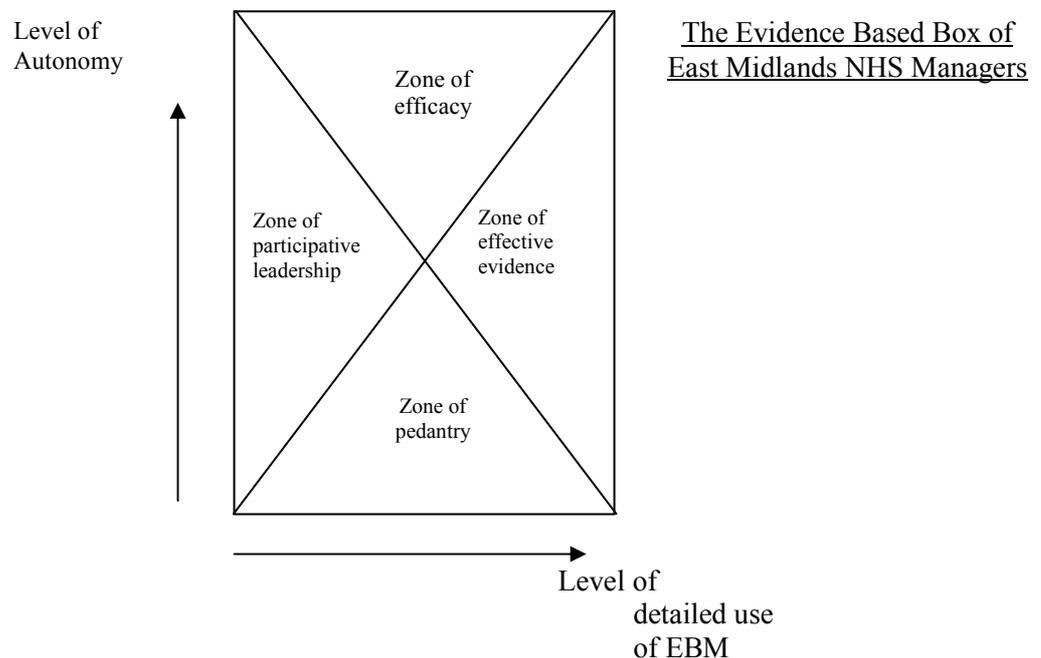


Table 8

I have quartered the box not by quadrants but by triangles to show that this structure to an extent overlaps and is about occupying different zones of the autonomy/detail axis. The key is that there are four zones.

4. “Participative leadership”. Experienced at all levels of autonomy, NHS managers try to use some degree of Evidence Based Management but they never explore it to its full extent. The best they ever get is a ‘halfway’ experimentation with evidence. Indeed it is possible to make decisions without evidence at all.
5. “Zone of pedantry”. Evidence is used to develop and control the organisation but the manager never rises above the middle tier of autonomy. Note the use of phrase autonomy rather than “authority” or “power” as even a powerful individual may find themselves in the zone of pedantry when working in a group because their autonomy is diminished in the meeting so that the use of evidence is seen to be picky or fussy in tone. In this zone a very detailed application of evidence based decision making correlates negatively with autonomy – if you have to use a lot of detail to make a decision you don’t have much autonomy.
6. “Zone of efficacy”. The decision will use varying degrees of evidence in getting things done. What is effective is not necessarily efficacious. The efficacious decision is the one that produces a desired amount of the desired effect and the success in achieving a given goal. It is imperative to note that in this zone, the complete acceptance of rejection of evidence based decision making are polar opposites but exist in their purest form where the manager has the ultimate autonomy.
7. “Zone of effective evidence”. The manager uses some, at least half of the available evidence based management insights at all levels of autonomy. At lower levels of

autonomy the manager does, or is compelled to, use a quite sophisticated level of detailed evidence to guide them as manager. At higher level of autonomy the manager is not coerced by concerns of politicians and as the quotation says “then they will always go with the evidence”. As we rise up the scales of autonomy we see two forces that push the detailed use of EBM backwards – one, the manager is not compelled to use evidence and can further explore a “romance of leadership” school of thought and two, decisions are increasingly made as a quotation says “on the views of politicians and key stakeholders” instead.

7.4 The decision must be acceptable as well as efficient

It is established by respondents that they have the technical skills to undertake evidence based decision making and to write a coherent ‘evidence based’ story. The managers were also able to demonstrate that they understood the importance of reflexivity as a management competence. Managers were not happy that the collection and evaluation of data was sufficient to help decision making. The collective and evaluated information may go some way to enhance the quality of NHS management. But the technical task of the assimilation of information may not be able to go far enough to convince NHS managers to move without a sceptical evaluation. More generally it was also asserted that there will always need to be more resources in order to carry out training in the evaluation of information.

I think World Class Commissioning, if we're not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach, and I think that's actually quite dangerous, because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions.
RESPONDENT F

So somebody has done some research, however subjective, to actually say those who scored highest on health commission scores, those who had most financial balance, those who were actually achieving the most important government targets. What was common about them?
RESPONDENT I

The cohort is efficacious. By efficacy I mean that the effect of a given managerial intervention has to not only be economically efficient it must be ‘acceptable’. Acceptable in the political and public context of the NHS. The impact of an intervention by the Chief Executive or senior manager has been thought before the decision has been unleashed in the real world NHS. Acceptable in that this decision is at least as good as any other.

Referring back to earlier conversations we see quotations that talk of a negotiated use of evidence through acquired years of experiential and experimental learning. This leads to the oft sought for “earned autonomy”. The best quote was the one that said “because you haven’t built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way” (RESPONDENT D).

7.5 Conclusion

From my findings it is possible to say that evidence based management has an identified and discernible impact on NHS management but it is not common and is certainly not in good health as a prevailing philosophy. It is not the managers who will keep it alive and any implementation of evidence based management on a wide scale will require the importation of external skills and political will to implement. Davies (2009 pXV) said that senior

managers only react to external policy direction “targets have ruled the roost, pushing organisations to the edge, often to the neglect of patient care. The past ten years have seen a plethora of incoherent initiatives and policy reviews, decreasing the ability of senior managers to display leadership, think and positively effect the delivery of services; and left governance confused and void of focus. The autonomy associated with a business-like framework means nothing if all it is used for is finding more innovative ways of meeting central targets”.

CHAPTER 8

Issues for Management

Purpose

Does the use of evidence equate to developing a high quality knowledge base that should improve organisational effectiveness and to what extent can variations in the NHS be explained by differing uses of evidence?

Key Arguments and Conclusions

8.1 What is used is determined by what is planned to be used by the organisation to coordinate

The accumulation and the use of the following skills is necessary to use the available evidence.

Thinking – if NHS management is to be evidence based at all, then it needs to spend time thinking about how evidence is used. In particular, the management in the NHS must think about evidence and whether it reduces financial and delivery risk. The key will also be to consider where evidence is relevant at the individual, organisational or pan East Midlands level.

Reflections – managers in the East Midlands must have the skills (and time) to take a retrospective look at current decision making structures and question the reasons for doing things this way. In a command and control structure where one of the key skills in organisational success is for the leader to correctly diagnose and horizon scan Department of Health indicators, this type of reflection is difficult.

Research interpretation – the key here is to be impartial in the use of evidence as a means of finding truth. Many topics are the subject of highly politicised dispute, but that does not mean there should be a bias towards the politically expedient solution. The ability to interpret research and be clear when you are biased in judgement despite the evidence, is a key competence for leaders in the NHS in the East Midlands.

Persuasion – this is not in short supply. The leaders have shown themselves by reason of appointment and track record of delivery, to have a persuasive management style. The adoption of that competence to individual or group based evidence is necessary if the available evidence is to be used for decision making.

8.2 Evidence is not the primary or defining tool in successful NHS organisations

The implication of blind prejudice for the objective of enhancing good practice in NHS management are profound. What we perceive as ‘good practice’ itself is called into question. This would imply that there was error in the NHS managers themselves rather than the context in which they find themselves. Whilst there will be a blurred distinction between heuristics and prejudice the term ‘blind prejudice’ might most usefully be applied to ignoring any conformity with accepted good practice. Where evidence to inform the decision is simply not sought out. The use of blind prejudice in this context is usually driven by a desire

to succeed in the political context – it is simply an exercise in power. There are many potential decision makers out there, but only so many posts, awards, organisations and years in a career and in the competition for resources and power, blind prejudice is simply a rejection of evidence where it does not enhance the standing of the individual decision maker. The individual is required to be a strong leader, not an evidenced decision maker.

If evidence based practice is seen as something separate and distinctive from day to day decision making, then the prevailing management culture works against basing decisions on evidence. On the other hand, evidence based practice may entail rejecting the accepted management orthodoxy and creating a separate quasi-autonomous enclave of interested practitioners. It is not ‘evidence base’ alone that determines the value set and the discourse – it is the extent to which the evidence base is taken down through organisational views to a granular level before a decision is made. In paragraph 5.9, I noted that senior managers valued an evidence based decision making model in their middle managers. This does not equate to an application of the evidence based method themselves, nor an implicit sourcing of and funding of evidence for these middle managers to use.

We must ask: not ‘do you understand the answer’? but ‘do you even know what the question is’.

So, let’s compare that to the earlier discussion about deep cleaning of hospitals. Managers found peace with the need for a structured political response by David Nicholson but here, in the case of winter death, he was avoiding even asking the question because the public wasn’t asking the question. I therefore asked if that meant they thought Nicholson rejected evidence where it said uncomfortable things about subjects the public weren’t asking about. The response:

I would suggest that he uses an evidence base for what he’s done and how he’s moved things forward, along with a set of personal beliefs, so I feel comfortable with that.

RESPONDENT B

8.3 Evidence is only part of a general method used to horizon scan

In the organisation and planning of ambulance services in the East Midlands there is an inextricable link between organisational performance, organisational effectiveness and leadership. Ambulance services and the importance of the ambulance response to older people who have fallen, has historically been poorly recognised within the wider NHS. Ambulance clinicians are in a unique position of attending this group of patients in their own home and as a result, are able to observe not only the condition of the patients, but also their living conditions including hygiene, diet etc. In order to transform the service that EMAS provides to falls victims and those at risk of fall, the Chief Executives of both EMAS and their Commissioning Primary Care Trusts, the transformational leaders, need to adopt an evidence based approach to the data collected by EMAS itself. Instead of a total focus on specific organisation objectives that is typical of the existing contractual relationship with EMAS, the management style should place an emphasis on evidence as a basis for innovation and a rationale use of resources.

By using the evidence available about how falls should best be managed, how the use of ambulance resources can be maximised and the effects that an aging population will have on calls to ambulances the leaders in the NHS can help the public to navigate the system in a different way, but still be confident that the system will be delivered in line with NHS

standards and values. The key is to respond to the evidence that has been collected, to park the targets of today (as their assistant directors and operational managers will achieve this) and to shape the targets of the next decade in line with the Ambulance clinicians.

Some concepts are judged by the participants to have poor credibility. If quantification, consistency, industrial level adoption and rigour are indicators of credibility then in our understanding of evidence based decision making it is possible to recognise items that have credibility. Credibility is not validated by the researcher it is expressed as a judgement made by the participants. Judgements of credibility are also seen to be influenced by particular (political) contexts so that what constitutes credible may change from period to period. In the specific context of the evidence based manager, there was a strong correlation between credibility and one word/phrase – “NHS” and a poor correlation between “politics” and credibility. I have included one quotation to illuminate that at the heart of this conflict is the role of the executive and whether they are agreed to be system leaders or system managers.

Consider that since 2000/01 the government decided to increase public spending and the proportion of public spending spent on the NHS significantly, and this was sustained for 7/8 years and yet politicians were given lots of negative associations such as the politician below, who is considered to be motivated by electoral majority not the NHS role in ‘reduce inequalities’ or even the NHS managers role in ‘best value for money’.

He’s an MP like the ‘X’ guy, who isn’t local doesn’t know the area, he’s in for the ballot box, he’s in for the re-election; you take someone more local like ‘AB’, who’s a local lad, worked in one of the local schools, will always live in this town, he’s got the mix, because he’s precariously seated because of the ballot box, because despite the fact he’s been in twice, this is not a natural one party community, and at some stage it will move again. *RESPONDENT A*

Whilst as a researcher I was able to ask for clarification of particular aspects of the application of EBM, the elite manager must feel that a codification of EBM is not just adulterated into a form of Pedantic Control. The traits that the Chief Executives and Senior Managers demonstrated were strong leadership, setting a good example, negotiating and navigating the future and co-ordinating disparate strands of policy into one coherent whole. In order for EBM to rise above the charge of pedantry into a system wide learning method it would have to enhance the ability to lead, negotiate, navigate and co-ordinate.

The Chief Executives are demonstrating intelligence. The elite has shown the ability to interpret policy and understand the business but they are relying on heuristics to drive solutions. The reason this is good is that leadership is visible, to an extent charismatic and essentially a valued commodity. In order to steer a successful course without recourse to evidence they need to be all or some alchemy of the following – politically astute, decisive, hardworking on networks. This demands in turn that they are perceived to be young in outlook, flexible/pragmatic, energetic and experienced. All of these are attributable characteristics that leaders cannot acquire themselves – they are by definition attributed by others. Crucially they are also consistent with the characteristics a Chief Executive or Senior Manager will want attributing.

CHAPTER 9

Conclusions

9.1 Messages from the field of study

Cultural and altitudinal change is required

Researchers and academics should be invited into the management process (5.9, 6.1) and we should be looking for evidence of what works to do the most optimal thing with our limited resources (5.5, 6.4). The key here is that the management role is enhanced by the use of evidence based management and in such a way that the credibility and development of the subject area is enhanced.

Develop a cadre of managers with the skills needed to use evidence more effectively

Managers rely on the use of data. But they are unlikely to be happy with data that has unknown interrelations (5.7, 6.3). An unavoidable consequence of asking the sort of what-if questions is that it can lead to adverse reaction amongst managers. Unlike performance data it may expose uncomfortable relationships between perceptions of excellence in the NHS target performance – attributed by others – and truly superior operational delivery (5.6, 6.5). The use of evidence prompts in longitudinal studies would only be possible were the competence of managers to use this evidence effectively developed also.

Looking for evidence of success of evidence based decision making would be an innovation itself

Evidence might be called the economic (opportunity) cost of the current solutions we use. Looking for evidence based enablers of the ‘central targets’ to be hit should also be pursued and we should not use targets as an excuse to avoid evidence based attitudes (5.2, 5.4, 5.8). Managers and policy makers have been prominent advocates of evidence based clinical practice, but have not been quick to apply the same principles to their own decision making. NHS Evidence should undertake this task with managers (3.4, 6.2).

As an avoider of data the politician can still have the opportunity to identify key business processes and target opportunities

The politician will not push for a multivariate analysis of the data (5.1, 5.3) and ultimately the problem is that the politician is concerned with abdicating control (8.3). The politician fears contradictions with policy, false-positives or results that are good for the NHS but no use for the politician at all (8.1, 8.2).

9.2 Inferences from theoretical and other researchers perspectives

Learmonth said (in my introduction) that managerialism was an imposed doctrine, and that evidence based decision making typified managerialism. At the end of my journey I disagree. (2.2, 4.4 and 6.5). Alexander (2007, p152) said that “evidence based management assumes that available research is consistent with the problems and decision making conditions faced by those who will use evidence in practice”. In his conclusions he notes that researchers must learn to think more like managers if their research is to be relevant and managers must learn to more effectively communicate their issues within the research community and frame their problems in researchable terms (4.1). There is an on-going nature of the debate about managerialism and evidence. The debate is evolving from managers use of ‘knowledge about knowledge’ in the private sector (Bailey and Clarke, 2000) to a broader NHS and health care discussion (Kovner 2006, 2009). The debate is also evolving from competitive advantage to an alignment between researchers and managers, but there is little empirical evidence to inform efforts to develop models in real world settings (3.1). Walter (2004) says that a whole systems approach, where the use of research involves a collaborative effort between organisations and individuals, would be a positive way forward. This is contradicted by Knowles (2008) in “command and control” to allocate resources; but both are consistent with the Rousseau Model (3.3). Ultimately, the conclusion to be made from theory and other researchers, is that if you want to, you have tools available to do a Kovner (2009) style action research project, but that will not matter if the government is interventionist. In this context – whether you are a Learmonth, Alexander or a Kovner – the key to using evidence or rejecting the use of evidence is the leader’s own decision to take charge of their destiny (7.5).

Of all of my references, the most important to me has been Kovner (2009). In his methods, he always espoused academic rigour. When talking to managers in the field of healthcare he always took time to properly frame research questions, obtain evidence as to why intervention might/might not work in various contexts, evaluate evidence with a balance of viewpoints represented and consider when further evidence was needed to support a decision. If Pfefer (2006) is the consolidation of evidence based management in healthcare as a distinctive specialism in its own right, then Kovner (2009) is the place within which the specialism gains its first manual for operating in a field environment.

9.3 Messages for the user of the study

As to how the NHS works, where the services are located, how they are delivered I don’t find that managers use evidence. I observe that there is some fact in there – for example in the use of joint strategic needs assessment, to inform decisions about need, but a lot of their decisions are based on history, politicians and key stakeholders and are not really evidence based (2.4). I have drawn a model of the NHS with an evidence based organisation of knowledge that shows that NHS managers use decision making tools that reflect managers place as only one quadrant of the NHS structure. If this diagram (2.4, table 1) is to be useful, it is to show that an NHS that moves on evidence based organisation of knowledge only to NHS managers, it will ignore the other players in the NHS – the politicians, patients and clinicians. The NHS manager must also consider the circumstances of the decision and the ethical concern that the management decision may provoke. Managerial freedom must also be considered when implementing an evidence based decision if it is likely to impact on the political cycle (3.4).

If evidence based practice is seen as something separate and distinctive from day to day decision making, then the prevailing management culture works it. On the other hand, evidence based practice may entail rejecting the accepted management orthodoxy and creating a separate quasi-autonomous enclave of interested practitioners. Finally from my increased understanding and interpretation of findings it is possible to say that evidence based management has an identified and discernible impact on NHS management but it is not common and is certainly not in good health as a prevailing philosophy. It is not the managers who will keep it alive and any implementation of evidence based management on a wide scale will require the importation of external skills and political will to implement. An alternative approach is a willingness to take an evidence-based approach – and to use the bad news it brings as a stimulus for improvement. For managers, looking at a service organisation for the first time from the customer’s point of view is a shock. Typically they discover that the organisation is ticking all its boxes and still providing hopeless service to customers and citizens. And from this comes another sobering revelation: the management methods used up to now are the problem, not the solution.

9.4 Relationships between variables

From paragraph 6.3 it is possible to construct the following simple table.

“Evidence Based” Followed by the following word	Is there a common agreement between NHS managers of the definition?	Associations with this word or phrase 0 being most negative, 10 being the most positive	Frequency of use of this word or phrase 0 being very rarely, 10 being very often
Administration	No	7	1
Allocation	Yes	9	3
Argument	No	3	3
Decision Making	Yes	4	9
Leadership	Yes	2	2
Learning	Yes	8	7
Management	No	7	8
Reporting	Yes	2	2

So it is possible to say that the key pairings of evidence based are with learning and with management – although management itself is not clearly defined. The most positive association is with evidence based allocations – the frequency of “decision making” may have been increased by my line of inquiry, but is the most common term.

Frank Blackler (2006) published in the Guardian Newspaper, his synopsis of what was good/bad in the political and managerial models of control in the NHS. Taking that as a template, it is possible to say whether he was right or wrong from what I found in this project.

Agree ✓ or disagree x	
The present system of politically lead targeting is wasteful	✓ An analysis of EMAS data shows an age bias in classification of patient need away/against the elderly (4.3)
Targets are based on mistrust of managerial autonomy	X It is a product of the managers not answering the ‘how do we know what we know’ consistently (3.1, 2.2)
The NHS has enjoyed substantial increases in public funding and politicians are anxious about how the money is used	✓ The craft of care has transformed into the machinery of the NHS supply system (8.3)
Managers need to be treated with and behave with confidence	✓ Otherwise, there will be a clash between prerogatives (7.1)
Distinguish the strategic objective of a policy from day to day implementation	X Targets are a political model, but the NHS is politically funded (2.4)
Management in the NHS is not hard, it is why we have NHS management	✓ The use of evidence is an exercise to control knowledge and choices (5.9)

9.5 To finish

If I were writing a note for the next Secretary of State for Health, the message I would give about evidence based management is:

“Dear Sir, as of today, there are 24 organisations that make up the NHS in the East Midlands. This ignores Government departments and refers only to those organisations that are statutorily accountable and therefore, have a Chief Executive. In a three year study of this group, I have found them capable, experienced and wise. In the matter of making their decisions on the basis of the evidence available to support their decisions the picture is unfortunately, mixed. The diagnosis of this is that elected parliamentarians, the treasury and the public prefer to command the NHS to act in response to NHS policy, rather than devolve to those Executive leaders the autonomy to act upon evidence about the matter at hand. The result is that we have an NHS that is increasingly good at practicing evidence based medicine, but an NHS in the East Midlands where managers are ambivalent about using evidence based management. Some clinicians may make a great of this fact to you. Ignore them, the governance structure of the NHS does not allow managers to be evidence based even if they wanted to”.

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Diagrams and figures:

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APPENDIX A

Distribution List:

People who contributed to this study. I would like to list them as a “thank you”, but also to assure the reader of the people who will vouch for me and the method pursued. This is the failsafe that the quotations were collected and existed. That the emails were sent and responded to. That people knew this work was going on. That my peers, colleagues and superiors trusted me enough to also take part in this research willingly and at cost of their time. Always with candour.

Julie Acred – CEO Derby Hospitals NHS Foundation Trust
Tracy Allen Derbyshire County PCT
Terry Allen Notts City PCT
Terry Alty Chesterfield Royal Hospital NHS Foundation Trust
Paul Badger Derbyshire County PCT
David Black Derbyshire County PCT
Kathryn Blackshaw Derby City PCT
Lee Bond Sherwood Forest PCT
Maggie Boyd Derbyshire County PCT
Derek Bray – CEO Derbyshire County PCT
Brian Brewster East Midland Ambulance Service
Paul Briddock Chesterfield Royal Hospital NHS Foundation Trust
Lisa Bromley Bassetlaw PCT
Jayne Brown – CEO Doncaster PCT
Andy Buck – CEO Rotherham PCT
Danielle Cecchini Derbyshire Mental Health Services Trust
Paula Clark – CEO Burton Hospital NHS Foundation Trust
Nigel Clifton CEO – Doncaster & Bassetlaw
Philip DaSilva NHS East Midlands
Kate Davies Nottingham County PCT
Cathy Edwards NORCOM
David Goodall Doncaster & Bassetlaw PCT
Catherine Griffiths – CEO Leicestershire County & Rutland
Barbara Hakin NHS East Midlands
Mike Harris Nottinghamshire Healthcare NHS Trust
Sue Hitchener NHS East Midlands
Peter Homa – CEO Notts University Hospitals
Brenda Howard NHS East Midlands
Chris Kerrigan Notts County PCT
Chris Linacre Sheffield Teaching Hospital
David Lowe Derbyshire County Council
Dave Marsden NHS East Midlands
John McIvor – CEO Lincolnshire Teaching PCT
Martin McShane Lincolnshire PCT
Phil Mettam Bassetlaw PCT
Eric Morton – CEO Chesterfield Royal Hospital NHS Foundation Trust
Oliver Newbould Leicester City
Louise Newcombe – CEO Bassetlaw PCT
Nigel Nice NHS Direct
Kevin Orford NHS East Midlands;
Paul Phillips East Midlands Ambulance Service NHS Trust
David Pitt Derbyshire Mental Health Services NHS Trust
Neil Priestley – Sheffield Teaching Hospital
Tim Rideout – CEO Leicester City
Wendy Saviour – CEO Nottinghamshire County PCT
Mike Shewan Derbyshire Mental Health Services NHS Trust
Prem Singh – CEO Greater Derby PCT
Chris Slavin Lincolnshire Partnership NHS Trust
Nikki Tucker Chesterfield Royal Hospital NHS Foundation Trust
David Walker Regional Director of Public Health
Sarah White Derbyshire County PCT
Martin Whittle Derbyshire County PCT
Jeffrey Worrall – CEO Sherwood Forest

APPENDIX B

LETTER OF INVITE:

Dear Colleague

Help!

I am currently undertaking a Doctorate of Business Administration. Yes, I know all the typical “get a life” things you say, but the NHS is deeply engaged in the practice of Evidence Based Medicine and I wish to consider the extent to which evidence based practice is a norm or an ideal for daily professional management in the National Health Service. To what extent do we, as practicing NHS Managers think Evidence Based Healthcare Management is an appropriate tool to resolve problems and what do we actually use? (A copy of the full research outline is attached should you wish to understand my objectives in more detail).

My reasons for writing to you are that I wish to make this more than a dusty academic treatment of the subject. It is my hope to work with my NHS colleagues over the next couple of years in making this a project that listens to and informs our experiences as leaders in the NHS today.

You can contribute in a number of ways. By replying that you do or do not want to participate – even a positive “no” is very helpful to me in shaping cohorts to correspond with. If you are a “yes” then would you like to participate in the following ways:

- As part of a focus group that will meet 2 or 3 times in the next 18 months involving 8-10 people with a semi-structured agenda?
- As a face to face 1:1 interviewee for about 2, 2 hour sessions over the next 18 months?
- As an e-mail and written responder to a structured set of questions a couple of times in the next 18 months?
- Any of the above?

I look forward to your replies.

ps If you can think of anybody else who you think would really enjoy getting involved in this, I would love to have their names.

EMAIL FOR 1:1:

Thanks for agreeing to give me some 1:1 time as part of my qualitative research towards my doctorate. You don't need to do anything in preparation and will be one of a number people I am interviewing this autumn and winter. In addition, I will be analysing a verbatim transcript part of 3 significant NHS meetings - most likely the Directors of Commissioning for the East Midlands, the East Midlands 18 Week group and either the Board or the Executive Management Team of Derbyshire PCT. Through these methods I hope to gain some observations on the nature of "Evidence Based Management in the NHS". I would expect to circulate the attached structured interview questions that I am using with you (the questions - not your answers) to a wider cohort of NHS leaders in the East Midlands for their written responses but only if our 1:1 interview(s) are a success.

In Case you need reminding, this is the essential reason I am doing this doctorate. Over the last few years I have been in a quandary about something and that is whether the notion of being a manager could be, within the NHS, grouped within an evidence based organisation of knowledge. I made 20 years as a moderately successful NHS manager, having qualified as an accountant with the NHS. On the one hand the discipline of the 'balance sheet' gave a respectability to the performance management methods used by me to help shape the patient care, but the use of that tool was necessarily shaped by the business and value model upon which it is based. Not all companies that employ accountants are successes so where was the equivalent for an 'evidence base' within the literature?

Anyway, in summary.....a big, big thanks for giving up your time and I look forward to listening to you.

Regards

David

QUESTIONS:

A synopsis of Evidence Based Management for this meeting*What is already known in this research area?*

Learmonth, an academic and former NHS manager, suggests that in the long term the very study of evidence based management is likely to inhibit rather than encourage a fuller understanding of the nature of evidence based management. Pfeffer has managed to write a definition of evidence based management and says that this is not how managers make decisions but that they instead focus on their own thoughts. Rousseau is entirely supportive of Pfeffer and, after exploring the promise that research offers for improved practice concludes that at present, it falls short. Elliot in a study of NHS managers provides some explanations for the constraints upon managers that prevent the use of research evidence.

What each of these writers say, is that the most successful NHS organisations would share one common strength – outstanding use of knowledge acquired through research (evidence). They would produce evidence the way that they need in order to inform decision making by management. Using an expertise with evidence they would make the best decisions, minor and major, everyday.

Opposing theoretical and methodological approaches to this research area?

Pearson takes issue with Learmonth and says that the whole concept of what constitutes evidence is itself, full of inequality and prejudice. Murphy, Mintzberg, Soltani may be taken as a direct challenge to the whole concept of evidence based management. In any case, they argue that there is a reason for the craft of management and personal experience to supplement evidence based management in context specific ways. Malterud manages to deconstruct the whole notion of a scientific approach to the knowledge of medicine.

Writers such as Delbanco, Davies, Dopson and Mitten propose that organisational effectiveness is not a result of effective management process or people but instead a combination of both. Issues such as organisational culture, leadership, total-quality management philosophies and innovative ways of budget setting are all claimed to have at least as great an impact on organisational outcomes as well researched decision making.

Karl suggests that in adversarial process advocates seek to prevail through the enjoyment of power, rather than through evidence based solutions and develops an alternative practical model of collaboration through joint fact finding is proposed. Smith supports the search for alternatives because, in the author's view, uncritical reliance on performance data can lead to a number of unintended and adverse consequences and Pearson says that evidence gathering is too slow to properly influence policy.

My interpretation of SDO research and my connection to it.

The National Institute for Health Research Services Delivery and Organisation Programme (NIHR SDO, commonly abbreviated to its shorter form SDO) has commissioned research on several themes concerned with management practice in health organisations. Their overarching strategic aims are to “add to the evidence base that is relevant to the practice of managers” and “the development of links between academic institutions and NHS organisations in this area”. (www.sdo.ishtm.ac.uk/ecashome.html).

Since April 2009 the management of the SDO programme has now transferred to the National Institute for Health Research Evaluations, Trials and Studies Co-ordinating Centre (NETSCC) based at the University of Southampton.

There are six distinct research projects as follows:

Reference	Lead Researcher	Duration	Title
08/1808/242	Professor Sue Dopson	1 July 2009 - 31 July 2012	Increasing the motivation and ability of Health Care Managers to access and use management research
08/1808/241	Dr Paula Hyde	1 January 2009 – 1 July 2012	Roles and behaviours of middle and junior managers: managing new organisational forms of health care
08/1808/243	Professor Christine Edwards	1 January 2009 – 2 March 2012	Explaining Health Managers’ information seeking behaviour and use
08/1808/244	Professor Jacqueline Swan	1 January 2009 – 31 December 2011	Evidence in Management Decisions (EMD) – Advancing knowledge utilisation in healthcare management
08/1808/236	Professor Chris Ham	1 March 2009 – 28 February 2011	Models of medical leadership and their effectiveness
08/1801/220	Professor Ewan Ferlie	1 October 2008 – 31 January 2010	Research utilisation and knowledge mobilisation – A scoping study

My organisation is the field study for project 244 lead by a team from Warwick University with the principle on-site researcher being Emmanouil Gkeredakis. The Lay Summary of this project is:

Primary Care Trusts (PCTs) receive the bulk of the NHS budget to allow them to commission health services for their local populations. They are charged with ensuring that healthcare provided to patients is "World Class."

However commissioning decisions are very complex. They involve different kinds of experts (commissioning and finance managers, public health experts) and many different criteria (quality, cost, patient benefit), all of which have to be carefully weighed up when coming to agreements about the best evidence upon which to base decisions. There is a great deal of unexplained variation in the ways in which managers in different PCTs actually commission health services.

Within the NHS, and internationally, a lot of thought and effort has gone into producing resources for managers so that they have the knowledge and information they need to commission services effectively.

In this research SDO will undertake in-depth qualitative research (case studies and observations of decisions) to discover how, why, and when managers in different roles use knowledge and information in NHS commissioning decisions. SDO will use the findings from this stage of the research to design a survey to test findings on a wider sample of NHS managers.

The results will be of direct relevance to the daily work of managers throughout the NHS, and of direct relevance to the public for whom services are commissioned. SDO will be better placed to identify the barriers and facilitators (organisational, cultural, and practical) to evidence-based practices in NHS management.

SDO will disseminate their work widely in order to inform policymakers and managers. The aim is that managers can be best equipped to make good decisions for the health of their local populations.

My organisation also supported an application for project 242 lead by a team from Keele University working with GPs in North Derbyshire and Chesterfield Royal Hospital which was ultimately unsuccessful. This has been pursued as an internally funded consultancy project. The lay summary of project 242 is:

Despite much work on how clinicians use and enact clinical research which is now well known, there is less on health care managers' use of management research and how this might be evolving. Previous research has suggested that health care managers often lack the skills to access and process research findings and play a marginal role in the R&D area. It is possible that these findings are now dated and that a better-developed research base and culture is now emerging within health care management. We believe that this novel idea requires further investigation. Specifically, we wish to investigate under what circumstances and how do managers (both general managers and hybrid-clinical managers) access and use management research based knowledge in their decision-making.

The design of the study uses mixed methods, having a linked, three-stage design which deliberately explores the boundary between management research and practice. The deliberate exploration of knowledge utilisation process in settings critical to the 21st century health economy will provide new research data to help policy makers and managers broadly defined, and benefit use

The Interviewees	What sort of person are they?	What is their Profession?	Period in the East Midlands
A Paragraph 5.1, 5.2, 5.4, 5.7, 6.3	Male, 50's	Accountant	East Midlands 10 years +
B Paragraph 5.1, 5.2, 6.3, 7.2, 8.3	Male, 40's	Doctor	East Midlands 3 years +
C Paragraph 5.2x2, 5.5, 5.7, 6.2, 7.1	Female, 50's	Accountant	East Midlands 10 years +
D Paragraph 5.2, 5.7, 6.2, 6.3, 7.2	Male, 50's	Medical	East Midlands 3 years +
E Paragraph 5.3, 5.7, 7.1	Male 50's	Doctor	East Midlands 10 years +
F Paragraph 5.3, 7.4	Male 40's	Marketing and Supply chain	East Midlands 3 years +
G Paragraph 5.6, 6.3, 7.2	Male 40's	Doctor	East Midlands 10 years +
H Paragraph 5.6, 7.1	Male 40's	Law	East Midlands 10 years +
I Paragraph 5.6, 7.4	Female 40's	MBA	East Midlands 10 years+
J Paragraph 5.6	Male 40's.	MBA	East Midlands 3 years+
K Paragraph 5.6	Female 30's.	Accountant/Audit	East Midlands 10 years +
L Paragraph 6.3, 8.4	Male 50's.	Scientist	East Midlands 10 years +

Job Description Additional Information Environmental Aspects Appendix B

ESSENTIAL	DESIRABLE
<p>Attainment/Qualifications</p> <ul style="list-style-type: none"> • Degree or equivalent professional qualification • Educated to Masters Level in specialist relevant area • Management Qualification • Significant Management experience at senior level in NHS including Board experience • Evidence of continuing professional development 	
<p>Skills</p> <ul style="list-style-type: none"> • Proven conceptual and analytical skills able to interpret overall health policy and strategy • Able to use power and influence to develop and improve services • Good communication skills (written, oral, presentational and interpersonal) and ability to liaise with people at all levels within and outside the trust about sensitive issues (eg hospital closures) • Highly developed project management and report writing skills – this will include Board reports • Possess highly developed numeracy and reasoning skills and be able to lead the development of information reporting systems and analyse information and appraise options and take appropriate decisions. • Ability to provide strategic direction and leadership without adopting a dictatorial style • Ability to effectively chair meetings at a senior level • Able to multi-task and continue to function to a high standard when under pressure • Highly developed skills in staff management • Able to use Microsoft Word and I.T Literate 	
<p>Knowledge / Experience</p> <ul style="list-style-type: none"> • Extensive experience at a senior level in Health Services • Experience of working at Board level • Extensive experience of supporting and 	

David Sharp
November 2009

Critical Reflection

Document 6 is submitted in part fulfilment of the requirements at the Nottingham Trent University for the degree of Doctorate of Business Administration

Cohort 8

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References

1. A Theoretical Model to Apply

In June 2009 I received the following notice –

“In England, the majority of decisions about the organisation and provision of local health services are made by Primary Care Trusts (PCTs). PCTs receive a significant proportion of the overall National Health Service (NHS) budget, which they use to commission health services for their local populations. In this study, we aim to understand how NHS managers make decisions about commissioning health services. We want to know what information they use to make these decisions and whether NHS management can become more “evidence-based”. By doing this we hope our findings can be used to inform the practice of commissioning in the future.”
Emmanouil Gkeredakis – University of Warwick.

It was rewarding to see that others were joining this field of study. It is reassuring to see that this type of qualitative analysis is still worthy of study in the NHS, almost three years after I began my project. What I think the Warwick study fails to understand and what I have based most of my study on, is the fundamental importance that the role of executive leaders have in setting organisational outcome in the NHS. I therefore feel vindicated as I complete document 6 and reflect on my learning journey that my thesis had something important to say.

1.1 Metacognition

J. H. Flavell first used the word "metacognition" (1976).

The reasons this has been important to me in my study is that I have been looking for a model that describes my learning process before and during this doctoral study. The benefit of the metacognition model is that it helps me to understand the use of knowledge in my executive role in the NHS. Executive management processes involve planning, monitoring, evaluating and revising one's own thinking processes and products. Strategic knowledge involves knowing *what* (factual or declarative knowledge), knowing *when and why* (conditional or contextual knowledge) and knowing *how* (procedural or methodological knowledge). Both executive management and strategic knowledge metacognition are needed to self-regulate one's own thinking and learning (Hartman, 2001).

A significant issue during my DBA has been a metacognition one. It has been difficult (and sometimes I have not been able) to distinguish between the why and the how of what I do as a manager in the NHS. I thought that this part of the journey was very helpful at this stage in my life. Halfway through a 45 year NHS career if it all goes to plan, I was making lots of decisions and here for the first time, thinking about why. At Masters level, I described systems in a reductionist way as being passive, but the why was much more human and difficult to deal with. This gave me the option to go different ways in different scenarios and managed to engage my passion for the NHS as well as being intellectually challenging.

1.2 Working in Groups or Alone

Converse to the individual journey, I did not find working in groups to decide on a course of action at all revealing. The cohort were all competent at debate and interaction and explaining the positions taken, but there was little collaboration except to retrace the 'audit trail' of the decisions we made to arrive at our choices. Possibly because I switched from cohort 7 (where I was struggling to keep up to time) to cohort 8 (where some group structure pre-existed my introduction) the experience I had of group work was magnified.

I found the tutorials useful in thinking about how I got an answer. In the NHS much of the data I receive is collected, graded and sifted before I see it. Given the right algorithm to turn this data into information, I just write down the answer. But, if you have to go right back to describing your method for data collection, you really do have to understand how you got your answer. A novelty.

The revelation to be honest, is that I am terrible at working with others. It is not that I can't do the team-player mindset at work (my 360° survey by peers, seniors and direct reports, suggests I am accessible and trusted and participate well) it is just that I like to be in the 'me' shell. Sitting in a North American airport with six hours to kill to work on a DBA on my own is a treat and the time flies too quickly. It is almost as if I feel that anything other than 1 to 1 conversation on part of the DBA (after the formal lecturing finished) is cheating me of time I could be doing something more interesting on the DBA.

Throughout much of this study I have contemplated the nature of the lone research practitioner. Individually I have found this a fascinating journey but it has caused me to question whether it was possible to do anything worthwhile whilst immersed in such an intensely personal topic.

Adrian Bejan, a professor at Duke's Pratt School of Engineering, argues that while the trend at major universities is the creation of large research groups focused on a particular problem, the individual researcher will not disappear.

There is only one thing I can do about all of this. That is to have courage and trust. To join a learning set of like minded individuals about evidence based management, or just management. To engage often and maybe aim to be the positive one. There is a real danger that my lethargy makes the group lethargic, so I resolve to be the project core not the periphery. This should be more dangerous, more fun and in opening up my skills and opinions to greater and regular scrutiny, the quality of my academic work should improve too. I realise that working with others is a start on the way to achieving my true potential.

1.3 Being positive and actually writing the Doctorate

The biggest learning for me is the need to be able to work with positive people. If you have ever sat in a seminar doing some group work on an easy task then you know that nothing is worse than working with lethargic people. The level of 'unmotivation' in the room is stultifying. The taught element of a DBA is the complete opposite. You find yourself just as inspired as people around you. In that kind of environment, I love group and partner work. So the thing I am going to do differently, because of this DBA, is always to be the project enthusiast. Encourage the group to put effort into what we are doing and, if the task is easy, re-define the group effort into something along the same lines, but that is able to inspire the talents of the think tank assembled for the next fifteen minutes. My opening line now is and will be "you'll find yourself having a lot more fun if you simply go with the flow and let the creativity flow". In addition, my own contribution will be higher quality.

Kamler and Thomson say this:

“Writing the dissertation lies at the centre of doctoral education. It is through writing that students make their findings known to the public and develop a sense of themselves as authorised scholars. Yet, in many universities, writing is treated as ancillary to the real work of research - as the invisible and taken for granted labour of the doctorate (Kamler and Thomson 2001)”.

The hardest part of this doctorate for me has been the writing. It is clear that without help from my tutors the ideas and analysis would never have got to paper.

Furthermore, I must complement my tutors on trying to make what I write an authentic form of what I say.

As a successful student at professional, undergraduate and masters level, this has been a vital part of the doctoral journey.

2. Where the Research Question came from

2.1 The Initial dilemma

There was an episode of the BBC TV programme ‘Casualty’ on a couple weeks ago, and I caught a bit of it while working on some projects around the house. As I watched it became pretty clear that every episode is built around solving a complex medical problem. And 90% of the show is spent learning about the problem, finding new pieces of information, and testing incorrect assumptions.

I think this is a pretty good description of lots of a lot of projects I’ve worked on as an NHS manager and project manager. Lots of doctors and managers want to get the “Problem Definition” done as soon as possible, and get on to the “real work” of solving the problem. But there’s real danger there, it’s easy to define and solve the wrong problem.

I like the system they use in casualty - there’s a central whiteboard which contains a description of the problem they’re trying to solve. As the show progresses, the problem definition is continuously updated, and the diagnostic team comes up with various theories. I’ve worked on projects where we the managers didn’t have a clear understanding of the problem, or where our understanding of the problem was months and months out of date.

The result was that we built the solutions and policies that solved the wrong problem, or in the best case, answers that solved the right problem in the wrong way. Either way, what we built fit the user stories we got for that iteration, but wasn’t “well designed” in terms of solving the core problem. In both cases, it was very clear as I talked to the patients, doctors and nurses, that we could have spent less time, and built better policies if we’d just had a clear and up to date picture of the clinical world. The National Health Service (NHS) is the “public face” of the three publicly funded health care systems of Great Britain (Northern Ireland does not use the title) and the full title of the national public health service for England. The NHS provides the majority of healthcare in England, from general practitioners to Accident and Emergency Departments, long-term healthcare and dentistry. It was founded in 1948 and has become an integral part of English society, culture and everyday life: the NHS was once described by Nigel Lawson, former Chancellor of the Exchequer, as “the national religion”. Private health care has continued parallel to the NHS, paid for largely by private insurance, but it is used only by a small percentage of the population, and generally as a top-up to NHS services. NHS services are largely “free at the point of delivery”, paid for by taxes; the NHS’s budget for 2006–07 is £96 billion. Employing over 1.3 million people, the NHS is the largest employer in Europe and one of the largest employers in the world, (believed to be third or fifth, according to different commentators). So the NHS requires lots and lots of people to run it.

Within this I have been a manager and as a manager you can “administrate” and electively hide or be a proper manager and change things.

Over the last few years I have been in a quandary about something and that is whether the notion of being a manager could be, within the NHS, grouped within an evidence based organisation of knowledge. On the one hand the discipline of the ‘balance sheet’ gave a respectability to the performance management methods used by me to help shape the patient care, but the use of that tool was necessarily shaped by the business and value model upon which it is based. Not all companies that employ accountants are successes so where was the equivalent for an ‘evidence base’ within the literature?

2.2 Getting in amongst the players

The author holds a senior management position in the National Health Service. The National Health Service being under transition affects the individual professionally therefore there is a subjective bias in the analysis of EBHM in the NHS. This issue of being a player in the system under review will qualify the judgements and interpretations of the researcher. Significantly the researcher has been a player in the National Health Service system since 1987, during which time many theoretical and practical models have been applied to the NHS. The National Health Service is an organisation that continues to deliver services. As with all socio-economic models, it is not possible to hold the day to day experiences of patients and the public frozen, therefore it is not possible to experiment with the system which will affect people’s lives just for the purposes of observation. The organisation that employs the individual is part-funding this research, therefore the NHS has a discernable desire to achieve a piece of management information.

Remembering that part of my essential purpose was to hold up a mirror to NHS managers in the East Midlands, what did I see in that mirror about myself? What did I learn on a personal level about my response to evidence based management? I learned that I was only capable of a low level of accommodation in response to changes in my environment. My culture within this organisational culture had meant that I experienced a low level of assimilation. Information from the wider environment would be accepted and processed, but it was never sought or accessed. Any desire or awareness of the need to modify how things are currently done came as a response to a policy imperative and heavy central directions. The appropriate environmental response was not to evidence, but policy and within that a forensic level of policy compliance. So why did I do this? My conclusion is that of two parts. Part one is that, consistent with other senior managers, the NHS in the East Midlands did not contain the necessary knowledge from which to choose a more adaptive response and the prevailing group culture discourages attaining that knowledge. Part two is that on a personal level, the culture had strictly punished me when my particular responses had been more adaptive. At job recruitment, my answer of “the answer is in the library” as opposed to “my experience of answering the problem is” was deemed insufficient to get the job!

I have worked high up and low down in the management hierarchy and my experience of EBM was that it faced/faces being squeezed by two forces that both oppose its very existence in the NHS management lexicon and toolbox. Unlike Medicine and Nursing in the NHS, management is not a profession. Put crudely, it is considered a task or an overhead. With the exception of Finance roles there is no established legal or cultural requirement regarding education or knowledge for an individual to become a manager the way there is for Doctor, Nurse, Physiotherapist, Podiatrist, etc. This does not mean that NHS managers are not legion in their BSC’s, their MBA’s, even their Doctoral qualifications but it does mean that no formal

disciplinary body or professional pressure exists to promote use of evidence by any manager who refuses to do so.

2.3 Science or ambiguity: how I take decisions at work

Are decision making tools disciplined or does it follow the hopes of the managers? The reason for reviewing this particular question in the literature is the juxtaposition of science and management. This is important for the NHS because the practice of medicine is bounded by the scientific method. Medical progress, the development of pharmaceuticals, the review of outcomes following a randomised control trial and even public health interventions are progressed using a cycle of observation-recording-discourse and conclusion. If that is true for the medicine then what of the management system that manages the medicine?

The desire for managers in public services to portray that they know all they need to know to make decisions for the public, is very persuasive. Ambiguity and research leading to conclusion may not be the model preferred by the public even if the NHS manager were to express such a preference. Starting with the possible methods for conducting this literature review, I myself am demonstrating some of the bias inherent in NHS management to precise rather than deliberating decision making. Significant writers in the study of NHS management and evidence based management such as Learmonth and Rousseau are studied and a conceptual framework "The Evidence Based NHS Box" is discussed and used to reference ideas about the subject. The key outcomes of the NHS such as improving health, value for money, wellbeing and better experience of care are taken as givens but the management responses to this problem are compared from the views of those who propose and oppose evidence based management.

2. 4 The role of the tutor in shaping this problem with me

Preparation: My preparation was poor for the DBA and for the individual documents within the DBA. My goals were often poor and it was occasionally a struggle to fit clearly within the marking guidelines without help. I say this not as a confessional, but because of something it taught me. If you are not clear what you want out of the project, it is difficult to be clear about what you think is your bottom line. This would have made it easier for me and my tutors to be clear about the point when I could offer no more. It would have made it possible to be much clearer about which parts of the study I was willing to walk away from or even to be clear when we were in a stalemate position.

The opportunity, both in and out of work, to spend time thinking about one's work, one's growth and development as a manager, and one's growing edges was a novel and positive experience for all me. I found that the space and time that was created allowed me to slow down and process, and be able to present different ideas. The personal journal of learning (Cantwell & Holmes, 1994) provided an effective place for me to reflect on the multiple layers of my experience. At the beginning of the doctorate I was reticent—and even unwilling—to keep a journal, yet, in the end was genuinely surprised at how helpful it was in keeping me focused on my own growth, and personally meaningful. It was more than just an outlet for my reflections, it also became the vehicle by which I learned to be self-reflective, to struggle to identify and express one's thoughts and feelings regarding my own development as an academic. My tutor was incredibly useful in helping me to see the experience of study as important to my final thesis.

2.5 How EBM has affected my working life

Evidence-based management (EBMgt) is an emerging movement to explicitly use the current, best evidence in [management decision-making](#). Its roots are in [evidence-based medicine](#), a quality movement to apply the scientific method to medical practice.

Evidence-based management entails managerial decisions and organisational practices informed by the best available scientific evidence. Like its counterparts in medicine (Sackett 2000) and [education](#) (Thomas & Pring, 2004), the judgments EBMgt entails also consider the circumstances and ethical concerns managerial decisions involve. In contrast to medicine and education, however, EBMgt today is only hypothetical. Contemporary managers and management educators make limited use of the vast behavioural science evidence base relevant to effective management practice (Walshe & Rundall, 1999; Rousseau, 2005, 2006; Pfeffer & Sutton, 2001).

I now understand that as an NHS leader I respond slowly to changes in the environment of the NHS. Without the study of the Masters and DBA I would be – and will have to avoid being in the future – closed to options other than the status quo. NHS culture is (despite my professional and academic training) slow to respond to information from the environment or does not accept the data into the decision making model. When it comes to evidence based management (the core subject of my thesis) the biggest problem was there is no desire or awareness of the need to modify how things are currently being done. As a government department in the midst of major economic turmoil you might think that taking the time to ask “what works best?” would be vital, or at best valid. The leadership and organisational response to this problem has been frustratingly slow.

Critical theorists have raised objections to the movement (Learmonth & Harding, 2006; Learmonth, 2006). In particular, it has been criticised for treating "evidence"

and "scientific method" as if they were neutral tools. From this perspective, "management" is not necessarily an automatic good thing - it often involves the exercise of power and the exploitation of others. Efforts have been made, however, to include a balanced treatment of such issues in reviewing and interpreting the research literature for practice (Rousseau, Manning & Denyer, 2008).

Some of the publications in this area are *Evidence-Based Management* (Pfeffer & Sutton, 2006), *Harvard Business Review* (Pfeffer & Sutton, 2006), and *Hard Facts, Dangerous Half-Truths and Total Nonsense: Profiting From Evidence-Based Management* (Pfeffer & Sutton, 2006). Some of the people conducting research on the effects of evidence-based management are [Jeffrey Pfeffer](#), [Robert I. Sutton](#), and [Tracy Allison Altman](#). Pfeffer and Sutton have recently opened a [web site](#) dedicated to the movement.

On a personal level I have tended to lead successful teams of high performing individuals and usually inherited maturing or well established teams but have rarely been asked to establish new organisations when the NHS goes through its periodic regular re-organisation. So a pattern emerges throughout my 20 year career in the NHS of being the director who succeeds the first Chief Executive in an organisation, the team player who replaces the first team leader when they leave and so on. I have worked in parts of the NHS that used EBM sparingly. For example the recruitment of leaders is supported by the evidence that it is possible to assess future leaders through competency based extrapolation of their past performance and also by evidence that emotional intelligence correlates with predictions of successful leadership. EBM has existed in two ways, as a self critique by managers that some of the decisions or assertions are just plain errors which would improve if based on evidence of what works, and as an exploration of the differences in culture that exist between NHS doctors who are increasingly evidence based and NHS managers who are seen to make little progress in adopting the concept.

2.6 Peer Approval

Watching one's peers work was helpful to me for a variety of reasons. For one, observation was a way to learn new skills or techniques, and also provided a chance to compare one's own style of working to another's. On an emotional level, watching others work was both calming and anxiety-provoking depending upon the perspective of my own work and the perception of the peer I was observing.

The diversity within the group of NHS managers I studied with regard to age, race/ethnicity, level of experience as therapists, and theoretical orientation was also identified as an important facilitator of reflectivity. Diverse backgrounds allowed for multiple viewpoints and perspectives to be shared and discussed and often spurred further reflection in students' journals.

The attitudinal stances that I took were important factors in whether I could be reflective. It was easy for when I was being confident, self-efficacious, open to learning, and non-defensive about my work to be reflective. For my tutors who were motivated by the challenges of the course rather than overwhelmed and defensive, being reflective seemed to come naturally.

Personal difficulties, at times, played a role in encouraging reflective practice. Life events such as the breakup of a significant relationship, a low grade on module 2, adjusting to a new city, becoming a parent, or struggling with parenting issues, tended to focus energy on an internal process of self-reflection. In addition, my personal difficulties with anxiety, doubt, and struggling with one's professional choice or not feeling competent stimulated a desire to be increasingly aware of one's own approach to other NHS managers with a deeper understanding and empathy for the difficulties presented.

There were some constraints within the training context that hindered me from being reflective. Some of these are consistent with the cognitive demands inherent in a DBA program in general, which places significant demands on students in terms of time and workload. Sometimes I found the workload to be too great and left too little time to be reflective about one's own growth. As a less experienced student, the facilitator's "hands-off style" was a factor that made it easy for me to maintain a reflective stance with my peers.

3 What worked and didn't work

3.1 Worked: The literature review: conceptual framework and literature search drew me into a much wider community

Accountants do not traditionally deal with qualitative data such as whether a patient was happy or sad or whether it looked like to him, that his father would die when a patient brought him to the emergency service. Qualitative data is not objective. It cannot be reliably verified. Quantitative data can often be verified – you can see the evidence on paper that it is correct. Accountants like myself, like things to be clear and unambiguous, for there to be no doubt, for the amounts presented to be clearly verifiable. In the literature review and throughout document 3 and document 4, I followed a reflective journey concerned with the need to be more flexible, more willing to embrace new sources of data from qualitative sources. There is still a problem that I face through traditional research designs that usually rely on a literature review leading to the formation of a hypothesis.

I am drawn to the notion that the ultimate goal of the DBA is a blog and a facebook page, where I will join a community of like minded practitioners and that the DBA is the entry requirement for a journey rather than the end in itself. The key to all of this is that the presence of trust is essential to the creation of this and I intend to shake the hands of as many of the participants as possible. I do believe that as the NHS works through the next three to five years of a much harsher macro economic climate, then the creation of such an endeavour will fit nicely into the broader range of academic centres well able to support more formal knowledge exchanges. The unique selling point of my facebook group, if there is to be one, will be to be clear about the bad knowledge.

3.2 Didn't Work: Making my new knowledge trusted and shared by my management colleagues

The academics are best at the distribution of good knowledge, but there is a place for suitably qualities and trusted networks to run their/our own hierarchy of evidence within the cadre of NHS managers. The question of whether the knowledge available to us is valid within our experience and needs as NHS managers, isn't one that can be settled easily, because we have too little time to do it and anyway, experts themselves disagree. Instead, we can run our own hierarchy by using our job positions to take some actions ourselves to test the validity of the knowledge.

Evidence-based-management within the NHS will therefore be grounded in an emergent process of continuous learning that leads both to better choices and a "fail fast" culture that exposes the practices that are least able to improve things.

The literature review offers the following insights.

Discourse analysis (1952) is defined as "concerned with the interrelationships between language and societies and as concerned with the interactive or dialogic properties of everyday communication". To this are added two subdivisions – genre and ideology. All of this is relevant in my study of management in the NHS because of genre and ideology. What is vital for the reader to understand as we progress on to the analysis of a specific decision, is that, without retro-fitting onto my material

there was something that I hadn't anticipated, that a real human narrative evolves and in the conclusion I use the Rousseau model to reveal that however the manager feels about 'evidence' as useful in their day to day behaviour they think they are playing a different game.

So what does this tell me about the nature of knowledge? The thing about the DBS is that it creates learning sets and tutorials and that is the thing that I found hardest to fit in with. I acknowledge that knowledge flourishes in connections and relationships. Part of my qualitative study was about the nature of tacit or craft knowledge. Different to explicit knowledge (that can be accessed and shared through many channels), this tacit knowledge is shared by trusted colleagues showing a reciprocal desire to exchange knowledge with each other. So the learning for me is that I must make the building of connections and relationships a priority and the challenge will be to network the conclusions of this DBA. Tony Kovner told me to spend less time worrying what I said in my DBA thesis and more time figuring out how I was going to give it a presence afterwards.

4 The personal Journey

4.1 Personal Commitment – occasional and inspirational

Personal commitment was a real issue throughout the doctorate. I had planned for the doctorate to take me about 1200 hours or 8 hours a week x 50 weeks a year x 3 years. Would that it had been that simple to stick to the plan with work, family, redundancy and travel.

Fulfilling obligations to the rest of my life as well as the doctorate were complicated when I had to move jobs, but I was my own problem maker, when in 2007 I was co-opted to run an all ages football club in Nottinghamshire. In the end though, the doctorate was the respite from the rest of my life.

Proper training and explicit planning are the signs of a successful athlete and team, so I applied the same logic to the doctorate and it seems to work. Early morning starts before the family had gotten up, proper diary management so that everyone knew when the doctorate deadlines were and always having my paperwork with me when I was sent away in hotels and on aeroplanes by work, broke the task down into the consumption of those hours. At no time did I doubt my personal commitment, but I had to prioritise it by applying sports planning.

Motivated by commitment to the NHS, this was what meant that the endeavour remained a pleasant, even fun, experience. I am American by birth, indeed, still am a citizen of the USA, yet the thing that makes the UK better than the USA is the National Health Service. The problem remains though how should we deliver rising standards of healthcare in a taxpayer-funded, free-at-the-point-of-use system, in which treatment is provided to all in the basis of need not ability to pay. So I always felt that my doctorate would help contribute to the answer.

Motivation and commitment to the doctorate came best when I had the protected time to do the work and think about what I was doing. But it was a rare moment of alchemy that made the work progress – I remember 6 hours in a New York airport and one time when I just had to get up at 3.00am to write something I had been thinking about, as times when the time, the inspiration, the material and the conclusions all came together.

Confidence and change within the DBA study programme was very slow. All I ever managed to do was follow a steady linear line upwards, knocking off the tasks one by one, module by module, document by document. The whole process will hopefully make more sense looking backwards, but whilst I have been in it the task

has been harder than my other degrees or either of my professional qualifications, although the time frame has been similar for all of them.

4.2 Changes in my personal life

Some changes in my life during the doctorate hit my emotions very hard. If I had known that I would go through two family deaths, redundancy, divorce, a new baby to add to my teenage children and moving house whilst doing the doctorate, I am not sure I would have thought it the best time to do a DBA. Throughout it all though the timetable was always a couple of months behind, time I never caught up from the beginning, but never getting further behind either.

Making decisions in my life and having some other things thrown at me, never stopped the sense of purpose that this was the right window of opportunity to be doing this particular type of study. In the end my kids have remained supportive of the endeavour and my boss has kept writing the annual contributions to my tuition fees. So I have been lucky with the level of external support I received. It might be deep to call it all "tolerance and compassion" but that is the way that I think I have felt my family, friends, work and even my tutor have dealt with the DBA task as the rest of my life threw up myriad challenges. I think they have helped me to re-prioritise things and also understand when the final product delivery reflected multiple overlapping and competing objectives.

Beliefs and culture play a large part in the attitude to education. If you come from a tradition that values study as a form of leadership or even prayer, then it is philosophically much easier to find the time in the "noise" of life to continue with a doctorate. I am lucky that I come from such a tradition.

4.3 My Changing Value Set

I have seen a lot of things and read a lot of things during the time of this study that I don't want to be "tacking on" of some extra and dispensable information, but rather an integral part of the learning experience. I have been given the opportunity to rethink and refashion my beliefs as I confront a dilemma, without fear of any authoritative imposition of beliefs from others. As a student who has experienced a diversity of alternative ideas I have begun to develop a more global viewpoint and be able to consider different aspects of a problem. Now I see that ethical thinking is neither a matter of pure intellect nor of gut feelings and prejudices. What is important here is one's reasoning and critical thinking skills. Thus, by strengthening and expanding these skills, I have been able to view our ever-changing policy world from a new perspective, and not be limited by the past or previous belief-systems. I now understand my decision making to be something like the following and that my values adjust accordingly.

- 1) What are the facts? What is available at this time?
- 2) Identify and define the ethical problem:
- 3) Who are the stakeholders in the decision?
- 4a) What options do you see are available to resolve this dilemma?
- 4b) Which options are the most compelling? Why?
- 5a) How would you resolve the dilemma?
- 5b) What values did you rely on to make your decision?
- 6) What consequences (if any) do you see your decision has on the others involved?
- 7) Could you personally live with this decision? Remember that no decision is immune to pressures of time and how we feel either.

5. Where this all fits

5.1 Anthony Kovner

Approach and Methods. Let me be clear. Tony is a professor, his wife is a professor, his daughter is a professor, his son-in-law is a professor. Tony is not an academic lightweight. He is published and quoted and re-published. Yet in amongst all of the people I read, Tony was the one who had a lifetime of being an administrator, researcher and teacher, so his perspective on the world of healthcare (even though he is regarding America) was the nearest I found to somebody "holding up a mirror" to themselves and their peer group. Put simply, he takes a position on the current state of healthcare management, board governance and the importance of research in management practice. In particular, he notes that decision makers would like evidence that is more applicable to their actual decisions, includes information of what needs to be done, is more easily accessible and that researchers and decision makers should consider long-term collaborations to help identify topics for and parameters of evidence development. He has encapsulated all of this in a book – but one that retails in paperback at £50 a time. After 20 years of looking at this issue of evidence based management, I would say that he has come to the following conclusions: that the case for evidence based management in healthcare remains a political judgement and that the return on investment calculation has not been, but could be, reliably made by any healthcare system. It is important to note that his 20 years of study are characterised by an increasing belief that hospital boards do not review the quality of managerial decisions, so would never know whether things need improving. Underlying all of his way of working is an almost iconoclastic belief in the widespread use of evidence to shift power away from senior towards junior managers. Tony was widely respected, that much is clear, but even in the NYU Wagner school within which he taught, his ideas were not necessarily mainstream. Finally though, in his methods he always espoused academic rigour. When talking to managers in the field of healthcare, he always took time to properly frame research questions, obtain evidence as to why intervention might/might not work in various contexts, evaluate evidence with a balance of viewpoints represented and consider when further evidence was needed to support a decision.

5.2 Confidence and Change

First we must create awareness of the need to change. What are the compelling reasons to move away from the familiar and comfortable and move to something different and perhaps uncomfortable?

In today's deficit funded NHS, more and more people are becoming aware of the need for improving the way or the NHS works. However, if we really want to turn up the heat on change, we must discuss internally the specific challenges facing the NHS.

Who is our benchmark? What are they doing? What new products and services are they adding? Is the public support for the NHS expanding or contracting? What are our costs and revenues per employee versus other countries? Will our products be subject to new environmental controls? What will rapidly expanding telecommunications technology mean to us and our existing work processes? Can we reduce our overhead expenses to match those considered best in the world? Could we really become "paperless?" How could we reduce our basic work process by 10 steps this month? How could we improve turnaround time by 90%?

It is my opinion that the more productive an organization is, the more creative it must

be in creating the appropriate challenge. One Chief Executive I worked with wanted to increase the rate of implementation of employee involvement, which for several years had been painfully slow. What, I asked myself, would provide some motivation for these people to move forward?

How I am linking into on-going research in EBM. Support for diffusion fellows and academics is developing, but the key is the consistency of the key players. If one were to consider that Kovner and Billings are at Wagner NYU and that Billings works closely with the Nuffield Trust in the UK, that Ham is at the HSMC in Birmingham and is a writer for Nuffield Trust and latterly has re-joined the Kings Fund, the same Kings Fund that was lead by Jo Boufford of Wagner NYU. A pattern emerges that a grouping of these organisations, plus my favourite Rousseau of Carnegie Mellon and Pfeffer and Sutton of Harvard Business School would very quickly present a comprehensive coverage of the subject as it could be presented to the NHS. It is my intention when the DBA is (hopefully) passed and completed, to email these key players with a simple question of whether they think the NHS provides a unique grounding for further study of this subject and whether they would each be willing to give me an hour of their time. Some I have met already. Only Rousseau is a logistical challenge to meet, but then Pittsburgh, PA is not that far away from my normal travel routes. At the very least, I intend to present the answer to the question in the British Medical Journal and the widely read, but less academic Health Service Journal in late 2010/early 2011.

5.3 Changing myself

I learned something very useful about the nature of reflection. I started off keeping a diary – as advised at the start of the DBA, it would help when it came to write Document 6. This enabled me to record what was learned whilst the experience was very fresh (and in one lunchtime immediate). This was necessarily collected chronologically. What I learned though was that the most useful thing was not to try to make sense of all this until much, much later. Collecting my observations together within the themes I set for Document 6, has given me much more insight into the learning experience, than if I had tried to make sense of this in the same chronological order that the observations were made (my previous or inherited learning form was like this). When reading about this issue, I came across a thing called the eportfolio system which I will use to help me emphasise this type of learning in the future. The eportfolio system should help me to build more of a retrospective about what I learned. The reason that this is useful and significant, is that I am a qualified accountant and necessarily complete a mandatory cpd (continuing professional development) requirement each year. This eportfolio system will enable me to describe my cpd, not as a series of task-and-finish seminars, but as a rounded reflection of the last one and last three years. I will also be able to note where my competence acquired was actually different to what I thought it was when the learning experience was very recent.

Becoming a broker between research and practice, I feel that I have found myself in a positive and comfortable slot where I am not an advocate (more of which below), but a potentially trustworthy broker. I have shown in this DBA that research can be a powerful tool to improve the structure and practice of management in the NHS. It can be argued that the emphasis on targets in the NHS is affecting decision making (and decision makers) by increasing the demand for evidence on the effectiveness of

various strategies for hitting these targets. But as the broker, I do not hold with that argument. In an era where the NHS is driven by the twin forces of performance and accountability, not much has been asked of management research. The policy is centrally directed and the management task to deliver the target is as discretionary and varied as the accountable officer wants it to be. So there is a space to broker in some academic content and research. On the other hand, I have seen in my brokerage role that even 'engaged' managers have oversimplified the problem about translating research into evidence for/about management practice. My brokerage role is therefore, also to promote a realism about what research evidence can do. The assumption that research is useless or that alternatively, evidence can simply tell managers what to do are commonly held – diametrically opposed positions. Both are wrong. Brokerage will close the gap.

Not being an advocate. Evidence based management is just another tool. It is not the only tool. It is not the toolbox itself. So I say "lets try it" – the alternative is to follow another fad or fashion that doesn't fit with the organisational culture. Learmonth would probably accuse me of hijacking the prevailing (superior) medical ethic and superimposing my own managerialist culture on the organisation, but he would be wrong. In no way have I become an advocate for evidence based management in healthcare. But then neither have the people I have read and enjoyed. What supporters, if you can call them that, of evidence based management in healthcare say, is that there is a theoretical application of EBM to improve management decision making and that it is worthy of field study. After all, the role of an advocate would be to intercede on behalf of EBM and it is not always clear how and when this opportunity would arise. What I can be said to be, is a conspicuous follower and an intrigued supporter of the concept, who will offer this positively if asked to debate the matter.

A development of my wider USA/International perspective has taken place in my working life. The department I head up was chosen to be a year long study in how we use evidence. Working with Warwick University and a grant from SDO (the NHS) it has been possible for our meetings, our 1 to 1's, our phone conversations, our emails and our interviews to give qualitative data for the researchers to collect. This will be classified into the tools that we use to make decisions and how we make decisions. Researchers have been given organised and co-ordinated (but free and unrestricted) access to a department of 200 people and as much time as they wanted with senior people.

Joining the Nottingham University CLAHRC (Collaboration for Leadership in Applied Health Research and Care) was also a significant event, as it entailed committing PCT funds of £180,000 over four years to become a member. The CLAHRC has the remit to develop new approaches to healthcare research and to enable research to be implemented in ways that bridge the gap between the academic and the practitioner.

5.4 In Conclusion

In conclusion. The DBA worked for me because the location of the university, the reputation of the course, the method of study, the resources invested by me and the university, the personal commitment of the tutor and the quality of supervision were all perfectly able to accommodate my needs. For anyone undertaking this DBA I would say that by the time you have a clear idea of the research you wish to undertake, you will find you are in the right place, but figuring out your own research agenda may be as hard as the research itself. There was a particular problem in my

situation in that the NHS had significantly funded half of the DBA which was the result of an exit payment from a senior post in the NHS. So although the NHS had implicitly recognised the benefit of a DBA to the NHS, the NHS as a sponsor had not had to make the decision on the specific organisational issue they wished me to develop and research solutions for. So I would recommend that anybody in my position again, gets themselves an internal sponsor or champion within the NHS to work with as well as the course tutors. There is no doubt that a DBA was much better at exploring the organisational question of evidence in NHS management than a Phd, but I think the NHS organisation is more experienced in dealing with Phd's. Ironically, Manchester Business School (Manchester Metropolitan) open up their DBA with a unit of evidence based management which says "in this unit you consider the case for research-informed management practice. You review current evidence based practice in management, considering developments in other disciplines and establish understanding of processes and levels of such practice" (www.ribm.mmu.ac.uk). But I still think I chose the right DBA course for me.

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David Sharp
July 2008-07-29

**Research Methodology for Non Survey Based
Research**

**Document 3 is submitted in part fulfilment of the
requirements at the Nottingham Trent University for
the degree of Doctorate of Business Administration**

**“A study of the response of NHS Chief Executives and
Senior Managers to Evidence Based Management”**

Cohort 8

Abstract

A decision making theory and process

I undertook a qualitative assessment of the use of evidence based decision making from real-world participants in the NHS. A qualitative approach was used because I wanted to develop a general categorisation of decision making that will enable me to develop topics for later thesis and qualitative study. The study is a selected sample of subjects representing a spectrum of Executives in the NHS from different professional backgrounds including doctor, accountant, academic professor, statistician and nurse. Subjects were recruited from the cohort of people working in the NHS in the East Midlands through personal contacts and in one case, referral by other subjects. A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort to test this method as well as the recording equipment.

Little in depth research has been done into the implications of the philosophical approach that a practicing group of senior executives in the NHS have to the work of the NHS itself and its bases in evidence based decision making. I wish to pursue the work of Rousseau on the difference in management response to management issues depending upon whether the decision maker was equipped with advanced knowledge of the effective implementation of Evidence Based Management or otherwise. Sample selection for this testing of Rousseau in a field environment was essentially pragmatic, based upon people who knew me well enough to give frank disclosure, but not well enough to have perceptions about what I thought the “correct answer” is. (I have no view on the “correct answer”).

Grounded theory and qualitative material

The overall aim of this research model is to enhance good practice in the craft of management in the NHS. To achieve this aim my objective in this piece of qualitative research is to conduct a systematic investigation into current perceptions of evidence based management including perceived barriers to its use and also including perceptions of good practice in the use of evidence based management. It was also necessary to begin to ascertain perceptions of skill deficits in this area and factors viewed as contributions to these deficits. The effect of the researcher as an observer is unknown. It could have an effect on the interviews and it may inhibit parties who participated in the review of meetings. A further limitation of the study is that I only included leaders from within the NHS East Midlands and it is possible that NHS regions may be more or less equipped to engage in a discourse about evidence based management. The strength of this study is that observation and participation with individuals and the groups by the researcher on an ongoing basis in the NHS in East Midlands increase the credibility and trustworthiness of the findings.

So in Summary

In the matter of the approach to academic research (Against!)

In the matter of supervision of employees (For!)

In the matter of the information available to managers on the consequences of their decisions (Against!)

In the matter of management style (No preference either way)

In the matter of the delivery of promises to the public, stakeholders and others (Against strongly!)

My Conclusion is

There is a bias against using academic research by NHS managers in the East Midlands. This is by no means universal, but is consistent in its presentation.

There is a very strong preference for using evidence based decision making amongst the cohort of East midlands managers and use an appropriately cultivated management approach to support evidence based decisions.

There is a bias against evidence based decisions. Decisions have insufficient data and evidence for decision making, and little value is attached to post implementation review. Some managers are neutral towards this subject but few, if any, show a preference for evidence based decision making informed by the consequences of their decisions.

There is only an inconclusive result in the area. There is no preference. Some managers have a preference for evidence it seems but equally some would discredit it as a viable and realistic approach.

Of all the areas this is the one where there is next to no examples of evidence based decision making, but there are multiple strong, lengthy and cross-referenced examples of decision making that is neither systematic nor developed by causal knowledge. Decision making is opaque to the public and frequently challenged.

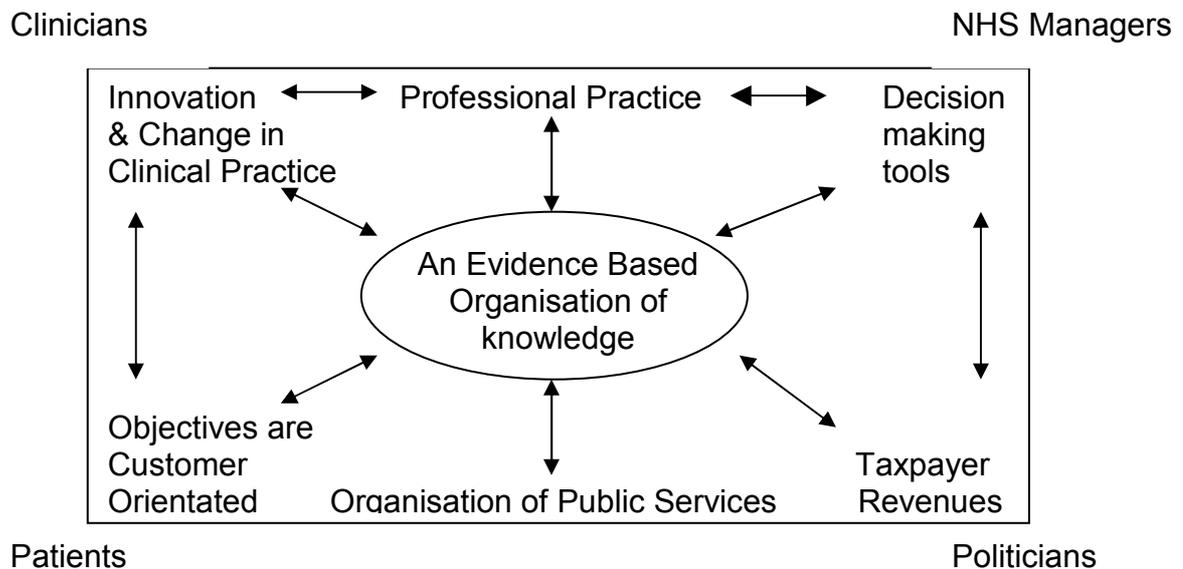
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THE DYNAMICS OF DECISION MAKING IN GROUPS AND BY INDIVIDUALS

A decision making theory and process

I undertook a qualitative assessment of the use of evidence based decision making from real-world participants in the NHS. A qualitative approach was used because I wanted to develop a general categorisation of decision making that will enable me to develop topics for later thesis and qualitative study. The study is a selected sample of subjects representing a spectrum of Executives in the NHS from different professional backgrounds including doctor, accountant, academic professor, statistician and nurse. Subjects were recruited from the cohort of people working in the NHS in the East Midlands through personal contacts and in one case, referral by other subjects. A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort to test this method as well as the recording equipment.



There are a few notes to say about the author. My own personal baggage about Evidence Based Management is that;

I have worked in services where EBM was a new or alien concept. Although the hierarchy of evidence is vaguely understood by most if not all NHS managers the sense that evidence should support or instruct decision makers, as proposed by distinguished leaders in the NHS management such as Muir Gray (1997), is not commonly accepted. To an extent the concept of evidence was mostly a binary rather than a linear concept. By that I mean that the Randomised Control Trial or RCT was seen to be "evidence" and that anything other than an RCT was not. In that way the concept of evidence was elevated to its most extreme version where an almost laboratory level of precision within its practice frightened lesser users. I have performed the role

of Director and Chief Executive in NHS organisations that were deemed to be successful. Although I am by no means a leading light amongst my peers the organisations I have lead either in the boardroom or as Accountable Officer (Chief Executive) have been surplus making, target hitting, award winning, highly credited by the auditors and demonstrably successful in the eyes of the regulators.

On a personal level I have tended to lead successful teams of high performing individuals and usually inherited maturing or well established teams but have rarely been asked to establish new organisations when the NHS goes through its periodic regular re-organisation. So a pattern emerges throughout my 20 year career in the NHS of being the director who succeeds the first Chief Executive in an organisation, the team player who replaces the first team leader when they leave and so on. I have worked in parts of the NHS that used EBM sparingly. For example the recruitment of leaders is supported by the evidence that it is possible to assess future leaders through competency based extrapolation of their past performance and also by evidence that emotional intelligence correlates with predictions of successful leadership. EBM has existed in three ways, as a self critique by managers that some of the decisions or assertions are just plain errors which would improve if based on evidence of what works, as an exploration of the differences in culture that exist between NHS doctors who are increasingly evidence based and HNS managers who are seen to make little progress in adopting the concept and finally in a way to stop the NHS re-inventing the wheel and making repeated mistakes or even worse employing management consultants to make the same mistakes.

I have worked high up and low down in the management hierarchy and my experience of EBM was that it faced/faces being squeezed by two forces that both oppose its very existence in the NHS management lexicon and toolbox. Unlike Medicine and Nursing in the NHS, management is not a profession. Put crudely, it is considered a task or an overhead. With the exception of Finance roles there is no established legal or cultural requirement regarding education or knowledge for an individual to become a manager the way there is for Doctor, Nurse, Physiotherapist, Podiatrist, etc. This does not mean that NHS managers are not legion in their BSC's, their MBA's, even their Doctoral qualifications but it does mean that no formal disciplinary body or professional pressure exists to promote use of evidence by any manager who refuses to do so.

Secondly, even some senior (former) NHS managers such as Learmonth (2000) oppose the scientific method and suggest that management is not an automatically good thing as it is believed to involve the exercise of power and the exploitation of others. These critics find some resonance in the media and popular cultural account that managers do not wish to consider the impact of their decisions on stakeholders. Ultimately, in my working life, I deal with these situations all the time, the adoption of evidence based practices is likely to be organisation specific where an NHS manager, typically an incoming Chief Executive or Director takes the initiative to build an evidence based culture. Fads, fashion and management consultancy are more often seen in

the design of a decision making or decision support system than problem-based reading and discussion of research summary.

Before I began, I was expecting to find that the Chief Executives would consider evidence based decision making to be a luxury. By luxury I meant that it was used sparingly and where a big decision/occasion merited detailed consideration. Implicitly a luxury would not be something they used every day. I also expected there to be a strong degree of convergence between the leaders given that they were working in the same health market, with the same policy framework and were using each other as reference points for acceptable norms of behaviour. I had considered this beforehand, probably as it matched my own practice when I had been a Chief Executive, and thought what a terrible waste this was. I declare that I remain neutral on the position of whether we should use evidence based decision making but with the amount of control we have as executives over risk, expenditures and investments it struck me as sad that we would not or could not practice an evidence based approach to these critical decisions.

Relevance and Rigour: the Hierarchy of evidence and the realist synthesis

Current schemes for evidence hierarchies were developed mainly for clinical research questions and therefore place major emphasis on randomised controlled trials as the main and most convincing evidence in the evaluation process. These types of study are rarely available for lifestyle-related factors and might even not be feasible to obtain. Arguments are advanced to support the notion that a modification of currently existing 'levels of evidence' as developed for clinical research questions might be necessary. Thereby, one might be able to accommodate the specific aspects of evidence-related issues of recommendations for primary prevention through lifestyle changes, like dietary changes. What I wanted to do in this study was to make sense of the evidence hierarchy for NHS managers to make sense of it, organise and follow their response to evidence given that the NHS is not a randomised control trial in total.

Levels of evidence have been used widely in evidence-based medicine. In this context, hierarchies of evidence have been further developed and modified. During the past few years, several organisations have created their own version of a hierarchy of evidence. Whilst in all these hierarchies the lowest level of evidence is given to expert opinion and the highest level of evidence to systematic reviews or meta-analyses of randomised controlled trials (RCTs), there is considerable variation among the categories in between. Common to all of these modifications is the emphasis on RCTs and meta-analyses thereof. But the question remains in the context of healthcare in England, how do the managerial leaders feel about this, is the meta-analysis believed to be the prime, the apex of decision making tools in non-clinical fields. Is it even respected by these people in clinical settings?

This (in the clinical context) well-founded grading system based on RCTs is now commonly regarded the one and only way to provide reliable answers to all medical questions. Even though it is stated in Cochrane Collaboration handbooks (2008) that reviews of other types of evidence can be helpful for decision-making, especially in areas where RCTs are either not available or not feasible, the stigma that everything else beyond RCTs is second – or even third-class evidence and therefore basically not credible is inherent to this not foreseen expansion. By making the manager come alive I wanted to understand whether there was a contradiction between the stigmatisation of everything but RCT in the medical and managerial parts of the same organisation.

A critical appraisal of the hierarchies of evidence and their application appears necessary, however, because a specific type of research question – mainly the evaluation of therapeutic effects – has driven the development of these hierarchies. This has led to the specific order and inclusion of certain study types. Only recently, levels of evidence have been published which take into account that different medical areas require different sets of levels of evidence. The Canadian Task Force on the Periodic Health Examination (1979) differentiated the following research categories and now presents separate hierarchies of evidence for each of these categories:

- Therapy/Prevention/Aetiology/Harm;
- Prognosis;
- Diagnosis; and
- Economic analysis.

In many of the grading schemes presented previously, observational research has been shifted to lower levels of evidence and/or the grading of recommendations attributed only second-or third-level grades to recommendations based on results from observational research. In addition, different types of observational study were often listed together in one group without differentiation of study designs, and often were not presented in their completeness. For example, several hierarchies of evidence do not even mention cohort studies at all.

The widespread notion that only RCTs are a valid basis for type A recommendations might delay or even stop decision-makers in the public health sector from devoting attention or resources to primary preventative measures just because, according to certain schemes, no 'grade A' evidence is available. If the sum of all evidence points in one direction and plausible alternative explanations are not present, the mere fact that 'only' observational studies are available should not automatically preclude one from deriving recommendations. So it is clear that the individual experience of the NHS manager can credibly be different to the RCT model. But by holding up a mirror to the people I talked to I wanted, in a non-judgemental way, to see where they sat on the spectrum of the credibility of evidence.

Individuals or the chairs of the groups to be recorded were initially contacted by email with a very prompt follow up by telephone. I outlined the nature of

the project and the contribution I felt the individual or group could make to my initial piece of qualitative research. I explained that all interviews would be taped, but that the material gathered would be considered confidential by me, with no identification of individuals except by some implicit membership of the taped group meetings. All of the individuals I approached were happy to help with this piece of the project, many suggesting this was an important discussion in the NHS that warranted further investigation. All of the interviews were conducted at the interviewees' work place. The meetings that were recorded happened at normal monthly meetings with the agenda of the previous months meeting including an explicit discussion about my authority to record the events verbatim.

I emphasise the mirror holding nature of this work and the questions this raises and the most suitable structural model for this is grounded theory (1967). In addition, what excites me about grounded theory is that it analyses the data with no pre-conceived hypothesis. Rather than searching for data that confirms or rejects my hypothesis, I can spend my time searching out the concepts behind "evidence based management" as they reveal themselves to my cohort of participants. Maybe the answer or question is unclear, but I can conduct a study on the nature of evidence based decision making as it is judged and participated in by NHS managers. A possible criticism of grounded theory is a lack of rigour due to careless interview techniques and the introduction of bias. On the other hand, a working awareness of bias is imperative in all interview research and as long as the researcher genuinely has discarded any preconceived ideas before collecting and analysing data then the interview technique is a neutral tool. For me, I have long gone past the point of wanting to introduce or reject evidence based management in the NHS – I simply wish to understand if, how, when and why it is used or rejected and to reflect that back to NHS managers themselves. For this reason, grounded theory is an appropriate tool.

After Rousseau

The UK government (funder of the NHS) proposes an approach to management that involves executives making decisions through the provision of increased access to information and this is, in itself, consistent with the philosophy of evidence based medicine which features strongly in the compliance and governance process of clinical/medical care. In practice the changing role of the executive in NHS management in this area is uncertain, despite being well researched as the literature review shows. Despite the accountability of executives being very clear and that managers in the NHS are ideally placed between the aspirations of the public/taxpayer and practicing clinicians, they are still ultimately viewed as an addition to the medical-patient relationship rather than integral to it.

Little in depth research has been done into the implications of the philosophical approach that a practicing group of senior executives in the NHS have to the work of the NHS itself and its bases in evidence based decision making. I wish to pursue the work of Rousseau (2006) on the difference in

management response to management issues depending upon whether the decision maker was equipped with advanced knowledge of the effective implementation of Evidence Based Management or otherwise. Sample selection for this testing of Rousseau in a field environment was essentially pragmatic, based upon people who knew me well enough to give frank disclosure, but not well enough to have perceptions about what I thought the “correct answer” is. (I have no view on the “correct answer”).

Elliot (2000) studied the paperwork of managers and clinicians in one region of the NHS and in depth interview and documentary analysis were used to collect evidence. Elliot used the ‘one region’ method favoured in my research proposal for reasons of practical concern – time, money, co-ordination – and also because the concept of the region was meaningful in the NHS. The region represented a natural cohort of NHS managers and a distinct area with a variable degree of autonomy from the Department of Health over how decisions about resource allocation are made.

Giddens (2003) posed the point that - policy makers have to get something out of research if they are to use it. Further, that it is necessary to consider which arguments are likely to be useful or gratifying to which policymakers. Giddens makes the point, significant for myself as an NHS employee studying the NHS, whilst part funded by the NHS to undertake the academic course and research, that it is still valid for the researcher to influence policy makers through an extended process of communication.

A synthesis from the literature of Rousseau proposes a juxtaposition of management decision making between systems that adopt evidence based management and those that avoid the use of research. The questions proposed by Rousseau are worthy of further discussion with practicing NHS managers. Some additional ideas were encountered in the literature review. Learmonth and Sambrook (2006) both say that the significance and implications of management language are an important part of this study, but it is difficult to continue to pursue this area within the conceptual framework. Conversely, Mello (2007) writes about the preoccupation of management with norms and averages and this “myth of the mean” is a particular branch of decision making tools that is possible to consider further. At the core of the conceptual framework is an evidence based organisation of knowledge, and supporters of this school of thought are sceptical about experience or wisdom. Sherman’s model of grading evidence from weak to strong, based on rules of scientific inference, would say that Mello was correct. In Sherman’s (2002) view a manager who uses evidence but then ranks this evidence against normative performance/behaviour is guilty of weak decision making just the same.

Medicine is a success story as the first domain within the NHS to institutionalise evidence based practice. The literature says that more than scientific insight is needed to create evidence based practice. Guidelines do not of themselves, equate to evidence of implementation. An evidence base

can only improve outcomes with adherence and therefore it is necessary to note that the heart of the conceptual framework (an evidence based organisation of knowledge) is only a partial proxy for applied evidence based decision making.

Tony Kovner (2008) commissioned 14 case studies on management interventions in health care organizations using an evidence-based approach. Kovner found the managers did not follow a rigid template but made significant attempts to properly frame research questions, obtain evidence with a balance of viewpoints represented, decide whether the intervention could be adapted to their organization, analyze what it took to make the intervention actionable, and consider whether further evidence was needed.

The interventions involved: emergency preparedness, leadership development, the chief learning officer, forming a corporate university, criteria for hospital evacuation, chronic care management, improving pain management, improving health of underserved children, the business case for a hospital palliative unit, state Medicaid management, quality management in home health, inpatient planning, and improved operating room scheduling. The authors and editors of these cases studies believe that managers in these context had better evidence than is customary in considering these management interventions.

Kovner concluded that evidence-based management is not widely used by health care managers for the following reasons; first, the business case for return on investment has not yet been reliably made. Second, widespread use would shift power away from senior toward junior managers. Third, hospital boards do not regularly review the quality of the managerial decision-making process. David Fine suggests that in the field of management, unlike clinical medicine, students are not taught to value and depend on studies as physicians are, and in part because of the lower priority, there are fewer studies done.

Whatever the merits of evidence-based medicine, it got off to a rocky start. When Guyatt began championing it back in the 1990's, he called it "scientific medicine," but he learned quickly that if you want to start a revolution, it helps to pick the right slogan. Many of his colleagues were outraged by the implied insult to their expertise. So he quickly went with "evidence-based", and tempers cooled.

Little in depth research has been done into the implications of the philosophical approach that a practicing group of senior executives in the NHS have to the work of the NHS itself and its bases in evidence based decision making. I wish to pursue the work of Rousseau on the difference in management response to management issues depending upon whether the decision maker was equipped with advanced knowledge of the effective implementation of Evidence Based Management or otherwise. Sample selection for this testing of Rousseau in a field environment was essentially pragmatic, based upon people who knew me well enough to give frank disclosure, but not well enough to have perceptions about what I thought the

“correct answer” is. (I have no view on the “correct answer”).

Grounded theory and qualitative material

The overall aim of this research model is to enhance good practice in the craft of management in the NHS. To achieve this aim my objective in this piece of qualitative research is to conduct a systematic investigation into current perceptions of evidence based management including perceived barriers to its use and also including perceptions of good practice in the use of evidence based management. It was also necessary to begin to ascertain perceptions of skill deficits in this area and factors viewed as contributions to these deficits. The effect of the researcher as an observer is unknown. It could have an effect on the interviews and it may inhibit parties who participated in the review of meetings. A further limitation of the study is that I only included leaders from within the NHS East Midlands and it is possible that NHS regions may be more or less equipped to engage in a discourse about evidence based management. The strength of this study is that observation and participation with individuals and the groups by the researcher on an ongoing basis in the NHS in East Midlands increase the credibility and trustworthiness of the findings.

Even champions of evidence-based practice acknowledge that the approach has limits. “Some things can’t be tested in randomized trials, and some things are so obvious, they don’t need it,” says Dr. Paul Glasziou, director of the Center for Evidence-Based Medicine in Oxford, England. (2007) There have never been randomized trials to show that giving electrical shocks to a heart that has stopped beating saves more lives than doing nothing, for example. Similarly, giving antibiotics to treat pneumonia has never been rigorously tested from a scientific point of view. It’s clear to everyone, however, that if you want to survive a bout of bacterial pneumonia, antibiotics are your best bet, and nobody would want to go into cardiac arrest without a crash cart handy. “Where randomized trials are most important is where you’re trying to affect a long-term condition, like stroke or cancer,” Glasziou says.

Finally, the very definition of evidence-based medicine is something of a moving target. Physicians who encouraged their female patients to take hormone-replacement therapy to prevent heart problems later on were practicing a kind of evidence-based medicine, since the best available evidence at the time – observational studies and the like suggested a benefit. Of course, when a randomized controlled trial showed otherwise, the advice changed. Even at that, the case is not entirely closed. Some researchers now believe there may be a window of opportunity right around the years of menopause during which hormone-replacement therapy could help the heart. Proving that would, naturally, require another study.

All the same, few people deny that the trend in medicine is increasingly to be guided, if not governed, by the data an idea that is spreading to other fields as well. Evidence-based practice is now being taught in nursing, general education and even philanthropy, thanks to the influence of the Bill and Melinda Gates Foundation, a results-based group if ever there was one. You

could see even the political fights over global warming as the birth pangs of the new practice of evidence-based policy.

But it is in medicine that the practice will have the most emotional impact. All patients would probably benefit if their doctors were abreast of the latest data, but none would benefit from being reduced to one of those statistical points. “You have to be able to take a good history and do a physical examination,” Guyatt says. “And you have to have an understanding of patients’ values and preferences.”, there is still as much art to medicine as there is science.

Revealing the role of the manager in the NHS

Five in depth interviews were held with leading managers in the NHS. Three meetings of senior NHS managers in the East Midlands were also recorded. Interviews were transcribed verbatim and interpreted with the aid of template analysis based on the Rousseau model as summarised above. The interviews and the meetings were structured around three major themes from this analysis concerning the extent to which the participant believed evidence based practice is a norm or an ideal, what tools they and other NHS managers actually used and whether public and politicians want decisions made on the basis of the best evidence possible. Let me start the reporting of this interview with two of the leaders who have been on both sides of the clinical and managerial debate, starting as clinicians but latterly attaining real top jobs as executives.

Right, well I think in medicine, it's sort of the norm in that there is a real status to understanding the evidence base in medicine, so the medical hierarchy is based on a sort of expert model, if you know the most, you're the most important and so they work very hard to demonstrate that they know the evidence base; you see it in junior doctors particularly, they are very keen to say, not just that they know what they're doing but that ...d...d...d....d – here's the evidence base to support it and therefore promote me! That's the sort of view you get. (Respondent 5 is a doctor of some seniority working outside of the hospital environment who has transferred to a managerial role by career progression but is well respected by colleagues for technical understanding of medicine).

For senior managers, oh I suppose consultants in the Health Service, it's a kind of expected thing, but that's all about the management of patients; and although people profess that, if you really pin them down on the evidence, a lot of the time the evidence is not what's supporting it, it's a sort of dogma around the subject that often isn't challenged very often, and I think that's one of the reasons we have lots of variations in clinical practice, because the evidence 20 years ago, is know very well by some consultants, and they've carried on doing the same thing regardless of what's happened. (5 again, this time revealing one of the hidden aspects of this dispute between doctors and managers – whether evidence still counts as evidence over time or whether its value diminishes rapidly, more rapidly than career progression).

*You write a letter to an MP and you can get an intervention tomorrow can't you so! But they don't want to intervene based on evidence though, they want to intervene based on electoral support. **Ok**. So if you look at the things that've been prioritised by Health Secretaries lately, they've all been around what the public say they want; the public say they want cleaner hospital, they're frightened, so that's top of the list; they want shorter waiting times, ok, so that's top of the list. And, what's the latest one, I don't know, but anyway, that's how it works – they haven't looked at the whole system, what does reducing the waiting time to a certain level do to the rest of the system, what things are not prioritised as a result? So they haven't taken a scientific approach to what would make things better. (5 in response to a question about whether there was any respect for evidence based decision making amongst political leaders).*

*I think that's a very narrow definition of management ...**carry on**.....to me, that's a definition of planning. My definition of planning is about ensuring that those who have responsibility for resource and allocation, do so in an informed manner, that's almost the same as what you've called management – the allocation of resources, scarce resources. To me, management is the function of achieving organisational, or achieving the objectives which are set for you, you do that by management, and that can be about resources, it can be about resource utilisation, it can be about service provision, it can be about moving the chair from one side to the other, moving 100 chairs, I think you need management tools, techniques and processes, and that to me is what management is about, it's about a set of tools, techniques and processes which achieve an objective. (Respondent 4 is a clinical who, though successful in that arena, decided to move into a more generalist managerial role rather than lead a team of clinicians. He is answering a question about whether their skill set acquired in clinical settings had benefited their managerial practice. The respondent disagrees with my concept of management).*

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The use of qualitative material as a quantitative person

Accountants do not traditionally deal with qualitative data such as whether a patient was happy or sad or whether it looked like to him, that his father would die when a patient brought him to the emergency service. Qualitative data is not objective. It cannot be reliably verified. Quantitative data can often be verified – you can see the evidence on paper that it is correct. Accountants like myself, like things to be clear and unambiguous, for there to be no doubt, for the amounts presented to be clearly verifiable. In this document and throughout document 3 and document 4, I will be following a reflective journey concerned with the need to be more flexible, more willing to embrace new sources of data from qualitative sources. There is still a problem that I face through traditional research designs usually rely on a literature review leading to the formation of a hypothesis. The literature review (this document) has not, however, helped me to create a test capable of experimentation in the real world as I had hoped. I have read about grounded theory and discourse analysis and hope that they may prove appropriate tools to keep some discipline and structure in my thesis despite the problems I am facing.

The literature review offers the following insights.

Discourse analysis (1952) is defined as “concerned with the interrelationships between language and societies and as concerned with the interactive or dialogic properties of everyday communication”. To this are added two subdivisions – genre and ideology. All of this is relevant in my study of management in the NHS because of genre and ideology. What is vital for the reader to understand as we progress on to the analysis of a specific decision, is that, without retro-fitting onto my material there was something that I hadn’t anticipated, that a real human narrative evolves and in the conclusion I use the Rousseau model to reveal that however the manager feels about ‘evidence’ as useful in their day to day behaviour they think they are playing a different game.

Through critical thinking or philosophy about the condition of management has existed throughout the study of NHS management, I find discourse analysis as created by Zellig Harris very useful in the analysis of the interviews I undertook. Harris was a true innovator because he maintained that the ‘sense making’ or classification system used is more subjective interpretation that is conditioned by social surroundings and the dominant ideas of its time. Alternative writers such as Poster (1990) or Steele (1997) say that discourse analysis is actually impossible to do with my level of training in the subject. Such alternative writers take a fundamentalist position, that with my interviews, discourse analysis cannot provide definitive answers and the best I can hope to achieve is an insight about any continuous debate but that it would lack conclusion or authority. For me though, what Harris offers is a useful low technology tool that can lead to a fundamental change in the “practice of an institution, a profession or even society as a whole” (Harris). I also like the Harris method because ultimately it showed that it could evolve from its low technology source. It was developed into a system for computer

analysis of natural language by New York University (NYU) and in particular applied to medical informatics. Known as the Medical Language Processor, it is widely used in the field of evidence based medicine which ignited my original concept of a study of evidence based management in the NHS.

ANALYSIS OF A PARTICULAR DECISION

How was the particular decision bounded?

Investigating the criteria used to assess the quality of a decision is a key objective of the research presented here. The way in which evidence is assessed is closely related to the perceived status and credibility of the evidence itself. It is possible to provide an idea of some broad areas the respondents seemed to take into account when assessing the quality of the evidence. The following comments reflect the extent to which the evidence reflects technical expertise in this area and also the neutrality of judgement when faced with the evidence. I chose to focus on a particular decision. The cohort being followed were charged with conducting a deep clean of clinical areas in the NHS in response to high profile media and political concerns about infection rates and the effect they were having on patients. The worst outcome for patients is for those with poor health and reduced immunity due to a range of factors (age, diet, morbidity) that proximate exposure to these infections would in fact kill them. That much was agreed by the cohort but the decision was around the way they approached the instructed solution of a 'deep clean', and the extent to which the assessment of the quality of evidence is used in that decision. A subset of this observation is the extent to which the use of evidence is seen as intuitive decision making rather than the systematic application of criteria.

Turning first to respondent 4 who is, you will remember, a clinician who moved to management early on in their career.

Who should determine the evidence, I mean, you used a very, almost, the answer's in the library approach, is that right, is it people who are skilled in research techniques, is it academics, who is it that gathers the evidence? Well I think the evidence does tend to be gathered by academics, but then there's a body of evidence which is experiential and gathered up by the individual. (4 what he is saying is that the answer to deep clean might be something that universities can be equipped to design solutions for there is something even more important in the role of the individuals that interprets and develops the academic model. Remember here we are talking about 'deep cleaning' to rid hospitals of deadly bacteria – a decision more closely related to laboratory control than most clinical interventions and yet the sense that it isn't quite the whole picture prevails).

The bare below the elbows thing – ok – I was in a Board meeting with my Chairman, where he was adamant we'd got this letter from Alan Johnson saying that all hospital workers should be bare below the elbows, so they shouldn't have watches and rings on and things like that, so that it would

promote hand washing and it would reduce infection, he was adamant that, this is what the Health Secretary says therefore it's policy, and we must do it, and he wanted us to write out to every clinician telling them that we're going to do this and we're going to come in and do spot checks in hospitals. (5, our eminent doctors, rebuts the policy that his own boss is using. 5 demonstrates a deep despondency with his bosses response to politicians and glumly reflects on the lack of evidence for the policy!).

Next, we turn to our first recording of a group response. Group responses are always bound by a box in this report to enable the reader to understand that such things were said in a meeting, rather than by one person. In a meeting, ideas diverge and converge and the linear pattern I give to the quote is a faithful representation of the idea, but that the people speaking may have been numerous.

3 is a group of people who meet monthly to review how their own organisational response to the NHS might work with other NHS organisations to smooth any avoidable conflicts and contradictions. Remember that, although all part of the NHS system, these people are executives in charge of statutorily independent authorities and accountable to the public as such.

And I went to the Chief Execs column ergo, seminar in London, David Nicholson (the Chief Officer of the NHS nationally) was up on his feet and he said, I go round the country, and he said, some people would rather have an argument with me about whether there is any evidence base about deep cleaning, than get on and do it, they need to just do it. I thought, what an arrogant pig that man is; well he isn't, because he's a great guy, but from their perspective, they have a different viewpoint on the world, their viewpoint is, the public have lost confidence in the NHS, the public must have their confidence restored in the NHS for their own good and for the good of the politicians. (What is of note here is that the whole group of 3 reflects what respondent 5 said that the policy was more important than the evidence. In fact, the de-facto top manager in the NHS was saying so and despite some initial disquiet about the personal motives of David Nicholson, even he is distanced from the politicians in the implementations of policy. Ultimately, the political imperative is and was respected though).

So you need to disentangle the means and the end, and focus on the end, so I guess the end in this case was restore public confidence, and it might have looked like strange move, like throwing money down the drain, strange way of improving the service, but in the eyes of the department, it was getting there, but what they sometimes fail to acknowledge is down at my level, the credibility is then so low. (6 – the same subject, but discussed at another meeting a week later, 6 are a different, but similar group to 3 and they reflect two things. One, that a week later the group are a lot calmer than 3 about the lack of evidence for the policy, but two, they demonstrate more concern that the level they are operating at – though still very high – is a level at which the politicians ‘just do it’ imperative is beginning to lack credibility).

Did the decision lend itself to evidence?

Different managers agreed that clinicians, their staff and indeed the politicians (perceived to be the source of this objective) needed to be exposed to multiple interpretations of why this decision was made. Conversations with politicians concentrated on what was going on ‘out there’ in the media and the public discourse of the problem/decision. Conversation with clinical staff often concentrated on the issue of the perception about what had caused this decision and differences between professionals interpretations of the solution/causes of the decision. The decision did lend itself to evidence, but the conclusion from the views expressed by the interviewees is that consideration of the evidence in making a decision was both vital and in fairly short supply. There was a thematic response that any evidence used in the decision should derive from both an outline theory of the nature of the problem, but relate closely to the practice of NHS management that means that given the potential lack of general management expertise in the area, any evidence ought to be accessible to NHS managers if they were to paint an organisational map that helped them to make decisions.

And that’s typical of a political response, and the medical view of that is absolutely damning, and the difference view is that the politicians are saying – look – we know this works it’s completely sensible, the politicians want it to happen, we know the public want it to be done; what’s so special about these doctors that they can’t wear short sleeved shirts and just do it for the patients’ benefit. And it’s not acceptable for them to say no, they should just do it, and we can manage this, we can make it happen. (1 returns to the earlier

concerns that 5 had about short sleeved shirts. 1 though, if not a doctor, but a practicing manager, who comes from a non-NHS background in industry, but one has been a ground breaking respected NHS executive/leader for 7 years now).

Well, it's an interesting thing, I mean, I guess I've learnt a bit over this, we all got it and went, how ridiculous is that, you know, do they think we don't deep clean areas, you deep clean it, and the minute somebody sets foot in it it's contaminated, it's stupid, witter, witter as you do. (7 is a group of people tasked with the actual implementation at the sharp end. They have roles that have given them accountability for operational delivery of this policy in clinical environments).

And it is clean, we threw some measures at it, we've increased our antibiotic prescribing policing, we put a half time post in there, we've made such a saving on the antibiotic prescribing alone, that we've made that up to full time now and it's still releasing cash which we are putting into cleaning; so I'm not looking to take money out, I'm looking to reinvest it, the place is a lot cleaner. (1 manages to take a pragmatic and organisationally beneficial response – a cleaner hospital – to a policy which, as a member of 3 (group) he would have accepted was flawed from an evidence base).

The uniforms are important, because that's about visibility, so that's what we are doing internally. (1 deliberately develops this opportunistic response. The public has in its mind a fixed view that dirty uniforms or uniforms worn outside of hospital, contribute to the spread of infection. Whilst disagreeing both individually and collectively as part of 3 with the evidence, respondent 1 is again willing to take the opportunity to make some pragmatic and necessary changes to maintain public confidence).

I asked the individual executives about how they had appointed the person to do this job. What were the characteristics of success they sought for this job. Respondent 2 is somebody who has occupied top executive roles in the NHS for the last 20 years and is, in this case, commenting upon somebody who is a member of group 7.

They all did their numeracy test, their verbal reasoning, and went through some 1:1 interviews, 15 minute talk when I told them what I wanted, and then they went through a formal interview. The person who scored the highest on the numeracy, never had a chance at the job because he didn't have the personality; the one who scored the highest on verbal reasoning, was ok, but would never have convinced people of the direction to go in; 'A' scored pretty badly on both, had a blazing interview and she got the job on personality and

potential. I only ever appoint people who can't do the job, because if they can do the job I won't appoint them because they have no where to go. (2, so it is very clear that personality is considered a vital attribute in carrying out this policy and that the individual who carries out the implementation must have developmental capacity. Worth noting is that 2 is pragmatic about how the leader for the task is chosen and whether evidence was of any relevance to the policy anyway).

Take infection control, because you mention that as being one of the greatest, ambitious gains be this government over the next six months to try and restore public confidence, but as you've said, no real evidence base, that anything we're doing is going to affect the world, how does that play out because you clearly identify yourself as wanting to give the public confidence in you being a good custodian of their health service, versus the method that would do that is not really evidence based. No it isn't, and what we've done is made, we've taken some decisions none of which were evidence based. (2)

In summary, I will leave my answer to whether the decision lent itself to evidence to my respondent 4 – the clinician in the past.

And we've seen that already, time after time, the decision on cleaning wards, deep cleans, is not an evidence based decision, it's a decision based around context as much as anything else. I agree, it's good, it's cheap actually, it improves the reputation of the NHS and gets the public off our back, around something that evidence will say will always be there called MRSA, it's actually not bad, the fact is a bad decision on one bit of evidence; so I think subjectivity and judgement of different evidence to make decisions is a real subtle art. (4, I emphasise again that bacteraemia are laboratory tested and counted. This is as near to medicine – by – numbers as it is possible to find in the NHS in 2008 and yet there was no agreement that evidence clinically backed the managerial response. But it was accepted as the right thing to do despite explicit knowledge by managers that this was the case).

Links back to Rousseau and my learning process are available in many ways:

This has changed the way I see things in the following ways. Rousseau starts from a principle that Evidence Based Management will enhance the overall quality of organisational decisions through deliberative use of relevant and available scientific evidence. What is omitted is that NHS managers have a vast behavioural science base relevant to effective management practice on which to draw and yet they choose or one forced to choose by politicians, experimentation and redesign of practices, structures and remuneration that reflect on ever changing (dynamic) social value and mission for the NHS. Therefore, what Rousseau overlooks for the NHS is that the single most important part of Evidence Based Management in the NHS is educating current and future managers and politicians in power and politicians in waiting about evidence-based practices applied in running the NHS. I am a clear supporter of the Rousseau method to describe the world with/without an evidence base but it is not sufficient in itself without using organisation such

as the NHS Institute and HHS Library as a repository of cares and tools that can inform the distribution of evidence based management in the NHS.

If anybody else takes on this research I would start with a tighter definition of the area to be considered. Whilst in an earlier literature review it was important to contextualise all of the players in the NHS using the “decision making box” it is clear from that work that evidence has different meaning to taxpayers – the media – patients – politicians and NHS managers. The Canadian Health Education and Research Foundation, the centre for Health Management Research and the Health Research and Educational Trust of the American Hospital Association all have structures to begin building management communities promoting Evidence Based Management. My recommendation is that a future researcher working with a similar cohort in this area asks the question of whether their study group has the characteristics of a receptiveness to EBM that would enable them to undertake just such an initiative.

It is possible to block out or be more blinkered about Rousseau in the following ways, like evidence based medicine the Rousseau model needs to consider that the professional is not a robot. Education about the method still requires judgement in its application. The NHS manager must also consider the circumstances of the decision and the ethical concern that the management decision may provoke. For example, immediately prior to a general election is not an easy time for an NHS manager to promote the idea that the NHS might improve its efficiency by paying cash incentives to drug users to attend Methadone clinics but to deny the ability of a woman to top-up her cancer treatment by co-payment for drugs. Whilst both decisions may be made by contemporary NHS Chief Executives on the basis of a developing evidence base relevant to effective management practice neither decision alone (and definitely not when they are juxtaposed) will be considered appropriate to the circumstances of an election nor ethically appropriate when portrayed by the media. So I would be more blinkered about finding out what parts of the ‘time’ horizon it is appropriate to take a Rousseau type decision in. In this way, it is important to remember that Rousseau is only describing an hypothetical NHS organisation that uses Evidence Based Management wildly in contrast to the same organisation as a hospital provider where Evidence Based Medicine will most likely actually exist.

What 5, the eminent doctor, brings to the discussion about evidence, is that it is bought into at one level but not implemented. 5 returns to a theme used earlier by him, that evidence needs not only to be relevant to the decision, but time sensitive as well. Here he discusses the causes of hospital acquired infection and whether it was preventable.

I know in several cases clinicians sat down with the architects and drew in what needed to be done, but of course, by the time the PFI arrives, it's all been taken out through cost savings, so the doctors' view is, so you managers are putting us in this position, in conditions which predispose to hospital acquired infection, you won't do any of the things of which there's a very good evidence base that it would make a difference, and so your first engagement

*with us, is to come and tell us to do something for which there is no evidence that any infection has been prevented, anywhere in the world – ever – by doing this, and you think that's the most important thing that we should do. Furthermore, you're effectively saying it's our fault, you're blaming us for the infections, when actually it's all your fault! (What 5 has done here is to draw together two ideas seen earlier – that an idea needs to use evidence, but evidence can be too early to be c** or too late to still be valid. 5 concurs with the idea that 3, 1 and 6 had that the politicians damage managerial credibility).*

Yes, I think the public as body public, would expect evidence based decision making, and quite rightly expect that, and would want it as well. I think the public as Joe-individual probably would expect, would want it, but when it came to them, would probably bring in other subjective assessment criteria. I think politicians are a bit different, and I don't think, whilst they would probably in a purer discussion say, of course we do, I think they will always, and evidence is always driven by context, they would always want their policy implemented – evidence or not. (1, the industry transfer to the NHS concurs with 5 – anybody can buy into the idea but nobody wants to deal with the inconvenient application. Further, I heard that:)

Ok. *So the black and white, the gold standard, the RCT's and so on, that is an academic gathering, and some of the big research studies, you know, we all go back to Mintzberg and all this sort of stuff don't we? So you look at some of the big bits of work that they've done, that is the academics, but I think there's also something about as you move up through a career, you gather experiential evidence, because the context in which we're all operating is continually changing, and none of us enjoy the context in which the research for x was done. So, you know, the operating of the context in the NHS from the political to the economic to the sociological, never mind the technological, the demographic and all the other bits of changes that are happening. (4 is saying that there are good reasons why the RCT basis for a solution to hospital acquired infection may be scientifically robust but organisationally naive).*

Mainly for the good of the politicians, but, it would help the public if they didn't feel scared to death every time they came into hospital. Therefore, we must do something to restore that confidence, what shall we do? (3, the group acknowledges that the public are concerned with confidence rather than evidence, but what group 7 conclude is that with a little more patience, we could have restored public confidence and been scientifically robust).

So, what worries me about that is, was it for the public or was it for the politicians? If it's for the public, I think they'd have thought about it a bit longer, a bit harder and picked a better thing! But then I'm just cynical!! (7)

Finally, this issue of buying into the evidence at one level but not implementing it, is given a humorous twist by 2. Maybe, evidence is only the retro-fitting of lunatics and prejudice after all.

The number of times, and as an accountant you can probably relate to this, the number of times when you look at something, and you come out with the answer, and then you spend time working it up to demonstrate the answer's right and question it, and when you get to the end of the process, you came up with the right number in the first place, and there is something inside people, I have this sort of belief that there is something inside your brain that assembles evidence (2)

The decision making structure

Managers demonstrated a world view in terms of their preference or otherwise for evidence-informed decision making. The decision making structure was seen to reflect a theme that analysing, presenting and delivering this task within the NHS required considerable charismatic management not just an evidence based focus. Occasionally the cohort singled out a specific group who in their eyes particularly needed help in understanding of and/or participating in the decision.

The doctors' view is, ok, 20 years ago, when you were building this hospital (because we've been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you've got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can't clean round the beds. Because there aren't enough beds, you've got too faster through put, so people with infections are moved around the hospital. (5)

I don't know who they asked, they picked the wrong things, but it kind of doesn't matter, do you know what I mean? If they are wanting to change perceptions, you know, if they said, paint your hospitals pink and it will deal with infection, we might have said what a load of crap, but if the public believed that pink hospitals were less likely to give them MRSA, it would have the desired effect. (3)

I mean, I had this very argument with my technical directors, look, I said, look, if people will believe painting the hospital pink will make them safer, then we'll do it. I don't care, that's what we'll do. (3, what is interesting here is that 'painting the hospital pink' has quickly and previously entered the groups language as a shorthand for any method chosen to deal with this problem that is organisationally robust, but evidence weak).

I'm a Chief Exec who is not one who will try to lead totally by charisma, I will try to do it by persuasion as well, and persuasion has a body of evidence behind it – even with my directors, when I want things to go different ways, I will often work with them on a 1:1 basis and show the evidence, so that I can get a quick decision later. You know, and there's something about, I think the evidence has got a role and responsibility. (4 manages to show that evidence takes time to consider and that a speedy decision making process may necessitate protected time to consider the evidence. That means implicitly that evidence does not inherently present to decision makers in an easily digestible form).

1 makes a vital distinction about the nature of decision making in the following quotation. When asked about who and who wouldn't use evidence he draws the answer towards whether you want to make a transformational change to the NHS or simply be a good leader in the mould of the NHS of that day.

It's interesting Nissan for an example, on their in-house college, they're very clear at saying to people, good leaders will keep this company afloat, great leaders will write a new chapter in the history of this company; do you want to be a good leader, or a great leader – because they will train you to be both, but they ask them very, because you know, are you willing to have an ambition for writing a new chapter in the history of Nissan, or do you just want to be the person who keeps the shareholders happy. (1)

THE APPLICATION OF A VALUE SET AND DISCOURSE

What part does blind prejudice play

The implication of blind prejudice for the objective of enhancing good practice in NHS management are profound. What we perceive as 'good practice' itself is called into question. This would imply that there was error in the NHS managers themselves rather than the context in which they find themselves. Whilst there will be a blurred distinction between heuristics and prejudice the term 'blind prejudice' might most usefully be applied to ignoring any conformity with accepted good practice where evidence to inform the decision is simply not sought out. The use of blind prejudice in this context is usually driven by a

desire to succeed in the political context – it is simply an exercise in power. There are many potential decision makers out there, but only so many posts, awards, organisations and years in a career and in the competition for resources and power, blind prejudice is simply a rejection of evidence where it does not enhance the standing of the individual decision maker. The individual is required to be a strong leader, not an evidenced decision maker.

And that's kind of inevitable, but the way I kind of play managing this Trust, you know, if I see a journey, the way policy works, it's seemingly, you know, I think we're going there, the government says we're going there, and all of a sudden, we're off up here, or we're off up there, or we're going down here, and we'll probably go back up there and then we'll go down here.

You know, my job I always think is to translate policies, a bit like a pendulum, know where it's going to settle, and it, you know, somebody keeps bashing it and it's swinging around, you know where it's going to settle, and the trick is I think, to describe what's happening, which may seem a little strange, you know, introducing competitions, subsidising competition. (3)

I can justify that to my organisation, in terms of it being the government wishing to give people choice, wishing to drive up quality, yes it's tough, yes it has very difficult set of issues for us to handle, but they're doing it because they want care to be better, and so you're always describing the end point, and trying to make sense of it and what's more trying to use it to get you to that point, and sometimes that means I sort of half ignore things I've been asked to do, or I throw myself at them with absolute huge enthusiasm because they seem to be going in the right direction.

How do you think you respond to oratory? *You know, if you see a great speech does it leave you cold, does it leave you questioning? I can be admiring of it, I can be motivated by it on a good day, although I tend to be quite analytical and I reflect on things. My nephew said the other day, we were going to see a film at the pictures, and he said he didn't want to go with anyone, he wanted to go on his own, because he didn't like talking about it afterwards, the way you all do, I think I'm a bit like that really, I like to kind of mull things over, and allow things to connect. (3)*

Do you read at all? *Hardly ever, only on holiday; I never read papers, never, I only open the pages quickly in the Health Service Journal. I used to read the Health Service Journal more than I do, but now I just sort of flick over the news and see what's in there, and put them in a pile to read until it falls over, and I throw them in the bin! – recycling, nowadays. (3)*

We had a doctor here say to us, we don't have to comply with the Health Care Commission standards because we're not a hospital! What's that about?

Yes. What end is that a means to? Certainly wasn't about better patient care. The trouble is I think, we half bake the rules and that's even worse than not having any at all because people can make things fit. (3)

Trillion times more complicated than a car engine, but there is no manual for the NHS, so I kind of take the view that there is no evidence on which you can call; when you evidence assess drugs, I mean there are lots of drugs you use for lots of different things, but it's only evidence when you've tested it in circumstances in which you want to draw a conclusion – ok – so it's got to be the drug in that category of patients, and not the same drug in a different category of patients, so it's very specific, and we never, ever have that. (3)

So as a reader I conclude that the cohort will use clinical evidence, I think managers are very much into the development of clinical pathways, working with clinicians and doing the best things in the best way. But as to how the NHS works, the sort of infrastructure, where services are located, how they're delivered, I don't conclude that they do use evidence, I observe there is some, scientific evidence in there, they'll look at journey times, and they'll look at volume, populations and the needs of that population (not been done very well until fairly recently). So they'll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based.

So what I as reader need to be careful on evidence of course, as always, is to make sure it doesn't just fit in with their own values and your own beliefs and actually be a bit more critical about that appraisal. That's one of the reasons for having a narrative conversation, is so that you don't have to pull all your sources out at the same time, but the method seems to have gained some understanding of the role of blind prejudice. To conclude from group 6.

I think in organisational change type evidence around management tools, techniques, where the evidence can often be seen to be quite a subjective set of evidence, or the context when it was developed, might have been different from today – yes you know, the evidence around change management is, there's lots of articles, lots of books and lots of research around change management, in my mind they come down to two things, one is it's like a pendulum, you push it bloody hard and it will finish up where you want it, or the other way you just gently nudge it to where you want it. Now, they are two total extremes, but you can find the evidence for both approaches. (6)

The acceptance or rejection of challenges that don't fit the value system

Let me start this section with a quotation from '4' who swapped between clinical and management roles.

I think my need for an evidence base would have been different at different stages in my career; the fact I've come up the clinical route, I hope I've use an evidence base for my clinical work previously. I've sought an evidence base for the interventions I've made to make things work and happen differently throughout my career, because it seems to me, if it's worked somewhere else, ie, there's evidence it's actually helped somebody else gain objective or reach an objective, it's probably worth trying here. So the evidence might not be gold standard evidence, but there is some evidence base to what I do. So I think that probably never peaked, but since I've been in management roles, I think I've always had, and considered evidence for the way I operate and what I do. (4)

Maybe a way to view this is that rather than viewing evidence based practice as squeezed out of the prevailing value set of NHS managers, it is anticipated that evidence based decision making may become the mainstream approach of the near future. There is a need therefore to review how the NHS managers recorded accept or reject challenges that don't fit the prevailing value system, how do values adapt? If the NHS is living through an era that does not favour one or more potential methods of decision making this may be temporary. How does NHS management introduce alternative approaches and consider whether they may become acceptable and even desirable. Can the NHA managers allow themselves to have a critical account of their own management? The record of the interviews says that this self critique is happening, but at the same time, the overall picture is one of the forces of orthodoxy maintaining the "status quo" (as portrayed in the Rousseau model). This, whilst it is possible to see that the NHS managers may be disposed to accept challenges that fit the value system, it is part of the natural balancing. None of the managers expressed a desire to explore the 'eccentric' (or abnormal) values that challenged the prevailing orthodoxy but they were willing to be flexible and accept challenges when they could point to something particular that prompted the change.

At a particular point in the conversation this rejection of the rules, this acceptance in the executive was becoming clear so I asked an explicit question.

Ok. Do you think we back off, from the implementation of the rules sometimes? *I think we do, yes. Well they are sort of political; some of it is a genuine means to an end, and I can see that: the reason we brought the private sector in and allowed them to be paid stupid amounts of money, is to get them in, and maybe the same as with practice based commissioning, now they're talking about paying them tariff, albeit the same tariff at the very low end complex work, I suppose it's a step in the right direction, but we usually do it because we've fallen flat on our face, rather than we ever had a grand plan. (8, who was an executive recently arrived in the NHS after 3 years away in the private sector, and a successful 20 year NHS career beforehand).*

So I asked the same question to 5 and there was broad agreement that sometimes the rules needed to be broken but because the rules themselves, although based on an orthodoxy were stupid!

There was something Melvin Brag was whittling on about on the radio whilst I was driving, about people who believe there was black blood and red blood and all about bloods being out of balance, and they used to bleed you, oh for Gods sake! But then we used to burn witches at the stake too didn't we! (4)

This wasn't the first time BBC radio 4 was used as a source of reference and this stimulated most noticeably a quotation I heard almost as an aside from 1 when we were just starting our talk together.

I'm just listening on audio, to the Blair Diaries from Alistair Campbell and I'm not so sure there, I haven't got far enough into it, so great leaders, I think, do have an evidence base and do consider the evidence, whether they - keep on going back to it, how they then fit that into the context of the situation of where they are, I think decides on how much credibility they give to the evidence. (1)

It became clear that these executives did not stand alone in their decision to accept or reject challenges to the prevailing orthodoxy, they were very concerned that 'we' (the cohort of NHS managers) had sometimes used the wrong benchmarks in assessing performance and evidence.

Another thing is, we get complacent about, we compare ourselves with ourselves, we talk about world class commissioning but we never look at what's happening in the world, we look at what's happening down the road, so if you look at Children's Services for example, our Children's Services, our best Children's Services are some of the best in the world, but our worst Children's Services are terrible. And if we look at outcomes compared to Europe, and the Unicef study compares us with most major economies, not just in Europe, and we're right at the bottom of the heap for Children's Services, why should that be, when we know that our best services are absolutely up there with the best. (5)

To that end the self-critique is not just of their own approach to evidence, but a critique of whether the group they identified as we had got their own orthodoxy wrong and that they were trying to evolve an answer or change from within rather than shouting from outside the team.

Finally, the conversations turned to people who were considered to be outside the value system. Firstly the politicians and their motivations were seen as a major challenge to whether evidence based decision making was welcome.

Politicians, do politicians want evidence based decision making for the NHS? No, they want to be elected, and that's the bottom line, and as long as you remember that, then everything they do is completely understandable! (5)

And then the public – who despite being patient, customer, taxpayer and friend to the NHS:

The public has very limited perceptions as to what the NHS is, and if you say to people, just list me the NHS from 1-10, it'll be ambulances, A&E, GPs, maybe surgery, and that's about it. Where's drug and alcohol abuse, where's mental health, where's learning disabilities, where's speech and language therapy, where's GUM, aren't anywhere to be seen, and that's because as a society we foster it, don't we, where are the bright lights, they're on an ambulance, they're outside A&E and the GP down the road, and of course on TV. (2 were considered to have little to add to the evidence based debate not because they couldn't cope with the debate, but that 'they', including it must be said, those who worked within the NHS in some cases, had a fundamental lack of insight into what the NHS down).

Lastly, and probably telling in this consideration of challenges that don't fit with the current system, is the sense that evidence based decision making cannot ever win the day by hegemony but it cannot be disregarded either.

*I'd expect them to do nothing which is contrary to the evidence.....**ok, I'm interested now**.....*firstly I'd not expect them to do anything that's contrary, I'd expect them, if they don't follow best practice, to have thought why not, and to be able to justify that to themselves, and therefore to the organisation. (2)**

The hegemony of organisational structure – reproduction and transformation

Managers in particular in this project, described a situation where their own control over the decision making process had been to some extent, lost through the requirements of audit and the promotion of certain themes consistently in the NHS. Executives have to be seen to be performing in an overt and accountable way and their work must be visible and subject to audit and inspection. A model of performance management is contrasted with maturity of thought and debate over the use of evidence. The external pressure for conformity and consistency is seen to result in high quality decision making tainted by group think. Managers cannot always dwell on particular topics or pursue the evidence base for what they are doing (or being told to do). There is a pressure to be overtly productive in the presentation of solutions rather than consideration of evidence. The interview and meetings material touches upon some of the complex relationships between established management culture, career needs of the managers themselves and the conduct of evidence based decision making. The pressure to obtain recognition for both themselves and their organisation may encourage a pursue of more credible 'target hitting' and leaves insufficient time for a consideration of the evidence in shaping organisational structure. In general, as described in this qualitative material, the current organisational form may discourage evidence based decision making and the need for reproduction will be perceived as less risky.

What I was really trying to say is, why I guess, why do we not have a think tank of credibility to have these debates, it always seems to come from a policy angle; no matter what the policy sub-group is called, you scratch below the surface and it's always either right wing, left wing, drug funded, you know. There doesn't seem to be an appetite for any environment within which this debate can actually happen. (5)

Fashion. The simple arcane practice of following the latest trend or idea, of importing behaviours from other societies was seen as damaging to an evidence based NHS. In a way it is believed that evidence is crucial to an acceptance of organic (internally generated) change within the NHS, but even higher than evidence in the hierarchy is novelty or importation from other systems.

I mean, we do have experience, we do have learning, we do have other places and other countries doing it differently to us, from which you can learn things, but it doesn't mean that you can straight forwardly apply them. And it fascinates me in a way, because we do the whole army of, the House of Commons is traipsing around the world visiting China and wherever. When ever I meet our local MPs, they've always been somewhere abroad to learn how to do something, and yet, when we do find things that work, it was all Kaiser, wasn't it? Which was an integrated primary and secondary care service, and did we learn from it? No! You know, we almost steadfastly refused to accept that it might possibly work and it was worth considering, because it didn't fit the positive framework of choice and competition. (8)

We put people in positions which are very difficult to back down from, and we've now exposed them in a way, and I think, the fear of world class commissioning will expose the leaders again, and that's why people sometimes abreact when it's suggested that we need to examine our own portfolios, our own evidence base, our own tool box, and actually check it's correct for world class commissioning. (4)

But there was one part of the organisational transformation from importation of ideas that was widely admired – the model of foundation (semi-autonomy) trusts imported from Spain.

One of the things that's happened of course to FTs is that they've attracted a different calibre and type of Chief Exec, arguably. I think, you know, we've advertised for two director posts lately and there are a lot of people who want to work for an FT.....ok.....there are a lot of people moving out of Trusts that wont make it to FT status, so you could say, what we've been doing is sapping the best management resource out of the non-FTs to maintain the performance of the FTs. We've also attracted, I think, some quite different people in Non-Executive roles and Chair roles; the Chairs of FTs, a lot of them are, like the freedom bit, like the get on and do run a business thing. (3)

The key distinction between a leader who had risen in confidence and therefore had the ability to avoid simple replication, is that they were given protected time to personally develop.

I think there would be nine very close opinions of what management is, because I think leaders, or people who have got to leadership positions at any part of the organisation with some development behind them, as opposed to just by natural progression, tend to have been on development programmes, where they have spend a lot of time considering leadership as opposed to management. Management is a tool and a technique, leadership is a bit more than that. (4)

Equally it was possible to distinguish a large amount of individual autonomy that would be given to and/or earned by people who worked even for some quite direct and authoritarian managers.

And if somebody passionately believes that the answer's right, then what I'll never do to them is say 'you're wrong'; what I'll say is, 'well, just go away and have a think about this again' and then sometimes you find they do come back and they've modified their view. But I'm a big believer that when you put somebody in a position of, you know, authority to deliver, as one of your senior managers, you've got to give them their head, what you can't allow them to do is to go off the edge, and I think one of the products about being at a place a reasonable amount of time, is that people know how to read you as well – this works both ways. (2)

So the question remains about whether the NHS approach to evidence is borne of a desire to reproduce by template expected behaviours or is capable of changing through transformational leadership. One answer is:

You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I've watched them do fantastic things, and I've watched them being stopped from doing fantastic things, because some rule book says it's not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps. (8)

But even 8, who looked for the transformational leader returns to the problem identified by 2 – you may want the manager to make transforming decisions but the executives wants them to be the same decisions they would have made.

Well, he reminded me what the end was, that's what he ultimately did, he kind of made me think about what they were trying to do, yes they did it in a cack-handed, stupid, I wouldn't have done it that way, kind of a way, but given that that's what they were trying to do, it was really not helpful for us to jump up and down and say 'there's no evidence for this', because it undermines the whole investment programme they've put in place, which wasn't adding any value to anybody, it was just making it wasted money, instead of possibly purposeful money. (8)

In summary, this section, whilst leading to few conclusions about the use of evidence does suggest that if evidence based management is to blossom in

managers in the NHS it will have to be given a foreign label, taught on management courses and lead to the same conclusions the boss wanted it to.

How the system could learn, this is what my study so far has said

Chief Executives and the elite managers of the NHS must be fellow travellers in the creation of the concept before they will be judged by it. Whether they trust anybody else to lead this type of NHS management evolution is debatable. Whilst it is not credible to say that the NHS is unique, and indeed none of the respondents said this, there is a particular refrain that it doesn't compare to any other business. Even if the manager or executive is relatively new to the NHS it does not take long for this cultural reference point to represent itself in their behaviour. There is an innate nervousness about introducing a concept such as EBM to the NHS management structure, with a worry about how it will be perceived in the press and no recognisable communication method to ensure that their credibility is maintained or enhanced by fulfilling a commitment to EBM. In order for a learning system to evolve around EBM the Chief Executive must engage with it emotionally displaying interest and pleasure in the message being cascaded. The type of incentives not only include a demonstrated generation of public service ethos but also an emotional attachment and pleasure in autonomy, applause, status and plaudits for their organisation where it achieves its targets. It is clear that money (personal or organisational) may help them to embrace an organisational approach to Evidence Based Management but that the benefits to patients makes them more responsive to system learning than money. If Evidence Based Management were to find itself imposed upon rather than developed by Chief Executives and locum? Managers it is clear that they are skilled enough at organisational cascade to make it look that they find it palatable without actually making it happen.

In order for the NHS managers to 'learn' then the contradictions and ambiguity that are thrown up need to be accepted without feelings of loss of status or embarrassment. The essential contradiction with reference to Evidence Based Management is that the Chief Executives do value somebody holding the detail, somebody having a handle with what is going on but they themselves like to set direction with autonomy, expressing their judgement and decisiveness even when they confess to having little idea what is going on. For example, the managerial response to policy may not be coherent when compared to the surplus or deficit financial position of the organisation. The managerial response from the Chief Executive need not take into account the best way to improve efficiency on an evidenced basis nor how to make investments on an evidenced basis (for example opportunity cost or Quality Adjusted Life Years QALY's) only that they have an active leadership role in the decision. So to the ambiguity inherent in adopting a learning approach to system development.

Whilst as a researcher I was able to ask for clarification of particular aspects of the application of EBM, the elite manager must feel that a codification of EBM is not just adulterated into a form of Pedantic Control. The traits that the Chief Executives and Senior Managers demonstrated were strong leadership,

setting a good example, negotiating and navigating the future and co-ordinating disparate strands of policy into one coherent whole. In order for EBM to rise above the change of pedantry into a system wide learning model it would have to enhance the ability to lead, negotiate, navigate and co-ordinate. The risks from adopting a learning system are to appear disengaged and not genuinely enthusiastic about looking at alternatives for each decision based only on best available evidence.

So from this section is it possible to conclude that such a change cannot come from internal experience based actions or managers sharing experience and evidence from current practice? To be honest, that is the only conclusion that can be drawn. Take this in the context for the introduction of a policy by a director that they know to be evidence based or the opposition for a policy known not to be evidence based by the same director. It is imperative that the manager is prepared to respond to challenges based upon a conviction that evidence is 'the best' policy not simply using an evidence-based-approach common to the team.

This result could be seen to be good from this perspective. The Chief Executives are demonstrating intelligence. The elite has shown the ability to interpret policy and understand the business but they are relying on heuristics to drive solutions. The reason this is good is that leadership is visible, to an extent charismatic and essentially a valued commodity. In order to portray this behaviour the executive or senior manager has shown the following competencies/behaviour.

In order to steer a successful course without recourse to evidence they need to be all or some alchemy of the following – politically astute, decisive, hardworking on networks to extend and share political authority. This demands in turn that they are perceived to be young in outlook, flexible/pragmatic, energetic and experienced. All of these are attributable characteristics that leaders cannot acquire themselves – they are by definition attributed by others. Crucially they are also consistent with the characteristics a Chief Executive or Senior Manager will want attributing. There is one characteristic that this rejection of the Evidence Based Approach will attribute and that is 'hard working'. There is no doubt that evidence based decision support is not seen to be 'hard work' but equally it is not clear whether 'hard working' is a positive or negative connotation for the managers and executives. On the other hand, a rejection of EBM could be seen to be bad from the following perspective.

Despite a range of data sources, the organisation will struggle to assert that it is a demonstrable learning system or entity. Given the complex/adaptive and evolutionary nature of organisational survival this inability to learn from the evidence is a drawback. Decisive management without Evidence Base can evolve easily into autocracy and egocentric leadership. Typically this will be bad in that decision making will essentially be short term as the time horizon without evidence about what works is at best 2/3 years (the possible time horizon of NHS organisation stability) but most likely the 12 months of the annual NHS planning and performance management cycle. Significantly the

leader will design systems without the ability to learn from failure or weakness. Charismatic management characteristics demand the rejection or re-interpretation of failures that deny the heroism of the leader. Similarly the inability to learn from failure sets the decision making system of the NHS manager at odds with the medical and nursing equivalents that are at the clinical core of the very same organisation that they lead. This will only continue communication and delegation and restrict decision making to an elite inner circle not a distributed evidence based allocation of power to different levels of decision makers.

When is fine detail important to the decision?

If evidence based practice is seen as something separate and distinctive from day to day decision making, then the prevailing management culture works against the objective of basing decisions on the basis of evidence. On the other hand, evidence based practice may entail rejecting the accepted management orthodoxy and creating a separate quasi-autonomous enclave of interested practitioners. The key to understanding this 'community wide' approach to evidence based decision making versus setting up evidence based practitioners as appellant micro communities, is the degree to which the cohort sample says fine detail is important to the decision. It is not 'evidence base' alone that determines the value set and the discourse – it is the extent to which the evidence base is taken down through organisational views to a granular level before a decision is made.

The first part of fine detail that is important to the decision is what we must ask: not 'do you understand the answer'? but 'do you even know what the question is'.

Because sixty thousand more people die each winter than in summer – why? At a journalistic level we'd say, well, of course they do it's winter – it's cold, so more people die in the cold, they don't die of hyperthermia, they die of respiratory disease, more heart attacks. We'd say, we can't change the weather, that's the way it is. But, they don't do that in Siberia, they don't do that in Norway, they don't do that in Sweden, Canada or Germany. So places which have a worse winter than we do don't have this, they have a little bit more mortality but not much, and it's all down to poor housing policy, benefits, insulation, social care, primary care access, all of those things. So if we were to look at it and say, ok, it's a really big health issue, we could save sixty thousand lives a year. I mean if sixty thousand people died in plane crashes a year what would we do? We'd throw billions at it. So it's happening and we're doing nothing, the answers are out there, other people are doing it – it's very easy. So that's one example.

5, so, let's compare that to the earlier discussion about deep cleaning of hospitals. Managers found peace with the need for a structured political response by David Nicholson but here, in the case of winter death, he was avoiding even asking the question because the public wasn't asking the question. I therefore asked if that meant they thought Nicholson rejected evidence where is said uncomfortable things about subjects the public weren't asking about. The response:

I would suggest that he uses an evidence base for what he's done and how he's moved things forward, along with a set of personal beliefs, so I feel comfortable with that. (4)

And further I was satisfied that 4 was clear that Nicholson had to respond to each decision differently with a fine level of distinction between each.

*So, I think you can use interventions which often conflict. **Ok.** (4)*

And in any case Nicholson was clearly not alone in using the public to get to the fine detail of a problem. Vox Pop even in its most rudimentary form was useful in focussing down on the detailed part of a decision.

And sometimes reading things, I prefer talking to people really, and I talk to a lot of management consultants who kind of say things, it's not that it tells you something new, it's just that it allows you to relate things in a different way. But so can stand in a queue at a supermarket, when you hear a conversation, in front of you, or behind you – you can just have one of those 'ah-ha' moments, that just kind of chrysalises something, and I think a lot of it is in your in heritability to be able to relate things, and relate to people and put yourself in other people's positions, I don't think it's a learnt thing. (3)

Most fundamentally, detail and the use of detail in decision making was seen to be a product of where you were in the hierarchy in fact, detail was seen to positively inhibit the executive function.

*How much do you use email, phone, internet, you know, those sorts of media? Hardly ever, well, hardly ever at work and all the time at home.....**ok, tell me, that's an interesting one!**.....well I've worked out over the years, I mean, I did have a computer at one time, and I worked out, I can type about 20% of the rate of my PA, the very process of opening and closing, and looking for and finding – she can probably do twice as fast as me, and what I find it does is it fails to flag up priorities for me, particularly because I work on two sites. I'll go into my office, I haven't got one on my desk at the moment, because I dealt with them all up there, but there will be a file on the top of my tray that says urgent, and it might have an email from last week, I wasn't in, or I missed, or that's become urgent, because somebody's rung, it'll have a phone message, it'll have something that came in the post, it'll have a note from somebody who walked by, you know, a patient's just about to shoot me, and I'd better know, and, so I've got the ten things that I've got to deal with in the next five minutes, in that tray, there is no way on God's earth that I can process by hearing anything in that way; at home, I'm a shambles! I do it all myself, I do half my emails, and fall asleep and leave it, I've missed the one that said, 'can you let me know by tomorrow' and I didn't and.....**ok**.....so it's a kind of needs must thing, I mean I find it very tedious anyway, because it's very detailed. (1)*

And this was corroborated by the colleague executive when they said:

I think it's good theory, it probably makes good papers and I don't think it does the job, that doesn't mean that I totally rubbish it, but I think it depends on where you sit in an organisation very often, and I think the evidence becomes less important the higher up the tree you go. The higher up the more it becomes intuition and more it becomes esp, the more it becomes knowledge that you don't know you've got. (4)

So we can see that fine detail is important in defining the question, crafting an answer and showing an ethical management style in the NHS but is given little credence in the day to day practice of top executives.

WHAT CONSTITUTES EVIDENCE?

Key words or phrases that are most used

Discourse analysis is a methodological approach that can be used in the study of communication by NHS managers. Activity type analysis permits the identification of characteristic forms of talk in the use of evidence and decision making. It is possible to recognise patterns of awkward or critical moments/words. The transcripts have been selected for their representative nature and simplified for presentation and ease of reading in the 'Rousseau Box' style appendices of this report and in the conclusions.

What I want to do here is to focus on the use of the word 'evidence' and consider its nature.

Let's consider some key words or phrases that are quoted in the interviews and taped group meetings. To the left I have put them in their stated form and in the right, whether this was used frequently, infrequently, positively or largely negative. I have also been clear where the phrase is used more than once but with no clear agreement about its value between managers.

Evidence Based Management	Frequent positive associations. Seen as a good thing, but struggling for a consistent definition. Juxtaposition with Evidence Based Management easily understood.
Evidence Based Administration	Used only once. A potentially semantic definitional distinction but very powerful when used by the 1 respondent. This is a metaphor for an idea expressed by many that the freedom to stray from evidence increases the higher up the organisation you go. Distinguishes managers (higher) from administration (lower).
Evidence Based Leadership	Used occasionally. Very negative associations. Seen by some to be an oxymoron. Seen to be an expedient at best and part of a value set that evaporates when applied to politicians.
Evidence Based Decision Making	Used often, but not surprising given my questions. The phrase 'administration' in this

	table above is key to distinguishing its positive and negative usage. Seen to be cumbersome and more relevant to juniors than executives.
Evidence Based Resource Allocation	Occasional use. Very positive associations. Given that resource allocation is considered a rare, but significant strategic action by leaders the supportive evidence for this is seen as crucial. Most persuasively used in gaining autonomy from the DH.
Evidence Based Reporting	Occasional use. Mostly negative. Seen to be a by-product of 'administration' rather than 'management' and much less importance in performance management than policy targets.
Evidence Based Argument	Occasional use. Mostly negative. Seen to be an insufficient basis upon which to make an acceptable decision. Where it is used it is almost pejorative in its diminution of the quality of the argument.
Evidence Based Learning	Frequent positive association. A clear value exists in the attempt to learn from the evidence. To foster a culture with due regard to evidence is viewed as an overwhelming positive.
Evidence Based Knowledge	Frequent positive associations. The organisation, communication and maintenance of knowledge are all seen to be ways within which the hierarchy of evidence is vital.

These examples show most importantly the differences between managers in the way they respond to concepts. The following concepts have no agreed definition.

- Information: used to mean everything from public communication to a relevant set of managerial numerics.
- Data: seen as collected for purpose and objectively or the arcane desire to count by bureaucracies that generates meaningful information.
- Interpretation: seen by some as a meaningful contextualisation of the evidence or by otherwise savvy managers as a means to discredit the evidence or source.
- Protocol:
- Best Practice: From an attainable counsel of perfection to a normative standard for all.
- Culture: positive and enabling, stifling and disempowering transformations only allowing reproduction.
- NHS: An organised system of tax funded healthcare or just one big experiment in political authority and social cohesion. The backbone of the political offer or the basis of a random importation of foreign fractions in healthcare management without necessary debate or evaluation.

I'll leave the final comment in this section to group 3 and a quote from one individual in the group.

But what we tend to not have is enough rules, it's a bit like practice based commissioning you know, I mean, they invent it as a concept, because it seems to be a means to an end, the end being whatever it is we all want – better everything – and we haven't made up the rules, I mean to me there are three criteria, does it give a better service? Does it offer better value for money? And is it sustainable? (3, after a long meeting of fierce debate and intellect, the silence around this definition was telling).

How do you identify your outliers and what they are saying?

Conversational attempts by the outsiders or outliers included assertions of academic knowledge, professional training and experience. The extracts illustrate a sequence of the type that was common during the interviews and the meetings. The sequence begins with the chair asking if, prompted by me recording the interview, whether evidence would help at all. On discovering that the group is willing to accept that the NHS is far from an ideal organisation, he asks some questions that get a more radical response than some of the strategic platitudes normally classified by the same individuals as 'assurance'. The chair continues a light cross examination as well as inserting a supportive and friendly narrative throughout. The Chair's role was didactic – in order to get to what the people were saying the conversation was nurtured – on only one occasion did an individual specifically announce that he wanted to ask a question.

The following is an example of when an 'outsider' (an off protocol doctor) is encouraged to move back into the fold of the use of evidence. In the end, an absence of evidence was taken as a lack of legitimacy (by managers) to practice.

And there will be occasions, you know, medicine's instinctive, and there will be occasions, I think, where you don't follow the protocol, because you don't know why you don't follow it, but you must have seen a patient somewhere similar; you wouldn't expect it to be the norm, but you should be able to justify in your own mind why you've not followed best evidence, what you should never do is not follow best evidence. If I take an example, we had here an anaesthetist prescribing some pain relief some years ago, and the evidence on it was no where near conclusive, no where near conclusive at all, and this was in the early days of clinical movements, and we looked at all the pros and cons, we looked at all the evidence, and in the end, we said to the anaesthetist, you will not prescribe. (2)

But on the other hand, there is an explicit acceptance that the NHS cannot change without exploring the boundaries of the NHS. In the following quotation there is a direct challenge to a doctor who believes that the NHS has attained an evidenced optimum.

To what extent would evidence help you at all, or is it.....it does a lot, it does a lot, there's loads of things we use, I mean, to me, you know the job is a simple job, I always say to people, you know, that's where we are now, that's the NHS today, and that's where we're trying to get it, and I've only had one person in my whole life say 'it's perfect now', only one person – a pathology trainee I was talking to a Keele University, clearly, a strange man! (3)

Let's consider something that I want to reflect back to the managers. The following is an extract from a 10 minute journey where a senior group of executives are trying to find the way to speak the unthinkable. It is worth knowing from the start that this discussion starts with trying to find a way to consider the proposition that nurses in a particularly poorly performing hospital (on quality and economic performance) are not a solution to but a cause of the problem. The outsider nature of this debate, challenging years of acquired cultural parameters about nurses is revealing. What is interesting in the following quotation is that the outsiders in the following group meeting don't use evidence to describe the need for change. What they choose to explore are scenarios. Much like a health economist they start off with an assumption.

But let's assume there's a journey to be made, right, and you can begin to describe what's in this future NHS, it's less wasteful, there's no healthcare associated infections, shorter waits, greater satisfaction, more motivated, you know, nicer buildings, better equipment, all the new drugs, whatever. (3)

Further, this is picked up by the next person in the group. Again, what the outsiders are trying to explore.....or rather, what the NHS manager in a protected environment within which they can think of the future.....are scenarios.

And my job is to take this organisation on that journey, but it's not just a simple more, more, more thing, as I think we all understand, and we all do that

all the time at home, we're all trying to get the best for our family, we have a limited income, we have circumstances, we all live in England – it's cold! (3)

Scenarios are by definition, alternative, plausible pictures of the future. Scenarios are created that are definitely not forecasts but are free from organisational constraint.

You know, so you'll say, we'll have a holiday a year, and I'll make sure I have central heating, and I can afford to keep paying the gas bill, and keep buying trainers for the retched kids feet that grow six inches every week, you kind of make those decisions to make that journey at home. (3)

The scenarios are written in a deliberately provocative style to tease out the differences between the different pictures of the future. The previous speaker was describing steady interactive change. The following speaker, although using a comforting style and collegiate language is painting an alternative scenario which is clinically relevant but more challenging.

And we have just the same to do at work, and we've kind of coined the phrase at the moment particularly about best care and best value, it's not just one, and it's not just the other, it's not just saving money at the expense of quality, it's not pursuing quality, spending money we haven't got, it's got to be about best care and best value, and I think people can relate to that. (3)

Then another more detailed description is ventured by the next reader. Scenarios, as I said are alternative plausible pictures and the next readers picture should be read side-by-side with the others to understand the differences.

'With you so far' they'll say, as a tax payer, as a user of the service, of course I want it to be as good as it can get, if we're wasting money seeing ten patients in a clinic when we could be seeing 20, somebody is missing out on something aren't they – that's an opportunity cost in terms of health gain. (3)

Until finally, we craft an answer to the problem. The staff can accept the analysis when applied in the abstract the actual implementation of the answer struggles when “the light is shown” on the problem. Only at the very very last moment is the evidence stated.....’overpaid compared’.

So, people are with you there, I mean, I’ve done lots of staff briefings and they’ve all left happy, what’s got them is when you’ve then pointed the light from the two towers into their department and said what’s more, you’re all overpaid compared to grades in other Trusts. (3)

My understanding of this whole conversation is that the evidence that was there all the time is not used by the very people who need to use this evidence to win the ‘outsider’ debate!

The quantum of support and the critical single piece of evidence

Managers took every opportunity to offer advice and support. The advice was often resisted or rejected by one of the other participant(s) in the discussion and advice was often given in the absence of any stated problem by the manager. Active resistance was very rarely shown to the giving or receiving of advice and managers did not call on any higher authority such as “the law” or the Department of Health. There were times when the critical single piece of evidence was sought by all contestants. That is where the advice was felt to have the potential to undermine and threaten the managers assumed competence amongst their peers. As important as evidence, were questions of integrity and self regulation by the group.

The next quotation shown that policy makers and commissioners do try to rise above their entrenched positions to agree a joint plan aimed at making the health services safe and high quality in a cost effective fashion.

Yes, I think one of the problems is actually what we measure, and so the information that we have to deal with. I mean, when you think about health and the paradigm, the NHS where we have performance data about activity, and we have some health data. But the system looks a lot different if you actually focus on some of the outcome data which is not routinely known. And if we were to focus on that, and ask why the system is failing these particular bits, then we might get a different view. (5)

But when it came to the acceptance of clinicians to allow quality-based benchmarking and to take part in the specialisation of these databases this was seen to be damaged by the political and policy pressure to do something based on a single précis of evidence – about public attitudes to infection in this case – or even no evidence at all.

If I said to you, evidence based, does it elicit a reaction in you, does it make you go 'no' or 'yes', does it, is it a neutral phrase, is it a pejoratively bad phrase, is it a phrase that you would want to follow? I think it makes me feel, you know, chance would be a fine thing, but surely we ought to do our best, that's what I would say, because there is too much that isn't, you know, deep cleaning a case in point. (3)

Information about acquired infection is readily available to patients and has had a real impact on their choice of provider, but the general attitude to the quantum of support for evidence based decision making, was in total undermined by this pre-occupation with a limited evidence base. There was no doubt that this was made worse by the media spotlight focussed on healthcare.

The political, health and social care agenda shifted in 2007/08 to focus policies and accountabilities on patient experience. There is a telling desire though to still trust that there is an evidence based solution that is better than random political interactive and that, even given the political desire to make this policy, evidence might be the best way to allocate resources to the policy.

If they had looked at the evidence, they could have made the best choice about how to spend that money, and if we don't even try, it will be purely chance. (3)

Further there was an explicit request to use evidence locally. There was broad acceptance that the choice of policy might not be evidence based but its effective implementation should still use the evidence of the best way to proceed.

So, I have two feelings about it, one is that we shouldn't see it as the solution for all of our problems, because it will never be that well developed in this experiment that is the NHS, and two, we should acknowledge that in the absence of evidence, we should do our very best to get the approximation for best knowledge to drive our decisions, that's what I think. (3)

My understanding of what happened here is that the ambition is for joint planning to be devolved to regional level and the East Midlands to become a role model for implementation of a national policy through evidence of best method.

Then the media spotlight was discussed. The media spotlight was accepted as staying focussed on healthcare – indeed it was hoped that in the next five years the ‘diabesity’ (diabetes and obesity) epidemic could be curbed by being the most common topic of TV debates and cooking programmes focussed on healthy eating.

There was however, a sanguine response to the media. In total, the population was able to deal with complex issues, but the newspapers (as the next three quotes show) are seen to maintain an adversarial stance even when the readers of their own papers were more sophisticated.

The Editorial stance of the paper, is not the same as those people who comment, so for example, when we talked about scrapping the air ambulance. (3)

The Editorial stance of the newspaper was totally a terrible thing, this is a bureaucratic decision, the comments on the website, were broadly in support of our policy. (3)

In terms of, let’s have less flash, so it’s almost like the media was slightly out of step to the people it sells. (3)

So in total, we see a desire by the managers to gain competence and control even in the most trying of times and they did, consistently refer to evidence as the basis of authority and control.

How many times was something given negative or positive associations?

The project here tries to conceptualise the issue of credibility. Some concepts are judged by the participants to have poor credibility. If quantification, consistency, industrial level adoption and rigour are indicators of credibility then in our understanding of evidence based decision making it is possible to recognise items that have strong positive or negative responses. Credibility is

not validated by the researcher it is expressed as a judgement made by the participants. Judgements of credibility are also seen to be influenced by particular (political) contexts so that what constitutes credible may change from period to period so it is difficult to say that the evidence base is able to avoid the temporal nature of credibility. In the specific context of the evidence based manager, there was a strong correlation between credibility and one word/phrase – “NHS” and a strong correlation between “politics” and the absence of credibility. I have included one quotation also to illuminate that at the heart of this conflict between credibility and two words/ideas, is the role of the NHS executive and whether they are agreed to be system leaders or system managers.

Consider that since 2000/01 the government decided to increase public spending and the proportion of public spending spent on the NHS significantly, and this was sustained for 7/8 years and yet politicians were given lots of negative associations such as the politician below, who is considered to be motivated by electoral majority not the NHS role in ‘reduce inequalities’ or even the NHS managers role in ‘best value for money’.

He’s an MP like the ‘X’ guy, who isn’t local doesn’t know the area, he’s in for the ballet box, he’s in for the re-election; you take someone more local like ‘AB’, who’s a local lad, worked in one of the local schools, will always live in this town, he’s got the mix, because he’s precariously seated because of the ballet box, because despite the fact he’s been in twice, this is not a natural one party community, and at some stage it will move again. (1)

NHS East Midlands commissioners are occasionally taken to judicial review for restricting access to new drugs yet a request for Labour MPs to be collegiate with government policy results in the following frustration.

And then you’ve got Dennis, who’s Dennis! and Dennis will only ever do what Dennis thinks is right, irrespective of which Party’s suggested it. (2)

What the NHS managers are identifying are examples of how they feel disaffected because politicians, as seen earlier, are only too keen to dictate NHS policy, but are absent, even when in government, when the policy needs public support as it is conducted and implemented by managers. Further:

But it’s fostered by television, and if you look at all the newspaper coverage, where’s all the noise in the Health Service about, it’s either GPs or it’s hospitals? It isn’t anywhere else is it! It’s all a perception affair, that whole feeling of that perception is about hospitals, ambulances, GPs. (5)

Managers in that quote are noting that politicians know a vote-winning part of the NHS when they see it, and vote winning areas don’t often coincide or find congruence with the methods used by managers to optimise quality, share risk and deliver cost efficiency.

But the connotations of management and even the less valued ‘administration’ compared unfavourably with what was considered to be the (small p)

politically charged leadership. There was a general trend to emphasise leadership, but equate management with bureaucracy.

I'm interested you've chosen evidence based management and not evidence based leadership, because I think there's a difference between leadership and management. I suppose, there's something about management based around evidence and management decisions based around evidence, which might be different from evidence based management. It depends how you define management, and evidence probably as well. (4)

The question about why politicians behave in the way (to see if positive associations are possible) was considered and the NHS dilemma of policy being set by politicians who were weak in defence of the policies – was seen to be no better or worse than democracy itself.

It's a yes and no if I'm brutally honest on this, if you take them in an enclosed ecosphere, where there are no consequences to their decisions, then they will always go with the evidence, then you put them back in the real world, and there are all sorts of other pressures and constraints that come into play, and democracy is an imprecise science, but it's the best that we've got. (2)

The question was then put about the political closure of an unsafe hospital.

There will be the mother and father of a job to close it, the MP will be up, the population will be up in arms about it. (8)

And when the same issue came up in a group meeting, the managers could see only equivocation coming from the local MP even after a lengthy 1:1 with the NHS executive.

She's new, so first and only time I'll ever speak to her live, you know it was a bit like the André Previn bit on Morecombe and Wise, you know all the right notes, not in all the right order, I'm sure I said all those words, but did I put them together in that way, no I certainly did not! (3)

Due to lobbying and marketing from providers, drug companies and patient organisations, the population now expects the NHS to provide an extensive care package and, remembering that co-payments are minimal in the NHS, the media has become a key driver in setting the expectations of the population for the NHS and newspapers critique the role of the manager. Whilst the media are accepted or supported, there is a particular loathing of 'the local' paper by all the NHS managers. The quality of journalism is seen as low and overtly personal in their attacks.

And of course it's been hugely, you know, people saying, 'how dare she say this', not the first time that's happened to me, but, they kind of generated a level of, you know, misery that didn't exist before, and they're loving it, and they want me to enter into a conversation with my staff on their website, you know, more people are writing, you really ought to get on, and I'll go, 'no'. (6)

One Chief Executive even went so far as to say that local print media had lost all relevance and that the key task of talking to people was direct not through the print news.

I said I shall be writing my next Chief Execs column in the staff newspaper, urging them to write to me, and I will reply, and I will go and meet with them. (7)

The motivation for press participation in the NHS is importantly considered to be opportunistic and not driven by values.

I'm not doing it on your website. No doubt I'll get another rotten story out of that, but I really don't care! Chief Executive refuses....you know! So, but they do, that's what they're trying to do, they're trying to create the news that sells newspapers, even if they sometimes get it wrong. (7)

So, if politicians and the media have frequent negative associations who gained from positive credit by the NHS manager. In one word – Doctors! – are viewed favourably regularly and consistently. Although, as you can see from earlier readings there was a worry that nobody was willing to take on real clinical leadership or instigate innovative thinking the comment below is typical of a sympathetic attitude to doctors who are viewed to be in a predicament.

Well, I think we're not in a position where it would be true in any system because the potential demand on the NHS is limitless now because there's so much we can do, and it'll get worse and worse. (5)

East Midland's clinicians are praised for their clinical innovations. Noted examples were the Patients' Medical information is available on-line and that virtual communication has lowered the patient threshold for seeking consultation and is increasing demand. Doctors were praised for their swift adoption of new technologies.

But I think it's a cultural thing about the way doctors are trained, and they're sort of inducted into a system, very early on in medical school, whereby you're taught the important thing is the doctor patient relationship, so they work for the patient, they don't work for the NHS, and that's the difference. (3)

And the doctors association with the NHS was considered to be broadly altruistic as opposed to entrepreneurial and venal in their behaviours.

They'll buy into the idea of the NHS, because it's got egalitarian, utilitarian values, but they don't buy into that from a management point of view. (7)

The question even arose about GPs motivation to work for the NHS and managers could see a way clinicians could abandon NHS employment to work from Chambers like other professionals, but this was given a positive light and association.

I think most GPs would quite happily work privately outside the NHS, because they could still maintain their doctor patient relationship. (6)

The only worry in all this was that clinicians could drive the use of information technology as a method of achieving higher quality and effective care, but could not progress from excellence in the treatment of individuals to a wider treatment of the population more effectively using technology.

And the managers see the value of the NHS, in my mind the managers are more the champions of the peoples' health than the doctors are, but the doctors don't see that. (5)

How does a decision blossom and develop?

The responses indicate that the interviewees and meetings participants are not applying a consistent criteria when making a decision. The decision

blossoms and develops in a quite unexpected way. In contrast to the perception that a decision would be clear in its use of evidence the reality is that the decision must be evidence based but the decision point itself is iterative, nobody is really sure when the decision is made. The idea evolves, contorts, negotiates, makes decisions, re-checks expectations. Even within a single organisation there are different interpretations contingent upon issues of hierarchy in the organisational structure. Thus, for example, the same idea may be evaluated by different people in terms of the extent to which it makes a decision necessary or possible. It may be that as an executive becomes very experienced in organisational leadership, they develop their own list of criteria which although not formally written down, are used as a heuristic device to make sense of the decisions they have to make or even whether they need to make a decision at all.

You know, if somebody took a senior member of your team, if they came to you with an idea or a solution, would you rather they had it on paper or they were able to explain it to you in a conviction way. I'd rather they explained it to me, but I think, what I usually say to people, and there's a lot of people that kind of knock on your door and say ...neh, neh, neh I've been thinking and neh, neh, neh when you haven't got time to listen to it.....ok..... doesn't really help, I'd prefer things to be explained, but things like that are very difficult to move on in an organisation of 7000 people, if they don't very shortly afterwards appear on paper, so you can do something with it. So personally, I prefer the conversation, but practically to progress it, it needs to extend beyond jabbering on the corridor or whatever's going on. (3)

Note that the word evidence never appeared in the above quotation at all, but then the manager was talking about a member of their team. Conversely when another executive talks about their own decision making (below) the word evidence appears time and again.

I think to be successful, you've got to be instinctive, you've got to make the decisions, you can't think about it – right or wrong decision – any decision is better than no decision, you then have to back your decision to the hilt, you have to be big enough to say you've dropped a bollock if you've got it wrong and change it if necessary. And probably every decision I've made I could retro-fit on evidence, but I didn't make them on evidence at the time. (2)
I don't think you're ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it's good in scientific situations, when I was a chiropodist, when it came down to the amount of chemical I put on to destroy something – there were tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that's behind that decision, but if you don't understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that's there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was

denied a drug six weeks ago, and now you're spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high. (4)

Note that there was no consistent base for saying the decision was evidence based, but there is clear reference to 'evidence' being the field or environment within which personal decision making takes place. Now consider the same executive in response to another prompt.

I think evidence based administration, to me administration is the application of processes to achieve an end, to me, that's what an administrator is doing, with a small degree, often no degree of latitude or ability to make changes. Management, managers have the ability to make changes to those processes, and leadership I think, is different. I think leadership is about achieving an organisational goal, and taking the whole organisation forward to achieve corporate objectives. So I do, evidence based administration, I think I would struggle with that, because I think the processes that are used by administrators should have an evidence base for doing them, and a rational defined by evidence; evidence based management, I think managers should use evidence in reaching their decisions, and evidence based leadership I think would go the same as management. (4)

So what we see revealed is that evidence is a consistent part of the framework of executive leadership, but the latitudes to err from the evidence or to even create the evidence afresh is denied to lower levels of manager – deemed to be administrators.

The use of decision by individuals?

In considering the way that individuals rather than organisations apply evidence to the decision making process, of particular interest is the underlying assumptions about the career of the NHS manager and the life stages they go through with regard to autonomy. The way in which individuals define the use of evidence is important in that it shapes their perceptions about who should be free to use judgement and who needs to concur with the evidence base (and indeed seek out the evidence base) before making a decision. From the responses and the recordings it is clear that a variety of individual decision making methods are in use and there is no general consensus about the nature of evidence in decisions by individuals within the NHS. What is clear though is that rather than being a restrictive or indeed exclusionary practice of some NHS managers, there is a body of support for evidence based decisions, with the right evidence by the right individuals in the right context.

Can I explore one of those, and I'm not challenging what you say, it's just this - say the rule book, say the rule was the piece of evidence based practice, and the manager is just coming up against that, you know, the person that, are just not getting it as anything other than a limiting factor, what do they do with that? Do they respect the evidence and back off, or do they try and work round it, or.....my guess, I'd say it

depends on their capabilities, it's a bit like one of these things in this document they've sent me – if you want to be a manager, get yourself educated in something, then get a job, just don't pretend it will teach you to be a manager, I mean, it's a bit like, don't pretend that world class commissioning will teach you to be a commissioner. Ok. So, a good person would be able to see the sense in that situation, people without good sense had better just follow the rules 'cos they'll be safer, do you know what I mean? I don't know, it depends on the rules!.....it's interesting about that, that follow the rules, because I think, a lot of that is a proxy for evidence based medicine isn't it? It's the, you know, look, the vast majority of you will not be as good as the best, so follow the rules, and then the outcomes will be better for everyone. (3)

And I have no problem with that, because what it tends to do is it generates a coherent conversation, you know, I mean for us; a lot of the rule following is very wasteful, labour intensive, and there are plenty of people who know the answer, without having to follow the rules, but there are a lot of people who don't; and the good thing about rules is it encourages conversation, you know if we want to prescribe a drug that's not on the protocol or the pathway, someone says, hey, this is what I want to do, and this is why I want to do it, a few great minds come together and will probably make what is the right decision, whether it follows the rules or not. (3)

To the two quotations above which talk of a negotiated use of evidence is the concept of earned autonomy. Earned autonomy first through acquired years of experimental learning.

But I do think that you work up through your career, you have to be more and more evidence based because you haven't built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way. (2)

And earned autonomy through understanding the 'culturally correct' way to respond to the signals being given by operational managers.

Yes, well, depends how you set yourself up really, I mean, you know, I and other managers get criticised a lot for not being out on the shop-floor enough, and indeed I'm not, but you pick up limited information about what's going on on the shop-floor if you stay close to the people running the business, they can be clinical or managerial, they will, you know, they will tell you what they're fretting about, they will say, 'oh my goodness, we've now got five

vacant posts in A&E and when this lot leave I don't know what we're going to do', that's what you need to know, but you also need to create a culture in which that happens, because, we were talking about this the other day actually, we've imported some new managers from another trust not far from here, and they had this alarming habit of telling you everything's alright, when it isn't! (3)

But broadly a consensus is achieved that evidence/science applies predominantly to clinicians and is a luxury few managers can afford.

I think they'll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and that's fine, doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they're delivered, I don't think they do use evidence, I think there is some, some scientific evidence in there, they'll look at journey times, and they'll look at volume, populations and the needs of that population not been done very well until fairly recently, but they are doing that. So they'll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based. (5)

The making of decision by groups?

One of the objectives of this project is to hold a mirror up to the cohort (of which I am a member) to identify perceptions of good NHS management practice. Within this I wished to look at how the group (when it worked collectively) would make decisions. It is amusing that interviewees found it easier to identify bad practices in the working of the group than highlight aspects of good practice. The issue of the right environment within which to make an evidenced decision emerged as being something managers needed to 'get right' it does not exist as a natural state in the group. Rather than making a decision that focused on technical constraints, describing and reflecting on the appropriate place and circumstance to make an evidence based decision as a group was highlighted by many of the cohort. Good practice in relation to the presentation of evidence and the use of evidence involved on ability to engage this group/a group, to be persuasive and to be credible despite limitations of data and knowledge. There is a caveat however, in that the very diversity of group structures makes universal interpretation problematic.

Clinicians were widely reported as helping negotiate quid pro quo deals to consolidate services such as stroke, trauma and maternity across sites. But they did this for managers who had years of NHS experience more readily than newly introduced managers.

For a manager to be accepted as something other than an irritation, getting in the way of clinical work, they have to demonstrate that they're in it for the long haul themselves, and that's very hard, and after the first three or four managers have gone your chances of making it as number five are really quite small. But there's a down-side to this longevity thing as well, and it's this

sort of practice being entrenched, that once, you know, we've done it this way for the last ten years, so you're not going to change what we do, and also, the culture becomes quite unhealthy because of the longevity sometimes. (5)

But the very longevity of managers that enables clinical participation is seen by some as a limiting factor when getting clinicians across the East Midlands to lead and support required configuration and productivity improvements. Here is 5 again, talking about how a new to the NHS executive uses clinical evidence to provide an antidote to organisational inertia and antipathy towards him as an individual.

He just rolled his trousers up, put a knotted handkerchief on his head and said, 'look – what do you want? This is evidence based medicine, here's the evidence, what are you all talking about?' And still, it made a big impression, it got a lot of laughs, but it takes that, sort of real challenge, before a lot of that out of date evidence is discarded. So evidence base – it's sort of important, but it's almost a culture rather than a reality sometimes. (5)

It is clear that strong financial control over medical cost increases is valued by executives, but in the following discussion by a leader who is no longer in finance, two things are worthy of note: the absence of the word evidence in any reference to accountants in the NHS and despite appreciation of their corporate contribution a question mark hangs over their ability to influence group decision making.

*I think it depends on what sort of an accountant you are, I mean, I don't think it was my natural bent to be honest, and I was heartily glad to get rid of it, because it was too precise for me. But it taught me some things, it taught me a balance sheet is only balanced when it balances to zero. Which is a good discipline; these people who go.....well, that's about right! taught me you can approximate, but you need to know how you're approximating, you know, when you round to the nearest million, you know what you've lost don't you. It doesn't mean you have to mess around with pennies, it just means you need to know what you're not taking account of. It taught me some good practice around delving in the detail, which is not my natural bent, and for people that are, they do struggle to make good strategic decisions, and I have watched accountants struggle to do that; I'm not suggesting you're one for a minute, but I have an ability to get into detail when I need to, in a way some people just can't, and it's given me an understanding in money that's essential if you're trying to do my job, it really is. And there are many, many, many times, no disrespect to 'B' who's been a great Director of Finance here, there are many times when we're kicking numbers around, and it's me who goes, 'but hang on a minute, you know, if that's going to drive that, and that's that and that's got to go there, then surely we've got a problem here', and you can kind of see everyone going oh-yes! And I couldn't do that probably, if I'd been a Physiotherapist. **Ok, so your profession has been a tool that you've been able to use on an ongoing basis**.....yes, hugely. **Ok.** (3)*

But, the decision making by accountants was not the only one group to fail the executive test of reasonableness – so to the matrons.

I went in very, very hard with the matrons last April about their cleaning audits, because what they were telling me back in March/April was that we were going to fail the health care commission standards, when we had all the matrons in, I said, I know it's not like that, you know it's not like that, what are you playing at. (1)

Finally, let's consider two quotations about the apex 'group' of the organisation – the board itself. The decision making in the boardroom is expected to be, demonstrated to be, cognisant of evidence based decision making.

Imagine you're in a boardroom and it's one of those, where for some reason, you're still in there at seven o'clock at night, and you know you've got locked into something, and you need to make a decision before the morning, and somebody says, shall we have a look at what the evidence says – is that a good thing to do at that moment, because it is a distraction and the evidence isn't in the room; imagine, taking my scenario, the evidence isn't in the room, so there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don't need any evidence, what we need is a decision. I would be shocked if the evidence wasn't already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on certain decisions I would want the 'show-me test' as well. On big things I want to see it. So I would stop – go to the evidence, then consider the evidence in the wider context of the decision we're making. (4)

And, this is true even when the whole board might be agnostic about the approach.

*Oohh, I think one or two of them would react positively, I think one or two of them, would I think not understand what I meant...**ok**.....and the rest would be agnostic in the middle. But, I do think that self perception and review of one's performance is something which leaders sometimes get a bit blasé about, and don't do! (5)*

Is information collected and evaluated?

It is established by respondents that they have the technical skills to undertake evidence based decision making and to write a coherent 'evidence based' story. The managers were also able to demonstrate that they understood the importance of reflexivity as a management competence. What is less clear is that managers were happy that the collection and evaluation of data was sufficient to treat the data as information to help aid decision making. Given the political context (and the consequent implications of decision making) the collective and evaluated information may go some way to enhance the quality of NHS management. But the technical task of the assimilation of information may not be able to go far enough to convince NHS

managers to move without a sceptical evaluation. More generally it was also asserted that there will always need to be more resources in order to carry out training in the evaluation of information.

I think World Class Commissioning, if we're not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach, and I think that's actually quite dangerous, because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions. (4)

So somebody has done some research, however subjective, to actually say those who scored highest on health commission scores, those who had most financial balance, those who were actually achieving the most important government targets. What was common about them? (4)

So I pushed the respondents to explore this idea with the following question:

You know when they talk about ideas like balance scorecards or even the idea that you spin up your machine in the morning and there's like a dashboard of dials in front of you telling you – how does that type of model play with you?

And, the most illuminating quotations were as follows:

Well it works to a degree, I mean, you know, I have one on my car, and it says ok when I switch it on, and sometimes it says ok and I go down the road and it stops, or brakes or the tyre goes flat, or you know, it's not foolproof. But I think it lulls you into a false sense of security because, if I take one of my current pressures at the moment, A&E, not the wrong side of the line, but dangerously close! And it's, well its the right side of the line, my dashboard would say ok, but what I know is, I've got a whole middle grade rota missing down there, because we can't appoint middle grade staff, because of all the MMC debacle etc, etc, so I know, you know, we tried to fill a post, we shortlisted 14 people and one turned up, and that's telling me that my car's going to be breaking down some time in the future, and there's no point switching on my engine; it's not proactive enough again. (3)

But, soon within this discussion arose the spectre of the ill-informed politician again.

Have you seen that joke, it was in the Health Service Journal a couple of weeks ago, about'look minister, they look like they're achieving now, ok, time for a reorganisation!', so we're retrofitting the evidence to see what's failed, as opposed to it's working and let's destabilise it. (3)

And, to that was added a long narrative reconsideration, in great technical detail, of the case against politicians with regard to NRSA. The information was collected and evaluated by the NHS it was ignored by politicians. Even worse, politicians used a partial dataset about hospital acquired infection upon which to determine their policy response.

And what we always find is every time they introduce one set of priorities, another set of priorities emerges because they've been ignored by the first set! Carry on with that, it's fascinating. Well, it's just the way of the world. I'll tell you what's going to happen next year if you like?! Yes. Yes, we're focusing on healthcare acquired infections, but we're only focusing on two, we're focusing on MRSA and Cdif, ok, which together account for about 25% of hospital acquired infections, so what's going to happen when we've sorted those two out? Well, all of a sudden, Pseudomonas is going to become an important infection. Vancamycin resistant enterococci are going to become, TB is going to become one. Because all of these infections are being ignored, because everyone's focusing on MRSA. And you may say, ok, but the measures we take to reduce hospital infections are generic, so if we take action against MRSA it'll work for every thing – but it doesn't, they're different, and what we already see is that the hospitals are doing well on MRSA and not doing well on Cdif and vice versa. I mean, MRSA bacteremia for an average hospital in this region, we're talking about 30 cases a year, of all the hundreds of thousand, or millions of patients we treat every year, we're trying to reduce 30 to 25, what the hell's that all about, you know, and yet that's the top of the priority. And we don't even look at the vast of MRSA infections, we don't look at all the MRSA infections that don't get bacteremia, all the joint infections, the skin infections, you know, the ulceration that people get, we don't look at the damage that that causes in the community. So we're looking at the tiniest tip of the smallest iceberg here, it's no way to do things, and yet that's the target, so the target culture enables then to say we're making progress against infection. Whereas we're sort of, it's like pushing the lumps down on the carpet you know, we're making progress on that one there, but this mound's appeared over here. (5)

And even more stringently the individual asserted that political policy without reference to the NHS clinician or manager was no more informal than that of a seven year old.

I asked a bunch of seven year olds, 'what do you think hospitals are for?' and they came up with pretty much the standard answer, it's where you go to when you're poorly so that you can get better. I thought, brilliant yes. So where in our performance management system is anything that tells us if that is actually happening. You know, when people go in with chronic obstructive airways disease, do we make them better than if they'd just stayed at home? Why aren't we measuring whether we make people better; we measure how many people die. (5)

At stages of the interview I asked whether the 7th of the stages of a system implementation (post implementation) was a feature of management policy.

Is the impact of a decision evaluated by post implementation review in the short and/or long term? Is empirical evidence used?

As stated in the introductory chapter of this project, one of the key objectives is to develop a narrative about evidence based management that encourages

informal and reflexive practice in NHS management research. To this end, the seventh stage of system implementation (post-implementation review) needs to be identified in the responses. Whilst the objectives of each of the participant managers may be different in content for each individual, the exercise of post-implementation review should be evaluated. The question is the degree to which participants and/or the wider NHS draw upon their own extant work to stimulate experimental learning.

The first negative response to the question of whether the NHS was appropriate evidence said:

That's fascinating, and nobody's mentioned, so, old evidence becomes dogma, so it's established on an evidence base, and this is not just relevant to medicine, so it's not just established on – it's established on an evidence base, but then that becomes dogma which in its self evaporates over time and then the evidence isn't refreshed, is that..... (5)

And even more telling was an acknowledgement that there was no post-imp limitation work done to evaluate the success of the initiative.

Which of all the measures here, we have introduced, has worked because our infection rate has reduced.....I don't know, if I'm honest, I don't much care so long as it's happened, it's a number of things we've thrown at it. I could play the experimental – I could take that one out and see if it makes a difference, but I'm not interested, it has had the desired effect. (1)

And 5 again returns to the sense that this is all irrelevant in a system determined by politicians and political favours.

Carry on with that, that's fascinating! *We work in a system where most of the levers that we've got were actually worked through with politicians in the first place, weren't they? **Yes.** NICE is a construct of a political approach to the NHS, by a government that hasn't changed political party in the last 11 years, and yet we don't seem to be any closer to political tolerance to this system than we were when we started; so that thing about, all they want to do is be elected. (5)*

The alternative is to give some well resourced people the time to plan, model and shape systems and more importantly, review what we have learned from what we have already done.

And I think everything else was left to – let's see what happens, we'll give some clever people and see if they come up with something, and that's what seems to happen with the NHS, the politicians either seem to go for a structural reform, on the grounds that it'll take a couple of years to do, and we can always claim – yes we know the system isn't working, we're doing this massive review, we're doing all this work to restructure, and it's going to work – just you wait and see, and then of course it takes three or four years to come through, doesn't work, and so they have to do it all over again! And if you look at the last three or four reorganisations, I don't think there's any

evidence that any of them have benefited the NHS at all. And certainly they didn't start off with any aspirations for that evidence. (5)

And then there are some direct and lengthy quotations given by an individual in a group situation that are worthy of inclusion as individual quotes. I like the one here that says the NHS is complex and cannot be easily modelled, but makes no reference to evidence.

I do believe that most people can understand that that's the world we work in, most people can understand that there isn't a text book on the shelf of how to do this job, and most people in my experience, if you spend the time talking to them, will understand that, all we're trying to do is what we believe to be the best, taking account of what everyone's telling us, and from my perspective, in my job, it's not opening holiday brochures, reading the small print and looking it up on the website, it's talking to people, and you know, should we regrade nurses in surgery they'd say no, you ask some of the surgeons they'd say no and if you do I'm going on strike, and you know, you ask some other nurses and they go, well yes, fair enough, whatever, you get a whole wide variety of views, and you somehow have to make sense of it. (3)

But the individual view is that there is sufficient evidence to make information and informed decisions that we can rely on.

I don't think evidence takes time to mature, evidence is there from when it's presentedit's then assessed, folk law, takes the time to mature, so I think evidence can come and be there, I think in management terms, new evidence rarely comes to light, but I think evidence itself, becomes evidence from the day it's presented, it's just a question of what category and what quality it is. (4)

The problem as ever, again quoted in a group context, is that politicians and information do not fit nicely together.

Yes, it is really, I said to my board, just the other day, you know, working in the NHS is like living the world's biggest experiment, and it is, you know, we'll twiddle this, and I always used to think, particularly when we had Alan Milburn, I used to imagine, you know, the man stood in front of this big complex machine with fan belts and nuts and bolts, and cogs and things, turning the spanner in his hand, just kind of diving in and just loosening a bit, or tightening a bit, taking a bit off or adding a bit on, and going, oh, that didn't work, we'll have another go, you know? (3)

And to the final observation on the use of information is a sense that however we focus on results – information – evidence and outcome, it will never be enough to identify the critical success factors in any post implementation review.

*But you don't know precisely what measure resulted in that success. **Ok.** I think it's probably a bit of all of those things. I think some of the writers say, you know, just give it up because you'll never be able to diagnose the causes,*

any one person can claim it's one thing, but it's a mixture of culture, ability and structure. This about hugely energetic capable people, do you think that, that almost gives them to reach an optimum outcome, irrespective of which path they follow? (3)

CONCLUSION

I would like to draw my conclusion back to the original concept of Rousseau. There has been a broad discussion in the paper of Rousseau and in amongst my hours of narrative I think it is most useful to classify my findings as follows:

First let me reproduce the table "After Rousseau" from my literature review.

After Rousseau: A synthesis from the literature of Rousseau on the practice of Evidence Based Management

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
A The supervision of employees	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
B Information available to managers on the consequences of their decisions	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
C The delivery on promises to the public, employees, stakeholders/taxpayers customers and others	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
D Management style	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
E Approach to academic research	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work

F Management culture	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors (1911) structured methods for improving efficiency were classified under scientific management	A belief that good management is an are - !the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
G In conclusion	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implantation fail	Managers are prevented from real learning by fads and falsehoods

And this is what we find.

In the matter of:

So, in conclusion, using the Rousseau or After Rousseau model. This is what we conclude about the nature of evidence based decision making within the NHS in the East Midlands during 2007-08. I have notated a + to mean that the quotation favours an evidence based approach and a – to mean that the quotation means the lack of an evidence based approach to decision making or an = sign to say that it neither favours one conclusion or the other.

In the approach to academic research

An evidence based approach would conclude that managers read the academic literature regularly and the consultants who advise them are likely to do so also. The alternative conclusion is that few practicing managers access this work.

- “get yourself educated in something, then get a job, just don’t pretend it will teach you to be a manager”
- “it’s a bit like practice based commissioning, you know, I mean they invent it as a concept because it seems to be a means to an end, the end being whatever it is we all want”
- + “And sometimes reading things, I prefer talking to people really and I talk to a lot of management consultants who kind of say things, it’s not that it tells you something new, it’s just that it allows you to relate things in a different way”
- In conditions which predispose to hospital acquired infection “you wont do any of the things of which there’s a very good evidence base that it would make a difference, and so your first engagement with us, is to come and tell us to do something for which there is no evidence that any infection has been prevented, anywhere in the world – ever, by doing this and you think that’s the most important thing that we should do”
- “If I say to you academic evidence? I think it makes me feel, you know, chance would be a fine thing”
- “It will never be that developed in this experiment that is the NHS”
- + “So places which have a worse winter than we do don’t have this, they have a little bit more mortality but not much and it’s all down to poor

housing policy, benefits, insulation, social care, primary care access, all of these things”

- = “I think they’ll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they’re delivered, I don’t think they do use evidence”
- “No! We almost steadfastly refuse to accept that it might possibly work and it was worth considering because it didn’t fit the positive framework of choice and competition”

In the supervision of employees

An evidence based approach would conclude that managers acquire a systematic undertaking of what productivity gains are most appropriately cultivated from their staff, in the alternative a manager would have a style with no reference to its outcome or organisational performance.

- + “I went in very, very hard with the matrons about their cleaning audits, when we had all the matrons in, I said, I know it (the evidence) is not like that, you know its not like that, what are you playing at”
- + “We had a doctor here say to us, we don’t have to comply with the Health Care Commission standards because we’re not a hospital! What’s that about? Certainly wasn’t about better patient care”
- = “My next Chief Execs column in the staff newspaper, urging them to write to me, and I will reply, and I will go and meet them”
- + “You work up through your career (and to begin with) you have to be more and more evidence based because you haven’t built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way”
- + “I think the processes that are used by administrators should have an evidence base for doing them, and a rationale defined by evidence, I think managers should use evidence in reaching their decisions and evidence based leadership I think would go the same”

In the information available to managers on the consequences of their decisions

An evidence based approach would conclude that there was appropriate evidence and data, a significant reduction in perceptual gaps and post implementation review is valued. The opposite is, that information is poor and evidence is not collected.

- “Old evidence becomes dogma. So it’s established on an evidence base but then that becomes dogma which in itself evaporates over time and then the evidence isn’t refreshed”
- “Balanced scorecards. It’s not foolproof. I think it lulls you into a false sense of security. A&E, not the wrong side of the line, my dashboard would say ok, but we tried to fill a post there, we shortlisted the people and one turned up, and that means it’s going to be breaking down some time in

- the future, it (the balanced scorecard) is not proactive enough again”
- “I think world class commissioning, if we’re not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach. And I think that’s actually quite dangerous because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions”
 - = “I’d prefer things to be explained but things like that are very difficult to move in an organisation of 7,000 people, if they don’t very shortly afterwards appear on paper so you can do something with it”
 - = “Taught me you can approximate, but you need to know how you’re approximating, you know when you’re approximating you know what you’ve lost. But I have an ability to get into detail (the evidence and the data) when I need to in a way that some people just can’t”
 - = “I don’t think you’re ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it’s good in scientific situations, when I was a chiropractor, when it came down to the amount of chemical I put on to destroy something – there were tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that’s behind that decision, but if you don’t understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that’s there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was denied a drug six weeks ago, and now you’re spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high”
 - “The doctors’ view is, ok, 20 years ago, when you were building this hospital (because we’ve been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you’ve got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can’t clean round the beds. Because there aren’t enough beds, you’ve got too fast through put, so people with infections are moved around the hospital”

In the delivery on promises to the public, stakeholders and others

An evidence based decision making would conclude that decisions are based on systematic causal knowledge conditioned by expertise. Decisions in an evidence based conclusion would be systematic, informed and readily justifiable. In the opposite environment the public challenges decisions in the search for transparency and managers cannot learn why their decisions may have been wrong nor what alternatives would have been right.

- “Politicians, do politicians want evidence based decision making for the NHS? No, they want to be elected and that’s the bottom line and as long as you remember that, then everything they do is completely

- understandable!”
- “Nice (the National Institute for Clinical Excellence) is a construct of a political approach to the NHS by a government that hasn’t changed political party and yet we don’t seem to be any closer than we were when we started”
 - “And what we always find is every time they introduce one set of priorities, another set emerges because they’ve been ignored by the first set”
 - “Yes, I think the public as body public, would expect evidence based decision making, and quite rightly expect that, and would want it as well. I think the public as Joe-individual probably would expect, would want it, but when it came to them, would probably bring in other subjective assessment criteria. I think politicians are a bit different, and I don’t think, whilst they would probably in a purer discussion say, of course we do, I think they will always, and evidence is always driven by context, they would always want their policy implemented – evidence or not”
 - “Pseudomonas is going to become an important infection. Vancamycin resistant enterococci are going to become, TB is going to become one. Because all of these infections are being ignored, because everyone’s focusing on MRSA”
 - “And we don’t even look at the vast of MRSA infections, we don’t look at all the MRSA infections that don’t get bacteremia, all the joint infections, the skin infections, you know, the ulceration that people get, we don’t look at the damage that that causes in the community. So we’re looking at the tiniest tip of the smallest iceberg here”
 - “you clearly identify yourself as wanting to give the public confidence in you being a good custodian of their health service, versus the method that would do that is not really evidence based”

In the matter of management style

In a conclusion erring towards evidence based decision making about the NHS, managers would have an understanding of the powerful impact of their decisions and managerial competencies would be recognised as critical and scarce. The opposite conclusion would be that evidence based decision making seems to threaten managers personal freedom to run their organisations as they see fit.

- = “You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I’ve watched them do fantastic things, and I’ve watched them being stopped from doing fantastic things, because some rule book says it’s not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps”
- + “So there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don’t need any evidence, what we need is a decision. I would be shocked if the evidence wasn’t already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on

certain decisions I would want the 'show-me test' as well. On big things I want to see it. So I would stop – go to the evidence, then consider the evidence in the wider context of the decision we're making”

- = “One of the things that’s happened of course to FTs is that they’ve attracted a different calibre and type of Chief Exec, arguably. I think, you know, we’ve advertised for two director posts lately and there are a lot of people who want to work for an FT.....ok.....there are a lot of people moving out of Trusts that won't make it to FT status, so you could say, what we've been doing is sapping the best management resource out of the non-FTs to maintain the performance of the FTs. We've also attracted, I think, some quite different people in Non-Executive roles and Chair roles; the Chairs of FTs, a lot of them are, like the freedom bit, like the get on and do run a business thing”
- “I'm interested you've chosen evidence based management and not evidence based leadership, because I think there's a difference between leadership and management. I suppose, there's something about management based around evidence and management decisions based around evidence, which might be different from evidence based management. It depends how you define management, and evidence probably as well”
- “Well, he reminded me what the end was, that's what he ultimately did, he kind of made me think about what they were trying to do, yes they did it in a cack-handed, stupid, I wouldn't have done it that way, kind of a way, but given that that's what they were trying to do, it was really not helpful for us to jump up and down and say 'there's no evidence for this', because it undermines the whole investment programme they've put in place, which wasn't adding any value to anybody, it was just making it wasted money, instead of possibly purposeful money”

So in Summary

In the matter of the approach to academic research (Against!)

In the matter of supervision of employees (For!)

In the matter of the information

My Conclusion is

There is a bias against using academic research by NHS managers in the East Midlands. This is by no means universal, but is consistent in its presentation.

There is a very strong preference for using evidence based decision making amongst the cohort of East midlands managers and use an appropriately cultivated management approach to support evidence based decisions.

There is a bias against evidence

available to managers on the consequences of their decisions (Against!)

based decisions. Decisions have insufficient data and evidence for decision making, and little value is attached to post implementation review. Some managers are neutral towards this subject but few, if any, show a preference for evidence based decision making informed by the consequences of their decisions.

In the matter of management style (No preference either way)

There is only an inconclusive result in the area. There is no preference. Some managers have a preference for evidence it seems but equally some would discredit it as a viable and realistic approach.

In the matter of the delivery of promises to the public, stakeholders and others (Against strongly!)

Of all the areas this is the one where there is next to no examples of evidence based decision making, but there are multiple strong, lengthy and cross-referenced examples of decision making that is neither systematic nor developed by causal knowledge. Decision making is opaque to the public and frequently challenged.

So how does this help in building up a grounded theory and how is the process of grounded theory working? The NHS is reflected by the cohort interviewed to be an industry whose growth is entirely government determined. It is not to say that it is a matter of ideology and indeed all three political parties support the NHS models in the provision of public healthcare but wherein lies the grounded theory of NHS management that emerges from these observations and interviews?

The following issues show that some similar concepts exist. All of the NHS executives interviewed and the group exercises recorded indicate that NHS managers in the east midlands are working for common, popular approaches to decision making that enable them to share and compare and to bargain and negotiate with each other or with politicians and the media. The public are a real challenge to their sense of comfort but there is no model or general methodology for generating theory to be tested out with the public and stakeholders. The group is numerate and the decisions by the individuals or bigger meetings are grounded in data that is collected and analysed even if that is never validated or best available evidence or best decision making tool. So in the round ideas are grouped into popularity – general application/applicability and – grounding in data. If and when public spending

growth in the NHS slows it is these grounded concepts – is the decision “popular, general and data driven” that emerge as a grounded theory.

Considering these examples, it is possible to form a collection of categories. The data used for decision making must have joint ownership between those collecting it and those being performance managed by it. This joint collection and analysis is a key to the evolution of a grounded theory of the relationship between NHS elites and the organisations, especially the clinical organisations that they lead. The data analysis is conducted in a system which seeks theoretical consistency no matter whether the evidence supports the theory. So for example data is compared against evidence about choice, competition, privatisation (plurality) and contracts (contestability) which is saturated imposition of neo-classical economics theory on the NHS even if there is no evidence for how it improves the organisational effectiveness of all or even part of the NHS. What is clear is that there is a constant desire for compassion.

Thinking about different ways to look at the evidence these are emerging themes and trends. It is clear that this piece of qualitative research was able to examine the individual and group behaviours of the current elite east midlands vision of the NHS manager. Other forms of qualitative research may have been applied. Ethnography might have lead to a way of understanding the daily life of NHS executives but there is a bias in this method to seek methods that improve the probability of success, conversation analysis may have explored the turn taking and power relationships at play and evaluation research applied would have lead to a consideration of the interests and values of NHS managers relative to the general and public welfare. Consistent with my position as a participant in the system and my desire to not only observe the cohort but to create a generalisable theory about us then grounded theory (the generation of theory from data has proven to be the most successful tool.

If the manager is a decision analyst then what do they count? All decision making, the direct costs of which are met by NHS funds collected by the taxpayer, should: provide new knowledge or direction needed to improve their performance and the performance by their part of the NHS. This should improve the health and/or healthcare of the population for which they are responsible.

If an NHS manager were to fill up a box that says ‘EBM’ what would they put in it and what would they throw out? Does this lead to the viable creation of a theory that can be concluded to arrive from grounded research?

The manager is willing to use evidence to argue their case and protect themselves. This in turn would mean that the findings of an EBM decision would be in the box only if they result from the following condition: The evidence was from a source that is generalisable for others in the NHS cohort to use – either by having adopted others sources or added to the commonwealth of resources. That the decision followed a protocol that was clear even to the layman/non-executive and was bounded by clear limits of its

applicability. An EBM box would include things that they were happy for everyone – their peers, their staff, politicians, taxpayers, patients to review for its evidential consistency. The box would have in it only those ideas that were ethically accepted as consistent with NHS values, rejecting those that are efficient but not effective in achieving organisational mission and goals. Given that the cohort in study are Chief Executives and senior managers, they will have demonstrated that these are clearly structured methods for implementation of their decision and that a cascade system exists for the dissemination of their decision.

How does this fit with my model and is it possible to create another diagram to show the relationship between these elements?

Let us consider the differences exhibited by groups and individuals, that groups were happier with evidence than individuals. Consider the definition of a pedant. A person who is overly concerned with formation and precision and who makes a show of learning. The corresponding notion is that the person is also a source of instruction or guidance. The term can typically be used with a negative connotation indicating someone overly concerned with minutiae and whose tone is perceived as condescending but when it was first used by Shakespeare in 1588 it simply meant teacher. Some people take pride in being pedantic and may preface a sentence as such. Therefore I believe there is a boundary where pedantry is an accepted form of evidence based decision making and that this is consistent with the amount of authority and status the individual has.

From the conversation I think through grounded theory, I can say that;

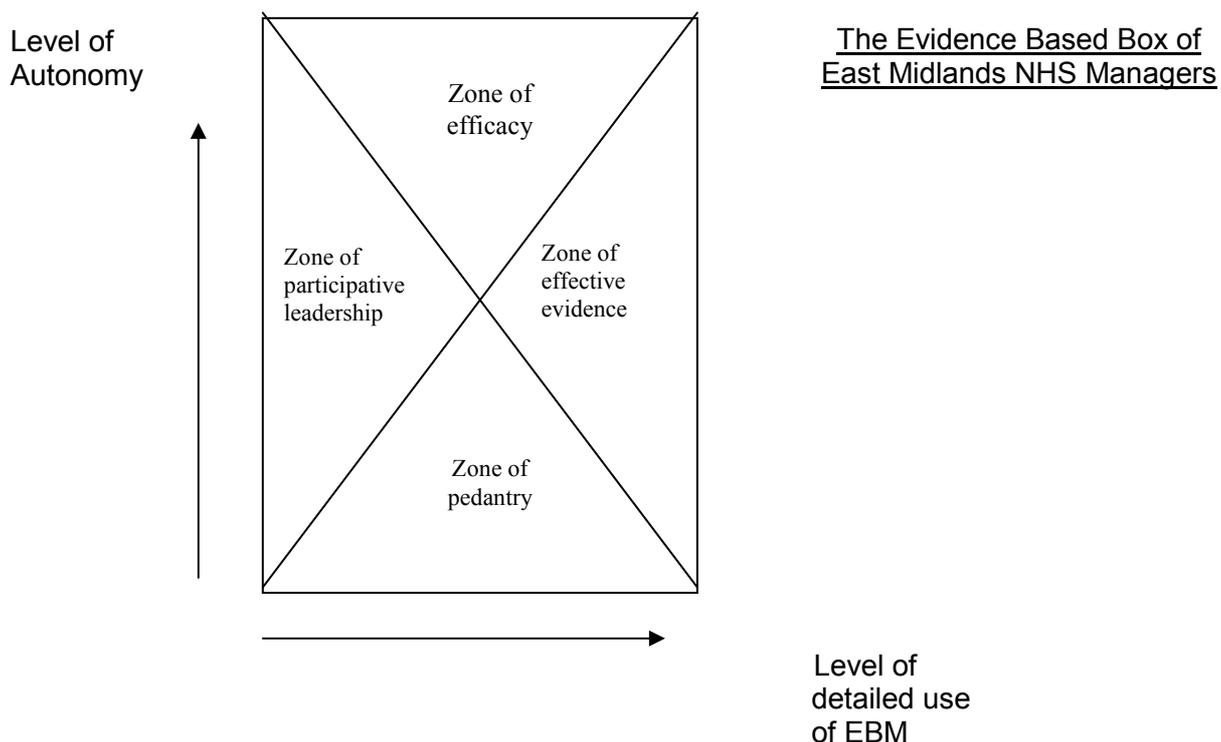
The cohort treats EBM in the following ways to display that the cohort itself is efficacious. By efficacy I mean that the effect of a given managerial intervention has to not only be economically efficient it must be 'acceptable'. Acceptable in that the political and public context of the NHS means that the impact of an intervention by the Chief Executive or senior manager has been thought through in an evidence based way before the decision has been unleashed in the real world NHS. Acceptable in that there is concerns that this decision is at least as good as any other.

That EBM in the cohort is alive in the following ways. If you consider the diagram below it is clear that there are some places where EBM is effective. Referring back to earlier conversations we see quotations that talk of a negotiated use of evidence through acquired years of experiential and experimental learning. This leads to the oft sought for "earned autonomy". The best quote was the one that said "because you haven't built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way".

But that EBM is dead to the cohort when you consider that managers in particular in this project, described a situation where their own control over the decision making process had been to some extent lost through the requirements of audit. At low levels of autonomy you use evidence a lot and

at high levels of autonomy you use evidence a lot again but somewhere in between it gets much more difficult. The best two quotations to summarise why EBM might be dead to the cohort are “It’s a yes and no if I am brutally honest, if you take them in an enclosed ecosphere when there are no consequences to their decisions. Then they will always go with the evidence, then you put them back in the real world and ...” plus “a lot of decisions that are made, seem to be based more on history and on the views of politicians and key stakeholders, which are often not really evidence based.

So in later study I would take the following defined tool and go back to the cohort in a challenging way.



This model is emergent rather than solid and concrete and how I can look at it and define it is something like this. I have quartered the box not by quadrants but by triangles to show that this model to an extent overlaps and is about occupying different zones of the autonomy/detail axis. The key is that there are four zones.

1. “Participative leadership”. Experienced at all levels of autonomy, NHS managers try to use some degree of Evidence Based Management but they never explore it to its full extent. The best they ever get is a ‘halfway’ experimentation with evidence. Indeed it is possible to make decisions without evidence at all.
2. “Zone of pedantry”. Evidence is used to develop and control the organisation but the manager never rises above the middle tier of autonomy and authority. Note the use of phrase autonomy rather than “authority” or “power” as even a powerful individual may find themselves in the zone of pedantry when working in a group because

their autonomy is diminished in the meeting. In this zone a very detailed application of evidence based decision making coreless negatively was autonomy – if you have to use a lot of detail to make a decision you don't have much autonomy.

3. “Zone of efficacy”. The decision will use varying degrees of evidence in getting things done. What is effective is not necessarily efficacious. The efficacious decision is the one that produces a desired amount of the desired effect and the success in achieving a given goal. It is imperative to note that in this zone, the complete acceptance of rejection of evidence based decision making are polar opposites but exist in their purest form where the manager has the ultimate autonomy.

Finally from my increased understanding and interpretation of findings it is possible to say that evidence based management has an identified and discernible impact on NHS management but it is not common and is certainly not in good health as a prevailing philosophy. It is not the managers who will keep it alive and any implementation of evidence based management on a wide scale will require the importation of external skills and political will to implement.

Given that my intent way to hold up a part of the mirror to the “us” that I belong to (NHS managers in the East Midlands) this makes me feel that we are using a body of care that draws upon our own experiences and the experience of generations of practitioners. The sad thing is that much of it has no real evidence base on which to justify various things that we do in the name of leadership and decision making. This only diminishes the sense that we are engaged in professional practice, that we have a gathered body of well organised knowledge that on a personal level nothing can be identified that eliminates unsound or excessively risky practices in favour of those that have better outcomes except my training as an accountant. Throughout this process I decided to slow the mirror in a way that enabled a true reflection not to study the effect of an evidence based intervention. Using the question of an “evidence based approach: does it exist? Had a number of advantages because it enabled all of the NHS managers to avoid truisms that are socially acceptable but which would prove not to be true when I sought the corroboration. For example the demand to provide evidence can simply be used as an excuse to avoid options and scenario's which have not yet been evaluated or which because of their nature are very difficult to evaluate.

Whatever my conclusions it was possible to say that I defined the mirror as the method by which our productivity as NHS managers might be enhanced in our own eyes. There is no doubt that a lack of an evidence base for a profession has left the door open to amateurish practice by charlatans and rogues. Therefore what I found fascinating (and led to the reused diagram) is that the evidence base is widely recognised as the means to provide sound validation for the work of middle managers. The Chief Executives and senior managers were not supportive of an imposed evidence based methodology but did acknowledge and support the control of junior staff to preserve the

integrity of the NHS management profession. My own personal observation of what this means to “us” is that we should like evidence based decision making but remember that EBM is a philosophical approach that denies the true value of experience and heuristics. I take comfort that examples of reliance on the “way it has always been done” can be found in almost every profession – including medicine and nursing – even when those practices are contradicted by new and better information. I admire that the NHS leaders I met remembered that no evidence can be better than the use of poor quality, contradicting or incomplete evidence, so ultimately making sense of what I see in the mirror for the reader is: the model is considered valid by elite people but for control and direction not for personal accountability because they see themselves being their own person. They don’t want evidence to be the concrete block that holds the elite down, they want freedom.

The discussion of evidence based management is a valid question but it is not liked in the higher echelons of management, linked as it is to the notation that management can easily merge into administration when considering white collar tasks.

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**David Sharp
February 2009**

**“A Quantitative Analysis of East Midlands Ambulance
Service Referrals”**

**Document 4 is submitted in part fulfilment of the
requirements at the Nottingham Trent University for the
degree of Doctorate of Business Administration**

Cohort 8

A Quantitative Analysis of East Midlands Ambulance Service Referrals

Schedule

1 Introduction to the problem

- 1.1 Why this is worthwhile to me as a matter to study.**
- 1.2 Why does this matter to the study of evidence based decision making in NHS Management.**
- 1.3 The collection and storage, or use of data.**
- 1.4 How does this fit with the evidence based box argument?**

2 Subjects under study

- 2.1 A brief introduction to EMAS.**
- 2.2 A brief introduction to the studied population.**
- 2.3 A brief introduction to the problem.**

3 Patterns of Data

- 3.1 Presentation of the Data.**
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- 3.3 Validation of the results.**
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4 Implications for NHS Policy and Practice

- 4.1 Practical implications for leaders in the NHS.**
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- 4.4 Needs for training and change.**
- 4.5 A checklist of evidence based conclusions.**

5 Conclusions

- 5.1 How this data has stretched our body of knowledge about EBM in the NHS.**
- 5.2 Did this match what I thought in the introduction (1.1/1.2)?**
- 5.3 What the picture looks like at the end of the analysis.**

6 Limitations of the approach

- 6.1 Methodological limitations.**
- 6.2 Data Capture.**
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7 Implications for further research

- 7.1 Topics to be studied.**
- 7.2 Different regions or countries.**
- 7.3 Foundation for further study of EMAS.**

1 An Introduction to the problem

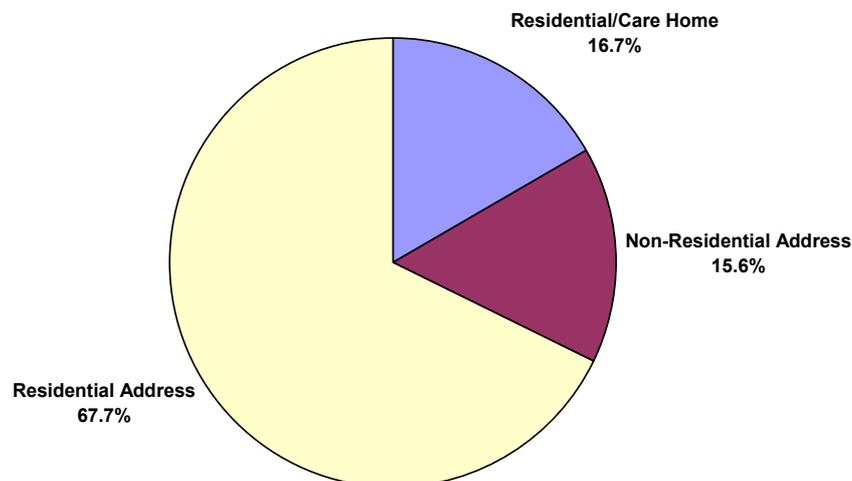
1.1 Why this is worthwhile to me as a matter to study

In my professional life I am a planner and purchaser of Emergency Ambulance Services. So I spend a great degree of time analysing and considering data about performance of ambulance responses to emergencies, the most efficient ways to do things and looking for insights that will either improve quality for the same price, or get me the same quality for a lower price. What I buy is affected by the reasons that people call for ambulances – dangerous personal behaviours, the frailty of the human body in times of extreme weather (heat and cold), biological factors such as disease or the contra-indicators of drugs, age and disability. In the response to a particularly difficult performance period it becomes clear that “falls” were a key reason for the despatch of ambulances. Although few trials have been carried out in the UK, the prevention and management of falls in the older population is a key government target in reducing ill health. This is a key target of the national service framework for older people. “Reduce the number of falls which result in serious injury and ensure effective treatment and rehabilitation for those who had fallen”. (NSF 2001).

So I asked for a simple binary analysis of the response to falls in the over 65 population. Using the previous 12 months data the query was asked – was the person you picked up as a result of a fall and if so, where did you pick them up from? The received wisdom was that residential care homes were prone to call for ambulances to avoid picking up fallen clients for reasons of potential hazardous injury to the care staff and that the older population – particularly in cold weather – was prone to fall in the street. So a simple analysis of the results was carried out and that is given in the figure below.

Figure 1

EMAS Responses to Falls in Over 65s: Type of Pick up Location
Sample of data from 2006/7



The sample set was 2700 records taken randomly from all EMAS calls received and non-residential address includes things such as “outside”, “shops”, “pub”, as identified by the caller and where the location was clearly non-residential, such as outside a named business or factory. What fascinated me was that people fell in their own homes. Consistently and evidentially people fall in their own homes. As a proportion of the population who live in residential care homes more people may be falling than those who live in their own home but, as an organiser of ambulance services, the evidence tells me we should start with what people are doing in their own homes not anywhere else. So why the pre-occupation with everywhere else in the study of falls? It became clear that the study of falls was time and again about the reason for falling or the avoidance of admission to Accident and Emergency Departments. Close (1999) analysed individuals presenting at A&E following a fall; Crotty (2002) looked at the best medicine and treatment to get fallers home quickly; Tinetti (1999) looked at improved daily living skills to prevent falls and developed work done by Ebrahim (1997) and only Pardessus (2002) considered the modification of environmental hazards that might affect the propensity of an individual to fall. I was therefore presented with a very simple piece of evidence that mattered in the planning of ambulance services, specific to the actual rather than theoretical experience and it told me something that we weren't considering. Whilst undoubtedly there was an issue with homes and people falling in the street, if we wanted to look at the reasons that the ambulance was called – in absolute rather than proportionate terms at least – then the answer for falls lay in peoples own homes.

1.2 Why does this matter to the study of evidence based decision making in NHS management?

Let me begin with two more data queries that were run on the same sample data, almost immediately after the first query. Ambulance calls are triaged from Category A (see immediately, danger to life and the individual) to Category C (traumatic to the person but requiring quick rather than immediate attention). There is also an acknowledgement in the work that NHS Direct do that communicating in a way that is sensitive to gender norms may also facilitate adherence to interventions that improve health or avoid ill health. So two reports were run as below.

Figure 2

EMAS Responses to Falls in Over 65's by Call Category
April 2006 to March 2007

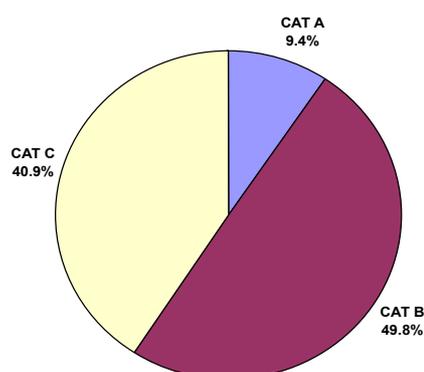
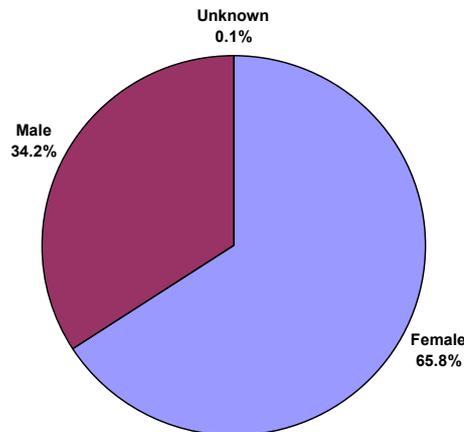


Figure 3

EMAS Responses to Falls in Over 65's: Gender
April 2006 to March 2007



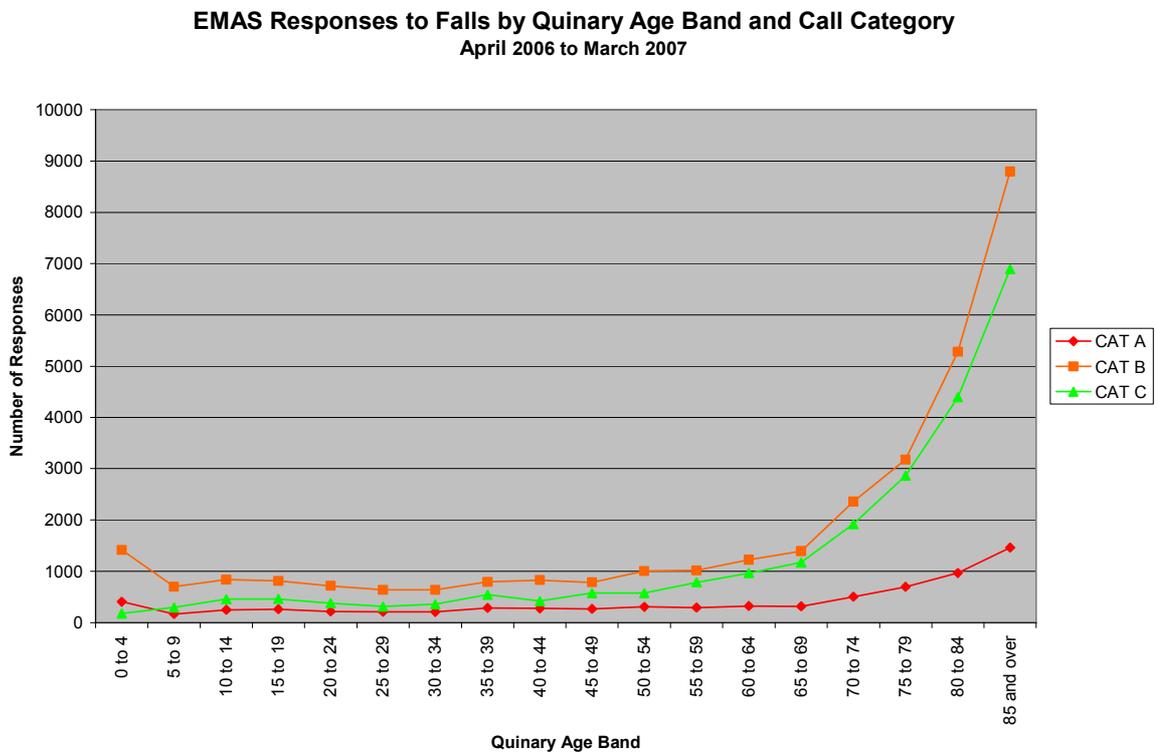
These two pieces of data turned into information are really important because the context here is ambulance services not the general planning of falls. Consider this quote from the NHS Direct website, (so this is the NHS talking about itself). "Falls often result in serious injury, often to bones and joints and there are many fatalities particularly amongst older people an estimated 1000 older people die each year from a fall on stairs. Falls cause the most deaths and long-term health problems amongst older people". But for emergency ambulances as part of the NHS less than 10% of the work collecting falls is Category A (NOW!) and Category C (quick, but okay to wait) is over 40%. However important falls are to the NHS, the Ambulance Service needs a different gradient to policy response for falls to other parts of the NHS. An evidence based response to falls in the East Midlands Ambulance Service in 2006/07 would be – to paraphrase the NHS direct quotation above – "Falls often result in serious injury, often to bones and joints but in most cases this will not require or receive a blue light response of a fast ambulance once we have assessed the comfort and risk of the fallen patient". I then engaged the question about whether this was a gender issue. Were there any issues that affected falls related to sex? The figures showed that 2/3 of the responses were to women. In an NHS where gender equality affects the general consideration of health status in the population the simple use of data analysed and identified a service with a specific gender bias and yet little or nothing was being done to identify this as a "women's issue" in the say that, say, breast cancer was (predominantly but not exclusively a female condition).

This all matters to the wider use of NHS policy. Some very rudimentary queries using data coding, already available in the minimum data set for ambulance call outs, was throwing up evidence for one region in one year that lead to different conclusions about the nature of service delivery than a planner might have had based on national policy alone. Let me consider for a moment five truly admirable things that NHS Direct tell us about falls as they affect the NHS:

1. Physical activity improves balance and prevents falls.
2. Older people respond to life events such as retirement or becoming a grandparent in adjusting their perception of the need to manage risk to prevent falling.
3. People like to work in groups on falls prevention, but these can be demanding if your hearing, sight or short-term memory isn't the best.
4. Self-management is better than dependence on professionals.
5. Advice can be tailored using websites.

Of these five, only one really mattered in the analysis of the EMAS response to falls, that in the over 65's the effects of aging are critical. As the next graph shows this is a material issue for EMAS.

Figure 4



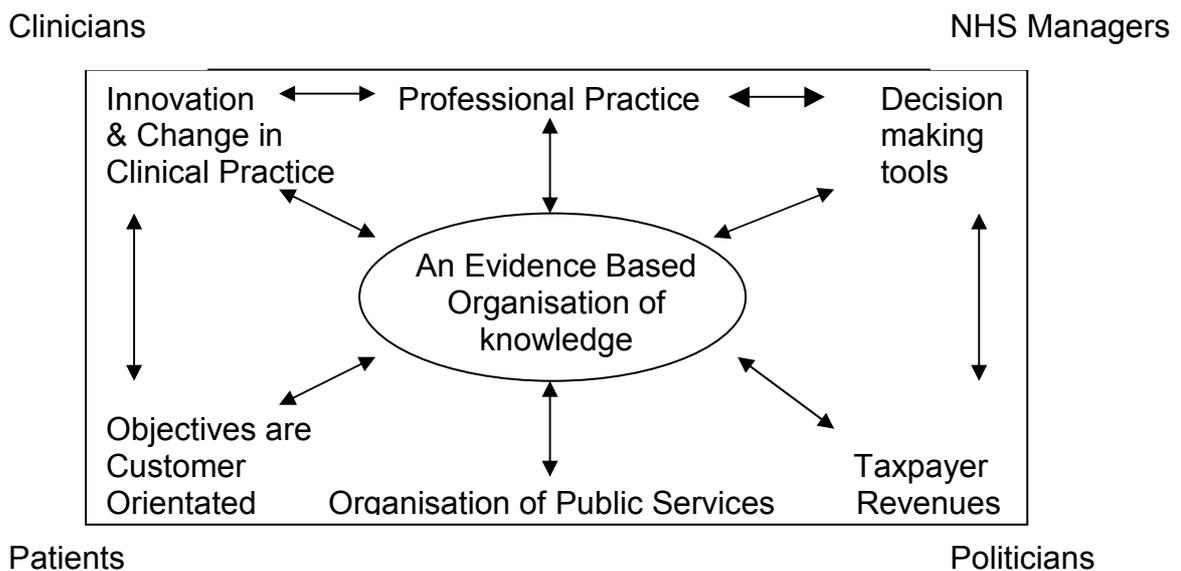
The response by quinary age band and call category tells us that in the over 65's the call category is also related to age. Responses to older people who have fallen are more likely to be coded as less urgent responses. The frequency of Category B and C responses to falls increases exponentially in the older age groups. In contrast, Category A responses increase only slightly in the older age groups. As the human condition becomes frailer with age the urgency of the response by EMAS diminishes – more people fall as they get older but they fall in less traumatic ways – requiring a measured, rather than a “NOW!” response.

1.3 The collection and storage, or use of data

'Performance' has long been the NHS – including EMAS – term coined to the task of extracting useful information from the clinical data collected. As new despatch and call handling methods have been introduced to ambulance services progressively since the 1980's the increasing volume of data that is collected has lead to

computer-based approaches for the storage of this data. The degree and method for applying query software to this data for information, discovery and knowledge can be obscured by the drive for 'performance' in the NHS. 'Performance' in effect is a very specific set of numerical responses to NHS policy and targets that extracts the data and compares/juxtaposes it with plans in a very structured way. What my first couple of introductory paragraphs have shown though is the dominance of performance can limit the use of simple algorithms to identify attributes of the NHS and identify opportunities to improve processes that we might have got from the same data.

Let us consider the "Evidence Based Box".



Starting with the principle that the ambulance data set has already given us four pieces of knowledge that we didn't have before – the location where falls happen, that falls happen to women rather than men, that most calls are not critically urgent and that the older you are the more likely it is that you will fall but it won't be a fall requiring a "NOW!" response from the ambulance crew. Asking the four corners of the evidence based box about why they didn't know this says some important thing to the use of evidence based management based on quantitative data in the NHS.

"Politicians" – The NHS is an exercise in political power. The politician will identify trends in public policy that go beyond simple analysis. The politician is naturally distrustful of ever more detailed algorithms about delivery for a part of the NHS, being concerned with the 'National' nature of the NHS and consistency of policy application. As an avoider of data the politician can still have the opportunity to identify key business processes and target opportunities but will not be able to push for a multivariate analysis of the data. Ultimately the problem is that the politician is concerned that abdicating control over the usefulness of data to the statistician to explore knowledge in this way may result in contradictions with policy, false-positives or results that are good for the NHS but no use for the politician at all.

"Public" – Ambulances are an emergency service. The call for an ambulance is 999. The same as for Fire or the Police. The public want their police visible and their fire service quick. It follows that the public want ambulances – glamorised by the media portrayal – to be there quickly whatever the circumstances. The public has made

the ambulance service part of the taxpayers compact with the NHS and a forecast or predictive modelling based approach to the use of EMAS data is of low regard for the public. The same data – mining and prediction techniques puts ambulances and modern response vehicles on road sides rather than ambulance stations and the public may be distrustful of the road-side ambulance opined to be “doing nothing”, when it has actually been statically placed. Data is, in effect, linked to targets – themselves a perceived corruption of a clinically lead NHS.

“Clinicians” – The clinician, as has been seen in the short literature search identified in paragraph 1.1, is most concerned with the nature of the fall. The ambulance service is seen as a scoop and run service, bringing the patient efficiently to the trauma centre. To the clinician the policy response of the NHS is consistent with the patient experience. Falls are ubiquitous and deadly, require immediate response and palliation for pain. EMAS will transport patients who require moving to the centre for excellence in this area. Continuous innovation in the clinical pathway, dramatically increasing the accuracy of diagnosis and prediction of likely outcomes for patients for different interventions makes them satisfied they are doing the best for falls: that the ambulance is likely to be the first responder; that falls are rarely life threatening; that there is a gender bias in those who fall and that getting to people at home before they fall, not in the street after they have fallen, would be economically sensible; none of this will matter to the clinician.

“Managers” – Managers rely on the use of data. But they are unlikely to be happy with data that has unknown interrelations. An unavoidable weakness of asking the sort of what-if questions posed about the EMAS data is that it can lead to two adverse reactions amongst managers. Unlike performance data it may expose uncomfortable relationships to be observed between perceptions of excellence in the NHS target performance (attributed by others) and real questions about operational policy and superior operational delivery. Secondly it can expose the pursuit of an information data source that has never been observed and leads to the torment of the professional administrator – a request for more form filling and data capture. Managers are also concerned about issues of data security given that significant data loss in the NHS is now a dismissible offence for all grades of NHS manager.

2 Subjects under study

2.1 A brief introduction to East Midlands Ambulance Service (EMAS)

I wanted to complete the analytical quantitative part of my study of evidence based management by looking at EMAS, as the only clinical service organisation that covered the whole of the East Midlands. EMAS also provides services in the South Humber areas of North and North East Lincolnshire which is outside the definition of East Midlands used elsewhere in this project. When I talk of the East Midlands in regards to ambulance service I will be talking about the area co-terminus with the East Midlands Strategic Health Authority and the Government Office for the East Midlands, not the whole of the service area covered by EMAS including South Humber. EMAS provided emergency and urgent care, patient transport, call handling and clinical triage services. EMAS employ 3000 staff and have 70 locations they operate from and an annual budget of £137 million in financial year 2008/09.

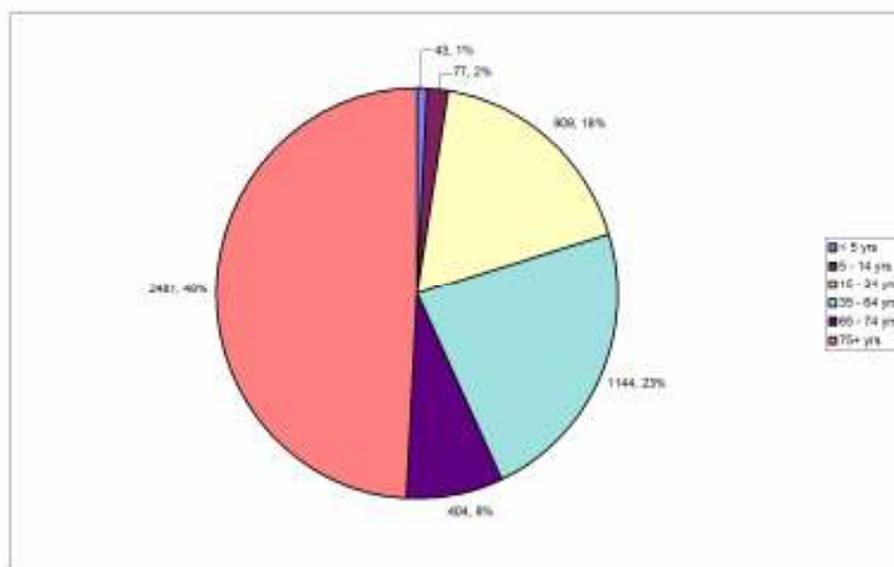
Accident and Emergency crews responded to over 500,000 calls this year. In addition, patient transport and volunteer ambulance car drivers provide care and transport on 5000 journeys to and from routine NHS appointments each day. Community Paramedics and Emergency Care Practitioners treat people in their own homes following an emergency response if a hospital visit is not required.

The requirement is for all NHS ambulance services to respond to the most serious and life threatening injuries (what was called Category A earlier) within eight minutes. Ambulance Trusts must also arrive at the home of patients within 15 minutes if requested by a GP. The publication of "Taking Healthcare to the Patient – transferring NHS Ambulance Services" (2005) also started a process of change which shifted the focus from simply response times to the quality of clinical care when response staff from EMAS reach a patient. So measures are monitored for example: how many heart attack patients have been given clot busting drugs (for heart attack and stroke patients this is vital to be given as quickly as possible to prevent long term damage); how well pain has been managed for patients by the use of scales and EMAS performance also includes an active duty to make referrals under child protection guidelines as a first responder to families in varying degrees of distress.

EMAS is organised as an NHS Trust and the ultimate objective of the organisation would be to sustain a sufficient track record of financial and quality performance over a number of years that they were authorised to be an NHS Foundation Trust. They receive their annual income from Primary Care Trusts. In that way EMAS can only be paid in competition/opportunity cost with every other possible disbursement of NHS resources. The amount that EMAS receives is settled in exchange for services provided but will be in the same way exclude GPs, urgent care centres, some private providers and other NHS hospitals who might have thought they could use that money for the same patients in a better way. To that extent, EMAS must constantly improve and re-prove itself to maintain the contract income it receives as well as place itself in the contest for additional resources within the NHS by way of innovation and good clinical quality. EMAS has grown both organically and by merger from previous ambulance service that served the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland. Before 2000 these would have been separate organisations.

2.2 A brief introduction to the studied population

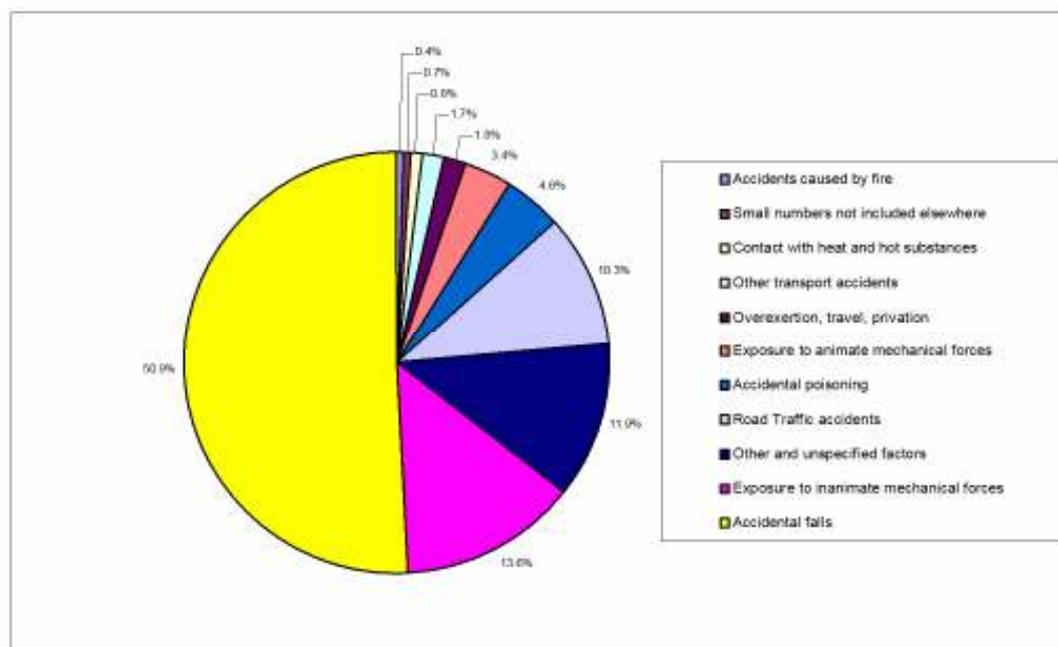
Figure 5: Deaths from avoidable injury by age group in the East Midlands (2001-2005)ⁱ



With a population of nearly 4.2 million, 7% of the UK total, the East Midlands is geographically the third largest region in England. The area faces diverse challenges including dependence on manufacturing industries and ongoing problems of urban deprivation. The south of the region is more prosperous due to close links with the South East but there are parts of the region affected by rural deprivation and isolation. Specifically, the East Midlands is the third most rural region in England with 29% of the population living in rural areas. The region has a similar age structure to the England average with 18% of residents of school age, 63% of working age and 19% of pensionable age. The population is projected to increase between 2003 and 2028, with the principal driver of this growth being the group of pensionable age. In the East Midlands there are slightly more women than men at 51% compared to 49%. In the 2001 Census, 9% of the region's population classified themselves as having an ethnic minority background. Residents of Indian origin make up the largest group in the East Midlands accounting for 3% of the total population. There is considerable sub-regional variation with ethnic minority communities making up 39% of the population of Leicester City, but only 3% in Derbyshire. A statistical overview of the East Midlands region shows that it is the second smallest region in terms of population. 29.5% of the population is resident in rural areas, which is 10 percentage points higher than the England average. In 2004, 19.8% of the East Midlands working age population self-described themselves as having a disability, which is one percentage point higher than the UK average. According to the 2001 Census of Population 72% of the population self-identified as Christian. 1.7% of the population described themselves as Muslim and 1.6% as Hindus. The Government estimates that between 5-7% of the UK population is gay, lesbian or bisexual. In June 2007 76.2% of the working age population of the East Midlands was in employment. This compares favourably with the average UK rate of 75.8%. The employment rate was higher in rural areas than urban areas. The regional NVQ3 rate for working age adults is 48.8% compared with the UK average of 50.5%.

2.3 A brief introduction to the falls problem

Figure 6: Main causes of avoidable injury admissions in 2005/6 (all ages) - East Midlands residentsⁱⁱ



Falls in the elderly population represent a serious and increasing issue in the UK and the subject area is attracting increased attention in current government policy development across different departments including health, social care and housing. In January 2008 the Department for Communities and Local Government released a report entitled “Lifetime Homes, Lifetime Neighbourhoods” (2008). This report highlights the following statistics:

- One older person dies every five hours as a result of a fall
- Falls in older people cost the NHS around three quarters of a billion pounds each year
- 1.25 million falls a year result in hospital admissions.

Ambulance services have a key part to play in tackling this issue. The recent Department of Health guidance on Urgent Care Pathways for Older people with Complex needs states that:

“The importance of the ambulance response to older people who have fallen has historically been poorly recognised within the wider NHS. Ambulance clinicians are in a unique position of attending this group of patients in their own home and as a result are able to observe, not only the condition of the patients, but also their living conditions (hygiene, food etc).”

“Lifetime Homes, Lifetime Neighbourhoods” commits the government to the following action:

- “We will improve joined-up assessment, service provision and commissioning across these three sectors (health, housing and social care) in order to deliver better outcomes for older people.”

Falls in the East Midlands

Against this national back drop it is important to understand the 'picture' of falls in our area and what we can do as a service to reduce the number of falls, through partnership working or by managing our response to them more effectively. The East Midlands falls data reinforces the national view and therefore there is a need to pay particular attention to falls.

3 Patterns of data

3.1 Presentation of the data

Several types of statistical/data presentation tools exist, including: charts displaying frequencies (bar, pie charts); charts displaying distributions (histograms) and charts displaying associations on an x-y scale (scatter or frequency diagrams). Throughout this paper I will try to use the simplest diagram available to enable the data to be understood, with summary values and graphical presentation. I have limited my presentation to summary values to illuminate the discussion for the reader. It is important if a deeper understanding of this data were to be had, to look not only at absolutes and means, but also to look at distribution, median, mode, range and standard deviation. It is important too to look at summary statistics along with the whole data set to understand the entire picture. Descriptive statistics can be illustrated though in an understandable fashion by presenting them graphically. It is important to note that this paper is an exercise in a consideration of evidence based management and the NHS management response not a classification of attribute and variable data so the data analysis is presented here with the following questions in mind. What am I trying to communicate? Who is my audience? What might prevent them from understanding this display? Does the display tell the entire story?

I am trying to communicate that even a simple analysis of data readily available at source from a clinical service – in this case – EMAS provides evidence that the NHS find it complicated to respond to, so to that extent, I want the conclusions presented simply and to be quickly understood.

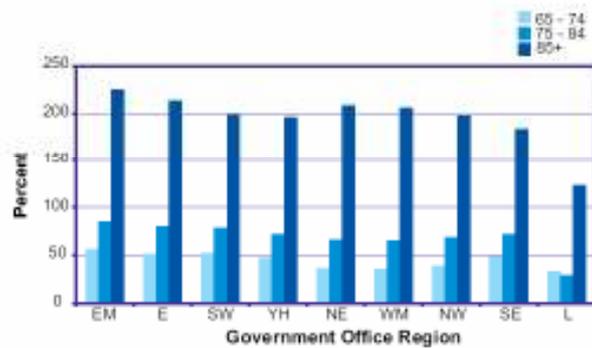
The audience is the reader of a senior management level paper who can be presumed to be able to manipulate and interpret data but is not working in this circumstance to a high degree of technical specification and will not necessarily need to know confidence intervals in the data to draw conclusion about its usefulness as evidence. What might prevent them from understanding the display is if the scale or origin of the data was skewed in presentation. Bar and pie charts are particularly useful to compare the sizes, amounts, quantities or proportion of various items or groupings of items. When I have presented data I can be confident it tells the entire story. Bar and pie charts (which predominate in this paper) can be used in defining or choosing problems to work on, analysing problems, verifying causes or judging solutions. Bar and pie charts are particularly helpful in presenting results to peers and managers, mixed in as they are with a written narrative. As part of the presentation here they can be particularly useful with variable data that have been grouped. Bar charts work best when showing comparisons among categories, while pie charts are used for showing relative proportions of various items making up the whole.

3.2 An analysis of the data

Consider the following table:

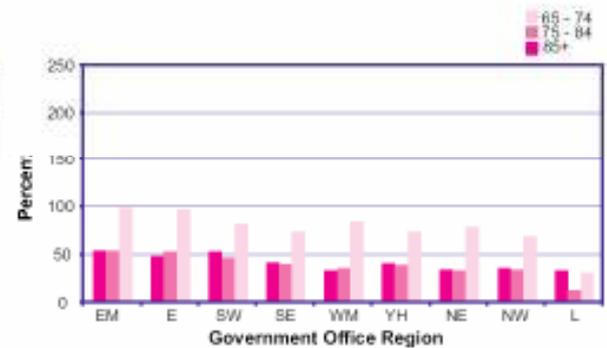
Figure 7: Population Changes by Government Regionⁱⁱⁱ

Figure 2.17a Projected population change 2004-2029 in males, age 65+, England



Source: ONS Projected population change 2004-2029

Figure 2.17b Projected population change 2004-2029 in females, age 65+, England



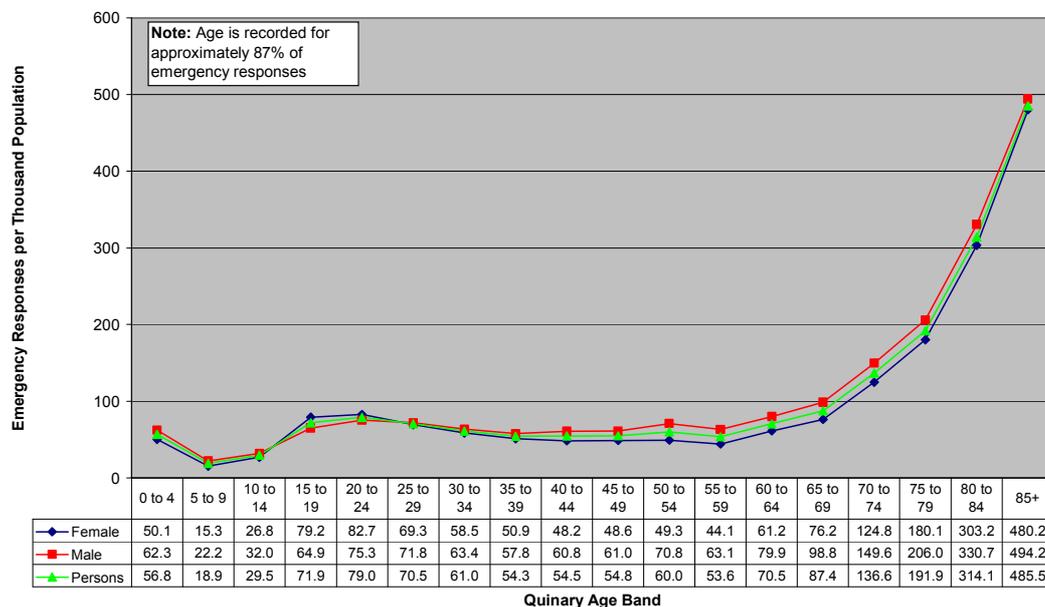
Source: ONS Projected population change 2004-2029

The office for national statistics predicts that the East Midlands will be the government region that experiences the greatest growth in its elderly population in the next 25 years. The regions male population over 85% years is expected to increase by over 200% in the same 25 year period. So we have an ageing population.

Now consider the next table:

Figure 8

EMAS Unadjusted Emergency Response Rates by Age and Sex
April 2006 to March 2007



Falls in the elderly have a significant impact on EMAS service provision. Different age groups use the ambulance service in different ways. This can be seen in the unadjusted emergency response rates for intervals of five-year age groups. The unadjusted rate of EMAS responses to females in the 85 and over age group is 480.2 responses per thousand population. This is over 6 times the response rates to teenage females which in itself is 5 times more than the response rate to females who are of primary school age. Any sense that the risk taking behaviours of school children in playgrounds or the lifestyles of teenagers are more dangerous than simply being elderly, are not borne out by the data at all. So, in this data rich area what is it possible to say about the data and not just the results? The first point is about the source of the data: each and every ambulance call is collected, coded and despatched by a team of trained handlers who complete a minimum summary data set of the transaction. This can be supplemented with other data but it does represent the same data used to provide published performance data, operational planning data for EMAS and contract (invoice) settlement data for the payers, the Primary Care Trusts. The data from which the sample is drawn is used for planning and performance of EMAS services. The queries may not always be the same as in the study, but the data is. There is no question of bias in the data capture, as this is not trial data it is a random sample of the whole database (subject of course to type 1 and type 2 errors as all samples are). The sample represents about 0.5 of 1 percent of the whole database of journeys over a financial year. The data and the results have not been peer reviewed by other professionals. Nevertheless, the data has been audited by external and internal auditors and is used in the publication of Healthcare Commission scores by the independent Healthcare Commission each year. Manipulation or falsification of data is a breach of the code of conduct for NHS managers. The combination of ethical, performance and legal controls combined with the use of the same data set for internal and external reporting gives confidence that EMAS do not have an incentive to hide data that contradicts their organisations position. This paper is part of a whole research project that works within the NHS framework on ethical and peer reviewing of research, governed by the NRES. The data used here is not an audit of an existing standard of management practice or an evaluation of a specific organisational changes but makes up part of a survey using multiple methods to test a thesis and generate new knowledge. To that extend the data has been accessed rather than created and can be treated as a sound base upon which to draw conclusions.

3.3 Validation of the results

There are a number of possible limitations to the validity of the results despite the unequivocal analysis of the quality of the data. This will be discussed further in paragraphs 6.1-6.3 but before drawing conclusions and considering the implications for NHS policy and practice, I want to be clear about the range within which these results are valid. First of all the data is a self-selected sample. It is made up of people who called the East Midlands Ambulance Service in the 2006/07 year. True, there were 500,000 + calls for an emergency response that year, but the population is of people who called the EMAS emergency numbers. The conclusions are only valid in responding to evidence about the use of EMAS services therefore. As an exercise in understanding the response wider of NHS management and NHS policy, it is valid but the conclusions are drawn from evidence that is valid only about EMAS. In simple epidemiological terms this is a study about 'disease' (emergency medicine and nursing) that didn't go out and collect data itself I have used source data that already existed and looked for meaningful patterns in the data to find

something interesting or revealing about the nature of management by evidence in the NHS. In order to avoid doubt this study, which sampled data for 2006/07, would need to redraw boundaries to check that the conclusions were true for periods less than a year and in other years before and after the same year too. This type of meta-analysis of all the years would increase the validity of my conclusions drawn from a longitudinal study of only one year. I chose the year 2006/07 as this was the last full year available when I undertook the literature review and the qualitative interviews of NHS executives so there is consistency of methodology. I have tried to avoid regression analysis despite the attractiveness of correlation because I do not have a null hypothesis about causation that that I want to test – and in the act I have also excluded ‘spurious correlation’ as a problem. Finally, the entire study has tried to draw conclusions using EMAS data about the nature of EMAS services. Only in forecasting population growth have I had to go to another data source (the East Midlands Government Office). What must be acknowledged about the validity of the results, is that it is not possible to have a ‘double-blind’ sample of people who did NOT call EMAS over the calendar year 2006/07. Let me draw an illustrative conclusion. EMAS has been sharing data with Nottingham City PCT in order to improve services for older people who have fallen. EMAS drew a pictorial representation of responses to falls in the over 65’s. The local acute teaching hospital (Nottingham University Hospital) drew a similar map which demonstrates the residential address for hospital admissions due to falls. Because the transport rates for falls varies between 30 to 50 percent of EMAS calls in response to a fall we have two similar but different populations. The percentage of people over 65 who have fallen and the percentage of people over 65 who have fallen who require transport to hospital. Add to this the cohort of people who fell but did not call EMAS, either because the incident was trivial or self-managed or they were transported independently or privately and we have four possible cohorts. All people who fell, were over 65 and used NHS services and/or EMAS. With ALL of this data – prohibitive if not possible to collect – not all extrapolation of the results I have found will be valid.

3.4 Significance of the results

A number of interventions exist that address the problem of falls. Home assessment and modification reduces the risk of falling by adapting homes of individuals at risk (introducing grab rails and ramps, removing loose rugs). Pharmacy reviews can address the pharmacological risk factors for falls. Other interventions soften the impact of falls – hip protectors are shields worn over the hip designed to distribute impact forces away from the hip into the soft tissues. Hip fracture appears to be a rare event when hip protectors are worn at the time of the fall.

Whilst the above interventions are effective against falls, they are expensive to administer. Resources are limited and therefore must be allocated to those interventions that bring the greater benefit. Currently we have a significant understanding of the magnitude of the problems that falls amongst the elderly creates, in terms of acute and long term needs. So what does an evidence based approach to the numbers we have seen so far mean to the ever growing knowledge of falls in the NHS. We have seen seven pieces of data so far. The evidence based significance of the results in a responsive NHS would be:

Pie chart, graph or table already displayed	Significance of the results to the debate about on NHS management that is evidence lead (+) and (-) not evidence based and ✓ to show which is most likely
EMAS response to falls in over 65's: by call category	+ Work with family and friends to develop a minimal lifting policy to differentiate recovery from traumatic injury. -Treat all falls as traumatic irrespective of carer (✓)
EMAS response to falls in over 65's by call category	+ Ambulance staff are recognised as normally the health and social care 'first contact' with fallers and triage is scaled appropriately. - PCTs invest in falls managers to fulfil the older people's national service framework only. No work with EMAS. No work with EMAS (✓)
EMAS responses to falls in over 65's by gender	+ Implement falls initiatives that positively impact on falls preventative issues recognising this is a major female use. - Undifferentiated service leads to low quality patient experience (✓)
EMAS response to falls in the population that is over 80 years old	+ Following transportation to hospital the support networks including family are continually engaged around the patient. - Admission to hospital the norm (✓)
Population changes by government region 2004-2029 (male)	+ Recognise gender is an issue in that the service mix changes from predominantly female. - Fail to tailor information on hop protectors to a male audience(✓)
Population changes by government region 2004-2029 (female)	+ Implement commercial policing of alarms systems or alert systems to cope with prevalence of low impact falling (✓) - Despatch ambulances to aging female population
EMAS unadjusted emergency response rates by age and sex	+ Ultimately reduce ambulance responses to those who fall. - Despatch ambulance as only source of care (✓)

So in only one area do we see anything like a positive likely evidence based outcome.

3.5 How do the results answer the problem?

As with much of the discussion about evidence based management in the NHS, I find two things to be true. 1 – using the Rousseau model (below) it is quite clear, quite quickly that the evidence based response can be differentiated from the non-evidence based response. It is also quite clear, quite quickly that the non-evidence based response is sub-optimal in the opportunity cost of patient care and wasted resources. 2 – that somebody somewhere will have drawn the conclusion and be implementing a pilot or innovative local solution but that this will not be normalised behaviour for the NHS.

After Rousseau: A synthesis from the literature of Rousseau on the practice of Evidence Based Management.

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
The supervision of employees	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
Information available to managers on the consequences of their decisions	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
The delivery on promises to the public, employees, stakeholders/taxpayers customers and others	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
Management style	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
Approach to academic research	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work

Management culture	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors structured methods for improving efficiency were classified under scientific management	A belief that good management is an art – “the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implantation fail	Managers are prevented from real learning by fads and falsehoods

Let me consider again the table in 3.4. In summary, evidence suggests that a significant percentage of those who fall are elderly and that following transportation to hospital their support networks and infrastructures are switched off – hence they tend to be admitted to hospital. On a practical level, the falls co-ordination services provided and commissioned by PCTs do not co-ordinate well with EMAS and fail to recognise that a) EMAS is the first responder in most cases, b) fewer of these cases are Category A calls. So the evidence based solution would be to adjust NHS policy and operational response to this issue. Which is just what the NHS in Plymouth did. In one ambulance station; this innovative team who have access to a specialist clinical support vehicle and access to the most modern lifting equipment, prevent other emergency vehicles and resources being sent to non-injury falls patients who do not need to be conveyed to hospital. In a 20 day period during December 2006 the method was used to respond to 24 falls and 95 GP urgent admissions.

Unfortunately the NHS response is NOT to industrialise this good practice on a larger scale. The pilot in the ambulance station was nominated for a prestigious award by the Ambulance Service Institute and beat off national tough competition to win the ‘Award for Innovation’ which was marked by a ceremony at the House of Commons on 3 May 2008. An MP presented the awards. This year coming (2009/10 financial year), some moves will be made to introduce this pilot to Bournemouth, Yeovil, Exeter and Truro. I will try to introduce it to EMAS for the East Midlands, but they have said, quite frankly, that they want to see the four pilots of the South West completed before they consider a change. Falls just aren’t that influential it seems.

Compare this to Ambulance Crew Reading to Cardiac Unit. A new system for treating patients who have suffered from heart attacks is to be rolled out across Scotland after the success of a pilot project at Edinburgh Royal Infirmary. In conjunction with the Ambulance Service for Scotland the hospital has been giving patients an automatic admission to operating theatres where on-call surgeons unblock the heart’s arteries. Timing is very fast. Ironically, this is done by the ambulance crew sending an ECG reading straight to the cardiac care unit. The Medical Director of EMAS advises that EMAS stopped doing this 3 years ago as the decision was to trust ambulance staff to read and therefore no need to transmit.

In summary, a proven method of preventing falls being a drain on ambulance resources is struggling to get beyond pilot stage, despite evidence (and awards and acclaim) whilst an unproven pilot, the evidence of which is patchy for the East Midlands, is being rolled out across the whole of the NHS in Scotland. The answer to the problem is that evidence is less important than policy.

4 Implications for NHS Policy and Practice

4.1 Practical Implications for Leaders in the NHS

Who does what? In the organisation and planning of ambulance services in the East Midlands there is an inextricable link between organisational performance, organisational effectiveness and leadership. Ambulance services and the importance of the ambulance response to older people who have fallen, has historically been poorly recognised within the wider NHS. Ambulance clinicians are in a unique position of attending this group of patients in their own home and as a result, are able to observe not only the condition of the patients, but also their living conditions including hygiene, diet etc. In order to transform the service that EMAS provides to falls victims and those at risk of fall, the Chief Executives of both EMAS and their Commissioning Primary Care Trusts, the transformational leaders, need to adopt an evidence based approach to the data collected by EMAS itself. Instead of a total focus on specific organisation objectives that is typical of the existing contractual relationship with EMAS, the management style should place an emphasis on evidence as a basis for innovation and a rationale use of resources.

How do they do it? The NHS is the name of the Government policy not just a service. The NHS identify can help patients and public access and understand this new system and the NHS can provide continuity of pathway planning. By using the evidence available about how falls should best be managed, how the use of ambulance resources can be maximised and the effects that an aging population will have on calls to ambulances the leaders in the NHS can help the public to navigate the system in a different way, but still be confident that the system will be delivered in line with NHS standards and values. The key is to respond to the evidence that has been collected, to park the targets of today as their assistant directors and operational managers will achieve this, and to shape the targets of the next decade in line with the Ambulance clinicians.

When do they do it? This paper has explored literature and data on evidence based decision making. As we have seen in earlier papers, the rhetoric of evidence based management serves an essentially ideological function, obscuring the real difficulty in securing effective and sustainable change. As considered earlier in this paper, the date exists, even with a simplistic analysis like mine to point to changing policy imperatives and a different prioritisation by age/sex/location of ambulance services. In organisations with deeply engrained power structures and as complex and intransigent in-year performance function as the NHS the executive of the East Midlands – particularly the PCTs – must only attempt to implement the evidence based approaches to EMAS when they meet collectively on a monthly basis. Otherwise these ‘numbers’ I have found will not survive the challenge of an NHS hierarchy in a climate of turbulent change created by the volatility of government policy.

Why do they do it? Falls in the elderly population represent a serious and increasing issue in the UK. This is gaining increased recognition in current government policy across different parts of government including social care and housing as well as the NHS. The reason the executives in the NHS respond to this is because it is NHS Policy and Practice. The key though is that at the very strategic level the NHS response via policy is, in this case, evidence based. The report by the Department for Communities and Local Government released in January 2008, named “Lifetime

Homes, Lifetime Neighbourhoods” highlighted the following statistics: one older person dies every five hours as a result of a fall; older peoples falls cost the NHS around three quarters of a billion pounds each year and 1.25 million falls a year result in hospital admissions. The role of the NHS executive in respect to evidence based management in the East Midlands NHS and with respect to EMAS in particular should be to ensure that however big these absolute numbers seem they should elicit an evidence based and proportionate share of resources to their answer.

4.2 Clinical Practice and Managerial Practice

Let me consider what the implications of quantitative analysis of East Midlands Ambulance Service referrals says about the development of evidence-based approaches to NHS management and policy.

Cultural and attitudinal change

Researchers and academics should be invited in to the commissioning cycle. At the moment there is strong participation from clinicians, executives and accountants in setting a robust planning and contract negotiation framework. There is some preference expressed for the use of data analysis – including to do some data mining – but the application of best management practice, knowledge management (or even a structured response to the research questions that the data throws up) is very difficult within the current make-up of the EMAS contract.

Look for evidence based enablers of the ‘central targets’ hitting should also be pursued. The key is here that the central targets for Category A response times, falls and patient transport are not going to disappear. My pie-charts say some interesting things, even that we may be missing the strategic overview of the direction for EMAS services by hitting central targets. Nevertheless, we should not use this as an excuse to avoid evidence based culture and attitudes. We should instead be looking for evidence of what works to do the most optimal things based upon ambulance resource usage and hitting the targets not making them mutually exclusive.

Invest in developing the infrastructure to support evidence-based decision making

Organise contract management boards that focus on clinical quality rather than adversarial performance assurance. The debate about what works from an evidence point of view will be enhanced by putting clinicians into the commissioning/planning arrangement. This is stimulated by the use of evidence based knowledge. If this is called “Therapeutic knowledge” then the use of management evidence is moved to that which makes best use of scarce resources for EMAS in pursuit of the optimal therapeutic interventions. Reducing waste is very good for EMAS and the NHS and patient education and communication being enhanced will make it better for patients to. This infrastructure would necessarily mean that the summary monitoring information (necessary for assurance about central target hitting) moves from weekly to monthly collection to free up the time for the saved intellectual and data processing to be applied to evidence based decision making.

Develop a cadre of managers with the skills needed to use evidence more effectively

Epidemiology and the patterns of population, falls, diseases that affect ageing (hearing, eye sight, bone density), age-sex ratios, population growth, morality and morbidity underlie a good use of data. This does not obviate the need for Financial Planning which has tended to be used for EMAS previously but it does mean an alternative from cost to a detailed understanding, not only of efficiency and economy to include effectiveness too. Evidence might be called the economic (opportunity cost) of the current solutions we use. A lack of managers ability to use epidemiology 'outcomes measurement' is probably a big leap but the use of evidence based prompts in longitudinal studies would only be possible were the competence of managers to use this evidence effectively also developed. Should plan whether something is feasible before we begin to do it. This looks at the probability of success, risks, timescales and critical paths. By simply saying that the data I have found about falls and EMAS should be applied to a feasibility analysis of an evidence based solution versus a policy solution to each project the cadre of skilled managers increases.

Look for evidence of success of evidence based decision making as an innovation itself

Managers and policy makers have been prominent advocates of evidence based clinical practice, but have not been quick to apply the same principles to their own decision making. In terms of the best commissioner performance, there is a post-hoc rationalisation of what was successful and what was not successful (normally in response to published performance ratings) but the key would be to show that by applying evidence based decision making, this lead to an evidence based increased in the performance and planning of EMAS. An early proxy such as "Increased interest in the area from other planners and providers of ambulance services" could be taken to mean that the data for EMAS has been successfully data-mined to improve performance in such a way that use greater appreciation of the value of management and its role in patient care. The key here is that the management role is enhanced by the use of evidence based management and in such a way the credibility and development of the subject area is enhanced.

4.3 Patient Behaviour

Consider the following pie charts.

Figure 9

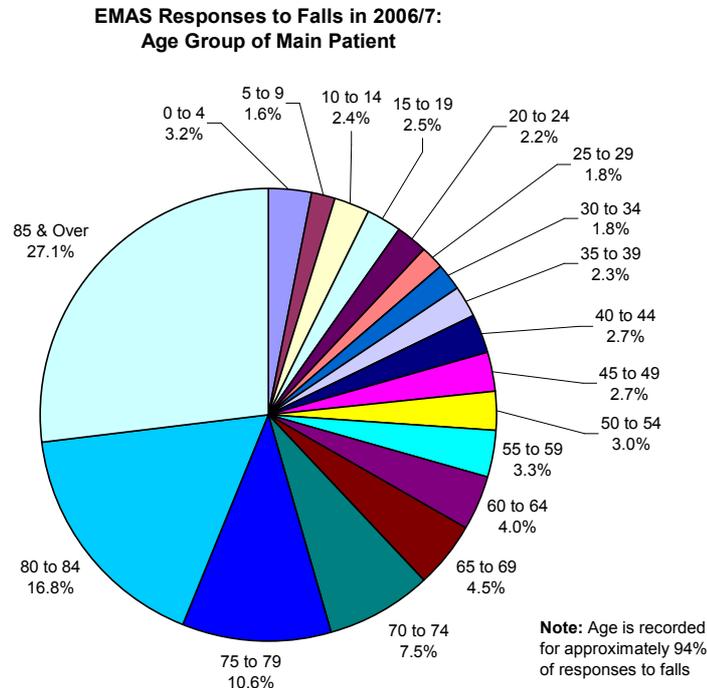
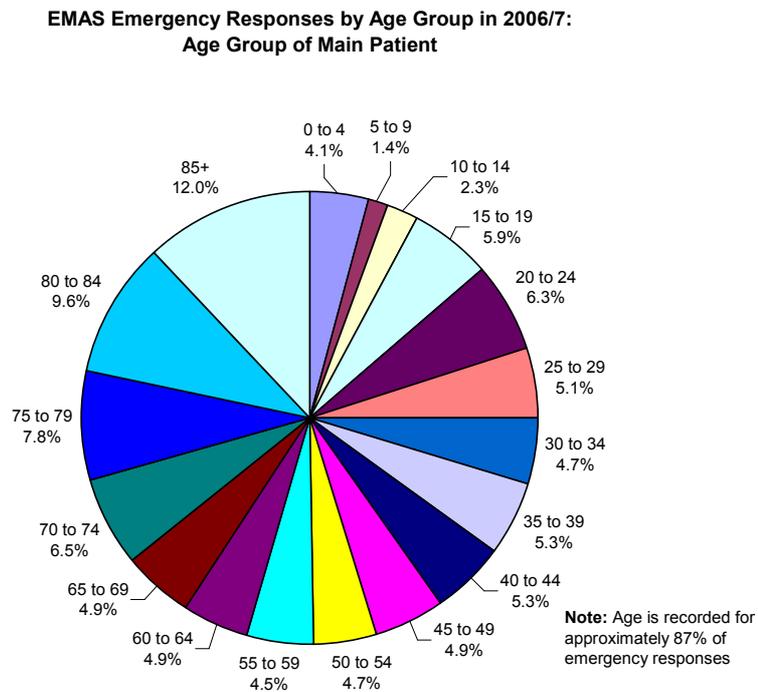


Figure 10



Whilst it is true that in both charts the use of the EMAS service increases with age, this is much more pronounced when it comes to falls than when the wider set of

emergency response is looked at. That therefore means the patient behaviour that needs to be developed is not the same for falls as it is for EMAS as a whole. The key here is to enhance communication between planners like myself, ambulance clinicians, control room dispatchers and most importantly patients. In the planning of EMAS the policy for Category A responses should be explored to understand in the East Midlands, how older people view and respond to the challenges of independent living. As earlier graphs have shown – without this communication about patient behaviour, the elderly will call EMAS but the very senior age-group, of 75+, will have a diminishing proportion of their falls treated as Category A. The commissioning policy for EMAS should collect information from the public about what they view as a successful outcome to their 999 call, but the data source should skew heavily towards the proportions outlined in the age - profile of falls – not the age profile of the population as a whole nor even the age population for which EMAS responds in a wider sense. Note that further work is required on the effectiveness of tailoring health advice in changing patient behaviour for the better is nevertheless clear that the normal sense of tailoring to address inequalities in access by ethnicity and location, overlook the tailoring that is required here to address age and very senior aging. The policy response for EMAS is not whether tailoring works as a model, but what the evidence tells us about when it is most effective, given the pie charts above. For example, large advertising campaigns need to be using technology and environments appropriate to the population at risk. Thus, the increasing vogue for mobile technology as opposed to traditional billboards on public transport and in supermarkets may not reach the target population. It is also true as noted before, that as hearing and eye-sight weakens with advanced age, video and one to one in-person interventions could be more successful. As the very least, the EMAS and PCT response to this dilemma should be to check that written materials designed to encourage participation by the very senior age group(s) are usable and address the basic needs for autonomy and competence that motivates us all.

4.4 A checklist of Evidence Based conclusion

Frank Blackler of the University of Lancaster in 2006, published in a media interview in the Guardian newspaper, his synopsis of what was good/bad and hard in the political and managerial models of control of the NHS. Taking that as a template it is possible to draw something of a framework for how the evidence based conclusions can be accommodated. I will specifically address what this means for the subject I am studying, EMAS, and the response to falls.

Blackler's Contentions (My comments)	What I observe as the Evidence Based Conclusion of my data on EMAS and falls 2006/07
1. Central controls have eroded the capacity of managers to lead (I disagree – central controls mean we now use our data better).	1. The evidence collected shows that in 2006/07 just under half of all deaths from avoidable injury are in people who are 75 or older. Prior to national policy setting the role of ambulances in this area has been poorly recognised.

<p>2. The present system of politically lead target setting is wasteful. (I agree).</p>	<p>2. Our evidence indicates that the call category of emergency responses is also related to age. Responses to older people who have fallen are less likely to be coded as Category A.</p>
<p>3. Targets represent an instruction to manager and are based on a mistrust of managerial autonomy (I disagree – the requirements to deal with over 85 year old females is neither promoted by nor limited by national targets).</p>	<p>3. Falls in the elderly population have a significant impact on EMAS service provision. Different age groups use ambulance services in different ways. For example, the adjusted rate of EMAS responses to females in the 85 and over age group is 480 responses per thousand population.</p>
<p>4. The NHS has enjoyed substantial increases in public funding and politicians are anxious about how this money is used (I agree).</p>	<p>4. The office for national statistics predicts that the regions male population over 85 years is expected to increase by over 200% between 2004 and 2029. Therefore the unequivocal substantial increases in public funding may be overtaken by an ageing growing population.</p>
<p>5. Targets are a conduit for politicians that negates local prioritization (I agree).</p>	<p>5. The data collected shows that 51% of all avoidable injury admissions in the East Midlands are due to falls. This has little to do with government policy that requires more joined-up assessment and service provision.</p>
<p>6. Managers need to be treated with and behave with confidence (I agree).</p>	<p>6. If the managers use the evidence drawn from the data sample, then confidence is increased. Evidence rather than opinion will increase confidence in decisions.</p>
<p>7. It is difficult to distinguish the strategic objective of a policy from its day to day working (I disagree).</p>	<p>7. The national policy reflects that falls are more common in the older population. The EMAS response to falls in over 65s by type of pick-up location is a day to day tactical East Midlands issue alone.</p>
<p>8. Targets should be fashioned locally (I agree).</p>	<p>8. EMAS has been sharing data with Nottingham City PCT in order to improve services for older people who have fallen.</p>
<p>9. The difficult shift in the NHS doesn't make management in the NHS hard – it is why we have NHS management (I agree).</p>	<p>9. In 2006/07 EMAS made approximately 42,000 responses to a person of 65 years or over who had fallen at an average cost of £193. This requires both increased recognition in policy <u>and</u> management action.</p>

10. "Go towards the gunfire" (I agree).	10. Responses to falls in the 65 and over age group during 2006/07 cost approximately £8.1 million – this is worthy of getting involved in an evidence debate about.
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5 Conclusions

5.1 How this data has stretched our body of knowledge about EBM in the NHS

- a. It has not been difficult to get access to a "body of knowledge" for East Midlands Ambulance Service. A years data is stored and easy to access and operational procedures are clear. It is clear from the EMAS dataset that much of what the NHS says about information and choice for the millennial generation that require power and choice itself – doubts the power and authority of myself and calls itself a customer. That governs much policy and planning of the NHS. EMAS on the other hand is a 10% glamour Category A service, but by majority it is a senior lady who has fallen and calls 999 because she did, but can wait.
- b. In our efforts to continually and refine the body of knowledge, guidelines exists for where evidence is and is not appropriate. There is a culture of target hitting, self-regulation and rooting out dangerous clinical practice that has it's origins in criminal and unsafe clinicians such as Harold Shipman. But there is also a fear of evidence that pervades any hope of a structural response to the issue. There is also as we have seen far more complexity in the NHS. We have pressures to avoid all clinical hazard whatever the opportunity cost is we have pressures and incentives for institutional growth over best patient care. We have consumerism and we have pre-occupation with financial costs over economics or 'whole system/whole life' costs.
- c. It soon became clear that the challenge for evidence based management is both simple and complex at the same time. Quite quickly, data can be manipulated to draw evidence based conclusions but these are multiple sub-tests. Our patients whom we are analysing are also the patients whose behaviour we must modify and adapt if the changes are to be made to a more evidence based planning and funding of services. Above all, what has changed in this report about EBM in the NHS, is that nobody can do it on their own. The tasks of responding, collecting and treating the population of the East Midlands with Ambulances and Paramedics have passed the capacity of any single human mind to plan the service, no matter how skilled or altruistic or self monitoring they are.
- d. Our knowledge base is changing. A definition of a 'profession' such as ambulance clinicians including paramedics as people reserving the right to judge the quality and appropriateness of their services is over. It is clear that the politicians believe the bond of public trust to be broken. The reason we get politicians using evidence based numerics in a heavy and dogmatic way is that the assumption of professionalism amongst paramedics has lost the confidence of politicians. Transparency about data has shown itself to benefit the management of falls in the over 65's in the East Midlands region, but at

the same time the complexity of the NHS system means that simple-easy to communicate – policies are seen as the antidote to complexity not the use of evidence.

- e. Our best effort to date would look like this: the evidence would be generated to pose questions for negotiated change in EMAS services. The work I do as a funder/commissioner of services has not stopped, fraying confidence in the public at large, of politicians and people like myself. Who, neither of us are immune to the charge that we use data and targets to peddle the untruths of politicians and the half-truths of managers like myself advertising success from data.
- f. NHS Direct said a lot about falls, but too much has been made about boundaries and who owns the body ‘body of knowledge’ about falls and the area is replete with professional rivalry. Organisations like NHS Direct and EMAS cannot thrive alone, but will thrive only in interdependency. The parts of the NHS – acute trust – EMAS – NHS Direct – PCT – politician – clinician, can only use evidence properly if they ask less about ‘what do I do?’ and more about ‘what am I part of?’

5.2 Did this match what I thought in the introduction

- a. I spend a great degree of time analysing and considering data about performance of ambulance responses to emergencies, but the question of ‘how do we know what we know’ keeps coming up. I – and the patients for whom I buy services – have now become irrevocably part of something far larger than myself. The craft of care has transformed into the machinery of a supply system. By simply returning again and again to the question of what the evidence is telling us, will we answer the question of how we “know”. In earlier papers it has been shown that leaders in the NHS prefer judgement to evidence, but in the matter of East Midlands Ambulance Service, I am not as clear as I was at the introduction, that craft of management can explain the totality of the machinery of care simply by judgement. Data throws up some counter intuitive truths for us to act on.
- b. People fall in their own homes, but it is still not clear with whom do we share our knowledge. Nobody has doubled my data, but the problem is the fact that there is a clash of prerogatives between Chief Executives and Doctors. Political knowledge and policy may be more about power and influence than it is about distribution and seeking the wisdom of leaders. The thing that I didn’t realise at the introduction, was that it was less about the data than it is about what happens when the evidence shines a spotlight on something. It is not the evidence that will effect clinical change, it is what the funder (me) and the clinician does when the light is shone on the data and what I do is visible to myself, to others, to strangers even, even when I don’t want it to be visible.
- c. Despite all the writers about falls, it is clear that knowledge does not equate to value. Maybe nobody knew that night-time was less dangerous for falling than Saturday morning? Maybe everybody knew you were more likely to suffer a fall in your own home than outside a pub? But now we do know and so too do the clinicians delivering the service. But it seems that without political support or the glare of media publicity, the gap between evidence and

action is still large. There is no altruistic reason for EMAS to respond to the data creatively. I had expected altruism and care paramount but it became clear that the targets were a shield against deeper engagement with the public and although I have generated new knowledge, the value was being questioned. People in EMAS do not trust me or the politicians to use the data without prejudice or manipulation.

- d. Ambulances use clinical best practice to categorise patients from A (high need) to C (low need) but in many ways I saw knowledge differ in education and practice. There is evidence of unexplained variations in the pattern of treatment, evidence that was easily generated. Why do so many more women than men fall – is this merely the age/sex ratio being played out in a harsher analytical gaze or is it that nobody has used the data before. The conclusions are not stark, but eh implications for service delivery are quite profound. If I thought that clinicians and politicians would respond positively to data based evidence, I misread the effect that a loss of control would have for them. Combining this data with the literature and my qualitative research about NHS managers attitudes to evidence, it is clear that what I thought at the introduction – those who define themselves by control over simple date – will not like the loss of control.
- e. ‘Evidence’ suggests that what I am engaged in is an exercise to control knowledge and choices and patient pathways that before only the politician and the paramedic controlled. The reality is that I too cannot control the situation any more than they can. I have some weakness of mind – of any mind – that means my response to evidence can only add value if I and the same team know what I need to know in order to help.

5.3 What the picture looks like at the end of the analysis

Figure 11

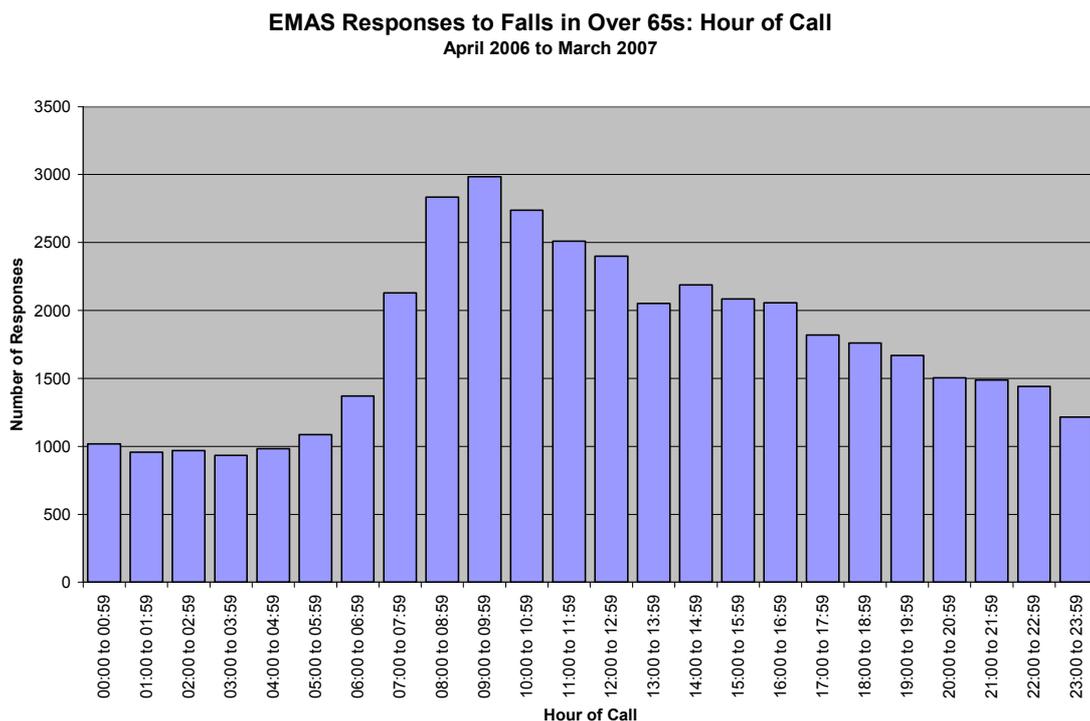
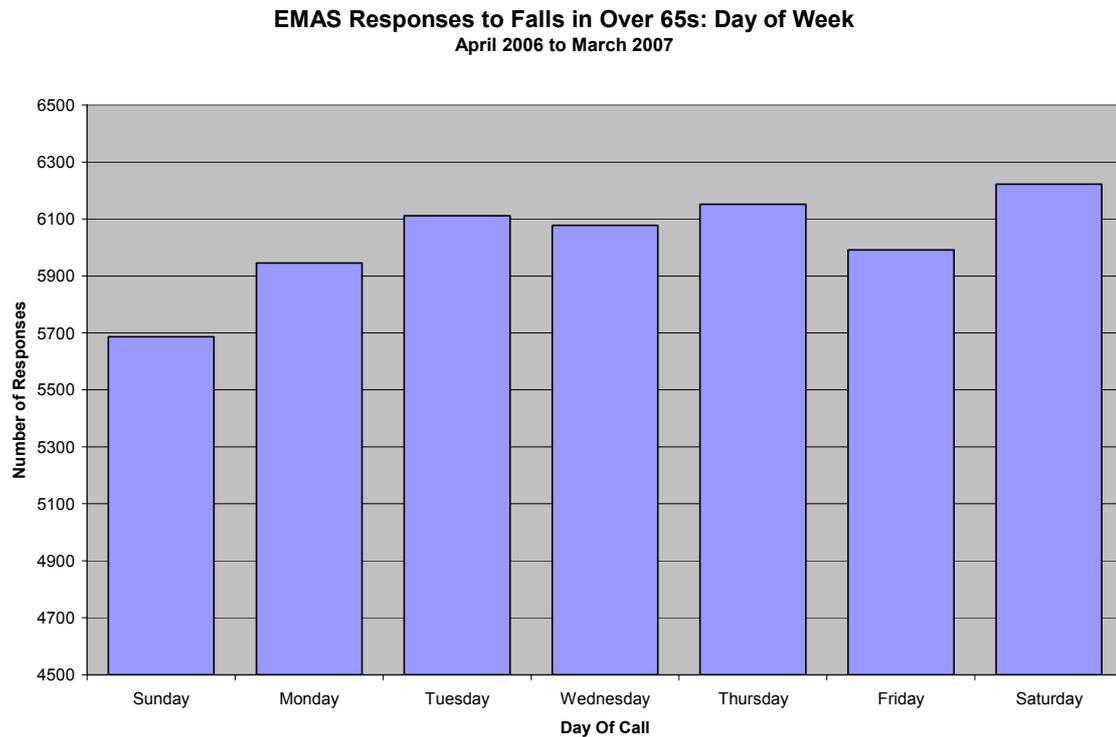


Figure 12



If we take the tables above. We can say that the EMAS responses to falls in the over 65's is likely to be by a woman at 9.30 on a Saturday and the call is not very likely to result in a Category A call, but will be made as a result of a fall in the home. This in no way negates the importance that one older person dies every five hours as a result of a fall, but it does obviate the thought that this should be the most pressing and uppermost thought of the ambulance clinician. Simple methodical application of data using pie charts and bar charts has given us a much, much richer analysis of the organisation of East Midlands Ambulance than the 'blue light fallen trauma' cliché that exists in the public imagination.

It is clear that we cannot conclude with any clear consensus about what constitutes a body of evidence for the East Midlands Ambulance Service, but we can agree that decision making is improved by the context of using evidence based judgements. It is true that a body of evidence or knowledge is multi-faceted and depends on one's perspective. Government policy may be based on evidence, but it can be alarmist and distorting of local prioritisation unless the Primary Care Trust takes a measured and evidence based response to the problems that EMAS face in implementing national policy. The definition of evidence likely changes when we use it to regulate the delivery of a particular clinical service for a particular community – even one as big as the East Midlands.

Sometimes a problem under consideration is advanced not by answering a question, but by better defining the question. At this level the data analysis has been successful and I will consider in Chapter 7 the implications for further research.

6 Limitations of the approach

6.1 Methodological limitations

All of my conclusions about evidence depend upon good quality data. The first problem is that I have used a secondary database. I have asserted that this data is both relevant and complete and that has been audited as such. I chose a random sample from the source data set. Nevertheless, in the absence of good primary data collection, my method would be improved by repeated sampling to gain greater confidence that there is no inherent bias in the data I am sampling. The method would be improved by panel studies or group consideration to validate in the absence of primary data.

The indicators that I selected were fields already in existence in the data set (age/sex/time of call/category of response/location of incident) and the evidence gain came from the juxtaposition of the data against existing policy – including where no policy existed. In selecting these indicators, I did not check the completeness of these data fields and whether there was any inherent bias towards that or this classification because of simple administrative routine.

I have also used pie charts and histograms rather than regression analysis and it may be true that in a multifactorial situation, the relationships I have recorded are not, in actual fact, relationships between two variables, but reflect their variability when compared to a third (as yet hidden) variable. I do not, therefore, attest to having detected statistically significant results and if they do exist I have not sought to prove any significant correlation. The choice of simple presentation methods means that different risk factors play different roles in the evidence collected. I have not tried to seek the major or determining variable around which the correlation of the ‘most efficient ambulance service’ should be organised. Similarly, I have not tested this longitudinally using a ‘traditional’ surveillance model that public health would use. I draw the conclusions from 2006/07 only, but presume generalisable conclusions across different time periods and this may be questioned.

To improve the results I would also have tried to organise comparison with other samples from other ambulance services. This is an NHS (National health system) about which we are trying to make conclusions without reference to habits and behaviours that are valid only in the East Midlands. I have also, in respect to the same habits and behaviours, made the case that in response to evidence, the habit (for example of senior women over 75) to call 999 when they fall, rather than their GP before they fall) can be changed so that the patient behaviour is the most favourable for patient and EMAS.

The last thing is that a lack of cross-sectional studies means that, although I have used population data going forward 25 years, the effect of short-term exposures such as a particularly mild winter or a flu outbreak, can distort the numbers, despite other more significant variables (clinician behaviour, family and carer response or training of paramedics in first response) heading in a different direction. In epidemiological terms the effect of environment fluctuations can affect population behaviour in the short, but rarely the long term.

6.2 Data Capture

Let us consider what high quality data would be: it would be accurate, up-to-date, quick and easy to find and free from duplication. As I have said previously, this is true for the EMAS dataset that I have used. Similarly the data was free from fragmentation (where different parts of the patient's records are held in different formats).

There are however some limits in the data that was captured. Firstly, the patient unique identifier is too weak to make a consistent electronic patient record by individual patient. So the data set is built around the 'event' of the ambulance journey, call and despatch. The NHS Care Records Service (NCRS), part of the NHS National Programme for IT in the NHS being delivered by NHS Connecting for Health will create a care record for every one of England's 50 million plus patients and allow information to be shared securely between all NHS organisations.

This will mean that whenever and wherever a patient seeks an ambulance including, out of hours and away from home elsewhere in England, the people caring for them will have access to their health information 24 hours a day, seven days a week. That means that files, scans, x-rays and general patient information that was traditionally 'fragmented or found in different places' will now/then be available to somebody repeating my research. This will include demographic data such as name, address, NHS number and date of birth and clinical information such as allergies, adverse reactions to drugs and basic details of any visits to hospital. This will provide an opportunity to put the EMAS data through the Information Assurance Quality Programme (IQAP) which has produced guidance to help with migration to a care records data service.

The NHS number is important as a unique identifier; in that it will be possible to trace and verify patients using the NHS number which is specific to them. At the moment, it would not be possible to build up a pattern of information where an individual seeks medical help at two different sites without the NHS number. Creation of duplicate records for the same fall is a problem of data capture. This is a particular problem for data capture without an NHS record as patients do not identify themselves in a consistent way when they use NHS services. For example, EMAS may know that an individual can be linked to a certain address, but data matching to use the consistent record of address field if you are looking for a person called William, who is sometimes also known as Bill, to check that this is the same patient each time. At the moment, without the NHS number, EMAS care for falls is not based on a complete, accurate and up to date record.

6.3 Deliberate boundaries on the question

I have defined the scope of the research to generate new and novel insights to an area that is compatible with my work as an NHS Commissioner. I have attempted to make it reasonably comprehensive within the study of falls collected by EMAS. The study of falls or emergency ambulance service is a much wider field than would be appropriate, given the limits of this particular study. This problem is bounded by being about the use of, and response to, evidence by decision makers in the East Midlands of the NHS. The question was whether using some very rudimentary queries using data coding, it was possible to make different decisions using the evidence that these data queries threw up, than decisions that would be made using

national prescribed policy alone. To that extent the deliberate boundary on the question was that it had to be so complicated that only sophisticated data management techniques could solve the calculation. More could have been made about how national policy changes have affected the treatment of fallers favourably or unfavourably, how these changes have or have not affected the elderly differentially and how East Midlands Ambulance Service have responded to legal developments in the training for lifting and handling in homes that the elderly have fallen in. This would have strayed outside of my essential concept of using only that data which has been generated from the day to day delivery of emergency ambulance services by EMAS. I did not want to look for data that was available in academic books and journal articles, because they would not have covered the same operational period – remember what I was trying to review was something relevant to recent decision making by EMAS. I did not want to be concerned with articles from the popular press as they were pre-occupied with service delivery failure, not the upper decile of service delivery successes. I did not wish to conduct a longitudinal study over too great a length of time as this was about primary sources of data still affecting service delivery today, not primary historical sources about the changing role of ambulances in the delivery of emergency patient care. In the end the answers to the questions are aided by the use of essential data from the source of operational management by EMAS. These deliberate boundaries on the question do not, I believe, limit the usefulness of the conclusions.

7 Implications for further research

7.1 Topics to be studied

There are some interesting topics to be studied as a result of this research. There is no doubt that falls and the integration of effective clinical strategies (in hospital and out) expands the range of successful services, but little is understood about how EMAS fit into this framework. In particular, because there is a social norm to dial 999 upon the occurrence of a fall, it would be worth studying the extent to which EMAS are the appropriate organisation within the NHS system to most easily influence the behaviour of individuals. If the key is falls avoidance and falls management, it would be worthy of study to understand the level of influence that EMAS have to make the utilization of all available services most effective compared to the existing community based approach to falls management.

A further development of this study would be to pilot the linking of hospital and EMAS and community systems by computer such that referrals are automatically made from the hospital to EMAS as well as vice-versa, so that individuals at risk of falling are tracked by EMAS in the community prior to falling.

Another combination of effective interventions would be to combine our knowledge of effective strategies for dietary management in the elderly, with the categories of call that are affected (A-B-C) by the quality of diet in an over 65 faller (in effect the ability of diet to give resilience to the consequence of falls). This leads to the interesting work that could be done using “integrated care” models that put falls management by EMAS, the acute hospitals, community NHS providers and some GPs into the same organisational and operational structure. This would be less passive in response to the evidence than this study indicated would be the case where only EMAS can respond fully. If this were to be attached to a study about cost-effectiveness and magnitude-of-impact of EMAS interventions in falls, then this

could rank the effect of EMAS utilization upon the total cost of falls management in the East Midlands NHS region.

A similar intervention initiative that compares the value of EMAS' treatment and patient delivery services after a fall with the cost effectiveness of interventions from Adult Social Services could help. By looking at commissioning PCTs to determine the appropriate mix of NHS and population (Social Service) based support to improve the outcome for the patient, the NHS could be moving further along the evidence-based spectrum.

7.2 Different regions or countries

There would be nothing to prevent this study being repeated in other regions of the National Health Service and would throw in further relevant factors to improve the applicability of the outcomes of this project. What could be added to this study were it to be conducted in another country would be; the establishment of reimbursement methods to suppliers that benefited from better use of this data for example as an income generation activity, increasingly possible as the NHS moves towards the use of an individual patient tariff; the development of suitable organisational arrangements in the private sector that can respond to evidence more quickly than, and in preference to, prescribed national policy; the development of environmental and ecological factors that stop ambulances being despatched on unnecessary journeys where the personal pain of NHS treatment (or treatment foregone) could be compared with the ecological aspects of responding to distress quickly, but in fossil fuel burning vehicles; the enlistment of the elderly communities in co-production solutions that do not use expensive emergency ambulance services without being aware of the opportunity cost of using specialised health services, essentially for a transport-to-health solutions for the elderly.

7.3 Foundation for further study of EMAS

In terms of further study of EMAS, it would be useful to do a study of documents pertaining to the treatment, transportation, classification and prevention of people having falls/fallen. Documents could be letters, memoranda, agendas, administrative documents, newspaper articles and would all be used to triangulate/corroborate the evidence found in this study. The use of documents to test the evidence in this study rather than to draw new hypothesis, would prevent or at least severely reduce the falls leads that could arise from an unstructured document review. It would be possible also, to repeat this study, supplemented by archival records and/or using structured interviews with executives and paramedics in EMAS themselves. Finally, this study of EMAS could be improved by direct observation in the field over a limited period and even when the researcher or a member of the family has a fall, to keep a diary of the period of the contact with EMAS in a detailed way from beginning to end!

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**David Sharp
July 2010**

**Exploring evidence based management in the National
Health Service**

**Document 5 is submitted in part fulfilment of the
requirements at the Nottingham Trent University for the
degree of Doctorate of Business Administration**

Cohort 8

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ABSTRACT

Purpose and Aims of the study

To contribute to the on-going debate over whether the use of evidence could and should improve organisational effectiveness. This is especially important in the context of the health service that has, since (May 1997) enthusiastically adopted evidence based medicine as its method of health delivery. To develop a practical explanation for policy makers and managers on how and where evidence based management is used appropriately.

Justification

Kovner and Rundall (2006 p3) said “the sense of urgency associated with improving the quality of medical care does not exist with respect to improving the quality of management decision making. A more evidence based approach would improve the competence of the decision makers and their motivation to use more scientific methods when making a decision”. The paper reviews the conclusion of Kovner and Rundall (2006) (an American study) within the context of the UK National Health Service. There is a need to develop a theoretical framework of how and why evidence is (or is not) used by managers in the NHS.

Motivation

The author holds a senior management position in the National Health Service. The author has performed the role of Director and Chief Executive in NHS organisations since 2000. These organisations have been surplus making, target hitting, award winning, credited by the auditors and successful in the eyes of the regulators. Unfortunately over the last few years the author has been in a quandary about something. Are NHS managers as a group of professionals, using policies that solved the wrong problem or solving the right problem, but still in the wrong way? Following this line of thought, the author wanted to ask “why don’t executives in the NHS make evidence based decisions?”

Methodology

A survey was conducted of the most senior NHS managers in the East Midlands. A set of interviews and participant observations of senior managers when making key decisions around current policy initiatives was recorded. This explored how the concept of evidence based management is perceived by the managers. The studied group were taken to have had career success and to be taken to be leaders in their field. The researcher was a senior manager within the same region of the NHS. The method additionally studied the effect of a discrete, but accepted piece of data upon the NHS as it struggled to adopt an evidence based response to the operational issue the data highlighted. The researcher was a planner within the same region that this data was being used and was responsible for responding to the data. The ontology used Bryman (2004) and Morgan (2007) to attach meaning to the views that members of that part of the NHS had of their world.

Methods

Through taped recordings of meetings and verbatim transcripts of 1 to 1 interviews with senior managers the study recorded the awareness of a need for evidence (or not) and also analysed the collection and evaluation of evidence where such awareness did exist. Using a model developed by Rousseau (2006) the study classified the responses. Interpretation of the responses was shared with the participant and conclusions drawn against the Rousseau based model.

Findings

Senior managers approve of evidence as it gives them a systematic view of what their staff are qualified to do and a requirement for evidence based decision making is part of the scheme of delegation.

Adoption of innovation and research is a complex and often drawn out process. The adoption of research evidence is not a single discrete event. Managers will only use research if it improves the organisations standing. Finally, it is shown that there are credible and complex reasons for the failure in NHS managers to use evidence very often, despite the prevailing orthodoxy of evidence based medicine. The researcher agrees with McDaniel (2009) that evidence should be used to start new creative methods of working. Although Arndt and Bigelow (2009) raise objections against evidence based decision making as “decisions do not necessarily lead to expected outcomes” The researcher finds their work cautionary rather than impeding to what Banaszak-Holl says are “compelling arguments for moving forward with developing EBM”.

CHAPTER 1

Introduction

Purpose

This work explains why an ethnographic account was used to record and then classify the conversations and decisions of current NHS managers. To develop an understanding of the NHS that is enhanced by professional insight from working in the NHS.

Key arguments and Conclusions

1.1 The research is exploratory in an emerging field

The nature of exploratory research is to provide an insight into and comprehension of an issue or situation. This research is exploratory because a problem has not been clearly defined, nor can it even be shown that a perceived problem (managers should/should not use evidence in the NHS) really exists. The study holds up a mirror to the cohort I work in. Components of this exploratory research will include a thorough literature review, informal discussions and in-depth interviews. It is to be hoped by the exploration, that a research design, data collection method and subject selection will arise. That would further the study of management in the National Health Service. This issue of the mirror being held up to the cohort itself is important because exploratory research is not typically generalisable to the population at large. The cohort of managers should be able to reveal what is going on with management in the health service during the period 2007 to 2010 and is investigated without explicit expectations. This methodology is sometimes referred to as a grounded theory and is an attempt to unearth a theory from the data itself, rather than from a pre-disposed hypothesis. The overall aim of this research is to enhance good practice in a craft of management in the NHS. The study will spend time searching out the concepts behind “evidence based management” as they reveal themselves to the participants.

The Department of Health (2009 a and Appendix E) note that this is an emerging field when they say that “many of the research studies commissioned by the SDO over the last eight years have direct relevance to healthcare managers. However, rather less of our past research has been directly focused on exploring the roles, work, performance, effectiveness and development of healthcare managers and healthcare management itself. At the same time there is increasing recognition of the potential for research evidence to improve managerial practice and decision making (Shortell, Rundall and HSU 2007)”. Further they say that “the rise of the evidence-based healthcare movement, the increasingly explicit use of research evidence....have all helped to focus attention on the way that healthcare managers and leaders use evidence in their decision making”. Additionally one might say this is an emerging field because there are important differences between the culture, research base and decision-making processes of clinicians and managers so that the ideas of evidence-based medicine whilst relevant need to be translated for management rather than simply transferred.

1.2 Why a specific research question would be inappropriate

To emphasise the mirror holding nature of this work and the questions this raises. What excites in this research is to analyse the data with no pre-conceived hypothesis. Rather than searching for data that confirms or rejects my hypothesis, a template analysis can search out the concepts behind “evidence based management” as they reveal themselves to my participants. Maybe the question is unclear, but by conducting a study on the nature of evidence based decision making as it is judged and participated in by NHS managers questions will appear. A working awareness of bias is imperative, but the author has long gone past the point of wanting to introduce or reject evidence based management in the NHS – so the paper simply wishes to understand if, how, when and why it is used or rejected and to reflect that back to NHS managers themselves. In early stages the document also avoided using such questions as “does an evidence based approach exist?” because inherent in that question is a narrowing down of options and scenarios that the executives have not yet evaluated or which, because of their nature, are very difficult to evaluate. This was because the evaluation did not want to impose a question that implied a thesis that was supportive of an evidence based methodology. The reader should remember that evidence based management is a philosophical approach that denies the true value of experience and heuristics. There had to be scope for the NHS leaders interviewed and recorded to say that they remembered, for example, that “no evidence” in decision making can be better than the use of poor quality, contradicting or incomplete evidence. The discussion of evidence based management is a valid research area, but whether there is a single valid research question is uncertain. There are undoubtedly key questions that arise in the research. The paper does ask whether evidence based practice is a norm or an ideal for daily professional management in the National Health Service? To what extent do practicing NHS managers think evidence based healthcare management is an appropriate tool to resolve problems and what do they actually use? Is there a conflict between politicians’ views of an effective National Health Service and the view of NHS managers? If so, where is the conflict and would application of evidence based healthcare management resolve the conflict? What is intended to be gained from these questions though, is a understanding of and to draw conclusions about, the nature of the preferences and decisions expressed by the cohort. Ultimately, the reason why the specific research question would be inappropriate, therefore, is that a question that implies best practice would typically only uncover case studies related to that practice and all other experiences would be under reported. The mirror is much more use if it reveals things about the cohort (the nature of relationships, power, eagerness to learn etc) than if it was a didactic about best practice case studies.

1.3 Why an ethnographic account was used

In April 2009 the NHS created a web portal, NHS Evidence (Department of Health 2009a), “to provide online access to high quality information about health and social care to all staff who are making decisions about care they provide to patients”. The objective is to help to make informed decisions about treatments and resources. A key differentiation is made between ‘evidence’, clinical and public health ‘guidance’, and government ‘policy’. This differentiation is at the heart of document 5. According to Walshe and Rundall (2001 p 429), “the rise of evidence based clinical practice in health care has caused some people to start questioning how health care

managers and policy makers make decisions and what role evidence plays in the process". Further, Walshe and Rundall say that (p 431) "though managers and policy makers have been quick to encourage clinicians to adopt an evidence-based approach, they have been slower to apply the same ideas to their own practice". Yet, there is evidence that the same problems (of the under use of effective interventions and the over use of ineffective ones) are as widespread in health care management as they are in clinical practice. According to the NHS, surveys done by the Department (Department of Health 2009 a, b) went on to say that the NHS had spent (08/09) £912 million on clinical research, £350 million on management consultants and yet had spent only £4 million on research and disseminating knowledge about the organisation and delivery of health care.

Pfeffer (2006, p 6) says that "evidence based management is a commitment to finding and using the best theory and data available at the time, to make decisions". This definition arose from study by Pfeffer (2006) of the "knowing-doing" gap and why managers "do things that were at odds with the best evidence of what works". This is the definition that I am settled on for this paper.

My own personal baggage about Evidence Based Management is that; I have worked in services where EBM was a new or alien concept. Although the hierarchy of evidence is vaguely understood by most if not all NHS managers the sense that evidence should support or instruct decision makers, as proposed by distinguished leaders in the NHS management such as Muir Gray (1997), is not commonly accepted. To an extent the concept of evidence is mostly a binary rather than a linear concept. By that I mean that the Randomised Control Trial (RCT) is seen to be "evidence" and that anything other than an RCT is not. In that way the concept of evidence is elevated to its most extreme version where an almost laboratory level of precision within its practice frightens lesser users.

I have performed the role of Director and Chief Executive in NHS organisations. It is significant that as a qualified accountant with a masters degree I should put an emphasis on craft knowledge. The use of evidence was seen not as a tool, but part of the 'craft' of a few researchers who could cope with the rigours of the RCT. The study of what other health systems outside the NHS could offer in terms of evidence was seen to be the role of specialised divisions of the health system, not mainstream NHS management. I broke into this through visits to Europe and to America. I was able to discuss the concepts of evidence based management with leading advocates of the idea, such as Dave Knutson at Minnesota, Tony Kovner and Jon Billings at NYU, Johanna Brared-Christensson at Sahlgrenska and James Roosevelt Jr at Tufts Medical.

Young (2005), Mitton (2003) and Wait (2005) have all presented models that allow for an international analysis of health outcomes, responsiveness and financing. This is not a crude league tabling, but a mixture of simulations and benchmarking, that allow for managers to not only understand how much is spent on health care, but how the resources are being applied. Indifference to such work typified the use of international comparative data by NHS management. Mitton (2003) considers the problem of applying a "rationing process" based on national allocation judgements, as opposed to the crude application of private sector management concepts from alternative health systems.

On the other hand, this baggage had the bonus that I could negotiate a quite privileged level of direct access to senior managers within my region of the NHS. Professional experience within that region over the last 10 years, plus my engaged discussions (socially) with these managers about me studying for a doctoral level qualification, gave me confidence that I had a cohort to study. But there needed to be a method of study and implicitly a preceding methodology to gather the best data from this research. I was drawn to the work of Frankfort-Nachmias (1996, pp12-13) that said “logical empiricists take the position that social scientists can attain objective knowledge in the study of the social as well as the natural world. Social and natural sciences can be investigated by the same scientific methodology. Furthermore, logical empiricism sees empathic understanding as a helpful route to discovery”. As I worked through the methodology – one thing troubled me about the method. Under Frankfort-Nachmias (1996) the research process starts with a hypothesis. “But discoveries must still be validated by empirical observations if they are to be integrated into the scientific body of knowledge”. So I carried on with the methodology and was more easily reconciled to a method when I read Atkinson (1990, page 9). Atkinson talks of ethnography as a “method and a genre” but just as importantly, Atkinson writes about the “poetics of authoritative accounts”. Under method and genre, he said “it is therefore necessary to perform the equivalent of a ‘phenomenological reduction’; that is, to step back and bracket or suspend our taken-for-granted assumptions about how ‘facts’ and ‘realities’ come to be represented as they are in our monographs and papers”. This appealed as it spoke to me of the way to observe my world as if I were an outsider despite being an actor in the system. Then Atkinson added “everyday commonsense tends to make a radical distraction between facts at one extreme and at the other subjectivity. If anyone were to adopt such a perspective then they would be guilty of gross oversimplification. Science is itself a rhetorical activity”.

For these reasons, I used an ethnographic account. Although I was concerned about the validity of the method as I had not used the method in previous studies at Masters or professional examination levels it did seem the appropriate tool. I did not want to observe a separate reality from the one I was working in as an executive in the NHS. I did also want to avoid historical research as the longitudinal nature of the study had to, as much as possible, concentrate not on who we had been as NHS managers in the past, but to look at who we are now and why. I accept that the ethnographic account is necessarily pragmatic and based on my values, but as I was trying to draw some general assumptions from explaining the behaviour of my peers, I believe it would be a valid research method. The key reason that this method was useful as well as valid for me, is that the realism of the record made the account most contemporary and subject to audit by the people being observed.

But what sort of ethnographic account to use? Ethnography; ethno as in people, graph as in to write. I am clear that I am writing about a people from my perspective. My people. NHS managers. In my region of the NHS. Denzin (1997) encouraged a creative study of human behaviour with lots of experimental texts and designs. This form of inquiry did not appear to be one I could credibly reproduce. In reference to Bryman (2004) I was able to gain a better idea of the structure of my ethnography. It would include participant observation, but I could say to all participants that my exploration was not testing a hypothesis. I simply wanted to record unstructured data, to find a particular case study within this unstructured data (in my case it turned out to be cleanliness in hospitals) and to add some interpretation to the

decisions being taken. Watson (1994) considered an ethnographic study that gave an insight into the way that managers worked, their thoughts and concerns. Watson (1994) contrasted this approach to the numerate and standardising work that he saw typified much managerial research. The key method that Watson (1994) had was to discover what management is like by understanding identity rather than observing the managerial task as if it was meant only to help to deliver a successful organisation.

1.4 The effect of the patient and the politician upon NHS managers

I was aware from my literature review that part of the ethnography would most likely observe the effect of the patient and the politician on managerial autonomy in the NHS manager. I therefore mapped out key players in the NHS and the links to evidence based management as shown in table 1 (paragraph 2.4). So, in this dynamic environment what else was it legitimate to add to my ethnography to make sure it passed the ultimate test of an ethnography; that you should be able to recognise the place at that point in time once you have read it? Myers (1999, p2) who wrote an advisory note on ethnographic research in information systems, gave a helpful distinction “in a case study, the primary source of data is interviews, supplemented by documentary evidence such as annual reports, minutes of meetings and so forth. In an ethnography these data sources are supplemented by data collected through participant and non-participant observation. Ethnography usually require the researcher to spend a long period in the field”. The ethnography had to produce something meaningful not only to the reader though, but also to this group of NHS managers who were having to react quickly to patients and politicians. Morgan (2007, p48) was helpful in adding to Bryman (2004) by saying that what I interpreted could be “from the perspective of the meaning, members of that society attach to their social world”. Importantly, in this unstable environment of reactive management, Morgan gave permission to “render the collected data intelligible and significant to fellow academics and other readers”.

The ethnographic account was also seen as a useful way to improve the performance of current and future NHS managers by feeding back and discussing the way decisions were made. Establishing a link between individual organisational effectiveness (and individual executive effectiveness) and the quality of evidence used by managers in the East Midlands was problematic. On the other hand, the cohort studies were consistently assertive (about themselves and others) that individuals leadership and effective individual performance would make a substantial (differential) impact on organisational delivery. This delivery would cover compliances with the metrics used by inspectors and the Government, but also better clinical performance. There was little opportunity to reflect on the effectiveness of their behaviour as individuals or to share learning as a group, however. Therefore this ethnographic study was welcomed to audit and articulate what worked today and also to see whether generalisable themes could be found to plan for future good performance (Yin 2008).

Some senior (former) NHS managers such as Learmonth (2000) oppose the scientific method and suggest that management is not an automatically good thing as it is believed to involve the exercise of power and the exploitation of others.

Swan (2005, p920) said “the majority of studies in this field (of the politics of networked innovation) have tended to focus on the more overt forms of political influence, including the role of managerial coalitions political tactics and the micro-politics of self-interest amongst decision makers (Pettigrew, 1973; Brass and Burkhardt, 1992; Jones et al, 2001). The emphasis has been on the ability to develop power over other groups, through the mobilization of resources (eg financial resources, information, and staff). The negative connotations of a focus on hierarchically coercive power have tended to steer research of innovation away from deeper analysis of the dynamics of power (Hardy, 1996)”. Swan concludes (2005, p938) “Dougherty and Hardy (1996 p1146) argue that for organisations to become innovative they must ‘reconfigure the power embedded in the organisational system – in its resources, processes and meanings’. The findings reported here provide support for the view of the politicality of innovation processes”.

Learmonth (2000) discourages the use of the scientific method due to exclusivity, but he needs not worry if managers themselves cannot or will not use the scientific approaches. Perhaps the answer is less about what numerics to use and move about what research can tell us about successful leaders in successful organisations and the management tools that they used.

The links between the better use of research and improved organisational performance are key to answering the question of ‘why don’t we use more evidence more often?!’ So why does this link prove so elusive to find within this paper? The DBA itself includes a literature search – not quite a meta analysis, but thorough and completed as document 2 before any quantitative or qualitative analysis is done. The conclusions were that evidence is rarely objective, rarely is it widely available to all NHS managers simultaneously and it is never free (requiring either cash or significant opportunity cost to trawl). Worst of all, it is usually contextually created within the market for management consultancy within the NHS that was, in 2008/09 worth £350 million or 0.3% of the total NHS budget (Department of Health 2009 b). In summary, there is not yet any empirical evidence about evidence itself that demonstrates without prejudice its effectiveness.

The following quotation from Giddens (1987, p310) explains how policy is related to research: “Evidence based policy is not simply an extension of evidence based medicine: it is qualitatively different. Research is considered less as problem solving than as a process of argument or debate to create concern and set the agenda. During the 1980s and 1990s this view was extended to a more interactive model based on a close dialogue between researchers and policymakers in which knowledge is considered to be inherently contestable”.

The implication of accepting this is that policymakers have to get something out of research if they are to use it. It is necessary, therefore, to consider which arguments are likely to be useful or gratifying to which policymakers. Researchers have to accept that their work may be ignored because policymakers have to take the full complexity of any situation into account. They need to recognise that the other legitimate influences on policy (social, electoral, ethical, cultural, and economic) must be accommodated and that research is most likely to influence policymakers through an extended process of communication.

In this section it is possible to conclude that there is a tension between politicians and managers in the running of the National Health Service. It is possible to conclude that a similar tension exists between taxpayers, patients and politicians in the running and funding of the NHS. None of the parties are inherently trusting of a link between research and improved organisational performance. An ethnographic account will help the reader and researcher to understand why this is.

1.5 A changing definition of management and professionalism

Our knowledge base is changing. A definition of a 'profession' as people reserving the right to judge the quality and appropriateness of their services is over. (Bonnell 1999). It is clear that the politicians believe the bond of public trust to be broken. The reason we get politicians using targets and based numerics in a heavy and dogmatic way is that the assumption of professionalism has lost the confidence of politicians. (Morris, 2002). At the same time the complexity of the NHS system means that simple-easy to communicate – policies are seen as the antidote to complexity. Not the use of evidence! (Paniagua, 2009).

The linkages between research and other forms of knowledge are important to understanding 'who' the NHS manager is and how this affects the production and use of evidence. Senior NHS executives must – according to their job descriptions – have a professional qualification, a masters degree level education (or equivalent) and at least five years significant NHS experience at Board level (Appendix G). This collective experience means a starting point for research and scientific enquiry that cannot only be forensic and analytical, but will also be experimental and, to an extent, based on story-telling and anecdote. Secondly, the leader will have won the post at a meritocratic interview within a public domain following advertisement of the post and an extended competition. This means that the structural analysis of who they are and how they use evidence, must consider that the process of arriving at being a leader is within a social/political context. That their skills make them capable of using evidence is clear from the competence requirements of their job description – but there is every chance this skill will atrophy after appointment as other attributes are developed.

1.6 Using my professional role to validate academic insight

In my professional life I am a planner and purchaser of Emergency Ambulance Services. So I spend a great degree of time analysing and considering data about performance of ambulance responses to emergencies, the most efficient ways to do things and looking for insights that will either improve quality for the same price, or get me the same quality for a lower price. What I buy is affected by the reasons that people call for ambulances – dangerous personal behaviours, the frailty of the human body in times of extreme weather (heat and cold), biological factors such as disease or the contra-indicators of drugs, age and disability. In the response to a particularly difficult performance period it became clear that "falls" were a key reason for the despatch of ambulances. Although few trials have been carried out in the UK, the prevention and management of falls in the older population is a key government target in reducing ill health. This is a key target of the national service framework for older people (2001). "Reduce the number of falls which result in serious injury and ensure effective treatment and rehabilitation for those who had

fallen". (Department of Health 2001) is the direct mission statement of this particular national service framework.

My professional roles gave me validity and made it acceptable to be an explorer. When an academic explores the NHS and attempts to codify behaviour or establish a theoretical schema, their study may exhibit a certain formality and quality. But the ultimate product is not useful to practicing NHS leaders in proportion to the resource deployed. (Baker, 2009). The implementation of conclusions fully is unlikely. This is not some problem with the epistemology that the academic displays. It is that their exploration is that of a tourist within the NHS. My validity means that any generality I observe will have to be tested in the challenges we as a cohort of NHS managers face in the future.

Two academics explored this problem. (Gill 2002 and Yin 2008). Gill (2002, p5) said that "research in the United Kingdom comparing attitudes towards research of managers revealed that managers believed research was initiated by academic researchers often insufficiently familiar with the managerial culture and so lacked credibility. For the most part, managers seemed to believe that management research was not cost effective but also, more critically, largely irrelevant to the problems they faced. Many managers confessed that they did not know how to use research findings and that clearly utilisable research would be more helpful to them". Yin (2008) broadens this helpfully, by saying that if the researcher intensively studies one or a few entries a case researcher is likely to develop deep insights of a phenomenon from which hypotheses may be generated. Following Yin (2008), my ethnography may lead to conclusions about the NHS in the East Midlands that are credible hypothesis in other parts of the NHS.

I wanted to complete the analytical quantitative part of my study of evidence based management by looking at East Midlands Ambulance Service (EMAS), as the only clinical service organisation that covered the whole of the East Midlands. EMAS also provides services in the South Humber areas of North and North East Lincolnshire which is outside the definition of East Midlands used elsewhere in this project. When I talk of the East Midlands in regards to ambulance service I will be talking about the area co-terminus with the East Midlands Strategic Health Authority and the Government Office for the East Midlands, not the whole of the service area covered by EMAS including South Humber. EMAS provided emergency and urgent care, patient transport, call handling and clinical triage services. EMAS employ 3000 staff and have 70 locations they operate from and an annual budget of £137 million in financial year 2008/09.

As well as the quantitative study of EMAS, I wished to do an in depth qualitative study. Investigating the criteria used to assess the quality of a decision is a key objective of the research presented here. The way in which evidence is assessed is closely related to the perceived status and credibility of the evidence itself. It is possible to provide an idea of some broad areas the respondents seemed to take into account when assessing the quality of the evidence. I chose to focus on a particular decision. The cohort being followed were charged with conducting a deep clean of clinical areas in the NHS in response to high profile media and political concerns about infection rates and the effect they were having on patients. For those with poor health and reduced immunity due to a range of factors (age, diet, morbidity) proximate exposure to these infections would in fact kill them. That much

was agreed by the cohort but the decision was around the way they approached the instructed solution of a 'deep clean', and the extent to which the assessment of the quality of evidence is used in that decision. A subset of this observation is the extent to which the use of evidence is seen as intuitive decision making rather than the systematic application of criteria.

1.7 Conclusion

I wanted a better understanding of the NHS that lead to better management (and especially executive) performance. The key was to have an intelligent system that was also simple to read and understand. I wanted to observe the most actively used algorithms for decision making by these managers (even if they didn't recognise it as being something as sophisticated as an algorithm) and to understand which algorithms they thought most deeply about before applying them to their decision. The codification of all of this needed to be something that would make sense to the participants in meetings and boards, not simply in an abstraction of their day to day experience.

CHAPTER 2

Context

Purpose

To represent schematically the relationship between policy makers, managers, clinicians and patients with respect to the use of evidence. To represent diagrammatically the reasons evidence is (or is not) used by managers in the NHS and by those who fund, provide and receive NHS care.

Key Arguments and Conclusions

2.1 Evidence encompasses codified and non-codified sources of knowledge

Kovner and Rundall (2006 p3) said “The sense of urgency associated with improving the quality of medical care does not exist with respect to improving the quality of management decision making. A more evidence based approach would improve the competence of the decision makers and their motivation to use more scientific methods when making a decision”. Kovner (2006, pp3-22) conducted a study of 68 US based health service managers and found a low level of evidence based management behaviours. From the findings, Kovner (2006) suggested that evidence based decision making should focus on strategically important issues and to build a management culture that values research. What I find compelling about Kovner’s study is that it understands that there is a bias in terms of describing ‘good’ management in health care in terms of what individuals know about their jobs, rather than describing a ‘good manager’ as one who uses research. Against all of the good work to improve the use of evidence, are pre-existing management cultures and scepticism about the transferability of findings of research.

Evidence based healthcare management (EBHM) refers to using research evidence in making management decisions. Defined narrowly it describes using evidence from randomised controlled trials investigating the effectiveness of management decisions. For example evidence about the effectiveness of representations of service (case management or team work), or about changes to organisation (changing skill mix or merging two organisations) or about new financing arrangements (e.g. primary care purchasing), or about public health or health promotion programmes. This accommodates a more flexible concept of evidence of effectiveness which can include the opinions of stakeholders if gathered using accepted systematic methods.

In its broadest sense EBHM describes using any “acceptable evidence” to make better informed management and policy decisions. Such evidence could be a survey of opinions about the likely value of a change or new policy, or an internal data gathering project to collect service statistics and assess their validity for informing a decision. An example of this concept is research informed management or “Evaluation-informed management” defined as “making more informed management decisions by using research evidence and evidence from research”.

In considering the way that individuals apply evidence to the decision making process, of particular interest is the underlying assumptions about the career of the NHS manager and the life stages they go through with regard to autonomy. The way in which individuals define the use of evidence is important in that it shapes their perceptions about who should be free to use judgement and who needs to concur with the evidence base (and indeed seek out the evidence base) before making a decision. From the responses and the recordings (described in depth in Chapers 5 and 6) it is clear that a variety of individual decision making methods are in use and there is no general consensus about the nature of evidence in decisions by individuals within the NHS. What is clear though is that rather than being a restrictive or indeed exclusionary practice of some NHS managers, there is a body of support for evidence based decisions, with the right evidence by the right individuals in the right context.

Even champions of evidence-based practice acknowledge that the approach has limits. "Some things can't be tested in randomized trials, and some things are so obvious, they don't need it", says Dr. Paul Glasziou, director of the Centre for Evidence-Based Medicine in Oxford, England. (2007 p3) "There have never been randomized trials to show that giving electrical shocks to a heart that has stopped beating saves more lives than doing nothing, for example. Similarly, giving antibiotics to treat pneumonia has never been rigorously tested from a scientific point of view. It's clear to everyone, however, that if you want to survive a bout of bacterial pneumonia, antibiotics are your best bet, and nobody would want to go into cardiac arrest without a crash cart handy".

2.2 There is a recognised corpus of knowledge for NHS managers

There is a managerial challenge, somewhere at the axis between clinicians and the NHS manager, that is about somebody making a decision about what the facts are going to be. The dialogue is between a claim for example about speedier recovery and the research evidence that confirms or denies this. This will inevitably clash with custom and practice. Equally, it will clash with entrepreneurs/innovators who have a penchant for change and experimentation that is not evidenced. Such entrepreneurs can be clinical or managerial. (Littlejohns, 2003 p862). "Most new interventions in health care are driven by entrepreneurs who have great faith in their project. They may not be capable of standing back and taking a dispassionate view of the cost effectiveness of the interventions. In this case, the implications of an emerging policy that was encouraging modular systems – that is, pharmacy and radiology that could be linked rather than fully integrated – were not fully assimilated".

Muir Gray (1997 p615) has said "management in health care is a young discipline without the trappings and traditions of medicine. Is it, though, more of an art than a science? Resistance to change may be less, but the increased rigor required could be much greater. Furthermore, in management and policy making the anatomy of a decision is very different from a clinical intervention. Deciding whether to invest in a further cardiothoracic centre in a health region or to move five vascular surgical units to one site, even if evidence were available, is a complex process. It can involve managers, professionals, local interest groups, politicians, the media, and the public. At times, social systems will undermine the science. For example, how often have we seen a decision changed late in the day by a bravura performance in committee,

based on emotion?" The National Institute for Clinical Effectiveness (NICE) has been created to help to create a more evidence based climate and to avoid the emotive response noted by Gray. The work that NICE is involved in attracts the attention of many groups, including doctors, the pharmaceutical industry, and patients. NICE is often associated with controversy, (politics.co.uk, 2010) because the need to make decisions at a national level can conflict with what is (or is believed to be) in the best interests of an individual patient, and because there is an inherent need for rationing in the NHS. From an individual's perspective it can sometimes seem that NICE is denying access to a potentially life-saving treatment. NICE has been criticised for its over-reliance on evidence-based medicine, which it is argued privileges certain kinds of econometrically derived types of studies over others. NICE has also been criticised for being too slow to reach decisions. Some of the more controversial NICE decisions have concerned beta-interferon for multiple sclerosis, imatinib (Glivec) for leukaemia, and trastuzumab (Herceptin) for breast cancer. The process aims to be fully independent of government and lobbying power, basing decisions fully on clinical and cost-effectiveness. There have been concerns that lobbying by pharmaceutical companies to mobilise media attention and influence public opinion are attempts to influence the decision making process. A fast-track assessment system has been introduced to reach decisions where there is most pressure for a conclusion.

There are obviously a number of other ways that this management task of resource gathering and allocation can take place. I would like to continue with the theme of the Learmonth approach to NHS management before moving on to other studies. Learmonth (2003) returns to the areas he had covered previously in suggesting that much of the established work in health services management research takes for granted managerial assumptions that are not consequently subjected to sustained critical examination. Learmonth maintains that this veneer of research credibility reinforces a view of management in the NHS that appears to be neutral and disinterested, but actually supports elite interests.

Harries (1999) on the other hand acknowledges the importance of developing an NHS where practice and policy is more evidence based. Harries' paper is based on a qualitative study which aimed to identify factors which facilitate or impede evidence based policy making at a local, rather than, national level in the NHS. Harries drew conclusions about the importance of influences and commitment in facilitating evidence based change. Harries actually did what Learmonth accuses the NHS of not doing and moved beyond the rhetoric of evidence based policy by conducting a series of in depth interviews with lead policy makers and analysis of project documents to see if and where and why evidence based management exists in the NHS.

Further to Harries; Pearson (2007) took on Learmonth by conducting a re-consideration of what constitutes evidence in healthcare. Pearson offers the Joanna Briggs Institute version to illustrate the broader definition of what works as evidence and therefore challenges Learmonth. Pearson (2007) says that the whole concept of evidence can be described fairly and without prejudice. This is not to say that Learmonth is entirely without foundation in his belief that management styles can be imported without evaluation. Enthoven (2000) says that previous reforms of the NHS were quite limited in effect because the essential conditions for a market to operate were not fulfilled. Enthoven ascribes the management tasks of innovation,

improving efficiency and driving good customer service as absent from NHS management and recommends the market as the best stimuli to improve the quality of management in the NHS with little or no evidence other than replication of what Enthoven saw elsewhere.

Hamlin (2001) presents arguments in support of evidence-based healthcare management, drawing on organisationally based empirical research, set within an NHS Trust Hospital in the UK. The research focuses on identifying the criteria of managerial effectiveness applying at the middle and front line management levels of the organisation, using critical incident technique and factor analysis methods. The findings suggest the existence of generalised criteria of managerial effectiveness, supporting the notion of the 'universally effective manager'.

Davis (2007) has made comparison studies of the functioning of health policy in Denmark, Germany, the Netherlands and the United Kingdom, to understand the incentives, rewards and penalties that might make players in a health system allocate resources efficiently. Boufford (2002) has written about the importance of teaching evidence based healthcare in universities to pre and post qualification healthcare managers.

There is a structure, albeit an informal one, for the implementation of management research in the National Health Service. The National Institute for Health Research (NIHR) was created in 2006 "to create a health research system in which the NHS supports outstanding individuals, working in world class facilities, conducting leading edge research focused on the needs of patients and the public" (Department of Health 2008). The NIHR is a virtual organisation, which provides a new framework for the Department of Health to work with its key partners involved in the different elements of NHS research. Also noteworthy is the West Midlands Health Technology Assessment Collaboration between universities and academic groups mostly based at the University of Birmingham, United Kingdom. It produces reviews and evaluations for a variety of national and regional clients, undertakes methodological research on health technology assessment, and provides training in systematic reviews and health technology assessment. The Service Delivery and Organisation (SDO) Research and Development Programme aims to produce research evidence directed at improving the organisation and delivery of health services, and to promote the uptake and application of that evidence in policy and practice. The SDO Programme is one of NIHR Programmes.

The Cochrane Collaboration is an international not-for-profit organisation that helps people make well informed decisions by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health care interventions. The major product of the Cochrane Collaboration is its database of systematic reviews. Most reviews are prepared by health care professionals and published in the Cochrane Library. The activities are supported by staff in Cochrane Centres (Department of Health 2005 a) around the world. Centre for Reviews and Dissemination (CRD) was established in 1994 to provide the United Kingdom's National Health Service (NHS) with important information on effectiveness of treatments, delivery and organization of health care. CRD is a sibling organization of the United Kingdom Cochrane Centre and is part of a network of academic departments and research centres at the University of York concerned with teaching, research and consultancy in health and public policy.

Evidence-based medicine categorises different types of clinical evidence and ranks them according to the strength of their freedom from the various biases that beset medical research. For example, the strongest evidence for therapeutic interventions is provided by randomised, double-blind, placebo-controlled trials involving a homogeneous patient population and medical condition. In contrast, patient testimonials, case reports, and even expert opinion have little value as proof because of the placebo effect, the biases inherent in observation and reporting of cases, difficulties in ascertaining who are an expert, and more. Evidence-based healthcare management is an emerging movement to explicitly use the current, best evidence in management decision-making. Its roots are in evidence-based medicine and as such is a quality movement to apply the scientific method to management practice.

2.3 Those who comment on the NHS don't use evidence to do so

Strathern (1997) says that any economic relationship which is used for policy purposes ceases to be valid. The paper gives an anthropological comment on what the writer calls the 'audit explosion' meaning the proliferation of procedures for evaluating performance. Strathern (1997) notes that audit does more than monitor, it actually has an effect on the behaviour and performance of the organisation that is being audited.

Recent Institute for Public Policy Research/Ipsos Mori survey work indicates that only around a quarter of the public thinks that the availability of drugs and treatments should be determined by cost and effectiveness (Brooks 2006). There are legitimate concerns about the cost and effectiveness of new drugs and treatments, and about the role of private companies in stimulating demand for their products, and these require a robust and transparent regulatory response. We certainly need a system that allows a rational pattern of expenditure rather than focusing disproportionate resources on specific treatments when they hit the headlines.

Conversely Clarke (2004, p28), Director of Finance at the Homerton University Hospital NHS Foundation Trust, has insisted that 'most people running hospitals know how to run them, and there is no universal solution available from the commercial sector'. In any case, with around 70% of costs set nationally, hospital management teams have only limited discretion – something the government's 'turnaround teams' have been finding out. Parker (2004, p29), chair of the King's College Hospital NHS Trust, stressed that NHS managers are often being asked to manage 'dysfunctional systems', with a lot of perverse incentives. 'We are managers but we're being asked to act like civil servants, each time the government screws things up.'

Crawford (2009) wrote of a time when, in the role of Chief Executive Officer there was a heated argument as to whether loss-leader items led to greater sales. As CEO he could have made the decision based on his own opinion but that's not what happened. Crawford said, "Let's not argue, let's find out." They proceeded to do an experiment to see if shoppers buying sale items also bought enough other items to justify the sale. (They didn't). This is a great example of the attitude of inquiry. Crawford, (2009).

An attitude of enquiry would include questions such as “what are the assumptions behind this?” “what evidence do we have that things may go wrong?” Advocates come into a meeting with an opinion they wish to defend. Bertelli (2008) employed count regression techniques to find out what MPs said about issues of wait times and resource allocation in the NHS. Bertelli (2008) showed that political careerism goes a long way to show whether MPs tabled any questions in this area. Advocacy was consistently used in the defence of high risk individuals, but MPs showed no appetite for discussion about more general health risks that may be a clue to an attitude of enquiry.

2.4 A way to represent this as a diagram

The decision to use evidence to distribute the resources of the NHS would be, of itself, a political act. Clinicians, patients, politicians, all use Politics to distribute the NHS resource. Derbyshire PCT, where I work, is only the eight largest PCT in the country, and yet still distributes £1.1 billion of taxpayer’s money on healthcare. (Department of Health, 2009c). The problem is not with the evidence based approach itself. The problem is that good evidence based decision making with an evidence based organisation of knowledge at its heart can be slow. Decisions based on evidence can be full of checks-and-balances and be open ended. The calm evidence based approach gets overtaken by an urgent desire to claim and distribute a significant part of this huge economic resource available from the NHS. It will be helpful to draw this issue diagrammatically. This way the researcher can frame within one picture or table the reasons why evidence is (or is not) used by managers in the NHS and by those who fund, provide and receive NHS care.

I conclude that the cohort will use clinical evidence, I think managers are very much into the development of clinical pathways, working with clinicians and doing the best things in the best way. But as to how the NHS works, the sort of infrastructure, where services are located, how they’re delivered, I don’t conclude that they do use evidence. I observe there is some, scientific evidence in there, they’ll look at journey times, and they’ll look at volume, populations and the needs of that population (not been done very well until fairly recently). So they’ll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based.

In our efforts to continually refine the body of knowledge, guidelines exists for where evidence is and is not appropriate. There is a culture of target hitting, self-regulation and rooting out dangerous clinical practice that has it’s origins in criminal and unsafe clinicians such as Harold Shipman. But there is also a fear of evidence that pervades any hope of a structural response to the issue. There is also as we have seen far more complexity in the NHS. We have pressures to avoid all clinical hazard whatever the opportunity cost is. We have pressures and incentives for institutional growth over best patient care. We have consumerism and we have pre-occupation with financial costs over economics or ‘whole system/whole life’ costs.

Part of the problem in the discussion about evidence is that the players in the National Health Service can be difficult to follow if your primary perspective is the flow of patient pathways through the clinical experience. This gives a sense that there is a linear NHS with one purpose and a clear objective. Consider the diagram of the NHS as it is represented and it is possible to see a complex multivariate

organisation within which each player has a different requirement of and/or rejection of the opportunities afforded by an evidence based approach. (Table 1, below).

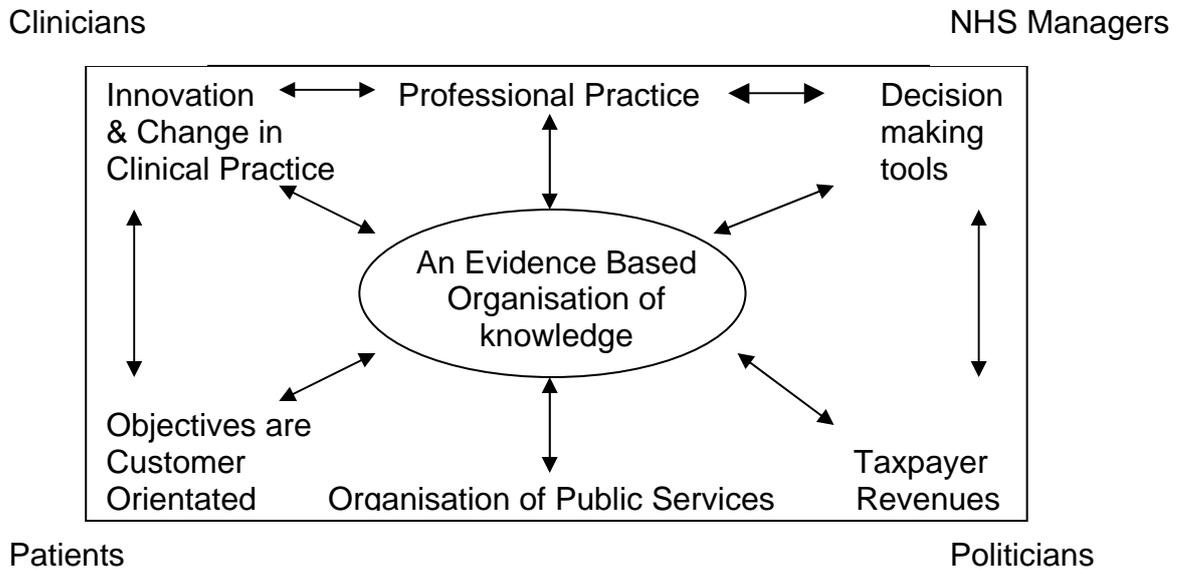


Table 1

An alternative diagram considered was the structured system analysis and design method (SSADM) piloted by Downs (1992). This is a registered trade mark of the UK treasury and therefore deeply embedded within the UK public sector. This type of modelling involves recording and documenting how data moves around an information system. This also involves significant dialogue with users and complex mapping and is a pinnacle of the rigorous document approach to system design. Although the investigative nature of this diagram is helpful in constructing a diagram it has two drawbacks that mean I favour my alternative. Primarily it is that SSADM is a waterfall method in which progress is steady through the phases of conception to construction and use. It is also problematic in that whilst SSADM may be useful in implementing evidence in a single organisation, it is contextually limited for those influencing, but not part of, the NHS.

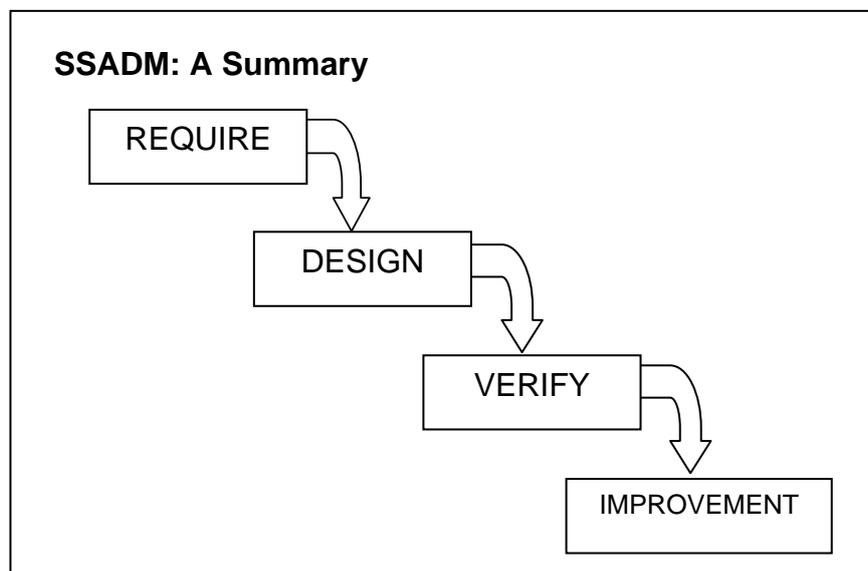


Table 2

The rational decision making diagram amongst its many assumptions assumes a single optimal solution. If, however, we opt for a diagram of 'bounded' rationality then my diagram makes sense. The decision maker takes the decision or is assumed to choose a solution that is good enough within the limited freedom and autonomy they have. All of the agents in the box makes assumptions about their perfect knowledge but all are aware that alternatives are limited by the other players in the box. Document 2 of the DBA (the literature review) discussed this point in more detail.

SSADM highlights that my diagram, as a faithful representation of the NHS, has a static nature and it may be that SSADM should be thought as the best way to enhance the "evidence based organisation of knowledge" at its core. This links with the next section in that I have so far described the existence of evidence as if it were a given, and the only question is therefore, whether or not it is used. Chapter 3 will discuss in more depth this issue of a "high quality knowledge base" and whether – if a decision was taken to be evidence based – the manager/politician/patient would find an "evidence based organisation of knowledge waiting to be tapped into".

Knowles (2008) says: Although the term "command and control" is used negatively in the current target-driven healthcare environment there is a coherent case for it being a more valid diagram than my evidence based approach. "Commonly held views about command-and-control are that it smacks of everything that is bad about those at the top telling everybody else what to do. However, with many years of 'shared situational awareness' (within the NHS) we may think of this as being clear about what is expected of oneself and one's colleagues and using one's initiative. It is about communicating a plan and ensuring it is understood".

CHAPTER 3

Concepts and Conceptual Framework

Purpose

To understand the on-going debate over whether the use of evidence should improve organisational effectiveness.

Key Arguments and Conclusions

3.1 The primary use of research is in shaping ideas not in the solution of immediate problems.

The National Institute for Health and Clinical Evidence (NICE) is a division of the NHS set up to consider not only the comparative clinical benefits, but also the cost-effectiveness of alternative technologies and services. Unfortunately, as Chalkidou (2009b, pp4-8) says “NICE typically does not, however, encourage evidence generation through prospective research into existing uncertainties. To the extent that evidence for new technologies is more readily available than for old. (Existing) Service-delivery models are much less frequently the subject of economic analyses, which further biases the whole process to new technologies. Local systems often lack the analytical capacity, resources, time and information and may overlook any resource use implications beyond the marginal pricing cost”.

Chalkidou (2009a) studied the experience of senior technical and administrative staff in setting up what she called ‘comparative effectiveness research’ centres in Britain, France, Australia and Germany. Chalkidou was a member of NICE (the NHS version of these ‘comparative effectiveness research’ centres. Using website access and informal interviews with key stakeholders, she was able to determine the mechanisms that typified their operation. She concluded “they have adopted a core structural, technical and procedural principles. Including mechanisms for engaging with stakeholders, governance and oversight arrangements and ‘explicit methodologies for analysing evidence’ to ensure a high-quality product that is relevant to their system” (my emphasis points).

What do writers conclude about evidence and the nature of evidence? Guven-Uslu (2006) was able to ask whether the nature of papers written upon the consideration of evidence based management were qualitatively different from those of other management disciplines. Guven-Uslu (2006) reviewed the literature of the NHS at a time when it was encouraging clinicians and managers to work together in networks to improve performance and the writer concludes that “evidence based management” is not so much a tool of decision making, as it is a state of mind. The incorporation of evidence based management into decision making is not at the decision point – it is the entire continuum of the philosophy of management. It becomes a credo wherein all decisions are taken in a structured and methodical way, and to some extent, trading timeliness for accuracy.

Rousseau (2006, p256) quotes from a wealth of resource available to guide effective execution of evidence based management “goal setting and feedback (Locke &

Latham 1984); feedback and redesign (Goodman 2001); health care managements greater orientation towards scientific evidence (Lemieux-Charles & Champagne 2004)” and says that the continued wide variation that we observe in how organisations execute decisions is remarkable. I have written in tabular form, the nature of the discourse contained in Rousseau’s literature so that a wealth of writing can be synthesised, in paragraph 3.3 and again in 5.9.

The Cochrane Centre was established as part of funding in 1992 by the NHS ‘to facilitate and co-ordinate the preparation and maintenance of systematic reviews of randomised control trials of health care’. The national level institution has been supplemented in the intervening years by National Service Frameworks (2000) and the National Institute for Health and Clinical Excellence (NICE) (2001). Other bodies such as Kings Fund, Nuffield Trust and the US Institute for Healthcare Improvement have been active in producing research and disseminating knowledge about the organisation and delivery of health care.

A company that embraces evidence-based management sees their company as a laboratory. Crawford (2009) ran an experiment to answer a specific question. Many businesses could do the same. Wherever there are multiple units – multiple stores, warehouses, production lines or branches – the company can run experiments to find out what works. This simple idea, “the company as a laboratory” is powerful one.

Sutton (2009) says “Last week I spoke to a group of MBA students (the Santa Clara University Executive MBA class of 2007). Their comments and questions gave me food for thought. For starters, is evidence based management anything new? Is it a movement that should be enthusiastically promoted, or simply a day-to-day activity that people should be encouraged to do? And what should it be called (assuming it even needs a name)? Sutton (2009) wishes to avoid using “data-driven” as a substitute, because evidence doesn’t always arrive in the form of hard data. Likewise, he says not to call it “fact-based” management, because not everything can be reduced to a set of objective facts. Sutton (2009) thinks “research-based” management is a decent description, but worries that it that might trigger “the dreaded MEGO (My Eyes Glaze Over) response”.

What each of the writers in paragraph 3.1 have done is provide a sense that evidence based management or “decision based on a careful appraisal of the best evidence available” is not only possible, but empowering. Whilst it has at its heart an inquiring style of management, it is not cautious in approach. If the manager were, say, the executive director in charge of twenty clinics, each with varied performance, the manager might reasonably conclude that the performance differences were due to something about the clinics or their administration. The executive director might even combine that presumption with a professional background in clinical or business disciplines to draw conclusions. What these writers have told the NHS manager to do instead, is to look for systematic attention to local facts (ie, the best evidence available) and plan their response accordingly which may mean looking at patients, building stock, transport or public health, but to look at them quickly!

The debate is evolving from managers use of ‘knowledge about knowledge’ in the private sector (Bailey and Clarke, 2000) to a broader NHS and health care

discussion (Kovner 2006, 2009). The debate is also evolving from one about managers strategic uses of knowledge to secure competitive advantage for the organisation (Hamblin 2001) to an alignment between researchers and managers to apply evidence to a broad range of other uses (Alexander 2007). There is as yet, little empirical research evidence to inform efforts to develop models in real world settings and the debate is typified by academic rather than practitioner dispute (Learmonth, 2006 and Rousseau, 2006).

We can observe the substance and discipline behind the evidence based culture; two writers Lomas and Rist are found in the literature with a number of lessons that they prescribe for anybody wishing to understand whether the public actually want their decisions to be made on the basis of best evidence. As a simple rule book this part of academic practice can be helpful in shaping an understanding for the later documents of how policy, public preference and management decision making come together. The writers make some bold statements as follows:

The relation between research and policy depends on the arena and, thus, the policymakers. Research evidence is more influential in central policy than local policy, where policymaking is marked by negotiation and uncertainty. Thirdly, the use of research depends on the degree of consensus on the policy goal. It is used if it supports the consensus and is used selectively if there is a lack of consensus. Fourthly, many researchers are politically naive. They have a poor understanding of how policy is made and have unrealistic expectations about what research can achieve. And, fifthly, policy-making is not an event but is “ethereal, diffuse, haphazard and somewhat volatile”. (Lomas 2006, p1-6). The consequences of failing to understand this are clear: “So long as researchers presume that research findings must be brought to bear upon a single event, a discrete act of decision making, they will be missing those circumstances and processes where, in fact, research can be useful”. (Rist 1994, p546).

3.2 Managers integrate data with other forms of knowledge

In the NHS in the East Midlands senior managers can embrace a dialogue about evidence and, at the same time, lead organisations that actually perform well. They are genuinely more interested in improving health care and organisational success than in power, prestige and being right. Unfortunately, despite their penchant for inquiry and observation the decision making box (2.4), the Rousseau model (3.3) and the critical single piece of evidence (4.3) show that their acceptance of evidence based decision making does not translate into practicing it. They feel compelled to act quickly and with direction in response to policy and the opportunity to consider evidence is ignored or lost.

Williamson (2000) acknowledges that knowing seems to be “highly sensitive” to such factors as justification and reliability. Taking each of these factors into consideration.

Justification: the meetings of the Senior Managers (Appendix C) took on board the empirical experience of the room, the authority of the speakers and logical deduction. Unfortunately, where evidence did occur within this rational sphere, it would be immediately discounted. If the evidence does not improve the organisations standing – suppose for example that the evidence was that

accountants cost more than they save in terms of the opportunity cost of health care foregone it was ignored.

Reliability: the managers do attempt to make generalisable conclusions that will be reliable across many scenarios and organisations – for example, that the public want quicker and safer health care – but chose these scenarios in a culturally biased manner. So evidence that staff need to work flexible hours to achieve this is discarded in favour of having more staff in the NHS.

So it is possible to see an NHS that does use knowledge, but could still discount evidence.

Rousseau (2006 a, p1091) continues to address why evidence-based management is timely and practical. An “evidence orientation” according to Rousseau shows that decision quality is a direct function of available facts, creating a demand for reliable and valid information when making managerial and organisational decisions. Improving information continues a trend begun in the quality movement giving systematic attention to discrete facts, indicative of quality (Rousseau 2006, p1091). “This trend continues in recent developments regarding open-book management (Case, 1995; Ferrante & Rousseau, 2001) and the use of organizational fact finding and experimentation to improve decision quality (Pfeffer & Sutton 2006). In all the attention we now give to evidence, it helps to differentiate what might be called Big E Evidence from little e evidence. Big E Evidence refers to generalisable knowledge regarding cause-effect connections derived from scientific methods. Little e evidence is local or organisation specific, as exemplified by root cause analysis and other fact-based approaches the total quality movement introduced for organisational decision”.

Evidence, according to Rousseau (2006, p1093) refers to data systematically gathered in a particular setting to inform local decisions. “As the saying goes, “facts are our friends,” when local efforts to accumulate information relevant to a particular problem lead to more effective solutions. Rousseau distinguishes evidence with a little e from Evidence with a big E. Although decision makers who rely on scientific principles are more likely to gather facts systematically in order to choose an appropriate course of action fact gathering (“evidence”) doesn’t necessarily lead decision makers to use social science knowledge (“Evidence”) in interpreting these facts”.

There are commentators on EBHM (Steward (2002), Paton (1999), Walshe (2001)) who say lack of evidence and lack of benefit are not the same, and that the more data are pooled and aggregated, the more difficult it is to compare the patients in the studies with the patient in front of the doctor — that is, EBHM applies to populations, not necessarily to individuals. In *The limits of evidence-based medicine* Tonelli (2001, p1435) argues that “the knowledge gained from clinical research does not directly answer the primary clinical question of what is best for the patient at hand.” Tonelli suggests that proponents of evidence-based medicine discount the value of clinical experience.

The emergence of evidence based medicine in the early 1990’s led to some clinicians challenging managers and policymakers to be equally evidence based in their policymaking. (Black (2001), Haines (1998), Raine (1998)). This demand was shared by some health policy analysts: “At a time when ministers are arguing that

medicine should be evidence based, is it not reasonable to suggest that this should also apply to health policy? If doctors are expected to base their decisions on the findings of research surely politicians should do the same The case for evidence based policymaking is difficult to refute” (Ham, 1995, p71).

The need to be seen to be making evidence based decisions has permeated all areas of British public policy. The government has proclaimed the need for evidence based policing, and the 1998 strategic defence review introduced evidence based defence. In the health sector, the concept of evidence based policy has gained ground, and a journal has been launched devoted to this challenge (journal of Evidence Based Health Policy and Management).

Walter (2004) is committed to developing and promoting evidence-based knowledge about good practice in social care. Understanding how research is used and how to improve its use is crucial for our work and the work of other organisations. This knowledge review focuses on the use of research by social care staff and how the use of research can be promoted in social care practice. It examines effective ways of promoting research use in social care, explores models of research use that include staff at different levels and settings in social care, and looks at what organisational structures are needed to realise the aim of using research to improve practice.

Four key conclusions emerged from the review Walter (2004) conducted on using knowledge to support social care:

- There is much activity to promote the use of research in social care, but this needs to be coordinated to avoid duplication and to ensure best practice is shared.
- The diversity of the social care sector, in terms of service delivery organisations, client groups and the workforce, demands that a variety of actions are used to promote the use of research. These actions also need to take into account multiagency and multidisciplinary working.
- Robust evidence of what works in promoting research use in social care is limited and tends to focus on the professionally qualified workforce.
- A whole systems approach, where the use of research involves a collaborative effort between organisations and individuals, would be a positive way forward.

Ham (2007) said that “Experience and available evidence from Europe, New Zealand and the US indicates that in no system is commissioning done consistently well. To be sure, there are examples of innovation in all systems, but equally there are examples of the limits to effective commissioning and the barriers that have inhibited commissioners from negotiating on equal terms with providers. As a review of New Zealand experience noted: Purchasing health services is inherently difficult in publicly financed health systems since purchasers are continually faced with the multiple and frequently conflicting explicit and implicit expectations of politicians, central government officials, managers, clinicians, patients and the public for the health system”, which indicates how little of the NHS management task is understood in its international context.

I have a paper by David Transfield and Ken Starkey (1988, p341-353) that emphasises the link between theory and practice and links to a craft versus engineering view of management. A quote they have is from Whitley (1984).

'the nature of management problems, as distinct from some manager's problems, receives little attention...yet if management research is to be more than technical trouble shooting for current incumbents of dominant positions this distinction needs sustained analysis. Considering management research as the study and improvement of co-ordination and control of human activities necessitates taking current structures and goals as problematic. This view implies some framework in which existing arrangements can be conceived as needing improvement and some conception of what constitutes improvement. It therefore has to transcend current beliefs and practices rather than reproduce them in formulating its problems and intellectual goals' (p369).

The need for evidence to shape organisational structure was promoted by Ham (2009) when he said "because of the importance of local context, the CQC should focus on the outcomes achieved by NHS organisations and local authorities and then use its leverage to stimulate partnership working where it can help to improve outcomes. Organisations that achieve poor or modest outcomes, and which function independently, should be challenged to work in partnership. The outcomes used to assess the effectiveness of local public services can be drawn from the comprehensive area assessment framework developed by the Audit Commission and the Vital Signs approach promulgated by the Department of Health. Improvements in health and wellbeing, and in the quality of health and social care services, are the outcomes that matter most, and the regulator should focus on these in its assessments of performance"; and in this he is consistent with Transfield and Starkey. Ham has offered real leadership in this area by leading a detailed publicly funded study of the role of Medics in Management, Ham (2008) said in the research proposal "the research will provide practitioners and policy makers with a better understanding of:

- 1) The types of structures which exist across England for engaging medical professionals in management and leadership;
- 2) How different structures are associated with different patterns of working and relationships between doctors, nurses and managers in the triumvirate; and
- 3) How different structures, roles and behaviours relate to organisational and directorate performance.

3.3 A Model to frame this narrative

So the problem is, how do I frame this rich narrative resource in a meaningful way? I propose to use a synthesis of the Rousseau model.

In paragraph 1.2 I quoted Morgan (2007, p48) who said that ethnography should also "render the collected data intelligible and significant to follow academics and other readers". My reasoning for selecting the Rousseau model as method is as follows. It explains why managers might feel unable to move to an advanced state of evidence based manager. It then says clearly that such an adherence to the status quo will stop the manager being a great manager in a great company. The conclusion of the Rousseau model is that managers using evidence based decisions are better managers. I am not accepting that conclusion by using this method. I am using the tool to make the data intelligible.

After Rousseau: A synthesis from the literature of Rousseau (2006 a, 2006 b) on the practice of Evidence Based Management.

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
<i>The supervision of employees</i>	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
<i>Information available to managers on the consequences of their decisions</i>	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
<i>The delivery on promises to the public, employees, stakeholders/taxpayers customers and others</i>	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
<i>Management style</i>	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
<i>Approach to academic research</i>	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work
<i>Management culture</i>	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors structured methods for improving efficiency were classified under scientific management	A belief that good management is an art - !the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implementation fail	Managers are prevented from real learning by fads and falsehoods

3.4 Conclusion

The NHS manager must also consider the circumstances of the decision and the ethical concern that the management decision may provoke. For example, immediately prior to a general election is not an easy time for an NHS manager to

promote the idea that the NHS might improve its efficiency by paying cash incentives to drug users to attend Methadone clinics but to deny the ability of a woman to top-up her cancer treatment by co-payment for drugs. Whilst both decisions may be made by contemporary NHS Chief Executives on the basis of a developing evidence base relevant to effective management practice neither decision alone (and definitely not when they are juxtaposed) will be considered appropriate to the circumstances of an election nor ethically appropriate when portrayed by the media. So I would be more blinkered about finding out what parts of the 'time' horizon it is appropriate to take a Rousseau type decision in. In this way, it is important to remember that my "After Rousseau Model" is only describing an hypothetical NHS organisation that uses Evidence Based Management. Wildly in contrast to the same organisation as a hospital provider where Evidence Based Medicine will most likely actually exist.

Is the method replicable but in a different situation? It is important to ask the question as this document does not have a tightly controlled experimental design but the method should be generalisable to the wider NHS otherwise the conclusions cannot be tested again. In all parts of the NHS there will be a cohort that can be reviewed individually and in groups to observe the use of evidence in decision making. Critically there will always be a number that is accepted without refute – the single piece of evidence – that is applied differentially, not at all or even wrongly (in contravention of the evidence) and it will be possible to conduct a field study of why that is so. Successful policies from repeated application of the method necessitate an NHS archive of the type typified by NHS evidence (www.evidence.nhs.uk).

Would the model need to be different if considering a different part of the public sector? I am not so confident that it could be considered 'best practice' and used again in, say, Adult Services of the local authority. There are two reasons. First, evidence based management is possible to juxtapose within the NHS with a prevailing demand for evidence based medicine. In this way there is some prior organisational support for the principles and methods. Second, the NHS has a unique governance structure within which there is no elected political representation at a locality level. All managers may understand best practice – not all have the NHS freedom to experiment with evidence.

CHAPTER 4

Research Methods

Purpose

To explain why I have chosen both a qualitative and a quantitative method of study. To identify two possible bias in the method – literature questioning the nature of the NHS manager and the potential scenarios within which managers answers may be vulnerable to gaming.

Key Arguments and Conclusions

4.1 The production of evidence to support my findings will include participant observation

In paragraphs 1.1 and 1.2 I quoted Frankfort-Nachmias (1996), Denzin (1997), Byrman (2004) and Morgan (2007) to explain my method of participant observation, that I classified as an ethnography. The method will include a large amount of qualitative data about managers. Swan (2002, p494) said that “when confronted by the demands of a radical, networked innovation process. Lacking the power to direct such a process, managers at (the PCT) adopted instead, the role of systems builder, working in an improvisational way across professional and organisational boundaries”. The key thing I believe Swan is pointing out here, is that my research method may be susceptible to bias from managers who adapt their behaviour in response to being watched. The key will be to classify as per Rousseau (2006) (paragraph 3.3) but mindful in reference to Swan (2002) of the “shift in management strategies and practice associated with innovation” during the observation. Swan (2002, p477).

Alexander (2007, p152) said that “evidence based management assumes that available research is consistent with the problems and decision making conditions faced by those who will use the evidence in practice”. This method explores without hypothesis, the studied environment of NHS management. The observer is part of the studied environment – having the same experiences as those being observed, but at the same time, taking a record (sometimes recorded by machine) of the process being undertaken. The problem with this method is that it produced a large amount of data which is difficult to analyse in an unbiased way.

I tested this assumption out by participant observation. An additional method would be to take a single hypothesis about a single decision – for example the implementation of an instruction that is nationally mandated simultaneously and to review the effectiveness of the response to that instruction at all places in the NHS at the same time. It would not be possible to have a randomised control trial of those who chose to implement the decision without evidence and to look at the harm/benefit that ensued because of the constraints of politics and time, but it has been possible to find a proxy for that task in the East Midlands. So I did that as well. This aspect of participant observation is explained further in 4.3.

The cohort I have studied; I conducted interviews and group observations in 2007 and 2008 with (Appendix A and B) Chief Executives, Strategic Health Authority Directors, Directors and Managing Directors of organisations within the East Midlands NHS. Notes were not taken in the meetings, but a recording machine was left on the to take a verbatim transcript of the meetings. Structured, but limited questions were used in the interviews and all respondents were encouraged to engage in a free discussion of the subjects without being re-directed. Observations normally took two to three hours as did interviews, although no strict time limits were set.

The East Midlands is one of the regions of England and consists of most of the eastern half of the traditional region of the Midlands. It consists of the combined area of Derbyshire, Leicestershire, Rutland, Northamptonshire, Nottinghamshire and most of Lincolnshire. Its main settlements are Nottingham, Leicester, Lincoln, Derby, Northampton, Mansfield and Chesterfield. Leicester is officially the largest city in the region, although the largest conurbation is the Nottingham Urban Area. For the purposes of this study the East Midlands represents a significant border for the division of delegated responsibility of the Department of Health. NHS East Midlands provides strategic leadership to NHS organisations in the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland. These organisations have a total NHS budget of £4.1bn, and serve a combined population of 4.3 million. This study will concentrate the practical elements of the research on the East Midlands NHS.

The writer is a participant in the National Health Service, the author holds a senior management position in the National Health Service. The National Health Service being under transition affects the individual philosophically, professionally and individually, therefore there is a subjective bias in the analysis of change in the NHS.

The study is a selected sample of subjects representing a spectrum of Executives in the NHS from different professional backgrounds including doctor, accountant, academic professor, statistician and nurse. Subjects were recruited from the cohort of people working in the NHS in the East Midlands through personal contacts and in one case, referral by other subjects. A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort to test this method.

The overall aim of this research is to enhance good practice in the craft of management in the NHS. To achieve this aim my objective in this piece of qualitative research is to conduct a systematic investigation into current perceptions of evidence based management including perceived barriers to its use and also including perceptions of good practice in the use of evidence based management. It was also necessary to begin to ascertain perceptions of skill deficits in this area and factors viewed as contributions to these deficits. The effect of the researcher as an observer is unknown. It could have an effect on the interviews and it may inhibit parties who participated in the review of meetings. A further limitation of the study is that I only included leaders from within the NHS East Midlands and it is possible that NHS regions may be more or less equipped to engage in a discourse about evidence based management. The strength of this study is that observation and participation with individuals and the groups by the researcher on an ongoing basis in the NHS in East Midlands increase the credibility and trustworthiness of the

findings. Bryman (2009, page 3-4) says of the usefulness of triangulation “do not deny the potential of triangulation, instead they depict its utility in terms of adding a sense of richness and complexity to an inquiry. As such, triangulation becomes a device for enhancing the credibility and persuasiveness of a research account”. Although Bryman does acknowledge that “it (triangulation) is sometimes accused of subscribing to as naive realism that implies there can be a single definitive account of the social world”. I am happy that my results can be triangulated and that this does not imply a single definitive account.

Individuals or the chairs of the groups to be recorded were initially contacted by email with a very prompt follow up by telephone. I outlined the nature of the project and the contribution I felt the individual or group could make to my initial piece of qualitative research. I explained that all interviews would be taped, but that the material gathered would be considered confidential by me, with no identification of individuals except by some implicit membership of the taped group meetings. All of the individuals I approached were happy to help with this piece of the project, many suggesting this was an important discussion in the NHS that warranted further investigation. All of the interviews were conducted at the interviewees’ work place. The meetings that were recorded happened at normal monthly meetings with the agenda of the previous months meeting including an explicit discussion about my authority to record the events verbatim.

4.2 The Interviewees, the groups and the meetings

A preliminary interview schedule was developed and two pilot interviews were conducted with people from outside the cohort. The meetings that were recorded happened at normal monthly meetings with the agenda of the previous months meeting including an explicit discussion about what I was doing and my authority to record the events verbatim. Five in-depth interviews were held with leading managers in the NHS and three meetings of senior managers in the East Midlands were also recorded. Four focus group meetings were held (three of them prior to the main meetings) as part of the process to understand the nature of the study I was involved in and any pre-conceived notions or approaches to evidence based management. The results were triangulated by feeding back to the original five interviewees. Seven people who were senior managers in the NHS, but not part of the original interviews read the results to test for reasonableness. Finally, I fed back to five group meetings the preliminary results to test for reasonableness.

	For the purpose of pilot	For the purpose of data collection	For the purpose of checking my understanding
Interviews	2	5	7
Focus Groups	-	4	-
Recorded Meetings	-	3	5

Table 3

4.3 The method must be aware that in the literature review, some writers would question whether the studied cohort are managers or autocrats

Collins (2001) labels ‘level 5 leadership’ as the ability to combine individual competence with unwavering resolve to confront the facts head on, fierce ambition (for the organisation) and personal modesty. All these are needed because once the evidence is assembled, the only way of creating a customer-orientated

organisation is to make it face the customer, not the leader. Paradoxically, the only way for leaders to gain control of the system is to give up the idea of controlling people through authority and hierarchy (the leader-facing organisation) and enable customers and frontline workers to jointly reconfigure the system to deliver what customers want rather than what politicians specify. As Robert Pfeffer and Jeffrey Sutton note in *Hard Facts, Dangerous Half-Truths and Total Nonsense: Profiting from Evidence-Based Management* (2006, page 187), if decisions are made on facts, then everyone's facts must be equal, but you don't need 'transformational leaders' to do it.

In a 2006 work informed by the work of French geographer Henri Lefebvre Learmonth (2006) suggests that in the long term the very study of evidence based management is likely to inhibit rather than encourage, a fuller understanding of the nature of public services. The author critically evaluates the phenomenon of 'evidence based management'. He goes on to suggest that the current approach, broadly informed by the pursuit of evidence based medicine, is misguided. The reasoning behind this approach from Learmonth is that there is a weakness at the heart of evidence based management. There is, quite simply, a deep debate to be had about the nature of 'evidence' within the discipline of management studies. Ultimately Learmonth moves to the conclusion that the pursuit of evidence based management has less to do with improving organisational effectiveness than it has to do with the transfer of certain management styles to the public service in spite of theoretical problems with their derivation.

Learmonth is important not only because he is an academic and former NHS Manager, but because work like his 2006 piece are part of a continuum of investigations by the author into managerialism and NHS managers stretching back to his own doctoral thesis soon after leaving the NHS. Learmonth (1997) presents the results of empirical work examining public attitudes towards UK NHS managers, with the author discussing possible explanations for the findings that there is a strong lack of sympathy for managers. The preferred explanation is that NHS managers as a group, tend to share an ideology about the nature of the NHS and the role of management within the NHS which is at odds with the belief held by most members of the public on these matters. Learmonth explores the origins and nature of managerial ideology (managerialism) in the NHS. In both his 2006 and 1997 papers, Learmonth suggests that management styles are being imported to the NHS, based on little effectiveness and that his 2006 identification of the symptom is evidence based management. Winyard (2003) agreed with Learmonth and further added that the introduction of general management in 1984 created new fault lines between doctors, managers and politicians.

Midway between these two dates of Learmonth lay the 2002 introduction of a code of conduct for NHS managers (Department of Health, 2002). The idea of the code was developed in the aftermath of high profile scandals around the management of clinical safety (Bristol) and dignity of the treatment of the body parts of deceased children (Alder Hey). The code set out the ethical and behavioural standards expected of managers. Breaches were to be viewed as gross misconduct leading to dismissal. Serious breaches such as financial fraud, supplying false information and negligence towards patient safety would result in the offender never being employed in the NHS again. Nigel Crisp, the then NHS Chief Executive said "the vast majority

of managers in the NHS are highly principled and value driven people who will welcome the code. But we must deal with failure”.

4.4 Using a critical single piece of evidence as managers to undertake a quantitative study

The organisation within the NHS that the manager works in will be a variable construct of the history of rebuilding and redefining the NHS that will vary region to region and even county to county. Despite this limit it is possible to ask the question, “faced with a verifiable piece of peer reviewed evidence that is relevant and significant to your organisations context and is nationally constant – what do you do with this as a manager?”

Consider the following table and graph.

Falls in the Elderly Population

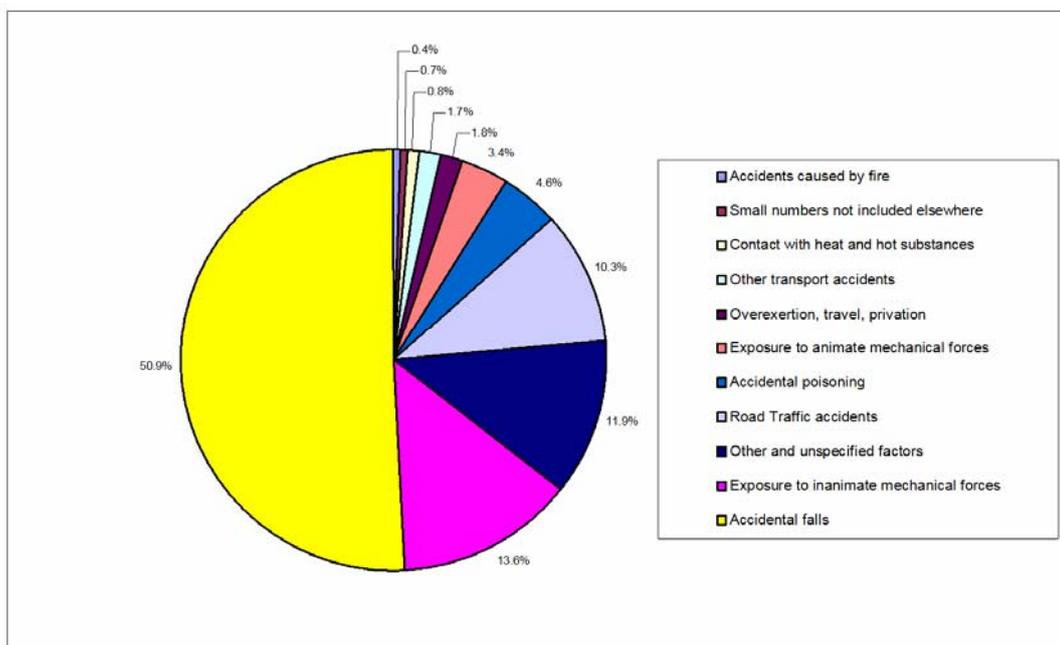


Table 4

Falls in the elderly population represent a serious and increasing issue in the UK and the subject area is attracting increased attention in current government policy development across different departments including health, social care and housing. In January 2008 the Department for Communities and Local Government released a report entitled “Lifetime Homes, Lifetime Neighbourhoods” (2008). This report highlights the following statistics:

- One older person dies every five hours as a result of a fall
- Falls in older people cost the NHS around three quarters of a billion pounds each year
- 1.25 million falls a year result in hospital admissions.

Ambulance services have a key part to play in tackling this issue. The Department of Health Pathways for Older people with Complex needs (2007) states that:

In summary, evidence suggests that a significant percentage of those who fall are elderly and that following transportation to hospital their support networks and infrastructures are switched off – hence they tend to be admitted to hospital. On a practical level, the falls co-ordination services provided and commissioned by PCTs do not co-ordinate well with EMAS and fail to recognise that a) EMAS is the first responder in most cases, b) fewer of these cases are Category A calls. The method will study the context within which a response to this evidence data is possible for NHS managers.

4.5 The method must be aware of a bias possible in responses because some outcomes of the study may be perceived as less fortunate than others

The NHS likes to league table. Organisations are scored and re-ranked, then ranked against different criteria and all of this makes the validation of what is working difficult to say within the business cycle of a given year. The key role of the performance and accountability framework in ensuring that this is used to explain why the bottom of the table finished bottom, rather than why the top finished top. The reality is that within the performance framework (that holds that the complex organisational reasons for failure can be attributed to one Chief Executive) there is a tendency to use evidence to criticise others rather than to understand the success of leading (league tabled) organisations.

So what would happen if I came out clearly in favour of more evidence based decision making? The effect on operational management of this would be: not all NHS organisations would be successful. Failures of delivery occur within all organisations within all sectors of the economy. The consequences range from minor inconveniences (a surgery opening late) to major catastrophe (the failure to vaccinate an entire population). On the other hand, accepting that evidence and the iterative application of evidence, refreshed by trial and context, would prevent repeated service failures of the same type. There will be an improvement in management.

This would effect a medium term review of resource allocation. A key part of public expenditure (fiscal) control is congruence between policy priorities and money given to priorities. Implied is the sense that evidence would take place in a lengthy (continual) process in which the treasury is engaged in funding a range of policies aimed at meeting the health needs of the population: more significantly, the Department of Health would recognise that all of their policies for the NHS have financial implications and that the evidence base to back up these policies has to be justified and monitored.

This would lead to a new evaluation of strategy. Evidence would enable the debate about the NHS to mature. Are the goals set by the department being achieved or not? If the evidence suggests they are, then decision makers should be acknowledged and applauded. If the evidence suggests this is as a result of using evidence then this should be communicated to public media and in the weekly Chief Executives bulletin. If the evidence being collected suggests that strategy implementation is struggling, the traditional NHS response has been continual organisational and structural change. The problem has been that the solution itself was not evidenced, piloted or given a priori evaluation that it would solve the diagnosed problem. The transformational leap would be for senior NHS managers

to see a shift that meant that what could be learned from strategic planning was always discussed and written down to make the next strategic plan more evidence based and efficient.

4.6 The analytical methods used to provide a robust and valid interpretation of the data

Waring (2008) says that “Template Analysis makes use of codes and coding of data. The complete analysis process of organising, connecting and corroborating/ legitimising is used to analyse large quantities of rich data collected from qualitative research using semi-structured, unstructured interviews or story telling data collection methods”. The process involves; creating a code manual, hand or computer coding the text, sorting segments to get all similar text in one place and reading the segments and making the connections that are subsequently corroborated and legitimised.

Template Analysis normally starts with some pre-defined codes to help guide analysis. In my case, the code was the use of the Rousseau model and the conversion of the management issues in the Rousseau model to letters A to E. The code also included letters F and G for management culture and conclusions respectively, although it soon became clear that these letters in the scheme were redundant or repetitious (paragraph 5.10 explains further). Rousseau was useful, not only as a synthesis of literature themes, but because it contained neither too many codes (blinking the data) nor too few codes (which would lead to an overwhelming classification and coding of all of the rich and unstructured data).

Waring (2008) notes that “Template analysis is now well embedded in healthcare qualitative research (Kind, 2004: Crabtree and Miller, 1999). However, it is not so well established in Business Management research and this is innovative yet challenging in itself, when applied to this different context. Traditionally business research has emerged a positivist paradigm”. The reason this project uses Template Analysis can be found in a deep dissatisfaction with the NVivo software package. As Waring (2008) says “(although) the software might allow a more comprehensive approach, we would argue that immersion in the data is an essential part of the interpretive process and use of technology can often act as a substantial barrier”. That is not to say that NVivo did not have some merits; in the discussion on neuro-semantics (paragraph 6.3) and conclusions (9.4), some useful correlations were made, but in the heart of the data interpretation Template Analysis using the Rousseau model gave a richer, more complex and ultimately more useful tool than NVivo.

The benefit of using Template Analysis – with a highlighter pen and post-it’s, reading, re-reading and cross referencing lengthy transcripts – is that it recognises that the Rousseau themes were not hiding in the qualitative data waiting to be “discovered” the way the NVivo tool suggested. The coding arose from my engagement as a researcher with those texts. As such, it enabled the Rousseau model to act as a pragmatic tool to give a classified account of the data. The classification would be meaningful to external readers and, just as importantly, to the cohort who participated in the data collection themselves.

Having completed the first stages of Template Analysis (creating a Rousseau code, hand coding the text and sorting the segments) the ultimate state is corroboration to independently verify the relationship between the data and the coding. Independent scrutiny of the data was used when directors and assistant directors of NHS Derbyshire County were formed into an “expert panel” to challenge different readings and aspects of the data over their own conclusions. Further the classified data was returned to the five in-depth interviewees, not for correction of transcript but to acknowledge the consistency of what they had said with the Rousseau classification. The Rousseau model, as well as being a coding system, also enabled the material to be presented in a reader-friendly form.

Template Analysis was a useful analytical method that encouraged reflexivity. Comments from the independent scrutinisers helped to reflect on the questions or assumptions being made by the researcher (me, especially as I am also a part of the population being reviewed). Keeping an audit trail of the highlighted documents, their annotations and the unused text, forced me to be explicit about the conclusions being made. Template Analysis was particularly useful in moving data from Document 3 of the DBA to Document 5, when it had to be re-read and re-checked prior to inclusion again in Document 5. Waring (2008) concludes that “I firmly believe that writing-up (using Template Analysis) should be seen as a continuation of the interpretative process. In my experience the process of accounting for your analysis to your readers deepens your own understanding of your data”.

CHAPTER 5

Research Findings

Purpose

To record the awareness of a need for evidence and the collection and evaluation of such evidence. Where an interview is quoted, I have put a notation in the corner of the box denoting the letter in Appendix F. Appendix F says more about who these people are.

Key Arguments and Conclusions

5.1 How to use evidence to enable staff

Jbilou (2007, p185) concluded that “decision making in the health sector is affected by general elements such as economic constraints, political agendas, epidemiology, managers values and public environment”. The paper explored the determinants of “research-based-decision-making” as a personal behaviour among managers and professionals in health administration in Canada. The results suggested that “further research is needed to identify and evaluate effective incentives and strategies to implement so as to enhance RBDM adoption”.

I framed a direct question to a Chief Executive of an Acute Hospital to try and get some specific answers to the question of how to use evidence in a way that is not threatening or coercive. The responses indicate that sometimes leadership has to determine whether the individual has the capacity to understand.

Can I explore one of those, and I'm not challenging what you say, it's just this - say the rule book, say the rule was the piece of evidence based practice, and the manager is just coming up against that, you know, the person that, are just not getting it as anything other than a limiting factor, what do they do with that? Do they respect the evidence and back off, or do they try and work round it, or.....*my guess, I'd say it depends on their capabilities, it's a bit like one of these things in this document they've sent me – if you want to be a manager, get yourself educated in something, then get a job, just don't pretend it will teach you to be a manager, I mean, it's a bit like, don't pretend that world class commissioning will teach you to be a commissioner. Ok. So, a good person would be able to see the sense in that situation, people without good sense had better just follow the rules 'cos they'll be safer, do you know what I mean? I don't know, it depends on the rules!.....it's interesting about that, that follow the rules, because I think, a lot of that is a proxy for evidence based medicine isn't it? It's the, you know, look, the vast majority of you will not be as good as the best, so follow the rules, and then the outcomes will be better for everyone.*

RESPONDENT A

Returning to the theme of the need for evidence. The macroeconomic environment and political context for the NHS is changing. Growth (in excess of GDP growth) for the NHS will not be able to be afforded without some changes (Wanless, 2008 b). So, if change is necessary, then the task is to identify new evidence and new information upon which to base management practice and management education.

The National Institute for Health Research's Service Delivery and Organisation Programme (part of the NHS) is undertaking primary research (ref NIHR, Km 259) which will inform and extend knowledge about management practice to facilitate best practice and best use of resources. Working within the programme, observers and researchers seek to generate creative processes for identifying, representing and accessing evidence of what evidence based practice is used. The objective is to ensure that management practice remains responsive to the changing financial and economic situation.

But there must be a limit to the extent within which a rule becomes an end in itself. As the following statement from a clinically trained leader says, the key is to develop dialogue and understanding.

And I have no problem with that, because what it tends to do is it generates a coherent conversation, you know, I mean for us; a lot of the rule following is very wasteful, labour intensive, and there are plenty of people who know the answer, without having to follow the rules, but there are a lot of people who don't; and the good thing about rules is it encourages conversation, you know if we want to prescribe a drug that's not on the protocol or the pathway, someone says, hey, this is what I want to do, and this is why I want to do it, a few great minds come together and will probably make what is the right decision, whether it follows the rules or not.

RESPONDENT B

5.2 The need to quantify risks and benefits of using evidence

Some blocks to shared understanding about the usefulness of evidence are the blocks to a shared quantification of the risks and benefits. The key here is that the accountants, the board, the matrons, everyone, must have some shared understanding that there is a risk to not using evidence and a shared understanding of the benefit of being evidence driven. The Chief Executive of a Acute Trust, the same trust for many years gives an explanation of the importance of a shared understanding.

For a manager to be accepted as something other than an irritation, getting in the way of clinical work, they have to demonstrate that they're in it for the long haul themselves, and that's very hard, and after the first three or four managers have gone your chances of making it as number five are really quite small. But there's a down-side to this longevity thing as well, and it's this sort of practice being entrenched, that once, you know, we've done it this way for the last ten years, so you're not going to change what we do, and also, the culture becomes quite unhealthy because of the longevity sometimes.

RESPONDENT C

So the very longevity of managers that enables clinical participation is seen as a limiting factor when getting clinicians across the East Midlands to lead and support required configuration and productivity improvements. Here is the same Chief Executive again, talking about how a new to the NHS executive uses clinical evidence to provide an antidote to organisational inertia and antipathy towards him as an individual.

He just rolled his trousers up, put a knotted handkerchief on his head and said, 'look – what do you want? This is evidence based medicine, here's the evidence, what are you all talking about?' And still, it made a big impression, it got a lot of laughs, but it takes that, sort of real challenge, before a lot of that out of date evidence is discarded. So evidence base – it's sort of important, but it's almost a culture rather than a reality sometimes.

RESPONDENT D

That's fascinating, and nobody's mentioned, so, old evidence becomes dogma, so it's established on an evidence base, and this is not just relevant to medicine, so it's not just established on – it's established on an evidence base, but then that becomes dogma which in its self evaporates over time and then the evidence isn't refreshed, is that.....

RESPONDENT B

And even more telling was an acknowledgement that there was no post-implementation work done to evaluate the success of the initiative.

Which of all the measures here, we have introduced, has worked because our infection rate has reduced.....I don't know, if I'm honest, I don't much care so long as it's happened, it's a number of things we've thrown at it. I could play the experimental – I could take that one out and see if it makes a difference, but I'm not interested, it has had the desired effect.

RESPONDENT A

5.3 The NHS is a complex structure that makes informed decisions difficult to make

And then there are some direct and lengthy quotations given by an individual in a group situation that are worthy of inclusion as individual quotes. I like the one here that says the NHS is complex and cannot be easily modelled, but makes no reference to evidence.

I do believe that most people can understand that that's the world we work in, most people can understand that there isn't a text book on the shelf of how to do this job, and most people in my experience, if you spend the time talking to them, will understand that, all we're trying to do is what we believe to be the best, taking account of what everyone's telling us, and from my perspective, in my job, it's not opening holiday brochures, reading the small print and looking it up on the website, it's talking to people, and you know, should we regrade nurses in surgery they'd say no, you ask some of the surgeons they'd say no and if you do I'm going on strike, and you know, you ask some other nurses and they go, well yes, fair enough, whatever, you get a whole wide variety of views, and you somehow have to make sense of it.

RESPONDENT E

But the individual view is that there is sufficient evidence to make information and informed decisions that we can rely on.

I don't think evidence takes time to mature, evidence is there from when it's presentedit's then assessed, folk law, takes the time to mature, so I think evidence can come and be there, I think in management terms, new evidence rarely comes to light, but I think evidence itself, becomes evidence from the day it's presented, it's just a question of what category and what quality it is.

RESPONDENT F

The problem as ever, again quoted in a group context, is that politicians and information do not fit nicely together.

Yes, it is really, I said to my board, just the other day, you know, working in the NHS is like living the world's biggest experiment, and it is, you know, we'll twiddle this, and I always used to think, particularly when we had Alan Milburn, I used to imagine, you know, the man stood in front of this big complex machine with fan belts and nuts and bolts, and cogs and things, turning the spanner in his hand, just kind of diving in and just loosening a bit, or tightening a bit, taking a bit off or adding a bit on, and going, oh, that didn't work, we'll have another go, you know? RESPONDENT C

5.4 The use of evidence to improve financial management

It is clear that strong financial control is valued by executives, but in the following discussion by a leader who is no longer in finance, two things are worthy of note: the absence of the word evidence in any reference to accountants in the NHS and (despite appreciation of their corporate contribution) a question mark hangs over their ability to influence group decision making.

*I think it depends on what sort of an accountant you are, I mean, I don't think it was my natural bent to be honest, and I was heartily glad to get rid of it, because it was too precise for me. But it taught me some things, it taught me a balance sheet is only balanced when it balances to zero. Which is a good discipline; these people who go.....well, that's about right! taught me you can approximate, but you need to know how you're approximating, you know, when you round to the nearest million, you know what you've lost don't you. It doesn't mean you have to mess around with pennies, it just means you need to know what you're not taking account of. It taught me some good practice around delving in the detail, which is not my natural bent, and for people that are, they do struggle to make good strategic decisions, and I have watched accountants struggle to do that; I'm not suggesting you're one for a minute, but I have an ability to get into detail when I need to, in a way some people just can't, and it's given me an understanding in money that's essential if you're trying to do my job, it really is. And there are many, many, many times, no disrespect to 'B' who's been a great Director of Finance here, there are many times when we're kicking numbers around, and it's me who goes, 'but hang on a minute, you know, if that's going to drive that, and that's that and that's got to go there, then surely we've got a problem here', and you can kind of see everyone going oh-yes! And I couldn't do that probably, if I'd been a Physiotherapist. **Ok, so your profession has been a tool that you've been able to use on an ongoing basis.....yes, hugely. Ok.*** RESPONDENT C

But, the decision making by accountants was not the only one group to fail the executive test of reasonableness – so to the matrons. Consider this Chief Executive of an Acute Trust.

I went in very, very hard with the matrons last April about their cleaning audits, because what they were telling me back in March/April was that we were going to fail the health care commission standards, when we had all the matrons in, I said, I know it's not like that, you know it's not like that, what are you playing at. RESPONDENT A

Sacket (1996) said that some fear that evidence based medicine will be hijacked by purchasers and managers to cut the costs of health care, McKeon (2009) said that nurses and doctors need to understand how NHS finance works, and Nolan (2006) says we must deal with funding the balances between quality and cost in healthcare. What section 5.4 says, to juxtapose the literature, is that without an evidence based attitude towards costs and quality, the clinical model will be insufficient to deliver the sustainable cost and quality improvements required. Instead of systems to improve the quality and reduce the cost of care, what is missing is an evidence based approach to improve the value of care.

5.5 The effect on organisational performance

The effect of evidence on organisational performance was considered by Hovmand (2008). They started their discussion by reference to administrators of mental health services who “may expect evidence based practices to offer strategic benefits”. Concentrating on clinical research and randomised control trials, they drew a conceptual framework for considering how implementation affects organisational performance. Although not strictly with the context of evidence based management, so much as organisational compliance with evidence based medicine, they still draw a useful conclusion. That: “results from the simulations shows how gains in performance depended on organisations initial inertia and initial efficiency and that only the most efficient organisations may see benefits in organisational performance from implementing EBP”.

Although Hovmand (2008) is referring to efficient organisations, I believe the quotation is still relevant for my study of effective management behaviour. This is because in a publicly funded, cash limited, health system the output (efficiency) of number of patients treated is differentiated from outcome (effectiveness) of the number of patients for whom health improves after treatment. The difference is a result of short term versus long term attitudes to evidence. The difference between efficient and effective is not semantic – the former being concerned with performing tasks with reasonable resource, the latter with the extent to which objectives are met. On the other hand, they are two of the three legs of value-for-money (economy being the other) and the inclusion of this quotation is still valid.

So finally, two quotations should be examined about the apex ‘group’ of the organisation: the board itself. The decision making in the boardroom is expected to be, demonstrated to be, cognisant of evidence based decision making. Both of the quotations below are from organisations that would be efficient (according to published ratings) and we can apply the Hovmand (2008) criteria.

Imagine you're in a boardroom and it's one of those, where for some reason, you're still in there at seven o'clock at night, and you know you've got locked into something, and you need to make a decision before the morning, and somebody says, shall we have a look at what the evidence says – is that a good thing to do at that moment, because it is a distraction and the evidence isn't in the room; imagine, taking my scenario, the evidence isn't in the room, so there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don't need any evidence, what we need is a decision. I would be shocked if the evidence

wasn't already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on certain decisions I would want the 'show-me test' as well. On big things I want to see it. So I would stop – go to the evidence, then consider the evidence in the wider context of the decision we're making.

RESPONDENT D

And, this is true even when the whole board might be agnostic about the approach.

*Oohh, I think one or two of them would react positively, I think one or two of them, would I think not understand what I meant...**ok**.....and the rest would be agnostic in the middle. But, I do think that self perception and review of one's performance is something which leaders sometimes get a bit blasé about, and don't do!*

RESPONDENT C

At a particular point in the conversation this rejection of the rules, this acceptance in the executive that rebellion was a tool in the chief Executive's armour, was becoming clear so I asked an explicit question.

Ok. Do you think we back off, from the implementation of the rules sometimes? *I think we do, yes. Well they are sort of political; some of it is a genuine means to an end, and I can see that: the reason we brought the private sector in and allowed them to be paid stupid amounts of money, is to get them in, and maybe the same as with practice based commissioning, now they're talking about paying them tariff, albeit the same tariff at the very low end complex work, I suppose it's a step in the right direction, but we usually do it because we've fallen flat on our face, rather than we ever had a grand plan.*

RESPONDENT D

5.6 The next part of these findings is to consider those who see “risk”, who aren't insiders - how does the NHS identify these outliers and what they are saying?

The sequence begins with the chair asking, prompted by me recording the interview, whether evidence would help at all. On discovering that the group is willing to accept that the NHS is far from an ideal organisation, he asks some questions that get a more radical response than some of the strategic platitudes normally classified by the same individuals as 'assurance'. The chair continues a light cross examination as well as inserting a supportive and friendly narrative throughout. The Chair's role was didactic – in order to get to what the people were saying the conversation was nurtured – on only one occasion did an individual specifically announce that he wanted to ask a question.

The following is an example of when an 'outsider' (an off protocol doctor) is encouraged to move back into the fold of the use of evidence. In the end, an absence of evidence was taken as a lack of legitimacy (by managers) to practice.

And there will be occasions, you know, medicine's instinctive, and there will be occasions, I think, where you don't follow the protocol, because you don't know why you don't follow it, but you must have seen a patient somewhere similar; you wouldn't expect it to be the norm, but you should be able to justify in your own mind why you've not followed best evidence, what you should never do is not follow best evidence. If I take an example, we had here an anaesthetist prescribing some pain

relief some years ago, and the evidence on it was no where near conclusive, no where near conclusive at all, and this was in the early days of clinical movements, and we looked at all the pros and cons, we looked at all the evidence, and in the end, we said to the anaesthetist, you will not prescribe.

RESPONDENT G

The effect of evidence on individual and group decision making. Evidence at the individual level can be sufficient or insufficient and the conversations showed that this affected perceptions and motivations about the use of evidence based decision making. It was not possible to say whether this had any direct effect on individual performance. It is reported though, that perceptions of the task of senior leadership did not correlate with high use of evidence. On the other hand, where a group was making a decision based upon a joint co-operation of members (rather than simply attempting to provide confirmation to a recommendation) there was a strong desire to work with evidence and perception that group performance outperformed what it would have been without evidence.

There is an explicit acceptance that the NHS cannot change without exploring the boundaries of the NHS. In the following quotation there is a direct challenge to a doctor who believes that the NHS has attained an evidenced optimum.

To what extent would evidence help you at all, or is it.....it does a lot, it does a lot, there's loads of things we use, I mean, to me, you know the job is a simple job, I always say to people, you know, that's where we are now, that's the NHS today, and that's where we're trying to get it, and I've only had one person in my whole life say 'it's perfect now', only one person – a pathology trainee I was talking to a Keele University, clearly, a strange man!

RESPONDENT H

Let's consider something that I want to reflect back to the managers. The following is an extract from a 10 minute journey where a senior group of executives are trying to find the way to speak the unthinkable. It is worth knowing from the start that this discussion starts with trying to find a way to consider the proposition that nurses in a particularly poorly performing hospital (on quality and economic performance) are not a solution to but a cause of the problem. The outsider nature of this debate, challenging years of acquired cultural parameters about nurses is revealing. What is interesting in the following quotation is that the outsiders in the following group meeting don't use evidence to describe the need for change. What they choose to explore are scenarios. Much like a health economist they start off with an assumption.

But let's assume there's a journey to be made, right, and you can begin to describe what's in this future NHS, it's less wasteful, there's no healthcare associated infections, shorter waits, greater satisfaction, more motivated, you know, nicer buildings, better equipment, all the new drugs, whatever.

RESPONDENT I

Further, this is picked up by the next person in the group. Again, what the outsiders are trying to explore.....or rather, what the NHS manager in a protected environment within which they can think of the future.....are scenarios.

And my job is to take this organisation on that journey, but it's not just a simple more, more, more thing, as I think we all understand, and we all do that all the time

at home, we're all trying to get the best for our family, we have a limited income, we have circumstances, we all live in England – it's cold!

RESPONDENT J

Scenarios are by definition, alternative, plausible pictures of the future. Scenarios are created that are definitely not forecasts but are free from organisational constraint.

You know, so you'll say, we'll have a holiday a year, and I'll make sure I have central heating, and I can afford to keep paying the gas bill, and keep buying trainers for the retched kids feet that grow six inches every week, you kind of make those decisions to make that journey at home.

RESPONDENT K

The scenarios are written in a deliberately provocative style to tease out the differences between the different pictures of the future. The previous speaker was describing steady interactive change. The following speaker, although using a comforting style and collegiate language is painting an alternative scenario which is clinically relevant but more challenging.

And we have just the same to do at work, and we've kind of coined the phrase at the moment particularly about best care and best value, it's not just one, and it's not just the other, it's not just saving money at the expense of quality, it's not pursuing quality, spending money we haven't got, it's got to be about best care and best value, and I think people can relate to that.

RESPONDENT J

Then another more detailed description is ventured by the next reader. Scenarios, as I said are alternative plausible pictures and the next readers picture should be read side-by-side with the others to understand the differences.

'With you so far' they'll say, as a tax payer, as a user of the service, of course I want it to be as good as it can get, if we're wasting money seeing ten patients in a clinic when we could be seeing 20, somebody is missing out on something aren't they – that's an opportunity cost in terms of health gain.

RESPONDENT H

Until finally, we craft an answer to the problem. The staff can accept the analysis when applied in the abstract the actual implementation of the answer struggles when "the light is shown" on the problem. Only at the very very last moment is the evidence stated.....'overpaid compared'.

So, people are with you there, I mean, I've done lots of staff briefings and they've all left happy, what's got them is when you've then pointed the light from the two towers into their department and said what's more, you're all overpaid compared to grades in other Trusts.

RESPONDENT I

My understanding of this whole conversation is that the evidence that was there all the time is not used by the very people who need to use this evidence to win the 'outsider' debate!

5.7 Managers will only use evidence if it is persuasive

To start with consider three responses from the interviewed cohort that show that evidence based decision making must not only be factually correct, it must also move people to a response based not only on fact, but also emotion. To an extent persuasion is more important than evidence.

The doctors' view is, ok, 20 years ago, when you were building this hospital (because we've been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you've got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can't clean round the beds. Because there aren't enough beds, you've got too faster through put, so people with infections are moved around the hospital.

RESPONDENT E

I don't know who they asked, they picked the wrong things, but it kind of doesn't matter, do you know what I mean? If they are wanting to change perceptions, you know, if they said, paint your hospitals pink and it will deal with infection, we might have said what a load of crap, but if the public believed that pink hospitals were less likely to give them MRSA, it would have the desired effect.

RESPONDENT A

I mean, I had this very argument with my technical directors, look, I said, look, if people will believe painting the hospital pink will make them safer, then we'll do it. I don't care, that's what we'll do. (What is interesting here is that 'painting the hospital pink' has quickly and previously entered the groups language as a shorthand for any method chosen to deal with this problem that is organisationally robust, but evidence weak).

RESPONDENT C

In the following quotation the use of a term pendulum is slightly confusing, as the respondent is making a point about the effort taken to persuade about the benefits of evidence being closely correlated to the impact of the change. The metaphor pendulum may also be taken to be a subtle reference that once the persuasion stops the centre of gravity is the same in all cases.

I think in organisational change type evidence around management tools, techniques, where the evidence can often be seen to be quite a subjective set of evidence, or the context when it was developed, might have been different from today – yes you know, the evidence around change management is, there's lots of articles, lots of books and lots of research around change management, in my mind they come down to two things, one is it's like a pendulum, you push it bloody hard and it will finish up where you want it, or the other way you just gently nudge it to where you want it. Now, they are two total extremes, but you can find the evidence for both approaches.

RESPONDENT D

5.8 A practical example of the difference that using evidence would make in the NHS

Consider this single piece of data: the EMAS response to falls

EMAS Responses to Falls in Over 65s: Type of Pick up Location
Sample of data from 2006/7

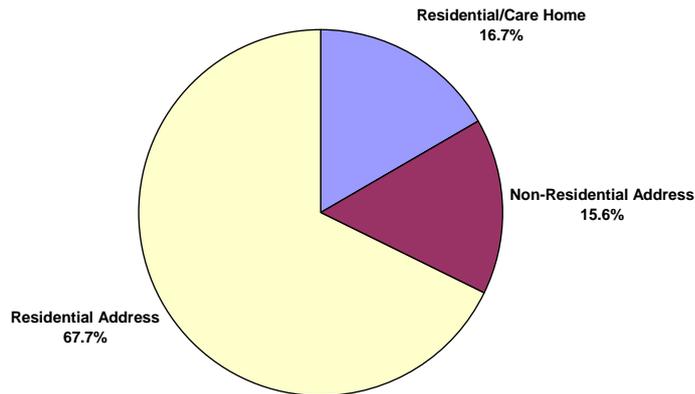


Table 5

The sample set was 2700 records taken randomly from all EMAS calls received and non-residential address includes things such as “outside”, “shops”, “pub”, as identified by the caller and where the location was clearly non-residential, such as outside a named business or factory. What fascinated me was that people fell in their own homes. Consistently and evidentially people fall in their own homes. As a proportion of the population who live in residential care homes more people may be falling than those who live in their own home but, as an organiser of ambulance services, the evidence tells me we should start with what people are doing in their own homes not anywhere else. So why the pre-occupation with everywhere else in the study of falls? It became clear that the study of falls was time and again about the reason for falling or the avoidance of admission to Accident and Emergency Departments. Close (1999) analysed individuals presenting at A&E following a fall; Crotty (2002) looked at the best medicine and treatment to get fallers home quickly; Tinetti (1999) looked at improved daily living skills to prevent falls and developed work done by Ebrahim (1997) and only Pardessus (2002) considered the modification of environmental hazards that might affect the propensity of an individual to fall. I was therefore presented with a very simple piece of evidence that mattered in the planning of ambulance services, specific to the actual rather than theoretical experience and it told me something that we weren't considering. Whilst undoubtedly there was an issue of people falling in the street, if we wanted to look at the reasons that the ambulance was called – in absolute rather than proportionate terms at least – then the answer for falls lay in peoples own homes.

Ambulance calls are triaged from Category A (see immediately, danger to life and the individual) to Category C (traumatic to the person but requiring quick rather than immediate attention). There is also an acknowledgement in the work that NHS

Direct do that communicating in a way that is sensitive to gender norms may also facilitate adherence to interventions that improve health or avoid ill health. So two reports were run as below.

EMAS Responses to Falls in Over 65's by Call Category
April 2006 to March 2007

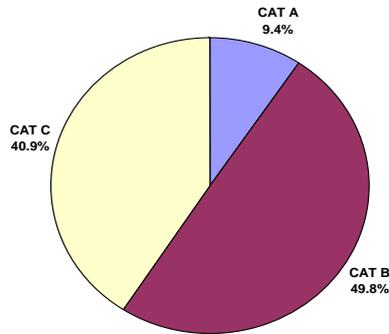


Table 6

EMAS Responses to Falls in Over 65's: Gender
April 2006 to March 2007

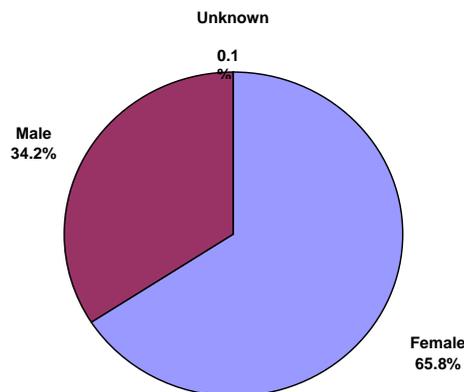


Table 7

These two pieces of data turned into information are really important because the context here is ambulance services not the general planning of falls. Consider this quote from the NHS Direct website, (so this is the NHS talking about itself). "Falls often result in serious injury, often to bones and joints and there are many fatalities particularly amongst older people An estimated 1000 older people die each year from a fall on stairs. Falls cause the most deaths and long-term health problems amongst older people". But for emergency ambulances as part of the NHS less than 10% of the work collecting falls is Category A (NOW!) and Category C (quick, but okay to wait) is over 40%. However important falls are to the NHS, the Ambulance Service needs a different gradient to policy response for falls to other parts of the NHS. An evidence based response to falls in the East Midlands Ambulance Service in 2006/07 would be – to paraphrase the NHS direct quotation above – "Falls often result in serious injury, often to bones and joints but in most cases this will not require or receive a blue light response of a fast ambulance once

we have assessed the comfort and risk of the fallen patient". I then engaged the question about whether this was a gender issue. Were there any issues that affected falls related to sex? The figures showed that 2/3 of the responses were to women. In an NHS where gender equality affects the general consideration of health status in the population the simple use of data analysed and identified a service with a specific gender bias and yet little or nothing was being done to identify this as a "women's issue" in the say that, say, breast cancer was (predominantly but not exclusively a female condition).

This all matters to the wider use of NHS policy. Some very rudimentary queries using data coding, already available in the minimum data set for ambulance call outs, was throwing up evidence for one region in one year that lead to different conclusions about the nature of service delivery than a planner might have had based on national policy alone. Let me consider for a moment five truly admirable things that NHS Direct tell us about falls as they affect the NHS:

1. Physical activity improves balance and prevents falls.
2. Older people respond to life events such as retirement or becoming a grandparent in adjusting their perception of the need to manage risk to prevent falling.
3. People like to work in groups on falls prevention, but these can be demanding if your hearing, sight or short-term memory isn't the best.
4. Self-management is better than dependence on professionals.
5. Advice can be tailored using websites.

Of these five, only one really mattered in the analysis of the EMAS response to falls, that in the over 65's the effects of aging are critical.

It has not been difficult to get access to a "body of knowledge" for East Midlands Ambulance Service. A years data is stored and easy to access and operational procedures are clear. It is clear from the EMAS dataset that concepts such as 'choice' and 'customer' do not easily fit into falls management. Unfortunately, choice and a speedy response govern much policy and planning of the NHS. EMAS on the other hand is a 10% glamour Category A service, but by majority it is an old lady who has fallen and calls 999 because she did, but can wait.

5.9 Using the Rousseau model to classify the responses received from Managers in a systematic way

My intent was to hold up a part of the mirror to the "us" that I belong to (NHS managers in the East Midlands). I see that we draw upon our own experiences and the experience of generations of practitioners. The sad thing is that much of our decision making has no real evidence base on which to justify various things that we do in the name of leadership. This diminishes the sense that we are engaged in professional practice. We do not have a gathered body of well organised knowledge. On a personal level nothing can be identified that eliminates unsound or excessively risky practices in favour of those that have better outcomes except my training as an accountant.

The discussion of evidence based management is a valid question but it is not liked in the higher echelons of management, linked as it is to the notation that

management can easily merge into administration when considering white collar tasks.

5.10 I will not be considering management culture in my Rousseau classification because it would only be a synthesis and repetition of points made elsewhere

Management culture would be a synthesis or repetition of points made against the other Rousseau criteria. Before I began this study, I was interested to know whether Chief Executives would consider evidence based decision making to be a luxury or an indulgence. This is consistent with what I call Management Issue F (a belief that good management is an art) so the intention would have been to look also at culture. During the interviews however, I noted that there was not necessarily a degree of convergence between the leaders *despite* the fact that they were working in the same health market, with the same policy framework and were using each other as reference points for acceptable norms of behaviour.

Let me explain why I will not be considering management culture because it is a synthesis of Issues A to E: whilst it is not credible to say that the NHS is unique, and indeed none of the respondents said this, there is a particular refrain that it does not compare to any other business. Even if this manager or executive is relatively new to the NHS, it does not take long for this cultural reference point to represent itself in their behaviour. The essential contradiction with reference to evidence based management is that, for example, the Chief Executives do value somebody holding the detail (Issue B), somebody having a handle on what is going on (Issue A, Issue C); but they themselves like to set direction with autonomy (Issue D). Each of these issues – delegation, attitude to details, management discretion – are the elements of culture, so it is possible to say that Issue F (culture) will be seen in the analysis of results A to E rather than separately.

I also consider management culture would be a repetition of points made under Issue A to E: Chief Executives and managers make it clear that they are skilled enough at organisational cascade to make it look like the final evidence based management is palatable, without making it happen. In order to steer a successful course without recourse to evidence they need to be all or some alchemy of the following – politically astute, decisive and networked. All of these are attributable characteristics that are by definition attributed by others. They are also a repetition of the elements of culture so again it is possible to say that Issue F (culture) will be seen in the analysis of the results A to E rather than separately.

First let me reproduce the table “After Rousseau” from Chapter 3.

After Rousseau: A synthesis from the literature of Rousseau on the practice of Evidence Based Management

Management Issue	With advanced knowledge of effective implementation of Evidence Based Management	For evidence avoiding status quo
<i>The supervision of employees</i> A	Managers acquire a systematic understanding of what productivity gains are most appropriately cultivated from their staff	A manager may misuse threats and punishments or overuse positive encouragement with no reference to the outcome of either style or organisational performance
<i>Information available to managers on the consequences of their decisions</i> B	Appropriate evidence and data base: perceptual gaps and misunderstandings are significantly reduced so that post implementation review is a valuable part of improving management	Information is poor as data and evidence is not collected so that experiences are likely to be misinterpreted
<i>The delivery on promises to the public, employees, stakeholders/taxpayers customers and others</i> C	Decisions are based on systematic causal knowledge conditioned by expertise. Decisions are legitimised by being made in a systematic and informed fashion more readily justifiable in the eyes of stakeholders	In such settings, managers cannot learn why their decisions may have been wrong, nor what alternatives would have been right. The public challenges decisions in the search for transparency
<i>Management style</i> D	Managers have an understanding of the powerful impact their decisions have on the fate of their firms. Managerial competence is recognised as a critical and often scarce resource	Evidence based management seems to threaten managers personal freedom to run their organisations as they see fit
<i>Approach to academic research</i> E	Managers read the academic literature regularly and the consultants who advise them are likely to do so also. There is a recognition that this research exists	Despite the explosion of research on decision making, individual and group performance, business strategy and other domains directly tied to organisational practice, few practising managers access this work
<i>Management culture</i> F	Supervisors and managers respond to a belief system probably 100 years old, as far back as Fredrick Taylors (1911) structured methods for improving efficiency were classified under scientific management	A belief that good management is an art - !the romance of leadership” school of thought where a shift to evidence an analysis connotes loss of creativity and autonomy
In conclusion G	Managers have evidence on which to base their decisions and consequently what is at stake should the decision or implementation fail	Managers are prevented from real learning by fads and falsehoods

And this is what we find.

In the matter of:

Using the Rousseau or After Rousseau model. This is what we conclude about the nature of evidence based decision making within the NHS in the East Midlands during 2007-08. I have notated a + to mean that the quotation favours an evidence based approach and a – to mean that the quotation means the lack of an evidence based approach to decision making or an = sign to say that it neither favours one conclusion or the other.

In the approach to academic research

An evidence based approach would conclude that managers read the academic literature regularly and the consultants who advise them are likely to do so also. The alternative conclusion is that few practicing managers access this work.

- “get yourself educated in something, then get a job, just don’t pretend it will teach you to be a manager”
- “it’s a bit like practice based commissioning, you know, I mean they invent it as a concept because it seems to be a means to an end, the end being whatever it is we all want”
- + “And sometimes reading things, I prefer talking to people really and I talk to a lot of management consultants who kind of say things, it’s not that it tells you something new, it’s just that it allows you to relate things in a different way”
- In conditions which predispose to hospital acquired infection “you wont do any of the things of which there’s a very good evidence base that it would make a difference, and so your first engagement with us, is to come and tell us to do something for which there is no evidence that any infection has been prevented, anywhere in the world – ever, by doing this and you think that’s the most important thing that we should do”
- “If I say to you academic evidence? I think it makes me feel, you know, chance would be a fine thing”
- “It will never be that developed in this experiment that is the NHS”
- + “So places which have a worse winter than we do don’t have this, they have a little bit more mortality but not much and it’s all down to poor housing policy, benefits, insulation, social care, primary care access, all of these things”
- = “I think they’ll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they’re delivered, I don’t think they do use evidence”
- “No! We almost steadfastly refuse to accept that it might possibly work and it was worth considering because it didn’t fit the positive framework of choice and competition”

In the supervision of employees

An evidence based approach would conclude that managers acquire a systematic undertaking of what productivity gains are most appropriately cultivated from their

staff, in the alternative a manager would have a style with no reference to its outcome or organisational performance.

- + “I went in very, very hard with the matrons about their cleaning audits, when we had all the matrons in, I said, I know it (the evidence) is not like that, you know its not like that, what are you playing at”
- + “We had a doctor here say to us, we don’t have to comply with the Health Care Commission standards because we’re not a hospital! What’s that about? Certainly wasn’t about better patient care”
- = “My next Chief Execs column in the staff newspaper, urging them to write to me, and I will reply, and I will go and meet them”
- + “You work up through your career (and to begin with) you have to be more and more evidence based because you haven’t built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way”
- + “I think the processes that are used by administrators should have an evidence base for doing them, and a rationale defined by evidence, I think managers should use evidence in reaching their decisions and evidence based leadership I think would go the same”

In the information available to managers on the consequences of their decisions

An evidence based approach would conclude that there was appropriate evidence and data, a significant reduction in perceptual gaps and post implementation review is valued. The opposite is, that information is poor and evidence is not collected.

- “Old evidence becomes dogma. So it’s established on an evidence base but then that becomes dogma which in itself evaporates over time and then the evidence isn’t refreshed”
- “Balanced scorecards. It’s not foolproof. I think it lulls you into a false sense of security. A&E, not the wrong side of the line, my dashboard would say ok, but we tried to fill a post there, we shortlisted the people and one turned up, and that means it’s going to be breaking down some time in the future, it (the balanced scorecard) is not proactive enough again”
- “I think world class commissioning, if we’re not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach. And I think that’s actually quite dangerous because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions”
- = “I’d prefer things to be explained but things like that are very difficult to move in an organisation of 7,000 people, if they don’t very shortly afterwards appear on paper so you can do something with it”
- = “Taught me you can approximate, but you need to know how you’re approximating, you know when you’re approximating you know what you’ve lost. But I have an ability to get into detail (the evidence and the data) when I need to in a way that some people just can’t”
- = “I don’t think you’re ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it’s good in scientific situations, when I was a chiropractor, when it came down to the amount of chemical I put on to destroy something – there were

tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that's behind that decision, but if you don't understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that's there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was denied a drug six weeks ago, and now you're spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high”

- “The doctors’ view is, ok, 20 years ago, when you were building this hospital (because we’ve been here for 20 years, not 10 minutes), 20 years ago we said to you, the design of this wonderful new PFI was wrong, you’ve got too many beds for the footprint, so the beds are too close together, you get cross contamination, you can’t clean round the beds. Because there aren’t enough beds, you’ve got too faster through put, so people with infections are moved around the hospital”

In the delivery on promises to the public, stakeholders and others

An evidence based decision making would conclude that decisions are based on systematic causal knowledge conditioned by expertise. Decisions in an evidence based conclusion would be systematic, informed and readily justifiable. In the opposite environment the public challenges decisions in the search for transparency and managers cannot learn why their decisions may have been wrong nor what alternatives would have been right.

- “Politicians, do politicians want evidence based decision making for the NHS? No, they want to be elected and that’s the bottom line and as long as you remember that, then everything they do is completely understandable!”
- “Nice (the National Institute for Clinical Excellence) is a construct of a political approach to the NHS by a government that hasn’t changed political party and yet we don’t seem to be any closer than we were when we started”
- “And what we always find is every time they introduce one set of priorities, another set emerges because they’ve been ignored by the first set”
- “Yes, I think the public as body public, would expect evidence based decision making, and quite rightly expect that, and would want it as well. I think the public as Joe-individual probably would expect, would want it, but when it came to them, would probably bring in other subjective assessment criteria. I think politicians are a bit different, and I don’t think, whilst they would probably in a purer discussion say, of course we do, I think they will always, and evidence is always driven by context, they would always want their policy implemented – evidence or not”
- “Pseudomonas is going to become an important infection. Vancamycin resistant enterococci are going to become, TB is going to become one. Because all of these infections are being ignored, because everyone’s

- focusing on MRSA”
- “And we don’t even look at the vast of MRSA infections, we don’t look at all the MRSA infections that don’t get bacteremia, all the joint infections, the skin infections, you know, the ulceration that people get, we don’t look at the damage that that causes in the community. So we’re looking at the tiniest tip of the smallest iceberg here”
- “you clearly identify yourself as wanting to give the public confidence in you being a good custodian of their health service, versus the method that would do that is not really evidence based”

In the matter of management style

In a conclusion erring towards evidence based decision making about the NHS, managers would have an understanding of the powerful impact of their decisions and managerial competencies would be recognised as critical and scarce. The opposite conclusion would be that evidence based decision making seems to threaten managers personal freedom to run their organisations as they see fit.

- = “You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I’ve watched them do fantastic things, and I’ve watched them being stopped from doing fantastic things, because some rule book says it’s not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps”
- + “So there was no reason you should have used it before, do you take a break and go and look for the evidence or do you say, no, we have sufficient skills to understand the context and consequences – in this room, of getting the decision right or wrong – we don’t need any evidence, what we need is a decision. I would be shocked if the evidence wasn’t already there, and I would want to have the evidence if there was some evidence around, I certainly would want to know it was there and on certain decisions I would want the ‘show-me test’ as well. On big things I want to see it. So I would stop – go to the evidence, then consider the evidence in the wider context of the decision we’re making”
- = “One of the things that’s happened of course to FTs is that they’ve attracted a different calibre and type of Chief Exec, arguably. I think, you know, we’ve advertised for two director posts lately and there are a lot of people who want to work for an FT.....ok.....there are a lot of people moving out of Trusts that wont make it to FT status, so you could say, what we’ve been doing is sapping the best management resource out of the non-FTs to maintain the performance of the FTs. We’ve also attracted, I think, some quite different people in Non-Executive roles and Chair roles; the Chairs of FTs, a lot of them are, like the freedom bit, like the get on and do run a business thing”
- “I’m interested you’ve chosen evidence based management and not evidence based leadership, because I think there’s a difference between leadership and management. I suppose, there’s something about management based around evidence and management decisions based around evidence, which might be different from evidence based management. It depends how you define management, and evidence probably as well”

- “Well, he reminded me what the end was, that’s what he ultimately did, he kind of made me think about what they were trying to do, yes they did it in a cack-handed, stupid, I wouldn’t have done it that way, kind of a way, but given that that’s what they were trying to do, it was really not helpful for us to jump up and down and say ‘there’s no evidence for this’, because it undermines the whole investment programme they’ve put in place, which wasn’t adding any value to anybody, it was just making it wasted money, instead of possibly purposeful money”

So in Summary

My Conclusion is

In the matter of the approach to academic research (Against!)

There is a bias against using academic research by NHS managers in the East Midlands. This is by no means universal, but is consistent in its presentation.

In the matter of supervision of employees (For!)

There is a very strong preference for using evidence based decision making amongst the cohort of East midlands managers and use an appropriately cultivated management approach to support evidence based decisions.

In the matter of the information available to managers on the consequences of their decisions (Against!)

There is a bias against evidence based decisions. Decisions have insufficient data and evidence for decision making, and little value is attached to post implementation review. Some managers are neutral towards this subject but few, if any, show a preference for evidence based decision making informed by the consequences of their decisions.

In the matter of management style (No preference either way)

There is only an inconclusive result in the area. There is no preference. Some managers have a preference for evidence it seems but equally some would discredit it as a viable and realistic approach.

In the matter of the delivery of promises to the public, stakeholders and others (Against strongly!)

Of all the areas this is the one where there is next to no examples of evidence based decision making, but there are multiple strong, lengthy and cross-referenced examples of decision making that is neither systematic nor developed by causal knowledge. Decision making is opaque to the public and frequently challenged.

CHAPTER 6

Research discussion

Purpose

To understand how the research fits with what is happening in this field of study, the policy context of the study and the message that comes from this research.

Key Arguments and Conclusions

6.1 Adoption of innovation and research is a complex and often drawn out process

An American (Stanford University) website in this field www.evidence-basedmanagement.com exists with categories of “academic research”, “management practice” and “beliefs and assumptions”, attracting regular bloggers (contributors) to an on-going discussion about evidence based management. Run by Jeff Pfeffer and Bob Sutton, it includes five principles of evidence-based management in its homepage/masthead that encourages people to tell the truth even if it is unpleasant and being committed to getting the best evidence and using it to guide actions. This site also includes a research and practice archive which is accessible and lengthy, but a couple of years out of date – an unfavourable comparison with the bloggers – and useful hyperlinks to relevant material and other evidence based movements.

Maybe a way to view this is that rather than viewing evidence based practice as squeezed out of the prevailing value set of NHS managers, it is anticipated that evidence based decision making may become the mainstream approach of the near future. There is a need therefore to review how the NHS managers accept or reject challenges that don't fit the prevailing value system, how do values adapt? If the NHS is living through an era that does not favour one or more potential methods of decision making this may be temporary. How does NHS management introduce alternative approaches and consider whether they may become acceptable and even desirable? Can the NHS managers allow themselves to have a critical account of their own management? The record of the interviews says that this self critique is happening, but at the same time, the overall picture is one of the forces of orthodoxy maintaining the “status quo” (as portrayed in the Rousseau model). Whilst it is possible to see that the NHS managers may be disposed to accept challenges that fit the value system, it is part of the natural balancing. None of the managers expressed a desire to explore the ‘eccentric’ (or abnormal) values that challenged the prevailing orthodoxy but they were willing to be flexible and accept challenges when they could point to something particular that prompted the change.

The policy context of the study; I described the NHS in the East Midlands as if it was a single coherent organisation. The point is that it is fractured into an internal market that splits the buyers and providers of health care from each other – and providers themselves are organised into a range of devolved and legally autonomous governance models that give them independence and usually some form of monopoly within a single urban area or county. So where we talk of ‘joined-

up' application of evidence and management recognising that complex problems transcend organisational boundaries, we are expecting a cross-sectional response at odds with the financial incentives of the payment by results regime. This is the main problem when trying to look at the general phenomena of evidence in NHS East Midlands – that the policy is predicated on unstable organisational competition and local monopolies.

Falls in the elderly population (EMAS 2008) represent a serious and increasing issue in the UK. This is gaining increased recognition in current government policy across different parts of government including social care and housing as well as the NHS. The reason the executives in the NHS respond to this is because it is NHS Policy and Practice. The key though is that at the very strategic level the NHS response via policy is, in this case, evidence based. The report by the Department for Communities and Local Government released in January 2008, named "Lifetime Homes, Lifetime Neighbourhoods" highlighted the following statistics: one older person dies every five hours as a result of a fall; older peoples falls cost the NHS around three quarters of a billion pounds each year and 1.25 million falls a year result in hospital admissions. The role of the individual executive in respect to evidence and with respect to EMAS in particular should be to ensure that however big these absolute numbers seem they should get an evidence based and proportionate share of resources.

There is an implied pattern of policy making in all of this. The essence of which is that evidence based management for the NHS is in conflict with policy making. The nature of this conflict is essentially one between an NHS based solution founded on evidence and the politicians decision made in the context of taxpayer revenues, the maintenance of electoral authority (not losing votes) and consistency/precedent. In order to resolve whether there is a conflict between politicians and managers view of an effective National Health Service the literature seems to direct us not to whether the conflict exists, but the extent to which this conflict is played out.

What is the implied pattern of policymaking? In essence, protagonists assume that the relation between research evidence and policy is linear; a problem is defined and research provides policy options. Research is used to fill an identified gap in knowledge. This is consistent with both a positivist pattern of science and professional dominance, in which the views and priorities of healthcare professionals (and doctors in particular) dominate healthcare policies. It assumes research evidence can and should influence health policy. Lomas has suggested that the pattern is viewed as "a retail store in which researchers are busy filling shelves of a shop-front with a comprehensive set of all possible relevant studies that a decision-maker might some day drop by to purchase."

Turning to a respondent who is a clinician who moved to management early on in their career, talking about whether infection control should be governed by policy or evidence.

Who should determine the evidence, I mean, you used a very, almost, the answer's in the library approach, is that right, is it people who are skilled in research techniques, is it academics, who is it that gathers the evidence? Well I think the evidence does tend to be gathered by academics, but then there's a body of evidence which is experiential and gathered up by the individual. RESPONDENT B

What he is saying is that the answer to deep clean might be something that universities can be equipped to design solutions for. Remember here we are talking about 'deep cleaning' to rid hospitals of deadly bacteria – a decision more closely related to laboratory control than most clinical interventions and yet the sense that it isn't quite the whole picture prevails.

6.2 The adoption of research evidence is not a single discrete event

One of the objectives of this project is to hold a mirror up to the cohort (of which I am a member) to identify perceptions of good NHS management practice. Within this I wished to look at how the group (when it worked collectively) would make decisions. It is amusing that interviewees found it easier to identify bad practices in the working of the group than highlight aspects of good practice. The issue of the right environment within which to make an evidenced decision emerged as being something managers needed to 'get right'. It does not exist as a natural state in the group. Describing and reflecting on the appropriate place and circumstance to make an evidence based decision as a group was highlighted by many of the cohort. Good practice in relation to the presentation of evidence and the use of evidence involved on ability to engage this group, to be persuasive and to be credible despite limitations of data and knowledge. There is a caveat however, in that the very diversity of group structures makes universal interpretation problematic.

Clinicians were widely reported as helping negotiate quid pro quo deals to consolidate services such as stroke, trauma and maternity across sites. But they did this for managers who had years of NHS experience more readily than newly introduced managers.

You know, if somebody took a senior member of your team, if they came to you with an idea or a solution, would you rather they had it on paper or they were able to explain it to you in a conviction way. I'd rather they explained it to me, but I think, what I usually say to people, and there's a lot of people that kind of knock on your door and say ...neh, neh, neh I've been thinking and neh , neh, neh when you haven't got time to listen to it.....ok..... doesn't really help, I'd prefer things to be explained, but things like that are very difficult to move on in an organisation of 7000 people, if they don't very shortly afterwards appear on paper, so you can do something with it. So personally, I prefer the conversation, but practically to progress it, it needs to extend beyond jabbering on the corridor or whatever's going on.

RESPONDENT C

Note that the word evidence never appeared in the above quotation at all, but then the manager was talking about a member of their team. Conversely when another executive talks about their own decision making (below) the word evidence appears time and again.

I think to be successful, you've got to be instinctive, you've got to make the decisions, you can't think about it – right or wrong decision – any decision is better than no decision, you then have to back your decision to the hilt, you have to be big enough to say you've dropped a bullock if you've got it wrong and change it if necessary. And probably every decision I've made I could retro-fit on evidence, but I didn't make them on evidence at the time.

I don't think you're ever totally crass to consider an evidence base, but to use it solely for decision making I think is crass in most situations. I think it's good in scientific situations, when I was a chiropractor, when it came down to the amount of chemical I put on to destroy something – there were tables of evidence about what was most effective, that was, to go outside of those, I can think of little context to go outside of those. When it comes to an investment decision, or even a personnel decision, you know, you can use the evidence of whatever, that's behind that decision, but if you don't understand the people, the place, the politics the environment, you can make a bad decision; so for instance, be it an investment decision around upgrading or changing a hospital, or buying or not buying a service, you need to understand the wider context that's there; be it the N in National for NHS, the national targets, national regime, be it the local context around who was denied a drug six weeks ago, and now you're spending £60,000 on people that seem to be more spurious – even if the evidence for one is nil and the evidence for an investment in district nursing is high.

RESPONDENT D

Note that there was no consistent base for saying the decision was evidence based, but there is clear reference to 'evidence' being the field or environment within which personal decision making takes place.

6.3 Managers will only use research that improves the organisation's standing

The message that comes from this research is that the use of evidence has to, in some way, improve the organisation's standing. It may be a function of the negotiated use of evidence. Earned autonomy is a function of years of experimental learning that means the executive can trust the judgement call of the individual. The hierarchical nature of the organisation and the relative distance from politicians will affect the use or flow of research evidence. If you are junior and/or new and/or clinical you have less earned autonomy. This organisational demarcation reflects the sharing of evidence.

But I do think that you work up through your career, you have to be more and more evidence based because you haven't built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way.

RESPONDENT D

And earned autonomy through understanding the 'culturally correct' way to respond to the signals being given by operational managers.

Yes, well, depends how you set yourself up really, I mean, you know, I and other managers get criticised a lot for not being out on the shop-floor enough, and indeed I'm not, but you pick up limited information about what's going on on the shop-floor if you stay close to the people running the business, they can be clinical or managerial, they will, you know, they will tell you what they're fretting about, they will say, 'oh my goodness, we've now got five vacant posts in A&E and when this lot

leave I don't know what we're going to do', that's what you need to know, but you also need to create a culture in which that happens, because, we were talking about this the other day actually, we've imported some new managers from another trust not far from here, and they had this alarming habit of telling you everything's alright, when it isn't!

RESPONDENT C

But broadly a consensus is achieved that evidence/science applies predominantly to clinicians and is a luxury few managers can afford.

I think they'll use clinical evidence, I think managers are very much into the development of clinical pathways, you know, working with clinicians and that's fine, doing the best things in the best way, but as to how the NHS works, the sort of infrastructure, where services are located, how they're delivered, I don't think they do use evidence, I think there is some, some scientific evidence in there, they'll look at journey times, and they'll look at volume, populations and the needs of that population not been done very well until fairly recently, but they are doing that. So they'll do that sort of thing, but a lot of the decisions that are made, seem to be based more on history, on the views of politicians and key stakeholders, which are often not really evidence based.

RESPONDENT A

Equally it was possible to distinguish a large amount of individual autonomy that would be given to and/or earned by people who worked even for some quite direct and authoritarian managers.

And if somebody passionately believes that the answer's right, then what I'll never do to them is say 'you're wrong'; what I'll say is, 'well, just go away and have a think about this again' and then sometimes you find they do come back and they've modified their view. But I'm a big believer that when you put somebody in a position of, you know, authority to deliver, as one of your senior managers, you've got to give them their head, what you can't allow them to do is to go off the edge, and I think one of the products about being at a place a reasonable amount of time, is that people know how to read you as well – this works both ways.

RESPONDENT B

So the question remains about whether the NHS approach to evidence is borne of a desire to reproduce by template expected behaviours or is capable of changing through transformational leadership. One answer is:

You know I mentor a lot of people and a lot of them are Directors in PCTs and over the years I've watched them do fantastic things, and I've watched them being stopped from doing fantastic things, because some rule book says it's not allowed; do you know what I mean? Yes. I find it sad, I mean, and the big picture is probably, you know, progress, the little picture depressingly irritating backwards steps.

RESPONDENT L

In summary, this section, whilst leading to few conclusions about the use of evidence does suggest that if evidence based management is to blossom in managers in the NHS it will have to be given a foreign label, taught on management courses and lead to the same conclusions the boss wanted it to.

*The bare below the elbows thing – **ok** – I was in a Board meeting with my Chairman, where he was adamant we'd got this letter from Alan Johnson saying that all hospital workers should be bare below the elbows, so they shouldn't have watches and rings on and things like that, so that it would promote hand washing and it would reduce infection, he was adamant that, this is what the Health Secretary says therefore it's policy, and we must do it, and he wanted us to write out to every clinician telling them that we're going to do this and we're going to come in and do spot checks in hospitals. (Our eminent doctor (Respondent B), rebuts the policy that his own boss is using, demonstrates a deep despondency with his bosses response to politicians and glumly reflects on the lack of evidence for the policy!).*

This paper has explored literature and data on evidence based decision making. The rhetoric of evidence based management serves an essentially ideological function, obscuring the real difficulty in securing effective and sustainable change. As considered earlier in this paper, the data exists, even with a simplistic analysis like mine to point to changing policy imperatives and a different prioritisation by age/sex/location of ambulance services. In organisations with deeply engrained power structures the PCTs must only attempt to implement the evidence based approaches to EMAS when they meet collectively on a monthly basis. Otherwise these 'numbers' I have found will not survive the challenge of an NHS hierarchy in a climate of turbulent change.

To conclude this research discussion and its overall message, I would like to consider some neuro-semantic.

Let's consider some key words or phrases that are quoted in the interviews and taped group meetings. To the left I have put them in their stated form and in the right, whether this was used frequently, infrequently, positively or largely negative. I have also been clear where the phrase is used more than once but with no clear agreement about its value between managers.

Evidence Based Management	Frequent positive associations. Seen as a good thing, but struggling for a consistent definition. Juxtaposition with Evidence Based Management easily understood.
Evidence Based Administration	Used only once. A potentially semantic definitional distinction but very powerful when used by the 1 respondent. This is a metaphor for an idea expressed by many that the freedom to stray from evidence increases the higher up the organisation you go. Distinguishes managers (higher) from administration (lower).
Evidence Based Leadership	Used occasionally. Very negative associations. Seen by some to be an oxymoron. Seen to be an expedient at best and part of a value set that evaporates when applied to politicians.

Evidence Based Decision Making	Used often, but not surprising given my questions. The phrase 'administration' in this table above is key to distinguishing its positive and negative usage. Seen to be cumbersome and more relevant to juniors than executives.
Evidence Based Resource Allocation	Occasional use. Very positive associations. Given that resource allocation is considered a rare, but significant strategic action by leaders the supportive evidence for this is seen as crucial. Most persuasively used in gaining autonomy from the DH.
Evidence Based Reporting	Occasional use. Mostly negative. Seen to be a by-product of 'administration' rather than 'management' and much less importance in performance management than policy targets.
Evidence Based Argument	Occasional use. Mostly negative. Seen to be an insufficient basis upon which to make an acceptable decision. Where it is used it is almost pejorative in its diminution of the quality of the argument.
Evidence Based Learning	Frequent positive association. A clear value exists in the attempt to learn from the evidence. To foster a culture with due regard to evidence is viewed as an overwhelming positive.
Evidence Based Knowledge	Frequent positive associations. The organisation, communication and maintenance of knowledge are all seen to be ways within which the hierarchy of evidence is vital.

These examples show most importantly the differences between managers in the way they respond to concepts. The following concepts have no agreed definition.

Information:	used to mean everything from public communication to a relevant set of managerial numerics.
Data:	seen as collected for purpose and objectively or the arcane desire to count by bureaucracies that generates meaningful information.
Interpretation:	seen by some as a meaningful contextualisation of the evidence or by otherwise savvy managers as a means to discredit the evidence or source.
Protocol:	
Best Practice:	From an attainable counsel of perfection to a normative standard for all.
Culture:	positive and enabling, stifling and disempowering transformations only allowing reproduction.
NHS:	An organised system of tax funded healthcare or just one big experiment in political authority and social cohesion. The backbone of the political offer or the basis of a random importation of foreign fractions in healthcare management without necessary debate or evaluation.

6.4 Sharing the theory in a calm and authoritative way

Subject to examination crediting this method, then I will take the following steps. In the spring of 2010 I will present the results to the East Midlands Chief Executives Forum (EMLET) with summary and graphical information and a hard/full copy stored on an accessible sharepoint drive. I will then follow the reactions wherever they take me – reacting to who is intrigued or dismissive by/of the conclusions. I have already shared drafts with my peer directors in the East Midlands and tested the methodology and theory with the rest of the Executive Team in Derbyshire and my seven direct reports. All have suggested modifications along the way.

In this paper I have tried to convey accurate detail to influence the credibility of my arguments. There are no superlatives about this paper – it is meant to be subdued in tone to give a quiet confidence that the tentative conclusions are neither obvious nor extreme, but worthwhile of consideration all the same. If I had believed that I had found something extravagant and remarkable, I would have said so, but I do believe that my proofs do justice to the conclusions. I wish to persuade, rather than excite, about the possibilities that arise from studying a small community of NHS managers.

When I started this doctorate in 2006 the field of evidence based management was evolving, but had been growing out of the field of behavioural science for about seven years (taking Harries (1999) as the starting of a distinctly NHS management consideration of the subject). Indeed, the first Wikipedia reference in 2006 was a simple paragraph with one or two references that were three or four years old. The page now has reference to two dozen references. On the other hand, this is not an area of ferocious and dynamic debate. The authors, Learmonth, Rousseau, Kovner, Pfeffer, Sutton and Rundall are still the same people who were actively engaged in 2006, so the statements made in this doctorate are sufficiently contemporaneous with the debate as it is today.

The issues this had raised for managers is to open up the dialogue. Who asks the “why” question if it is not the managers themselves? Especially in a field such as the NHS where management and simple ‘administration’ of public policy can become increasingly blurred. What the debate about evidence based decision making says is that we need a vision about who we want to be in the NHS. Do we want to be leaders in health policy and leave a distinct legacy – and do we want the decisions we made to be remembered? If evidence and the use of informed data represents a characteristic we aspire to – and I think we do, even when we don’t practice it – then we need to remember that things like my study stop us from straying from who we want to be.

An overview of the governance of the NHS has been shown diagrammatically (2.4, table 1) and this shows that evidence cannot exist without influencing the governance model in all its corners. Without serious effort to address the social, economic and political aspects of the NHS, then the managerial consideration of evidence will amount, even at its best, to a form of patching-up of the quality of decisions made. At the moment, there does not appear to be an effective arena for discussion between politicians – the public – medics – managers over how and whether we can be evidence based managers. This is a governance weakness.

The effect on NHS policy will be negligible unless there is a listening exercise. This cannot be the traditional castigation of opposite ends of the management structure as bigots or with the rendition of the “how can we get them to listen”. The problem is that all too often, the debate concentrates on the ‘them’ in the phrase rather than the listen. Managers talk of doctors as ‘them’, politicians talk of managers as ‘them’. This is no way to consider the implementation of evidence on a system wide basis. The environment of the NHS provides its own set of tensions between participants. So the listening exercise must cover three areas: do doctors believe that managers are using appropriate language to advance evidence based management. Is the language inclusive or a barrier to interpretation?; is the message being delivered to the public in the right context – do the public tell you they hear this as part of a compelling and consistent message that evidence is used to improve patient care; and do you listen to or dismiss the politicians understanding of the NHS? Politicians know the NHS as a parliamentary funded system where evidence must accommodate their mandate to govern.

6.5 Conclusions of the field study and published material since I completed the field study

So what is evidence based management? The short answer, is the belief that it makes sense for managers to act primarily on the facts about what works out there. It is an explicit relegation of other forms of knowledge and a rejection of memory and ideology as management styles. It is alien to the National Health Service. In the NHS in the East Midlands, it is only part of the decision making process. “I would want to have the evidence if there was some evidence around, I would certainly want to know it was there on certain decisions” and the telling “I’m interested you’ve chosen evidence based management and not evidence based leadership, because I think there’s a difference between leadership and management” – the closing remarks of two of the most experienced Chief Executives in the East Midlands.

When and where is evidence based management used?

There is a belief that up to middle management levels, evidence based decision making is useful, but not at more senior levels. Senior managers approve of evidence as it gives them a systematic view of what their staff are qualified to do and a requirement for evidence based decision making is part of the scheme of delegation. As the best quote said “you work up through your career (and to begin with) you have to be more evidence based because you haven’t (learned) to make the judgement call in the same way”, said a Chief Executive who started as a clinician.

How is evidence based management perceived?

There is a bias against using academic research by NHS managers in the East Midlands. Even where academic research can be found to recommend and justify an alternative course of action, and this evidence is supported by a senior clinical manager the forces of conservatism limited implementation opportunities. In the matter of the information available to managers on the consequences of their decisions, there is a bias against evidence based decision support and little value is attached to post implementation review. Within the NHS East Midlands there is no preference – some managers would value an evidence based approach, but the

same numbers would not see it as viable or useful. The craft of management is valued more through creativity and autonomy than in a response to evidence. “No! we almost steadfastly refuse to accept that it might possibly work and it was worth considering because it didn’t fit with the positive framework of choice and competition” was my favourite quotation.

I recognise this: If the question was written not as ‘Why should we use evidence’, but “why shouldn’t we use evidence?” then we are nearer to the heart of this thesis. Evidence based medicine is a prevailing organisational culture so in the study of the management culture of the same organisation, it is reasonable to see whether we are following fad or fashion. The key is not to be swept along or swamped by this – let me use a surfing metaphor of “riding the wave”. Instead of being drowned by the energy of the sea, you use a simple tool (a surfboard) to harness the energy of the ocean to transport you quickly. The key is to see whether evidence based management is a surfboard that is harnessing the energy of the prevailing evidence culture in the NHS. McDaniel (2009) says that “Facilitating meaningful conversation in health care organisations is often difficult, but it is important for making effective change (Jordan et al 2009). Rather than applying evidence as indicated per an EBM model of organisational change, health care managers should rely on evidence to start creative, locally relevant dialogue. Evidence from management research should be used to open the door to new conversations that can be used to propel organisations along positive paths of managerial action. This would be significant if we want managers to make a difference”. Paragraph 2.4 (table 1) suggested that managers have a limited opportunity to make a difference, bounded as they are by those who fund, use and provide clinical care in the NHS. To facilitate meaningful conversation would enable the managers to talk coherently with politicians and the public about the best way to make difficult decisions and whether evidence would improve the acceptance of, and satisfaction with, the decision in the public domain. There is a prevailing evidence based medicine culture, the conversation would be whether management can take the opportunity this creates to be more evidence based too.

Some additional reading on the subject highlights the following since I completed the field study – Arndt and Bigelow (2009) say that caution should be expressed about the use of evidence based management in healthcare. In an illuminating discussion they say that “We raise a cautionary note about the assumptions underlying the calls for evidence-based management. Given the complexity of decision making and of the health care environment, as well as differences among health care organisations, decisions do not necessarily lead to expected outcomes, and results may not be replicable across organisations. Moreover, evidence is an artefact of social interactions and limited by the difficulties inherent in studying complex organisational phenomena. Research is needed into the diffusion of evidence-based management in health care and into the results achieved by organisations that used the practice compared with organisations that did not. Managers should use all available information and data when planning and implementing decisions, and evidence from research should play a role in that. At the same time, in a turbulent and uncertain environment, creativity and risk taking also will be important, and unanticipated outcomes may result from, among other factors, limits on human cognition, unknowable differences in initial conditions in organisations, and adaptive responses to change as it is implemented”.

What I fundamentally disagree with Arndt and Bigelow (2009) about is that they claim their note for caution to be unique against a prevailing orthodoxy that “urges” us to adopt evidence based management as new and exemplary. I think they overstate the ground of support for evidence based management and they ignore that writers such as Kovner and Rousseau were aware of the same caveats when they wrote. So we see a developing debate in 2009 between the scale and pace of implementation. Also, this study is not just happening in the NHS. Nutley (2009) writes about how important this is for research utilisation in social care – “This article draws on both a cross-sector literature review of mechanisms to promote evidence-based practice and a specific review of ways of improving research use in social care. At the heart of the article is a discussion of three models of evidence-based practice: the research-based practitioner model, the embedded research model, and the organisational excellence model. The article concludes that the ideas contained within each of these models are likely to be appropriate at different times and for different service settings. There is a need to build on such models to develop a coherent framework for strategies to promote research use.” She says that this needs supporters and intermediaries to make it happen “developing a culture that supports research use – these kinds of activities might include developing appropriate leadership and management practices; collaborations between researchers and research users; the creation of specific research brokering posts; and membership of intermediary organisations that aim to get research into practice.” Ultimately, Banaszak-Holl (2009) is able to both commend and critique Arndt and Bigelow and say that although Arndt/Bigelow offer some useful caveats, they are actually providing arguments to progress, rather than halt, the debate about EBM in healthcare. “Hence, the authors of Evidence-Based Management in Health Care Organisations: A Cautionary Note (Arndt and Bigelow, 2009) should be applauded for their timely contribution to raising critical issues in how to advance the field of evidence-based management in health care organisations (HCOs) while the evidence base is still in the early stages of evolution. At this point, such criticisms should be raised because they help inform plans for systematically analysing, disseminating, and applying management evidence. We, however, believe that the issue raised in the cautionary note provide compelling arguments for moving forward with developing EBM albeit in a manner that leads to the formalisation of both a better framework for discourse about our evidence base and a public knowledge library allowing greater sharing of management evidence across HCOs”.

CHAPTER 7

Issues for practice

Purpose

To develop a practical model for policy makers and managers on how and where evidence is used appropriately.

Key Arguments and Conclusions

7.1 Senior managers are close to department policies and use evidence less

Senior managers are concerned about a volatile policy framework – where policy is either unclear strategically or unclear in the operational impact within the 12 month business cycle. Uncertainty in this context negates a primary use of evidence to inform decision making.

And that's kind of inevitable, but the way I kind of play managing this Trust, you know, if I see a journey, the way policy works, it's seemingly, you know, I think we're going there, the government says we're going there, and all of a sudden, we're off up here, or we're off up there, or we're going down here, and we'll probably go back up there and then we'll go down here.

RESPONDENT H

You know, my job I always think is to translate policies, a bit like a pendulum, know where it's going to settle, and it, you know, somebody keeps bashing it and it's swinging around, you know where it's going to settle, and the trick is I think, to describe what's happening, which may seem a little strange, you know, introducing competitions, subsidising competition.

RESPONDENT E

I can justify that to my organisation, in terms of it being the government wishing to give people choice, wishing to drive up quality, yes it's tough, yes it has very difficult set of issues for us to handle, but they're doing it because they want care to be better, and so you're always describing the end point, and trying to make sense of it and what's more trying to use it to get you to that point, and sometimes that means I sort of half ignore things I've been asked to do, or I throw myself at them with absolute huge enthusiasm because they seem to be going in the right direction.

RESPONDENT C

According to supporting documentation from the NHS issued at this time, this would be consistent with an evidence based culture. This code of conduct could be contrasted with how models for organisation and management in health care over the last 20 years had been based on popular trends and fads rather than research on organisational and management practice. Strategic decisions, it was maintained, typically follow the recommendations of consultants with the information upon which these are based remaining unchallenged. As evidence based healthcare was popularized among health care professionals there would be increasing recognition that these ideas should be adopted in management. Management innovations that were not evidence-based included the use of organisational mergers in tackling service quality; decisions on the optimal size of organizations for capacity or

financial viability; substitution of doctors with other health professionals and the move towards home care as an alternative to hospital inpatient care.

Managers in particular in this project, described a situation where their own control over the decision making process had been to some extent, lost through the requirements of audit and the promotion of certain themes consistently in the NHS. Executives have to be seen to be performing in an overt and accountable way and their work must be visible and subject to audit and inspection. A model of performance management is contrasted with maturity of thought and debate over the use of evidence. The external pressure for conformity and consistency is seen to result in high quality decision making tainted by group think. Managers cannot always dwell on particular topics or pursue the evidence base for what they are doing (or being told to do). There is a pressure to be overtly productive in the presentation of solutions rather than consideration of evidence. The interview and meetings material touches upon some of the complex relationships between established management culture, career needs of the managers themselves and the conduct of evidence based decision making. The pressure to obtain recognition for both themselves and their organisation may encourage a pursuit of more credible 'target hitting' and leaves insufficient time for a consideration of the evidence in shaping organisational structure. In general, as described in this qualitative material, the current organisational form may discourage evidence based decision making and the need for reproduction will be perceived as less risky.

Fashion. The simple arcane practice of following the latest trend or idea, of importing behaviours from other societies was seen as damaging to an evidence based NHS. In a way it is believed that evidence is crucial to an acceptance of organic (internally generated) change within the NHS, but even higher than evidence in the hierarchy is novelty or importation from other systems.

7.2 Middle managers are more directly involved in supporting the uptake of research on effective management

Let me start this section with a quotation from somebody who swapped between clinical and management roles.

I think my need for an evidence base would have been different at different stages in my career; the fact I've come up the clinical route, I hope I've use an evidence base for my clinical work previously. I've sought an evidence base for the interventions I've made to make things work and happen differently throughout my career, because it seems to me, if it's worked somewhere else, ie, there's evidence it's actually helped somebody else gain objective or reach an objective, it's probably worth trying here. So the evidence might not be gold standard evidence, but there is some evidence base to what I do. So I think that probably never peaked, but since I've been in management roles, I think I've always had, and considered evidence for the way I operate and what I do.

RESPONDENT G

I think evidence based administration, to me administration is the application of processes to achieve an end, to me, that's what an administrator is doing, with a small degree, often no degree of latitude or ability to make changes. Management, managers have the ability to make changes to those processes, and leadership I think, is different. I think leadership is about achieving an organisational goal, and

taking the whole organisation forward to achieve corporate objectives. So I do, evidence based administration, I think I would struggle with that, because I think the processes that are used by administrators should have an evidence base for doing them, and a rational defined by evidence; evidence based management, I think managers should use evidence in reaching their decisions, and evidence based leadership I think would go the same as management.

RESPONDENT D

So what we see revealed is that evidence is a consistent part of the framework of executive leadership, but the latitudes to err from the evidence or to even create the evidence afresh is denied to lower levels of manager – deemed to be administrators.

Most fundamentally, detail and the use of detail in decision making was seen to be a product of where you were in the hierarchy. In fact, detail was seen to positively inhibit the executive function.

Different managers agreed that clinicians, their staff and indeed the politicians (perceived to be the source of this objective) needed to be exposed to multiple interpretations of why this decision was made. Conversations with politicians concentrated on what was going on 'out there' in the media and the public discourse of the problem/decision. Conversation with clinical staff often concentrated on the issue of the perception about what had caused this decision and differences between professionals interpretations of the solution/causes of the decision. The decision did lend itself to evidence, but the conclusion from the views expressed is that consideration of the evidence was both vital and in fairly short supply. There was a thematic response that any evidence used in the decision should derive from both an outline theory of the nature of the problem, but relate closely to the practice of NHS management. That means that given the potential lack of general management expertise in the area, any evidence ought to be accessible to NHS managers.

7.3 The relationship between autonomy, pedantry and the use of evidence

Referring back to earlier conversations it is possible to see quotations that talk of a negotiated use of evidence through acquired years of experiential and experimental learning. This leads to the oft sought for "earned autonomy". The best quote to demonstrate this was the one that said "because you haven't built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way". One of the conclusions of the project has been that at low levels of autonomy you use evidence a lot and at high levels of autonomy you use evidence a lot again if you can avoid the politicians (table 1 refers) but somewhere in between it gets much more difficult. The two quotations which summarise this are "it's a yes and no. If I am brutally honest, if you take them in an enclosed ecosphere when there are no consequences to their decisions. Then they will always go with the evidence, then you put them back in the real world and...." Plus "a lot of decisions that are made, seem to be based more on history and on the views of politicians and key stakeholders, which are often not really evidence based".

Consider the definition of a pedant. A person who is overly concerned with formation and precision and who makes a show of learning. The corresponding

notion is that the person is also a source of instruction or guidance. The term can typically be used with a negative connotation indicating someone overly concerned with minutiae and whose tone is perceived as condescending but when it was first used by Shakespeare in 1588 it simply meant teacher. Some people take pride in being pedantic and may preface a sentence as such. Therefore I believe there is a boundary where pedantry is an accepted form of evidence based decision making and that this is consistent with the amount of autonomy and status the individual has. So if a table is drawn to show the relationship between pedantry, earned autonomy and a detailed use of evidence based management it would look something like this:

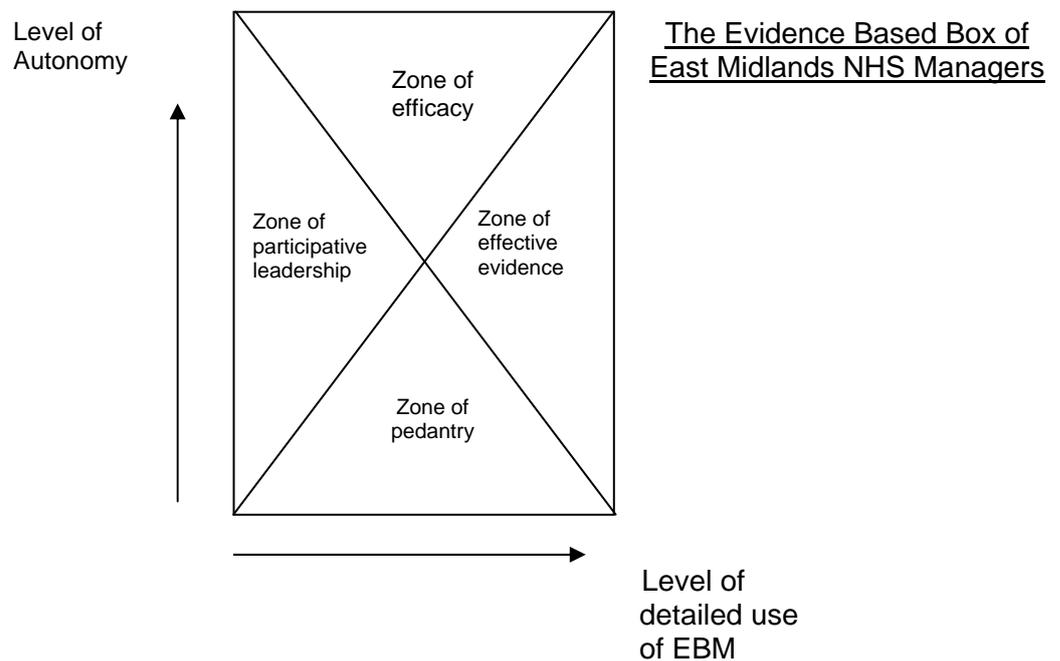


Table 8

I have quartered the box not by quadrants but by triangles to show that this structure to an extent overlaps and is about occupying different zones of the autonomy/detail axis. The key is that there are four zones.

1. “Participative leadership”. Experienced at all levels of autonomy, NHS managers try to use some degree of Evidence Based Management but they never explore it to its full extent. The best they ever get is a ‘halfway’ experimentation with evidence. Indeed it is possible to make decisions without evidence at all.
2. “Zone of pedantry”. Evidence is used to develop and control the organisation but the manager never rises above the middle tier of autonomy. Note the use of phrase autonomy rather than “authority” or “power” as even a powerful individual may find themselves in the zone of pedantry when working in a group because their autonomy is diminished in the meeting so that the use of evidence is seen to be picky or fussy in tone. In this zone a very detailed application of evidence based decision making correlates negatively with autonomy – if you have to use a lot of detail to make a decision you don’t have much autonomy.

3. “Zone of efficacy”. The decision will use varying degrees of evidence in getting things done. What is effective is not necessarily efficacious. The efficacious decision is the one that produces a desired amount of the desired effect and the success in achieving a given goal. It is imperative to note that in this zone, the complete acceptance of rejection of evidence based decision making are polar opposites but exist in their purest form where the manager has the ultimate autonomy.
4. “Zone of effective evidence”. The manager uses some, at least half of the available evidence based management insights at all levels of autonomy. At lower levels of autonomy the manager does, or is compelled to, use a quite sophisticated level of detailed evidence to guide them as manager. At higher level of autonomy the manager is not coerced by concerns of politicians and as the quotation says “then they will always go with the evidence”. As we rise up the scales of autonomy we see two forces that push the detailed use of EBM backwards – one, the manager is not compelled to use evidence and can further explore a “romance of leadership” school of thought and two, decisions are increasingly made as a quotation says “on the views of politicians and key stakeholders” instead.

7.4 The decision must be acceptable as well as efficient

It is established by respondents that they have the technical skills to undertake evidence based decision making and to write a coherent ‘evidence based’ story. The managers were also able to demonstrate that they understood the importance of reflexivity as a management competence. Managers were not happy that the collection and evaluation of data was sufficient to help decision making. The collective and evaluated information may go some way to enhance the quality of NHS management. But the technical task of the assimilation of information may not be able to go far enough to convince NHS managers to move without a sceptical evaluation. More generally it was also asserted that there will always need to be more resources in order to carry out training in the evaluation of information.

I think World Class Commissioning, if we’re not careful, will give us a rigorous discipline on investment issues, even going down to an actuarial type approach, and I think that’s actually quite dangerous, because context and consequences are two things that a manager and a leader need to continually take into account, the consequences of one decision on another set of decisions. RESPONDENT F

So somebody has done some research, however subjective, to actually say those who scored highest on health commission scores, those who had most financial balance, those who were actually achieving the most important government targets. What was common about them? RESPONDENT I

The cohort is efficacious. By efficacy I mean that the effect of a given managerial intervention has to not only be economically efficient it must be ‘acceptable’. Acceptable in the political and public context of the NHS. The impact of an intervention by the Chief Executive or senior manager has been thought before the decision has been unleashed in the real world NHS. Acceptable in that this decision is at least as good as any other.

Referring back to earlier conversations we see quotations that talk of a negotiated use of evidence through acquired years of experiential and experimental learning. This leads to the oft sought for “earned autonomy”. The best quote was the one that said “because you haven’t built up the wealth of experience, the wealth of knowledge, the falling over, the making mistakes, to make the judgement call in the same way” (RESPONDENT D).

7.5 Conclusion

From my findings it is possible to say that evidence based management has an identified and discernible impact on NHS management but it is not common and is certainly not in good health as a prevailing philosophy. It is not the managers who will keep it alive and any implementation of evidence based management on a wide scale will require the importation of external skills and political will to implement. Davies (2009 pXV) said that senior managers only react to external policy direction “targets have ruled the roost, pushing organisations to the edge, often to the neglect of patient care. The past ten years have seen a plethora of incoherent initiatives and policy reviews, decreasing the ability of senior managers to display leadership, think and positively effect the delivery of services; and left governance confused and void of focus. The autonomy associated with a business-like framework means nothing if all it is used for is finding more innovative ways of meeting central targets”.

CHAPTER 8

Issues for Management

Purpose

Does the use of evidence equate to developing a high quality knowledge base that should improve organisational effectiveness and to what extent can variations in the NHS be explained by differing uses of evidence?

Key Arguments and Conclusions

8.1 What is used is determined by what is planned to be used by the organisation to co-ordinate

The accumulation and the use of the following skills is necessary to use the available evidence.

Thinking – if NHS management is to be evidence based at all, then it needs to spend time thinking about how evidence is used. In particular, the management in the NHS must think about evidence and whether it reduces financial and delivery risk. The key will also be to consider where evidence is relevant at the individual, organisational or pan East Midlands level.

Reflections – managers in the East Midlands must have the skills (and time) to take a retrospective look at current decision making structures and question the reasons for doing things this way. In a command and control structure where one of the key skills in organisational success is for the leader to correctly diagnose and horizon scan Department of Health indicators, this type of reflection is difficult.

Research interpretation – the key here is to be impartial in the use of evidence as a means of finding truth. Many topics are the subject of highly politicised dispute, but that does not mean there should be a bias towards the politically expedient solution. The ability to interpret research and be clear when you are biased in judgement despite the evidence, is a key competence for leaders in the NHS in the East Midlands.

Persuasion – this is not in short supply. The leaders have shown themselves by reason of appointment and track record of delivery, to have a persuasive management style. The adoption of that competence to individual or group based evidence is necessary if the available evidence is to be used for decision making.

8.2 Evidence is not the primary or defining tool in successful NHS organisations

The implication of blind prejudice for the objective of enhancing good practice in NHS management are profound. What we perceive as 'good practice' itself is called into question. This would imply that there was error in the NHS managers themselves rather than the context in which they find themselves. Whilst there will be a blurred distinction between heuristics and prejudice the term 'blind prejudice'

might most usefully be applied to ignoring any conformity with accepted good practice. Where evidence to inform the decision is simply not sought out. The use of blind prejudice in this context is usually driven by a desire to succeed in the political context – it is simply an exercise in power. There are many potential decision makers out there, but only so many posts, awards, organisations and years in a career and in the competition for resources and power, blind prejudice is simply a rejection of evidence where it does not enhance the standing of the individual decision maker. The individual is required to be a strong leader, not an evidenced decision maker.

If evidence based practice is seen as something separate and distinctive from day to day decision making, then the prevailing management culture works against basing decisions on evidence. On the other hand, evidence based practice may entail rejecting the accepted management orthodoxy and creating a separate quasi-autonomous enclave of interested practitioners. It is not 'evidence base' alone that determines the value set and the discourse – it is the extent to which the evidence base is taken down through organisational views to a granular level before a decision is made. In paragraph 5.9, I noted that senior managers valued an evidence based decision making model in their middle managers. This does not equate to an application of the evidence based method themselves, nor an implicit sourcing of and funding of evidence for these middle managers to use.

We must ask: not 'do you understand the answer'? but 'do you even know what the question is'.

So, let's compare that to the earlier discussion about deep cleaning of hospitals. Managers found peace with the need for a structured political response by David Nicholson but here, in the case of winter death, he was avoiding even asking the question because the public wasn't asking the question. I therefore asked if that meant they thought Nicholson rejected evidence where it said uncomfortable things about subjects the public weren't asking about. The response:

I would suggest that he uses an evidence base for what he's done and how he's moved things forward, along with a set of personal beliefs, so I feel comfortable with that.

RESPONDENT B

8.3 Evidence is only part of a general method used to horizon scan

In the organisation and planning of ambulance services in the East Midlands there is an inextricable link between organisational performance, organisational effectiveness and leadership. Ambulance services and the importance of the ambulance response to older people who have fallen, has historically been poorly recognised within the wider NHS. Ambulance clinicians are in a unique position of attending this group of patients in their own home and as a result, are able to observe not only the condition of the patients, but also their living conditions including hygiene, diet etc. In order to transform the service that EMAS provides to falls victims and those at risk of fall, the Chief Executives of both EMAS and their Commissioning Primary Care Trusts, the transformational leaders, need to adopt an evidence based approach to the data collected by EMAS itself. Instead of a total focus on specific organisation objectives that is typical of the existing contractual

relationship with EMAS, the management style should place an emphasis on evidence as a basis for innovation and a rationale use of resources.

By using the evidence available about how falls should best be managed, how the use of ambulance resources can be maximised and the effects that an aging population will have on calls to ambulances the leaders in the NHS can help the public to navigate the system in a different way, but still be confident that the system will be delivered in line with NHS standards and values. The key is to respond to the evidence that has been collected, to park the targets of today (as their assistant directors and operational managers will achieve this) and to shape the targets of the next decade in line with the Ambulance clinicians.

Some concepts are judged by the participants to have poor credibility. If quantification, consistency, industrial level adoption and rigour are indicators of credibility then in our understanding of evidence based decision making it is possible to recognise items that have credibility. Credibility is not validated by the researcher it is expressed as a judgement made by the participants. Judgements of credibility are also seen to be influenced by particular (political) contexts so that what constitutes credible may change from period to period. In the specific context of the evidence based manager, there was a strong correlation between credibility and one word/phrase – “NHS” and a poor correlation between “politics” and credibility. I have included one quotation to illuminate that at the heart of this conflict is the role of the executive and whether they are agreed to be system leaders or system managers.

Consider that since 2000/01 the government decided to increase public spending and the proportion of public spending spent on the NHS significantly, and this was sustained for 7/8 years and yet politicians were given lots of negative associations such as the politician below, who is considered to be motivated by electoral majority not the NHS role in ‘reduce inequalities’ or even the NHS managers role in ‘best value for money’.

He's an MP like the 'X' guy, who isn't local doesn't know the area, he's in for the ballot box, he's in for the re-election; you take someone more local like 'AB', who's a local lad, worked in one of the local schools, will always live in this town, he's got the mix, because he's precariously seated because of the ballot box, because despite the fact he's been in twice, this is not a natural one party community, and at some stage it will move again.

RESPONDENT A

Whilst as a researcher I was able to ask for clarification of particular aspects of the application of EBM, the elite manager must feel that a codification of EBM is not just adulterated into a form of Pedantic Control. The traits that the Chief Executives and Senior Managers demonstrated were strong leadership, setting a good example, negotiating and navigating the future and co-ordinating disparate strands of policy into one coherent whole. In order for EBM to rise above the charge of pedantry into a system wide learning method it would have to enhance the ability to lead, negotiate, navigate and co-ordinate.

The Chief Executives are demonstrating intelligence. The elite has shown the ability to interpret policy and understand the business but they are relying on heuristics to drive solutions. The reason this is good is that leadership is visible, to an extent charismatic and essentially a valued commodity. In order to steer a successful

course without recourse to evidence they need to be all or some alchemy of the following – politically astute, decisive, hardworking on networks. This demands in turn that they are perceived to be young in outlook, flexible/pragmatic, energetic and experienced. All of these are attributable characteristics that leaders cannot acquire themselves – they are by definition attributed by others. Crucially they are also consistent with the characteristics a Chief Executive or Senior Manager will want attributing.

CHAPTER 9

Conclusions

9.1 Messages from the field of study

Cultural and altitudinal change is required

Researchers and academics should be invited into the management process (5.9, 6.1) and we should be looking for evidence of what works to do the most optimal thing with our limited resources (5.5, 6.4). The key here is that the management role is enhanced by the use of evidence based management and in such a way that the credibility and development of the subject area is enhanced.

Develop a cadre of managers with the skills needed to use evidence more effectively

Managers rely on the use of data. But they are unlikely to be happy with data that has unknown interrelations (5.7, 6.3). An unavoidable consequence of asking the sort of what-if questions is that it can lead to adverse reaction amongst managers. Unlike performance data it may expose uncomfortable relationships between perceptions of excellence in the NHS target performance – attributed by others – and truly superior operational delivery (5.6, 6.5). The use of evidence prompts in longitudinal studies would only be possible were the competence of managers to use this evidence effectively developed also.

Looking for evidence of success of evidence based decision making would be an innovation itself

Evidence might be called the economic (opportunity) cost of the current solutions we use. Looking for evidence based enablers of the 'central targets' to be hit should also be pursued and we should not use targets as an excuse to avoid evidence based attitudes (5.2, 5.4, 5.8). Managers and policy makers have been prominent advocates of evidence based clinical practice, but have not been quick to apply the same principles to their own decision making. NHS Evidence should undertake this task with managers (3.4, 6.2).

As an avoider of data the politician can still have the opportunity to identify key business processes and target opportunities

The politician will not push for a multivariate analysis of the data (5.1, 5.3) and ultimately the problem is that the politician is concerned with abdicating control (8.3). The politician fears contradictions with policy, false-positives or results that are good for the NHS but no use for the politician at all (8.1, 8.2).

9.2 Inferences from theoretical and other researchers perspectives

Learmonth said (in my introduction) that managerialism was an imposed doctrine, and that evidence based decision making typified managerialism. At the end of my journey I disagree. (2.2, 4.4 and 6.5). Alexander (2007, p152) said that “evidence based management assumes that available research is consistent with the problems and decision making conditions faced by those who will use evidence in practice”. In his conclusions he notes that researchers must learn to think more like managers if their research is to be relevant and managers must learn to more effectively communicate their issues within the research community and frame their problems in researchable terms (4.1). There is an on-going nature of the debate about managerialism and evidence. The debate is evolving from managers use of ‘knowledge about knowledge’ in the private sector (Bailey and Clarke, 2000) to a broader NHS and health care discussion (Kovner 2006, 2009). The debate is also evolving from competitive advantage to an alignment between researchers and managers, but there is little empirical evidence to inform efforts to develop models in real world settings (3.1). Walter (2004) says that a whole systems approach, where the use of research involves a collaborative effort between organisations and individuals, would be a positive way forward. This is contradicted by Knowles (2008) in “command and control” to allocate resources; but both are consistent with the Rousseau Model (3.3). Ultimately, the conclusion to be made from theory and other researchers, is that if you want to, you have tools available to do a Kovner (2009) style action research project, but that will not matter if the government is interventionist. In this context – whether you are a Learmonth, Alexander or a Kovner – the key to using evidence or rejecting the use of evidence is the leader’s own decision to take charge of their destiny (7.5).

Of all of my references, the most important to me has been Kovner (2009). In his methods, he always espoused academic rigour. When talking to managers in the field of healthcare he always took time to properly frame research questions, obtain evidence as to why intervention might/might not work in various contexts, evaluate evidence with a balance of viewpoints represented and consider when further evidence was needed to support a decision. If Pfefer (2006) is the consolidation of evidence based management in healthcare as a distinctive specialism in its own right, then Kovner (2009) is the place within which the specialism gains its first manual for operating in a field environment.

9.3 Messages for the user of the study

As to how the NHS works, where the services are located, how they are delivered I don’t find that managers use evidence. I observe that there is some fact in there – for example in the use of joint strategic needs assessment, to inform decisions about need, but a lot of their decisions are based on history, politicians and key stakeholders and are not really evidence based (2.4). I have drawn a model of the NHS with an evidence based organisation of knowledge that shows that NHS managers use decision making tools that reflect managers place as only one quadrant of the NHS structure. If this diagram (2.4, table 1) is to be useful, it is to show that an NHS that moves on evidence based organisation of knowledge only to NHS managers, it will ignore the other players in the NHS – the politicians, patients

and clinicians. The NHS manager must also consider the circumstances of the decision and the ethical concern that the management decision may provoke. Managerial freedom must also be considered when implementing an evidence based decision if it is likely to impact on the political cycle (3.4).

If evidence based practice is seen as something separate and distinctive from day to day decision making, then the prevailing management culture works it. On the other hand, evidence based practice may entail rejecting the accepted management orthodoxy and creating a separate quasi-autonomous enclave of interested practitioners. Finally from my increased understanding and interpretation of findings it is possible to say that evidence based management has an identified and discernible impact on NHS management but it is not common and is certainly not in good health as a prevailing philosophy. It is not the managers who will keep it alive and any implementation of evidence based management on a wide scale will require the importation of external skills and political will to implement. An alternative approach is a willingness to take an evidence-based approach – and to use the bad news it brings as a stimulus for improvement. For managers, looking at a service organisation for the first time from the customer’s point of view is a shock. Typically they discover that the organisation is ticking all its boxes and still providing hopeless service to customers and citizens. And from this comes another sobering revelation: the management methods used up to now are the problem, not the solution.

9.4 Relationships between variables

From paragraph 6.3 it is possible to construct the following simple table.

“Evidence Based” Followed by the following word	Is there a common agreement between NHS managers of the definition?	Associations with this word or phrase 0 being most negative, 10 being the most positive	Frequency of use of this word or phrase 0 being very rarely, 10 being very often
Administration	No	7	1
Allocation	Yes	9	3
Argument	No	3	3
Decision Making	Yes	4	9
Leadership	Yes	2	2
Learning	Yes	8	7
Management	No	7	8
Reporting	Yes	2	2

So it is possible to say that the key pairings of evidence based are with learning and with management – although management itself is not clearly defined. The most positive association is with evidence based allocations – the frequency of “decision making” may have been increased by my line of inquiry, but is the most common term.

Frank Blackler (2006) published in the Guardian Newspaper, his synopsis of what was good/bad in the political and managerial models of control in the NHS. Taking that as a template, it is possible to say whether he was right or wrong from what I found in this project.

Agree ✓ or disagree x	
The present system of politically lead targeting is wasteful	✓ An analysis of EMAS data shows an age bias in classification of patient need away/against the elderly (4.3)
Targets are based on mistrust of managerial autonomy	X It is a product of the managers not answering the 'how do we know what we know' consistently (3.1, 2.2)
The NHS has enjoyed substantial increases in public funding and politicians are anxious about how the money is used	✓ The craft of care has transformed into the machinery of the NHS supply system (8.3)
Managers need to be treated with and behave with confidence	✓ Otherwise, there will be a clash between prerogatives (7.1)
Distinguish the strategic objective of a policy from day to day implementation	X Targets are a political model, but the NHS is politically funded (2.4)
Management in the NHS is not hard, it is why we have NHS management	✓ The use of evidence is an exercise to control knowledge and choices (5.9)

9.5 To finish

If I were writing a note for the next Secretary of State for Health, the message I would give about evidence based management is:

“Dear Sir, as of today, there are 24 organisations that make up the NHS in the East Midlands. This ignores Government departments and refers only to those organisations that are statutorily accountable and therefore, have a Chief Executive. In a three year study of this group, I have found them capable, experienced and wise. In the matter of making their decisions on the basis of the evidence available to support their decisions the picture is unfortunately, mixed. The diagnosis of this is that elected parliamentarians, the treasury and the public prefer to command the NHS to act in response to NHS policy, rather than devolve to those Executive leaders the autonomy to act upon evidence about the matter at hand. The result is that we have an NHS that is increasingly good at practicing evidence based medicine, but an NHS in the East Midlands where managers are ambivalent about using evidence based management. Some clinicians may make a great of this fact to you. Ignore them, the governance structure of the NHS does not allow managers to be evidence based even if they wanted to”.

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Diagrams and figures:

Paragraph 2.4	“The decision making box”	Table 1
Paragraph 2.4	“The structured system analysis and design method”	Table 2
Paragraph 4.2	“Interviewees and meeting”	Table 3
Paragraph 4.4	“Falls in the Elderly population”	Table 4
Paragraph 5.8	“Emas response to falls in the over 65’s: type of pickup location”	Table 5
Paragraph 5.8	“Emas response to falls in the over 65’s: by call Category”	Table 6
Paragraph 5.8	“Emas response to falls in the over 65’s: by gender”	Table 7
Paragraph 7.3	“Evidence based box of East Midlands NHS Managers”	Table 8
Paragraph 9.4	“The decision making box”	Table 1

APPENDIX A

Distribution List:

People who contributed to this study. I would like to list them as a “thank you”, but also to assure the reader of the people who will vouch for me and the method pursued. This is the failsafe that the quotations were collected and existed. That the emails were sent and responded to. That people knew this work was going on. That my peers, colleagues and superiors trusted me enough to also take part in this research willingly and at cost of their time. Always with candour.

Julie Acred – CEO Derby Hospitals NHS Foundation Trust
Tracy Allen Derbyshire County PCT
Terry Allen Notts City PCT
Terry Alty Chesterfield Royal Hospital NHS Foundation Trust
Paul Badger Derbyshire County PCT
David Black Derbyshire County PCT
Kathryn Blackshaw Derby City PCT
Lee Bond Sherwood Forest PCT
Maggie Boyd Derbyshire County PCT
Derek Bray – CEO Derbyshire County PCT
Brian Brewster East Midland Ambulance Service
Paul Briddock Chesterfield Royal Hospital NHS Foundation Trust
Lisa Bromley Bassetlaw PCT
Jayne Brown – CEO Doncaster PCT
Andy Buck – CEO Rotherham PCT
Danielle Cecchini Derbyshire Mental Health Services Trust
Paula Clark – CEO Burton Hospital NHS Foundation Trust
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Sue Hitchener NHS East Midlands
Peter Homa – CEO Notts University Hospitals
Brenda Howard NHS East Midlands
Chris Kerrigan Notts County PCT
Chris Linacre Sheffield Teaching Hospital
David Lowe Derbyshire County Council
Dave Marsden NHS East Midlands
John McIvor – CEO Lincolnshire Teaching PCT
Martin McShane Lincolnshire PCT
Phil Mettam Bassetlaw PCT
Eric Morton – CEO Chesterfield Royal Hospital NHS Foundation Trust
Oliver Newbould Leicester City
Louise Newcombe – CEO Bassetlaw PCT
Nigel Nice NHS Direct
Kevin Orford NHS East Midlands;
Paul Phillips East Midlands Ambulance Service NHS Trust
David Pitt Derbyshire Mental Health Services NHS Trust
Neil Priestley – Sheffield Teaching Hospital
Tim Rideout – CEO Leicester City
Wendy Saviour – CEO Nottinghamshire County PCT
Mike Shewan Derbyshire Mental Health Services NHS Trust
Prem Singh – CEO Greater Derby PCT
Chris Slavin Lincolnshire Partnership NHS Trust
Nikki Tucker Chesterfield Royal Hospital NHS Foundation Trust
David Walker Regional Director of Public Health
Sarah White Derbyshire County PCT
Martin Whittle Derbyshire County PCT
Jeffrey Worrall – CEO Sherwood Forest

APPENDIX B

LETTER OF INVITE:

Dear Colleague

Help!

I am currently undertaking a Doctorate of Business Administration. Yes, I know all the typical “get a life” things you say, but the NHS is deeply engaged in the practice of Evidence Based Medicine and I wish to consider the extent to which evidence based practice is a norm or an ideal for daily professional management in the National Health Service. To what extent do we, as practicing NHS Managers think Evidence Based Healthcare Management is an appropriate tool to resolve problems and what do we actually use? (A copy of the full research outline is attached should you wish to understand my objectives in more detail).

My reasons for writing to you are that I wish to make this more than a dusty academic treatment of the subject. It is my hope to work with my NHS colleagues over the next couple of years in making this a project that listens to and informs our experiences as leaders in the NHS today.

You can contribute in a number of ways. By replying that you do or do not want to participate – even a positive “no” is very helpful to me in shaping cohorts to correspond with. If you are a “yes” then would you like to participate in the following ways:

- As part of a focus group that will meet 2 or 3 times in the next 18 months involving 8-10 people with a semi-structured agenda?
- As a face to face 1:1 interviewee for about 2, 2 hour sessions over the next 18 months?
- As an e-mail and written responder to a structured set of questions a couple of times in the next 18 months?
- Any of the above?

I look forward to your replies.

ps If you can think of anybody else who you think would really enjoy getting involved in this, I would love to have their names.

EMAIL FOR 1:1:

Thanks for agreeing to give me some 1:1 time as part of my qualitative research towards my doctorate. You don't need to do anything in preparation and will be one of a number of people I am interviewing this autumn and winter. In addition, I will be analysing a verbatim transcript part of 3 significant NHS meetings - most likely the Directors of Commissioning for the East Midlands, the East Midlands 18 Week group and either the Board or the Executive Management Team of Derbyshire PCT. Through these methods I hope to gain some observations on the nature of "Evidence Based Management in the NHS". I would expect to circulate the attached structured interview questions that I am using with you (the questions - not your answers) to a wider cohort of NHS leaders in the East Midlands for their written responses but only if our 1:1 interview(s) are a success.

In Case you need reminding, this is the essential reason I am doing this doctorate. Over the last few years I have been in a quandary about something and that is whether the notion of being a manager could be, within the NHS, grouped within an evidence based organisation of knowledge. I made 20 years as a moderately successful NHS manager, having qualified as an accountant with the NHS. On the one hand the discipline of the 'balance sheet' gave a respectability to the performance management methods used by me to help shape the patient care, but the use of that tool was necessarily shaped by the business and value model upon which it is based. Not all companies that employ accountants are successes so where was the equivalent for an 'evidence base' within the literature?

Anyway, in summary.....a big, big thanks for giving up your time and I look forward to listening to you.

Regards

David

QUESTIONS:

A synopsis of Evidence Based Management for this meeting*What is already known in this research area?*

Learmonth, an academic and former NHS manager, suggests that in the long term the very study of evidence based management is likely to inhibit rather than encourage a fuller understanding of the nature of evidence based management. Pfeffer has managed to write a definition of evidence based management and says that this is not how managers make decisions but that they instead focus on their own thoughts. Rousseau is entirely supportive of Pfeffer and, after exploring the promise that research offers for improved practice concludes that at present, it falls short. Elliot in a study of NHS managers provides some explanations for the constraints upon managers that prevent the use of research evidence.

What each of these writers say, is that the most successful NHS organisations would share one common strength – outstanding use of knowledge acquired through research (evidence). They would produce evidence the way that they need in order to inform decision making by management. Using an expertise with evidence they would make the best decisions, minor and major, everyday.

Opposing theoretical and methodological approaches to this research area?

Pearson takes issue with Learmonth and says that the whole concept of what constitutes evidence is itself, full of inequality and prejudice. Murphy, Mintzberg, Soltani may be taken as a direct challenge to the whole concept of evidence based management. In any case, they argue that there is a reason for the craft of management and personal experience to supplement evidence based management in context specific ways. Malterud manages to deconstruct the whole notion of a scientific approach to the knowledge of medicine.

Writers such as Delbanco, Davies, Dopson and Mitten propose that organisational effectiveness is not a result of effective management process or people but instead a combination of both. Issues such as organisational culture, leadership, total-quality management philosophies and innovative ways of budget setting are all claimed to have at least as great an impact on organisational outcomes as well researched decision making.

Karl suggests that in adversarial process advocates seek to prevail through the enjoyment of power, rather than through evidence based solutions and develops an alternative practical model of collaboration through joint fact finding is proposed. Smith supports the search for alternatives because, in the author's view, uncritical reliance on performance data can lead to a number of unintended and adverse consequences and Pearson says that evidence gathering is too slow to properly influence policy.

My interpretation of SDO research and my connection to it.

The National Institute for Health Research Services Delivery and Organisation Programme (NIHR SDO, commonly abbreviated to its shorter form SDO) has commissioned research on several themes concerned with management practice in health organisations. Their overarching strategic aims are to “add to the evidence base that is relevant to the practice of managers” and “the development of links between academic institutions and NHS organisations in this area”. (www.sdo.ishtm.ac.uk/ecashome.html).

Since April 2009 the management of the SDO programme has now transferred to the National Institute for Health Research Evaluations, Trials and Studies Co-ordinating Centre (NETSCC) based at the University of Southampton.

There are six distinct research projects as follows:

Reference	Lead Researcher	Duration	Title
08/1808/242	Professor Sue Dopson	1 July 2009 - 31 July 2012	Increasing the motivation and ability of Health Care Managers to access and use management research
08/1808/241	Dr Paula Hyde	1 January 2009 – 1 July 2012	Roles and behaviours of middle and junior managers: managing new organisational forms of health care
08/1808/243	Professor Christine Edwards	1 January 2009 – 2 March 2012	Explaining Health Managers' information seeking behaviour and use
08/1808/244	Professor Jacqueline Swan	1 January 2009 – 31 December 2011	Evidence in Management Decisions (EMD) – Advancing knowledge utilisation in healthcare management
08/1808/236	Professor Chris Ham	1 March 2009 – 28 February 2011	Models of medical leadership and their effectiveness
08/1801/220	Professor Ewan Ferlie	1 October 2008 – 31 January 2010	Research utilisation and knowledge mobilisation – A scoping study

My organisation is the field study for project 244 lead by a team from Warwick University with the principle on-site researcher being Emmanouil Gkeredakis. The Lay Summary of this project is:

Primary Care Trusts (PCTs) receive the bulk of the NHS budget to allow them to commission health services for their local populations. They are charged with ensuring that healthcare provided to patients is "World Class."

However commissioning decisions are very complex. They involve different kinds of experts (commissioning and finance managers, public health experts) and many different criteria (quality, cost, patient benefit), all of which have to be carefully weighed up when coming to agreements about the best evidence upon which to base decisions. There is a great deal of unexplained variation in the ways in which managers in different PCTs actually commission health services.

Within the NHS, and internationally, a lot of thought and effort has gone into producing resources for managers so that they have the knowledge and information they need to commission services effectively.

In this research SDO will undertake in-depth qualitative research (case studies and observations of decisions) to discover how, why, and when managers in different roles use knowledge and information in NHS commissioning decisions. SDO will use the findings from this stage of the research to design a survey to test findings on a wider sample of NHS managers.

The results will be of direct relevance to the daily work of managers throughout the NHS, and of direct relevance to the public for whom services are commissioned. SDO will be better placed to identify the barriers and facilitators (organisational, cultural, and practical) to evidence-based practices in NHS management.

SDO will disseminate their work widely in order to inform policymakers and managers. The aim is that managers can be best equipped to make good decisions for the health of their local populations.

My organisation also supported an application for project 242 lead by a team from Keele University working with GPs in North Derbyshire and Chesterfield Royal Hospital which was ultimately unsuccessful. This has been pursued as an internally funded consultancy project. The lay summary of project 242 is:

Despite much work on how clinicians use and enact clinical research which is now well known, there is less on health care managers' use of management research and how this might be evolving. Previous research has suggested that health care managers often lack the skills to access and process research findings and play a marginal role in the R&D area. It is possible that these findings are now dated and that a better-developed research base and culture is now emerging within health care management. We believe that this novel idea requires further investigation. Specifically, we wish to investigate under what circumstances and how do managers (both general managers and hybrid-clinical managers) access and use management research based knowledge in their decision-making.

The design of the study uses mixed methods, having a linked, three-stage design which deliberately explores the boundary between management research and practice. The deliberate exploration of knowledge utilisation process in settings critical to the 21st century health economy will provide new research data to help policy makers and managers broadly defined, and benefit use

The Interviewees	What sort of person are they?	What is their Profession?	Period in the East Midlands
A Paragraph 5.1, 5.2, 5.4, 5.7, 6.3	Male, 50's	Accountant	East Midlands 10 years +
B Paragraph 5.1, 5.2, 6.3, 7.2, 8.3	Male, 40's	Doctor	East Midlands 3 years +
C Paragraph 5.2x2, 5.5, 5.7, 6.2, 7.1	Female, 50's	Accountant	East Midlands 10 years +
D Paragraph 5.2, 5.7, 6.2, 6.3, 7.2	Male, 50's	Medical	East Midlands 3 years +
E Paragraph 5.3, 5.7, 7.1	Male 50's	Doctor	East Midlands 10 years +
F Paragraph 5.3, 7.4	Male 40's	Marketing and Supply chain	East Midlands 3 years +
G Paragraph 5.6, 6.3, 7.2	Male 40's	Doctor	East Midlands 10 years +
H Paragraph 5.6, 7.1	Male 40's	Law	East Midlands 10 years +
I Paragraph 5.6, 7.4	Female 40's	MBA	East Midlands 10 years+
J Paragraph 5.6	Male 40's.	MBA	East Midlands 3 years+
K Paragraph 5.6	Female 30's.	Accountant/Audit	East Midlands 10 years +
L Paragraph 6.3, 8.4	Male 50's.	Scientist	East Midlands 10 years +

Job Description Additional Information Environmental Aspects Appendix B

ESSENTIAL	DESIRABLE
<p>Attainment/Qualifications</p> <ul style="list-style-type: none"> • Degree or equivalent professional qualification • Educated to Masters Level in specialist relevant area • Management Qualification • Significant Management experience at senior level in NHS including Board experience • Evidence of continuing professional development 	
<p>Skills</p> <ul style="list-style-type: none"> • Proven conceptual and analytical skills able to interpret overall health policy and strategy • Able to use power and influence to develop and improve services • Good communication skills (written, oral, presentational and interpersonal) and ability to liaise with people at all levels within and outside the trust about sensitive issues (eg hospital closures) • Highly developed project management and report writing skills – this will include Board reports • Possess highly developed numeracy and reasoning skills and be able to lead the development of information reporting systems and analyse information and appraise options and take appropriate decisions. • Ability to provide strategic direction and leadership without adopting a dictatorial style • Ability to effectively chair meetings at a senior level • Able to multi-task and continue to function to a high standard when under pressure • Highly developed skills in staff management • Able to use Microsoft Word and I.T Literate 	
<p>Knowledge / Experience</p> <ul style="list-style-type: none"> • Extensive experience at a senior level in Health Services • Experience of working at Board level • Extensive experience of supporting and 	

David Sharp
November 2009

Critical Reflection

Document 6 is submitted in part fulfilment of the requirements at the Nottingham Trent University for the degree of Doctorate of Business Administration

Cohort 8

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References

1. A Theoretical Model to Apply

In June 2009 I received the following notice –

“In England, the majority of decisions about the organisation and provision of local health services are made by Primary Care Trusts (PCTs). PCTs receive a significant proportion of the overall National Health Service (NHS) budget, which they use to commission health services for their local populations. In this study, we aim to understand how NHS managers make decisions about commissioning health services. We want to know what information they use to make these decisions and whether NHS management can become more “evidence-based”. By doing this we hope our findings can be used to inform the practice of commissioning in the future.”
Emmanouil Gkeredakis – University of Warwick.

It was rewarding to see that others were joining this field of study. It is reassuring to see that this type of qualitative analysis is still worthy of study in the NHS, almost three years after I began my project. What I think the Warwick study fails to understand and what I have based most of my study on, is the fundamental importance that the role of executive leaders have in setting organisational outcome in the NHS. I therefore feel vindicated as I complete document 6 and reflect on my learning journey that my thesis had something important to say.

1.1 Metacognition

J. H. Flavell first used the word "metacognition" (1976).

The reasons this has been important to me in my study is that I have been looking for a model that describes my learning process before and during this doctoral study

The benefit of the metacognition model is that it helps me to understand the use of knowledge in my executive role in the NHS. Executive management processes involve planning, monitoring, evaluating and revising one's own thinking processes and products. Strategic knowledge involves knowing *what* (factual or declarative knowledge), knowing *when and why* (conditional or contextual knowledge) and knowing *how* (procedural or methodological knowledge). Both executive management and strategic knowledge metacognition are needed to self-regulate one's own thinking and learning (Hartman, 2001).

A significant issue during my DBA has been a metacognition one. It has been difficult (and sometimes I have not been able) to distinguish between the why and the how of what I do as a manager in the NHS. I thought that this part of the journey was very helpful at this stage in my life. Halfway through a 45 year NHS career if it all goes to plan, I was making lots of decisions and here for the first time, thinking about why. At Masters level, I described systems in a reductionist way as being passive, but the why was much more human and difficult to deal with. This gave me the option to go different ways in different scenarios and managed to engage my passion for the NHS as well as being intellectually challenging.

1.2 Working in Groups or Alone

Converse to the individual journey, I did not find working in groups to decide on a course of action at all revealing. The cohort were all competent at debate and interaction and explaining the positions taken, but there was little collaboration except to retrace the 'audit trail' of the decisions we made to arrive at our choices. Possibly because I switched from cohort 7 (where I was struggling to keep up to time) to cohort 8 (where some group structure pre-existed my introduction) the experience I had of group work was magnified.

I found the tutorials useful in thinking about how I got an answer. In the NHS much of the data I receive is collected, graded and sifted before I see it. Given the right algorithm to turn this data into information, I just write down the answer. But, if you have to go right back to describing your method for data collection, you really do have to understand how you got your answer. A novelty.

The revelation to be honest, is that I am terrible at working with others. It is not that I can't do the team-player mindset at work (my 360° survey by peers, seniors and direct reports, suggests I am accessible and trusted and participate well) it is just that I like to be in the 'me' shell. Sitting in a North American airport with six hours to kill to work on a DBA on my own is a treat and the time flies too quickly. It is almost as if I feel that anything other than 1 to 1 conversation on part of the DBA (after the formal lecturing finished) is cheating me of time I could be doing something more interesting on the DBA.

Throughout much of this study I have contemplated the nature of the lone research practitioner. Individually I have found this a fascinating journey but it has caused me to question whether it was possible to do anything worthwhile whilst immersed in such an intensely personal topic.

Adrian Bejan, a professor at Duke's Pratt School of Engineering, argues that while the trend at major universities is the creation of large research groups focused on a particular problem, the individual researcher will not disappear.

There is only one thing I can do about all of this. That is to have courage and trust. To join a learning set of like minded individuals about evidence based management, or just management. To engage often and maybe aim to be the positive one. There is a real danger that my lethargy makes the group lethargic, so I resolve to be the project core not the periphery. This should be more dangerous, more fun and in opening up my skills and opinions to greater and regular scrutiny, the quality of my academic work should improve too. I realise that working with others is a start on the way to achieving my true potential.

1.3 Being positive and actually writing the Doctorate

The biggest learning for me is the need to be able to work with positive people. If you have ever sat in a seminar doing some group work on an easy task then you know that nothing is worse than working with lethargic people. The level of 'unmotivation' in the room is stultifying. The taught element of a DBA is the complete opposite. You find yourself just as inspired as people around you. In that kind of environment, I love group and partner work. So the thing I am going to do differently, because of this DBA, is always to be the project enthusiast. Encourage the group to put effort into what we are doing and, if the task is easy, re-define the group effort

into something along the same lines, but that is able to inspire the talents of the think tank assembled for the next fifteen minutes. My opening line now is and will be “you’ll find yourself having a lot more fun if you simply go with the flow and let the creativity flow”. In addition, my own contribution will be higher quality.

Kamler and Thomson say this:

“Writing the dissertation lies at the centre of doctoral education. It is through writing that students make their findings known to the public and develop a sense of themselves as authorised scholars. Yet, in many universities, writing is treated as ancillary to the real work of research - as the invisible and taken for granted labour of the doctorate (Kamler and Thomson 2001)”.

The hardest part of this doctorate for me has been the writing. It is clear that without help from my tutors the ideas and analysis would never have got to paper. Furthermore, I must complement my tutors on trying to make what I write an authentic form of what I say.

As a successful student at professional, undergraduate and masters level, this has been a vital part of the doctoral journey.

2. Where the Research Question came from

2.1 The Initial dilemma

There was an episode of the BBC TV programme ‘Casualty’ on a couple weeks ago, and I caught a bit of it while working on some projects around the house. As I watched it became pretty clear that every episode is built around solving a complex medical problem. And 90% of the show is spent learning about the problem, finding new pieces of information, and testing incorrect assumptions.

I think this is a pretty good description of lots of a lot of projects I’ve worked on as an NHS manager and project manager. Lots of doctors and managers want to get the “Problem Definition” done as soon as possible, and get on to the “real work” of solving the problem. But there’s real danger there, it’s easy to define and solve the wrong problem.

I like the system they use in casualty - there’s a central whiteboard which contains a description of the problem they’re trying to solve. As the show progresses, the problem definition is continuously updated, and the diagnostic team comes up with various theories. I’ve worked on projects where we the managers didn’t have a clear understanding of the problem, or where our understanding of the problem was months and months out of date.

The result was that we built the solutions and policies that solved the wrong problem, or in the best case, answers that solved the right problem in the wrong way. Either way, what we built fit the user stories we got for that iteration, but wasn’t “well designed” in terms of solving the core problem. In both cases, it was very clear as I talked to the patients, doctors and nurses, that we could have spent less time, and built better policies if we’d just had a clear and up to date picture of the clinical world.

The National Health Service (NHS) is the "public face" of the three publicly funded health care systems of Great Britain (Northern Ireland does not use the title) and the full title of the national public health service for England. The NHS provides the

majority of healthcare in England, from general practitioners to Accident and Emergency Departments, long-term healthcare and dentistry. It was founded in 1948 and has become an integral part of English society, culture and everyday life: the NHS was once described by Nigel Lawson, former Chancellor of the Exchequer, as "the national religion". Private health care has continued parallel to the NHS, paid for largely by private insurance, but it is used only by a small percentage of the population, and generally as a top-up to NHS services. NHS services are largely "free at the point of delivery", paid for by taxes; the NHS's budget for 2006–07 is £96 billion. Employing over 1.3 million people, the NHS is the largest employer in Europe and one of the largest employers in the world, (believed to be third or fifth, according to different commentators). So the NHS requires lots and lots of people to run it. Within this I have been a manager and as a manager you can "administrate" and electively hide or be a proper manager and change things.

Over the last few years I have been in a quandary about something and that is whether the notion of being a manager could be, within the NHS, grouped within an evidence based organisation of knowledge. On the one hand the discipline of the 'balance sheet' gave a respectability to the performance management methods used by me to help shape the patient care, but the use of that tool was necessarily shaped by the business and value model upon which it is based. Not all companies that employ accountants are successes so where was the equivalent for an 'evidence base' within the literature?

2.2 Getting in amongst the players

The author holds a senior management position in the National Health Service. The National Health Service being under transition affects the individual professionally therefore there is a subjective bias in the analysis of EBHM in the NHS. This issue of being a player in the system under review will qualify the judgements and interpretations of the researcher. Significantly the researcher has been a player in the National Health Service system since 1987, during which time many theoretical and practical models have been applied to the NHS. The National Health Service is an organisation that continues to deliver services. As with all socio-economic models, it is not possible to hold the day to day experiences of patients and the public frozen, therefore it is not possible to experiment with the system which will affect people's lives just for the purposes of observation. The organisation that employs the individual is part-funding this research, therefore the NHS has a discernable desire to achieve a piece of management information.

Remembering that part of my essential purpose was to hold up a mirror to NHS managers in the East Midlands, what did I see in that mirror about myself? What did I learn on a personal level about my response to evidence based management? I learned that I was only capable of a low level of accommodation in response to changes in my environment. My culture within this organisational culture had meant that I experienced a low level of assimilation. Information from the wider environment would be accepted and processed, but it was never sought or accessed. Any desire or awareness of the need to modify how things are currently done came as a response to a policy imperative and heavy central directions. The appropriate environmental response was not to evidence, but policy and within that a forensic level of policy compliance. So why did I do this? My conclusion is that of two parts. Part one is that, consistent with other senior managers, the NHS in the East Midlands did not contain the necessary knowledge from which to choose a

more adaptive response and the prevailing group culture discourages attaining that knowledge. Part two is that on a personal level, the culture had strictly punished me when my particular responses had been more adaptive. At job recruitment, my answer of “the answer is in the library” as opposed to “my experience of answering the problem is” was deemed insufficient to get the job!

I have worked high up and low down in the management hierarchy and my experience of EBM was that it faced/faces being squeezed by two forces that both oppose its very existence in the NHS management lexicon and toolbox. Unlike Medicine and Nursing in the NHS, management is not a profession. Put crudely, it is considered a task or an overhead. With the exception of Finance roles there is no established legal or cultural requirement regarding education or knowledge for an individual to become a manager the way there is for Doctor, Nurse, Physiotherapist, Podiatrist, etc. This does not mean that NHS managers are not legion in their BSC's, their MBA's, even their Doctoral qualifications but it does mean that no formal disciplinary body or professional pressure exists to promote use of evidence by any manager who refuses to do so.

2.3 Science or ambiguity: how I take decisions at work

Are decision making tools disciplined or does it follow the hopes of the managers? The reason for reviewing this particular question in the literature is the juxtaposition of science and management. This is important for the NHS because the practice of medicine is bounded by the scientific method. Medical progress, the development of pharmaceuticals, the review of outcomes following a randomised control trial and even public health interventions are progressed using a cycle of observation-recording-discourse and conclusion. If that is true for the medicine then what of the management system that manages the medicine?

The desire for managers in public services to portray that they know all they need to know to make decisions for the public, is very persuasive. Ambiguity and research leading to conclusion may not be the model preferred by the public even if the NHS manager were to express such a preference. Starting with the possible methods for conducting this literature review, I myself am demonstrating some of the bias inherent in NHS management to precise rather than deliberating decision making.

Significant writers in the study of NHS management and evidence based management such as Learmonth and Rousseau are studied and a conceptual framework “The Evidence Based NHS Box” is discussed and used to reference ideas about the subject. The key outcomes of the NHS such as improving health, value for money, wellbeing and better experience of care are taken as givens but the management responses to this problem are compared from the views of those who propose and oppose evidence based management.

2. 4 The role of the tutor in shaping this problem with me

Preparation: My preparation was poor for the DBA and for the individual documents within the DBA. My goals were often poor and it was occasionally a struggle to fit clearly within the marking guidelines without help. I say this not as a confessional, but because of something it taught me. If you are not clear what you want out of the project, it is difficult to be clear about what you think is your bottom line. This would have made it easier for me and my tutors to be clear about the point when I could offer no more. It would have made it possible to be much clearer about which parts of the study I was willing to walk away from or even to be clear when we were in a stalemate position.

The opportunity, both in and out of work, to spend time thinking about one's work, one's growth and development as a manager, and one's growing edges was a novel and positive experience for all me. I found that the space and time that was created allowed me to slow down and process, and be able to present different ideas. The personal journal of learning (Cantwell & Holmes, 1994) provided an effective place for me to reflect on the multiple layers of my experience. At the beginning of the doctorate I was reticent—and even unwilling—to keep a journal, yet, in the end was genuinely surprised at how helpful it was in keeping me focused on my own growth, and personally meaningful. It was more than just an outlet for my reflections, it also became the vehicle by which I learned to be self-reflective, to struggle to identify and express one's thoughts and feelings regarding my own development as an academic. My tutor was incredibly useful in helping me to see the experience of study as important to my final thesis.

2.5 How EBM has affected my working life

Evidence-based management (EBMgt) is an emerging movement to explicitly use the current, best evidence in [management decision-making](#). Its roots are in [evidence-based medicine](#), a quality movement to apply the scientific method to medical practice.

Evidence-based management entails managerial decisions and organisational practices informed by the best available scientific evidence. Like its counterparts in medicine (Sackett 2000) and [education](#) (Thomas & Pring, 2004), the judgments EBMgt entails also consider the circumstances and ethical concerns managerial decisions involve. In contrast to medicine and education, however, EBMgt today is only hypothetical. Contemporary managers and management educators make limited use of the vast behavioural science evidence base relevant to effective management practice (Walshe & Rundall, 1999; Rousseau, 2005, 2006; Pfeffer & Sutton, 2001).

I now understand that as an NHS leader I respond slowly to changes in the environment of the NHS. Without the study of the Masters and DBA I would be – and will have to avoid being in the future – closed to options other than the status quo. NHS culture is (despite my professional and academic training) slow to respond to information from the environment or does not accept the data into the decision making model. When it comes to evidence based management (the core subject of my thesis) the biggest problem was there is no desire or awareness of the need to modify how things are currently being done. As a government department in the midst of major economic turmoil you might think that taking the time to ask “what

works best?" would be vital, or at best valid. The leadership and organisational response to this problem has been frustratingly slow.

Critical theorists have raised objections to the movement (Learmonth & Harding, 2006; Learmonth, 2006). In particular, it has been criticised for treating "evidence" and "scientific method" as if they were neutral tools. From this perspective, "management" is not necessarily an automatic good thing - it often involves the exercise of power and the exploitation of others. Efforts have been made, however, to include a balanced treatment of such issues in reviewing and interpreting the research literature for practice (Rousseau, Manning & Denyer, 2008).

Some of the publications in this area are *Evidence-Based Management* (Pfeffer & Sutton, 2006), *Harvard Business Review* (Pfeffer & Sutton, 2006), and *Hard Facts, Dangerous Half-Truths and Total Nonsense: Profiting From Evidence-Based Management* (Pfeffer & Sutton, 2006). Some of the people conducting research on the effects of evidence-based management are [Jeffrey Pfeffer](#), [Robert I. Sutton](#), and [Tracy Allison Altman](#). Pfeffer and Sutton have recently opened a [web site](#) dedicated to the movement.

On a personal level I have tended to lead successful teams of high performing individuals and usually inherited maturing or well established teams but have rarely been asked to establish new organisations when the NHS goes through its periodic regular re-organisation. So a pattern emerges throughout my 20 year career in the NHS of being the director who succeeds the first Chief Executive in an organisation, the team player who replaces the first team leader when they leave and so on. I have worked in parts of the NHS that used EBM sparingly. For example the recruitment of leaders is supported by the evidence that it is possible to assess future leaders through competency based extrapolation of their past performance and also by evidence that emotional intelligence correlates with predictions of successful leadership. EBM has existed in two ways, as a self critique by managers that some of the decisions or assertions are just plain errors which would improve if based on evidence of what works, and as an exploration of the differences in culture that exist between NHS doctors who are increasingly evidence based and NHS managers who are seen to make little progress in adopting the concept.

2.6 Peer Approval

Watching one's peers work was helpful to me for a variety of reasons. For one, observation was a way to learn new skills or techniques, and also provided a chance to compare one's own style of working to another's. On an emotional level, watching others work was both calming and anxiety-provoking depending upon the perspective of my own work and the perception of the peer I was observing.

The diversity within the group of NHS managers I studied with regard to age, race/ethnicity, level of experience as therapists, and theoretical orientation was also identified as an important facilitator of reflectivity. Diverse backgrounds allowed for multiple viewpoints and perspectives to be shared and discussed and often spurred further reflection in students' journals.

The attitudinal stances that I took were important factors in whether I could be reflective. It was easy for when I was being confident, self-efficacious, open to learning, and non-defensive about my work to be reflective. For my tutors who

were motivated by the challenges of the course rather than overwhelmed and defensive, being reflective seemed to come naturally.

Personal difficulties, at times, played a role in encouraging reflective practice. Life events such as the breakup of a significant relationship, a low grade on module 2, adjusting to a new city, becoming a parent, or struggling with parenting issues, tended to focus energy on an internal process of self-reflection. In addition, my personal difficulties with anxiety, doubt, and struggling with one's professional choice or not feeling competent stimulated a desire to be increasingly aware of one's own approach to other NHS managers with a deeper understanding and empathy for the difficulties presented.

There were some constraints within the training context that hindered me from being reflective. Some of these are consistent with the cognitive demands inherent in a DBA program in general, which places significant demands on students in terms of time and workload. Sometimes I found the workload to be too great and left too little time to be reflective about one's own growth. As a less experienced student, the facilitator's "hands-off style" was a factor that made it easy for me to maintain a reflective stance with my peers.

3 What worked and didn't work

3.1 *Worked*: The literature review: conceptual framework and literature search drew me into a much wider community

Accountants do not traditionally deal with qualitative data such as whether a patient was happy or sad or whether it looked like to him, that his father would die when a patient brought him to the emergency service. Qualitative data is not objective. It cannot be reliably verified. Quantitative data can often be verified – you can see the evidence on paper that it is correct. Accountants like myself, like things to be clear and unambiguous, for there to be no doubt, for the amounts presented to be clearly verifiable. In the literature review and throughout document 3 and document 4, I followed a reflective journey concerned with the need to be more flexible, more willing to embrace new sources of data from qualitative sources. There is still a problem that I face through traditional research designs that usually rely on a literature review leading to the formation of a hypothesis.

I am drawn to the notion that the ultimate goal of the DBA is a blog and a facebook page, where I will join a community of like minded practitioners and that the DBA is the entry requirement for a journey rather than the end in itself. The key to all of this is that the presence of trust is essential to the creation of this and I intend to shake the hands of as many of the participants as possible. I do believe that as the NHS works through the next three to five years of a much harsher macro economic climate, then the creation of such an endeavour will fit nicely into the broader range of academic centres well able to support more formal knowledge exchanges. The unique selling point of my facebook group, if there is to be one, will be to be clear about the bad knowledge.

3.2 *Didn't Work*: Making my new knowledge trusted and shared by my management colleagues

The academics are best at the distribution of good knowledge, but there is a place for suitably qualities and trusted networks to run their/our own hierarchy of evidence

within the cadre of NHS managers. The question of whether the knowledge available to us is valid within our experience and needs as NHS managers, isn't one that can be settled easily, because we have too little time to do it and anyway, experts themselves disagree. Instead, we can run our own hierarchy by using our job positions to take some actions ourselves to test the validity of the knowledge. Evidence-based-management within the NHS will therefore be grounded in an emergent process of continuous learning that leads both to better choices and a "fail fast" culture that exposes the practices that are least able to improve things.

The literature review offers the following insights.

Discourse analysis (1952) is defined as "concerned with the interrelationships between language and societies and as concerned with the interactive or dialogic properties of everyday communication". To this are added two subdivisions – genre and ideology. All of this is relevant in my study of management in the NHS because of genre and ideology. What is vital for the reader to understand as we progress on to the analysis of a specific decision, is that, without retro-fitting onto my material there was something that I hadn't anticipated, that a real human narrative evolves and in the conclusion I use the Rousseau model to reveal that however the manager feels about 'evidence' as useful in their day to day behaviour they think they are playing a different game.

So what does this tell me about the nature of knowledge? The thing about the DBS is that it creates learning sets and tutorials and that is the thing that I found hardest to fit in with. I acknowledge that knowledge flourishes in connections and relationships. Part of my qualitative study was about the nature of facet or craft knowledge. Different to explicit knowledge (that can be accessed and shared through many channels), this facet knowledge is shared by trusted colleagues showing a reciprocal desire to exchange knowledge with each other. So the learning for me is that I must make the building of connections and relationships a priority and the challenge will be to network the conclusions of this DBA. Tony Kovner told me to spend less time worrying what I said in my DBA thesis and more time figuring out how I was going to give it a presence afterwards.

4 The personal Journey

4.1 Personal Commitment – occasional and inspirational

Personal commitment was a real issue throughout the doctorate. I had planned for the doctorate to take me about 1200 hours or 8 hours a week x 50 weeks a year x 3 years. Would that it had been that simple to stick to the plan with work, family, redundancy and travel.

Fulfilling obligations to the rest of my life as well as the doctorate were complicated when I had to move jobs, but I was my own problem maker, when in 2007 I was co-opted to run an all ages football club in Nottinghamshire. In the end though, the doctorate was the respite from the rest of my life.

Proper training and explicit planning are the signs of a successful athlete and team, so I applied the same logic to the doctorate and it seems to work. Early morning starts before the family had gotten up, proper diary management so that everyone knew when the doctorate deadlines were and always having my paperwork with me when I was sent away in hotels and on aeroplanes by work, broke the task down into

the consumption of those hours. At no time did I doubt my personal commitment, but I had to prioritise it by applying sports planning.

Motivated by commitment to the NHS, this was what meant that the endeavour remained a pleasant, even fun, experience. I am American by birth, indeed, still am a citizen of the USA, yet the thing that makes the UK better than the USA is the National Health Service. The problem remains though how should we deliver rising standards of healthcare in a taxpayer-funded, free-at-the-point-of-use system, in which treatment is provided to all in the basis of need not ability to pay. So I always felt that my doctorate would help contribute to the answer.

Motivation and commitment to the doctorate came best when I had the protected time to do the work and think about what I was doing. But it was a rare moment of alchemy that made the work progress – I remember 6 hours in a New York airport and one time when I just had to get up at 3.00am to write something I had been thinking about, as times when the time, the inspiration, the material and the conclusions all came together.

Confidence and change within the DBA study programme was very slow. All I ever managed to do was follow a steady linear line upwards, knocking off the tasks one by one, module by module, document by document. The whole process will hopefully make more sense looking backwards, but whilst I have been in it the task has been harder than my other degrees or either of my professional qualifications, although the time frame has been similar for all of them.

4.2 Changes in my personal life

Some changes in my life during the doctorate hit my emotions very hard. If I had known that I would go through two family deaths, redundancy, divorce, a new baby to add to my teenage children and moving house whilst doing the doctorate, I am not sure I would have thought it the best time to do a DBA. Throughout it all though the timetable was always a couple of months behind, time I never caught up from the beginning, but never getting further behind either.

Making decisions in my life and having some other things thrown at me, never stopped the sense of purpose that this was the right window of opportunity to be doing this particular type of study. In the end my kids have remained supportive of the endeavour and my boss has kept writing the annual contributions to my tuition fees. So I have been lucky with the level of external support I received. It might be deep to call it all “tolerance and compassion” but that is the way that I think I have felt my family, friends, work and even my tutor have dealt with the DBA task as the rest of my life threw up myriad challenges. I think they have helped me to re-prioritise things and also understand when the final product delivery reflected multiple overlapping and competing objectives.

Beliefs and culture play a large part in the attitude to education. If you come from a tradition that values study as a form of leadership or even prayer, then it is philosophically much easier to find the time in the “noise” of life to continue with a doctorate. I am lucky that I come from such a tradition.

4.3 My Changing Value Set

I have seen a lot of things and read a lot of things during the time of this study that I don't want to be "tacking on" of some extra and dispensable information, but rather an integral part of the learning experience. I have been given the opportunity to rethink and refashion my beliefs as I confront a dilemma, without fear of any authoritative imposition of beliefs from others. As a student who has experienced a diversity of alternative ideas I have begun to develop a more global viewpoint and be able to consider different aspects of a problem. Now I see that ethical thinking is neither a matter of pure intellect nor of gut feelings and prejudices. What is important here is one's reasoning and critical thinking skills. Thus, by strengthening and expanding these skills, I have been able to view our ever-changing policy world from a new perspective, and not be limited by the past or previous belief-systems. I now understand my decision making to be something like the following and that my values adjust accordingly.

- 1) What are the facts? What is available at this time?
- 2) Identify and define the ethical problem:
- 3) Who are the stakeholders in the decision?
- 4a) What options do you see are available to resolve this dilemma?
- 4b) Which options are the most compelling? Why?
- 5a) How would you resolve the dilemma?
- 5b) What values did you rely on to make your decision?
- 6) What consequences (if any) do you see your decision has on the others involved?
- 7) Could you personally live with this decision? Remember that no decision is immune to pressures of time and how we feel either.

5. Where this all fits

5.1 Anthony Kovner

Approach and Methods. Let me be clear. Tony is a professor, his wife is a professor, his daughter is a professor, his son-in-law is a professor. Tony is not an academic lightweight. He is published and quoted and re-published. Yet in amongst all of the people I read, Tony was the one who had a lifetime of being an administrator, researcher and teacher, so his perspective on the world of healthcare (even though he is regarding America) was the nearest I found to somebody "holding up a mirror" to themselves and their peer group. Put simply, he takes a position on the current state of healthcare management, board governance and the importance of research in management practice. In particular, he notes that decision makers would like evidence that is more applicable to their actual decisions, includes information of what needs to be done, is more easily accessible and that researchers and decision makers should consider long-term collaborations to help identify topics for and parameters of evidence development. He has encapsulated all of this in a book – but one that retails in paperback at £50 a time. After 20 years of looking at this issue of evidence based management, I would say that he has come to the following conclusions: that the case for evidence based management in healthcare remains a political judgement and that the return on investment calculation has not been, but

could be, reliably made by any healthcare system. It is important to note that his 20 years of study are characterised by an increasing belief that hospital boards do not review the quality of managerial decisions, so would never know whether things need improving. Underlying all of his way of working is an almost iconoclastic belief in the widespread use of evidence to shift power away from senior towards junior managers. Tony was widely respected, that much is clear, but even in the NYU Wagner school within which he taught, his ideas were not necessarily mainstream. Finally though, in his methods he always espoused academic rigour. When talking to managers in the field of healthcare, he always took time to properly frame research questions, obtain evidence as to why intervention might/might not work in various contexts, evaluate evidence with a balance of viewpoints represented and consider when further evidence was needed to support a decision.

5.2 Confidence and Change

First we must create awareness of the need to change. What are the compelling reasons to move away from the familiar and comfortable and move to something different and perhaps uncomfortable?

In today's deficit funded NHS, more and more people are becoming aware of the need for improving the way or the NHS works. However, if we really want to turn up the heat on change, we must discuss internally the specific challenges facing the NHS.

Who is our benchmark? What are they doing? What new products and services are they adding? Is the public support for the NHS expanding or contracting? What are our costs and revenues per employee versus other countries? Will our products be subject to new environmental controls? What will rapidly expanding telecommunications technology mean to us and our existing work processes? Can we reduce our overhead expenses to match those considered best in the world? Could we really become "paperless?" How could we reduce our basic work process by 10 steps this month? How could we improve turnaround time by 90%?

It is my opinion that the more productive an organization is, the more creative it must be in creating the appropriate challenge. One Chief Executive I worked with wanted to increase the rate of implementation of employee involvement, which for several years had been painfully slow. What, I asked myself, would provide some motivation for these people to move forward?

How I am linking into on-going research in EBM. Support for diffusion fellows and academics is developing, but the key is the consistency of the key players. If one were to consider that Kovner and Billings are at Wagner NYU and that Billings works closely with the Nuffield Trust in the UK, that Ham is at the HSMC in Birmingham and is a writer for Nuffield Trust and latterly has re-joined the Kings Fund, the same Kings Fund that was lead by Jo Boufford of Wagner NYU. A pattern emerges that a grouping of these organisations, plus my favourite Rousseau of Carnegie Mellon and Pfeffer and Sutton of Harvard Business School would very quickly present a comprehensive coverage of the subject as it could be presented to the NHS. It is my intention when the DBA is (hopefully) passed and completed, to email these key players with a simple question of whether they think the NHS provides a unique grounding for further study of this subject and whether they would each be willing to

give me an hour of their time. Some I have met already. Only Rousseau is a logistical challenge to meet, but then Pittsburgh, PA is not that far away from my normal travel routes. At the very least, I intend to present the answer to the question in the British Medical Journal and the widely read, but less academic Health Service Journal in late 2010/early 2011.

5.3 Changing myself

I learned something very useful about the nature of reflection. I started off keeping a diary – as advised at the start of the DBA, it would help when it came to write Document 6. This enabled me to record what was learned whilst the experience was very fresh (and in one lunchtime immediate). This was necessarily collected chronologically. What I learned though was that the most useful thing was not to try to make sense of all this until much, much later. Collecting my observations together within the themes I set for Document 6, has given me much more insight into the learning experience, than if I had tried to make sense of this in the same chronological order that the observations were made (my previous or inherited learning form was like this). When reading about this issue, I came across a thing called the eportfolio system which I will use to help me emphasise this type of learning in the future. The eportfolio system should help me to build more of a retrospective about what I learned. The reason that this is useful and significant, is that I am a qualified accountant and necessarily complete a mandatory cpd (continuing professional development) requirement each year. This eportfolio system will enable me to describe my cpd, not as a series of task-and-finish seminars, but as a rounded reflection of the last one and last three years. I will also be able to note where my competence acquired was actually different to what I thought it was when the learning experience was very recent.

Becoming a broker between research and practice, I feel that I have found myself in a positive and comfortable slot where I am not an advocate (more of which below), but a potentially trustworthy broker. I have shown in this DBA that research can be a powerful tool to improve the structure and practice of management in the NHS. It can be argued that the emphasis on targets in the NHS is affecting decision making (and decision makers) by increasing the demand for evidence on the effectiveness of various strategies for hitting these targets. But as the broker, I do not hold with that argument. In an era where the NHS is driven by the twin forces of performance and accountability, not much has been asked of management research. The policy is centrally directed and the management task to deliver the target is as discretionary and varied as the accountable officer wants it to be. So there is a space to broker in some academic content and research. On the other hand, I have seen in my brokerage role that even ‘engaged’ managers have oversimplified the problem about translating research into evidence for/about management practice. My brokerage role is therefore, also to promote a realism about what research evidence can do. The assumption that research is useless or that alternatively, evidence can simply tell managers what to do are commonly held – diametrically opposed positions. Both are wrong. Brokerage will close the gap.

Not being an advocate. Evidence based management is just another tool. It is not the only tool. It is not the toolbox itself. So I say “lets try it” – the alternative is to follow another fad or fashion that doesn’t fit with the organisational culture. Learmonth would probably accuse me of hijacking the prevailing (superior) medical

ethic and superimposing my own managerialist culture on the organisation, but he would be wrong. In no way have I become an advocate for evidence based management in healthcare. But then neither have the people I have read and enjoyed. What supporters, if you can call them that, of evidence based management in healthcare say, is that there is a theoretical application of EBM to improve management decision making and that it is worthy of field study. After all, the role of an advocate would be to intercede on behalf of EBM and it is not always clear how and when this opportunity would arise. What I can be said to be, is a conspicuous follower and an intrigued supporter of the concept, who will offer this positively if asked to debate the matter.

A development of my wider USA/International perspective has taken place in my working life. The department I head up was chosen to be a year long study in how we use evidence. Working with Warwick University and a grant from SDO (the NHS) it has been possible for our meetings, our 1 to 1's, our phone conversations, our emails and our interviews to give qualitative data for the researchers to collect. This will be classified into the tools that we use to make decisions and how we make decisions. Researchers have been given organised and co-ordinated (but free and unrestricted) access to a department of 200 people and as much time as they wanted with senior people.

Joining the Nottingham University CLAHRC (Collaboration for Leadership in Applied Health Research and Care) was also a significant event, as it entailed committing PCT funds of £180,000 over four years to become a member. The CLAHRC has the remit to develop new approaches to healthcare research and to enable research to be implemented in ways that bridge the gap between the academic and the practitioner.

5.4 In Conclusion

In conclusion. The DBA worked for me because the location of the university, the reputation of the course, the method of study, the resources invested by me and the university, the personal commitment of the tutor and the quality of supervision were all perfectly able to accommodate my needs. For anyone undertaking this DBA I would say that by the time you have a clear idea of the research you wish to undertake, you will find you are in the right place, but figuring out your own research agenda may be as hard as the research itself. There was a particular problem in my situation in that the NHS had significantly funded half of the DBA which was the result of an exit payment from a senior post in the NHS. So although the NHS had implicitly recognised the benefit of a DBA to the NHS, the NHS as a sponsor had not had to make the decision on the specific organisational issue they wished me to develop and research solutions for. So I would recommend that anybody in my position again, gets themselves an internal sponsor or champion within the NHS to work with as well as the course tutors. There is no doubt that a DBA was much better at exploring the organisational question of evidence in NHS management than a Phd, but I think the NHS organisation is more experienced in dealing with Phd's. Ironically, Manchester Business School (Manchester Metropolitan) open up their DBA with a unit of evidence based management which says "in this unit you consider the case for research-informed management practice. You review current evidence based practice in management, considering developments in other disciplines and establish understanding of processes and levels of such practice" (www.ribm.mmu.ac.uk). But I still think I chose the right DBA course for me.

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