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Increasing the motivation and ability of health care managers to access and use management research

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1. Aims

We will investigate the argument that:

Healthcare managers' motivation and ability to access and use management research may (under some circumstances) be increasing from historically low levels, due to the professionalisation of management and a developing high-quality knowledge-base.

If empirical data confirm this proposition, it is a significant development which has not been adequately explored in the literature or in policy, with important policy implications for research generation, education, socialisation and mentoring of managers. 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 and D arena (Dopson and FitzGerald, 2005). 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 is a novel and exciting idea which requires further investigation.

We can operationalise our broad idea into the following research question:

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?

2. Background

This argument is largely under-investigated. Despite much work on how clinicians use and enact clinical research which is now well known (Dopson and FitzGerald, 2005), there is less on healthcare *managers'* use of *management research* and how this might be evolving. Our earlier work concluded that healthcare management was largely invisible in the Evidence Based Medicine arena (Ferlie et al, 2005; Dopson and FitzGerald, 2005). Healthcare managers may have become more interested in evidence-based guidelines (e.g. National Service Frameworks), but a recent study (McGivern et al, 2008b) found managers were motivated to meet targets rather than read or 'own' research. So the baseline is one of very limited engagement of health care managers with research.

Why might this depressing picture change? The broader context is one of a very significant expansion of management education generally over the last twenty years which has been characterized by growing number - and variety – of management programs and higher enrolments (Doh and Stumpf, 2007). Business Schools now account for about one seventh of all students in UK Higher Education (223,041 FTE in 2005/6, see http://www.the-abs.org.uk/). The rise of the Business School is a noteworthy feature of UK higher education. The ABS web site lists over 100 member Schools, even though the first two Schools (London and Manchester) were founded as recently as 1965.

As part of a professionalisation process (Abbott, 1988; Khurana, 2007) managerial qualifications are moving toward graduate or even post graduate education (AACSB-International, 2002). The emphasis on research in many UK Business Schools has been accentuated by the effects of the Research Assessment Exercise. There has been an expansion of peer reviewed academic journals, with a hierarchy of esteem emerging (as in the ABS list of peer ranked journals). The top management journals are now extremely competitive to publish in, with some complaints that Business Schools are now divorcing themselves from their roots in practice and becoming captured by professional researchers (Bennis and O'Toole, 2005). This is contested by some bio medical researchers (Lilford et al, 2003). Mirroring the experience of other fields, such as medicine (Lemieux-Charles and Champagne, 2004, Sackett et al., 2000), education (Thomas and Pring, 2004), policing (Petrosino et al., 2003) and psychology (DeAngelis, 2005), some academic authors have recently started to delve into the implications that the evidence-based management could have on the structure of management curricula, type of faculty, and research (in the academic side) and on the decisions and managerial practices (in the practitioners side) (Rousseau, 2006a, Rousseau, 2006b, Pfeffer, 2007).

The emergence of clinical managerial hybrid roles (such as Clinical Directors) has also been significant. These role holders were originally educated as doctors in Medical Schools where there is a well developed bio medical research base, but then acquired a second identity as a manager. Clinical managers began to develop their own institutions (such as the British Association of Medical Managers BAMM) and journals (such as 'Clinician in Management').

Some of them developed an interest in research into health care organisations which had potential relevance to their new role or even began to contribute to this literature. We would wish to examine the 'research mindedness' of these clinical managerial hybrids as well as NHS general managers. In addition, a new intellectual discipline of Health Services Research has emerged which brings together researchers from many backgrounds in investigating

questions of health care service delivery, including some clinicians. A wider range of non traditional methods, including action research and qualitative work, has been evident (Fulop et al, 2001) in HSR. The SDO R and D programme has also been active in generating a knowledge base in this field both in terms of primary empirical research and broader overviews, and some of its publications (Iles and Sutherland, 2001) have been very widely disseminated to NHS managers and might be thought to be 'high impact'.

Some organisational research has proved to be very high impact in the NHS field, notably the work of Berwick and his IHI group at Boston (Berwick, 1996) which helped diffuse the notions of service redesign and patient pathways into NHS management. It was picked up by the NHS Modernisation Agency as a key technique for the modernisation of health care, for example, through the Cancer Collaboratives (Buchanan et al, 2007). So the role of national agencies in the diffusion of management research into the NHS field also needs to be considered.

What kind of knowledge base is emerging? Much of this research base is qualitative, often case based, or involving an action research element (Buchanan et al, 2007 is a good example). IHI's Plan Do Study Act cycles is another variant of this approach. Quality ideas and applied research techniques, perhaps associated with the 'Japanisation' of British management including the NHS, are also evident. Such a style of research may be thought to be more likely to connect with and engage practising NHS managers than (say) econometric modelling or RCTS. If it is related to concrete work problems that they are facing, they may be well motivated to apply it.

We argue that (i) the *supply* of health care management research has increased in quantity and improved in quality (ii) that the *demand* for it has increased at least amongst highly educated local managers and some key national agencies and (iii) the *motivation and capacity* to apply it has also increased. This is a more positive picture than evident historically. Health system policy/decision makers around the world have committed to evidence based decision making as sound and responsible practice (WHO, 2004). Now it is unlikely that there is as yet a system wide shift; rather these more positive behaviours may as yet be confined to 'leading edge' settings. It suggests that such a study of 'leading edge' settings is now warranted to see if empirical data support the general, novel and forward looking argument developed here.

Our understanding of the processes involved in knowledge acquisition and utilisation can be informed by previous well known and established research on organisational learning (Cook and Brown, 1999; Nicolini et al, 2003) knowledge transfer and translation (Von Hippel, 1994, Zander and Kogut, 1995, Szulanski, 1996). In particular, we note that organisational learning is conceptualised as situated learning (Gheradi, 2000) and that knowledge transfer or translation cannot be simplified as a mere flow of information (Carlile, 2004); Rouseau & McCarthy, 2007). Agents have to learn not only the principles (*what*) but also the procedures (*how*), and then judge if they apply to each concrete case, since there are no rules that are self-contained and/or complete: all rules and norms need the interpretation of the agents, they are always inherently indeterminate (Tsoukas, 1996).

Reflecting on existing research on knowledge utilization, it has traditionally considered utilization as the immediate and direct impact of research in decision making and policy design. In our own work, we have argued there are many more dimensions to research utilization. Drawing on a large set of empirical case studies of evidence based health care initiatives we provided a social analysis of knowledge translation and utilization in this context which scripted in perspectives and concerns of the field (Dopson and Fitzgerald, 2005). We argued that utilising and adopting knowledge depends on a set of social processes which would include: sensing and interpreting new evidence; integrating it with existing evidence, including tacit evidence; its reinforcement or marginalisation by professional networks and communities of practice; relating the new evidence to the needs of the local context; discussing the evidence with local stakeholders; taking joint decisions about its enactment and finally changing practice.

While some studies from economics (Ghoshal and Moran, 1996) and finance (MacKenzie, 2003, Ferraro et al., 2005) have shed light on the effects of some theories and research on practitioners' decision-making, we are left craving for empirical research on how managers use the research base of organizational knowledge in their decision making. In general, Rousseau asserts that "active users of social science evidence in industry, to date, regrettably are few and far between" (2006b:1091). Several reasons have been articulated to explain the apparently low number of mangers using 'Evidence Based Management': the lack of consensus in social science about cause-effect connections in organizational research (Rousseau, 2006b), the distance between the researchers and practitioners interests (Pfeffer, 2007, Clinebell and Clinebell, 2008), the wide use of personal experience and /or information based on weak evidence in management decision making (Staw and Epstein, 2000, Walshe and Rundall, 2001), among others. However, the available literature does not indicate any empirical study of managers use of management research, and how they derive principles from research evidence and translate them into concrete actions to resolve problems (cf. Rousseau, 2006a). There is a need for a more forward looking and novel study which will explore this important argument. Equally there is a wide body of literature on technological innovation, but there has been little written about managerial innovation. We will draw on the findings of a recent AIM research programme on managerial innovation (Birkinshaw et al., 2005) examining how and why it occurs, applying this research to the healthcare context.

These research-practice gaps have also been found in hybrid roles, such as that of clinical managers. While health care systems have been used as an exemplar in the introduction of an evidence-based approach in the clinical realm (Rousseau and McCarthy, 2007) and this has been the focus of many studies (see e.g. Dopson et al., 1999, Surender et al., 2002, Ferlie et al., 2005, Addicott et al.), to date the acceptance of EBM ideas in health-care managerial practice is low (Walshe and Rundall, 2001), even when it is recognized that that healthcare managers are facing increasing pressures in a more competitive and changing environment (Kovner et al., 2000). The few identified cases / projects in the domain of health care management that try to foster EBM (e.g. Centre for Health Management Research) point toward some ideas: a) that a evidence-based culture should be fostered (Walshe and Rundall, 2001), b) that both evidence and organizational process and incentive to use it should be available (Frosini, forthcoming), and c) that managerial practices and way of making decision should be changed in order to fully use EBM (Walshe and Rundall, 2001). But this is normative rather than empirical argumentation so that empirical knowledge about the current picture and the conditions under which these positive processes occur is badly needed.

3. Need

Our proposal relates to the theme: knowledge utilization in health care management: improving managerial decision-making though better use of relevant evidence. The design enables us to comment on the use health care managers (both general and hybrid clinical managers.) make of different forms of evidence in different contexts that appear to us to be pivotal to the 21st century health economy. The value and contribution of the mixed methods design including case studies proposed lies in the ability to provide an in-depth understanding of the social processes involved in knowledge utilization in this area. Furthermore, the action research aspect to the design will allow the identification and evaluation of promising practices that facilitate in a positive fashion the uptake and use of knowledge that will impact on health care service delivery, organization and leadership.

4. Methods

Our design uses mixed methods, having a linked, three staged design, which deliberately explores the boundary between management research and practice.

Part 1: The analysis will focus on individuals' motivations to seek out management knowledge and research, their search strategies, how this is affected by their career backgrounds, demographics, and barriers they experience to accessing and using this knowledge. Interviews will be analysed drawing on content analysis techniques (Boyatzis, 1998; Miles and Huberman, 1994; Bryman and Burgess, 1999; Silverman 2001)

Part 2: We will deepen our understanding of these issues by exploring them within an organisational context, employing comparative case study analysis techniques. (Fitzgerald and Dopson, 2009)

Part 3: We will explore: the ways in which participants from a diverse range of organisation settings learn from each other and change their practice as a result of participating in this organisational intervention; participants own perceptions of how they have changed; their colleagues perceptions of such changes (linked to Part 2); and those of an independent observer from the research team.

5. Contribution to existing research

Benefits of research to NHS:

National level

- Using a range of complementary research techniques the work will generate rich research data and will create a particularly strong and robust evidence-base on the factors (individual, group and organisational level) impacting on access and use of managerial knowledge.
- The deliberate exploration of knowledge utilization process in settings critical to the 21st century health economy will provide useful data for policy makers and may inform discussions of how to improve knowledge flows between these settings.

Case level

- We will be explicitly examining the boundary between management research and practice which has thus far been difficult to transcend.
- The adoption of a comparative case design will produce knowledge of the research issues in diverse settings that can be used for reflection and will lead to changes in practice that will improve decision-making in the sites.

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Individual level

Engagement with the research process should provide an opportunity for individuals to reflect on practice and access new knowledge and networks that positively influence practice.

6. Plan of Investigation

Part 1 Access and the creation of a cohort of managers -

Initially, a thorough literature review would be undertaken by a Doctoral candidate who is working in the utilisation of knowledge field. This literature review would crucially inform the design of research instruments and ensure informed choice of analytical frameworks. Core to the design, is exploring the acquisition and utilization of knowledge from the

field of management/ organisation studies in a wide diversity of healthcare-related settings. These settings will be purposefully selected to explore the links between individual motivation, learning, action and group and organisational incentives/disincentives to acquire new managerial knowledge. We will study similar social processes in different settings. The design also affords the possibility of multi-context and multi-disciplinary knowledge sharing between settings. Candidate organizational settings proposed are:

- NHS acute trust
- NHS PCT
- Private organisation/hospital
- Management consultancy specialising in healthcare (an expanding knowledge-based industry).
- A translational research centre, linking bio-medical knowledge with organisational knowledge on research diffusion, e.g. CLARHC.
- A national regulatory agency (e.g. NICE or NIIH) seeking to access organisational knowledge;
- A policy division of the Dept of Health.

The final choice of the sites (we expect to do up to 6) would all be selected as 'leading edge settings'.Each setting delivers a different orientation on using knowledge. This is deliberately a study of 'positive outliers' because a study of the health system as a whole would still be unlikely to generate many examples of healthcare managers effectively using management research. Negotiation of access and ethical clearance issues will be dealt with in the first phase.

An important activity in the first phase of the research is to create a cohort of managers interested in using research in order to explore their relationship to management knowledge, and to consider the nature of management knowledge drawn upon. Such knowledge would include knowledge of service delivery and organisation as well as management and leadership knowledge more generally. 'Interest' is defined as having researched or published on a management related topic; or holding a higher degree MPhil, DBA, PhD in a healthcare management related subject; or devising a new evidence-based training, consulting, management or policy programme. This phase will focus primarily on exploring the individual's perspective and enable detailed investigation of how and why an individual:

a) is motivated to seek new knowledge;
b) decides on the logic of their search processes and the sources used;
c) utilises this knowledge within their work. This will include investigating the organizational facilitators and inhibitors to knowledge utilisation.
d) knowledge use is affected by a 'knowledge career' and effects on underlying knowledge identity, at work. In particular we will look at the impact of early experiences or management and managerial role models, on the way managers enact management roles later in their careers (see McGivern et al 2008a);

All respondents will be invited to join the action learning sets. This phase of the research (as set out below in part 3) will offer respondents the benefits of learning and sharing with other like-minded individuals.

Part 2 Case studies

The primary focus of Part 2 is on the utilization of knowledge in context. It comprises in-depth comparative case studies of management knowledge utilisation and transfer in a, particular social context (selected in Part 1) of which the managers are a part. Each of these diverse sub-sectors will be chosen by our steering group for their significance to various facets of processes of knowledge utilisation in a healthcare economy which has become more diverse and multi layered. For each site we will study a concrete tracer issue (for example, a leadership development intervention, process redesign, or an organisational development programme such as 'pursuit of perfection') to explore if any of our learning about individual processes of knowledge utilisation in phase 1 matters. Case studies will be constructed from multiple methods. Firstly, relevant documentary materials will be collected and analysed, relating to both strategy development in the context and HRM processes for supporting learning for the concrete tracer issue. Secondly, about 12-15 interviews will be conducted at each site. The sample will be drawn from people who have sought knowledge and are trying to do something with it as well as relevant stakeholders in this effort. The focus of these interviews will be the way that individuals (particularly those participating in part 1) use management knowledge and research in their settings and to what extent aspects of context facilitate or hinder this. Thus Parts 1 and 2 will be linked and learning from parts 1 will be explored in part 2. Interviews will also be carried out with stakeholders in the change processes being studied to get their perceptions of on it and how managers use management knowledge. The case studies will enable us to learn about what happens in knowledge intensive sites. The range and diversity of the sites, enables us to study organizations that play a significant role in the 21st century health economy. These organisations will need to learn from each other and make meaningful strategic connections if service delivery, organisation and healthcare outcomes are to be improved.

Part 3 Action learning sets: An evaluated capacity building intervention
The design incorporates the formation of three action learning sets in order to test and evaluate this form of intervention as a method of sharing research-based learning and of encouraging and facilitating the uptake and utilisation of research-based evidence. This third action learning phase of the project will itself be an experiment in how managers use management/organisation, knowledge/research in healthcare related settings, and processes of inter-organisational learning.

Data will be analysed using three different sets of data

a) observer and facilitator will produce analysis of each set
b) Collectively the observers will explore for themes across the sets.
c) We will analyse the reflections of the set members

7. *Project Oversight*

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8. Service users/public involvement

Proposals for the involvement of stakeholders

- For each case study we will offer a half day workshop on site to discuss findings and possible changes to practice, which will also act as an opportunity to check the relevance and usefulness of the fieldwork.
- Action learning sets will provide personal development opportunities for participants. We will bring representatives from case study sites together to share learning in a facilitated day workshops. (see phase 3)

- The project will disseminate its findings to a range of stakeholders outside the case study organisations, comprising three elements. Firstly, a project conference that will allow us to feedback the findings to those who have been involved in the research process and more widely to outside interested parties. We will discuss with relevant organisations e.g. BAMM and or Health Services Research Network the possibility of a jointly organised conference. Secondly a project website (linked to the blog /chat room) containing research findings from with lasting public access beyond the life of the project. Finally academic, policy oriented and applied papers in peer reviewed journals, conference and other relevant outlets.

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