Explaining Health Managers' Information Seeking Behaviour and Use

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This report contains transcripts of interviews conducted in the course of the research and contains language which may offend some readers.

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Disclaimer:

Criteria for inclusion

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Contributions of Authors

Professor Christine Edwards: Chief Investigator and Lead Applicant, who oversaw the progress and development of the project, undertaking case study interviews, data analysis and was the lead contributor in the writing of the final report.

Dr Rebekah Fox: Research Fellow involved in all aspects of the project.

Dr Steven Gillard: Co-applicant. Set up user panel and advised on user involvement process, advice on qualitative analysis, review and revision of report.

Dr Stephen Gourlay: Co applicant involved in initial project development and literature review for the report.

Dr Pinar Guven: Involvement in all stages of the project, secured access and undertook interviews for East of England cases. Analysis and writing up of case studies, review and revision of report.

Professor Charles Jackson: Responsible for the design and analysis of the national survey of health managers and the survey of librarians. Author of the sections of the report presenting the survey findings.

Professor Mary Chambers: Co-applicant, involved in initial project design, development stages of the project. Review and revision of the report.

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Executive Summary

Background

The term information behaviour covers the range of activities from awareness of a need for information or evidence to inform decision-making, through to the activities of searching, collecting, evaluating and using such information. It also includes the role that information intermediaries (knowledge managers, librarians) play in such processes.

It is widely accepted that managers will make better decisions if their decision making process is based on good quality information. However, although the concept of evidence based practice is well established in relation to clinical practice, what little research there is suggests that health managers largely rely on experience and intuition. While there are studies of clinical professionals, health services managers' information behaviour has not been investigated systematically. This project contributes to improved knowledge and thus provides grounding for better practice.

The study concerned anyone who has managerial responsibilities as all or part of their job, and included clinical and professional staff as well as general managers.

Aims

The aims of the project were to analyse the information behaviour of health service managers in decision-making, to identify the facilitators and barriers to the use of information, and to develop guidelines for improving practice.

Methods

The study employed a mixed methodology in two phases:

Phase I: Qualitative and background data collection.

Case studies of five innovative projects were made in five Trusts – mental health, acute and primary. These covered a range of Trust investment in information use resources. Projects were selected to illustrate contrasting tasks and contexts and to capture variation in information behaviour. In depth interviews were held with 54 managers involved in the projects. The interviews provided rich descriptive evidence, operant categories of perspectives on information behaviour, and informed the construction of the surveys in Phase 2. Documentary evidence relating to the participating Trusts and projects was also collected.

Interviews were transcribed and analysed by theme. Statements were extracted for use in a Q sort exercise where 33 managers prioritised them

in relation to their own information use. Analyses of sorts were used to identify attitudinal statements for use in the two surveys.

<u>Phase 2: National survey of managers and a survey of librarians</u>

The managers' survey (n=2092 across 59 Trusts) was used to generalise information about managers' information behaviour derived from Phase 1. The intermediaries' survey (n=151) informed us about services and resources available to managers, and managers' use of them. Analysis was performed to identify associations between information behaviour and personal characteristics, attitudes, job and tasks, and Trust culture, type, and performance.

There was user/participant input at the design and analysis stages of each phase in order to draw on their expertise and to ensure authenticity of the results. An SDO management fellow was seconded from a local Trust for one year as a full member of the core research team.

It was not possible to calculate a response rate, as the size of the populations of managers and librarians invited to participate were unknown, but there was good coverage of Trust type and performance, and professions and job roles. This is the most comprehensive study of health managers information use undertaken in the UK. The research probably included a disproportionate number of managers with high information needs and usage, but these are a key target group for action.

Results

Virtually all managers see information use as important, and are engaged not only in seeking but also passing on information. Those involved in strategy/long-term planning and/or the management of major change have even greater information needs.

Only one third found it easy to find information relevant to their work as a manager. They also found it difficult to access information either through lack of time, information overload, or not knowing where to find it.

Training in information search was helpful, but those with significant expertise in search and research based sources – librarians and medical staff – reported most difficulty in finding information related to management. However, those who have studied management find it easier, indicating that grounding in management knowledge is important for effective search, selection and application.

Managers used a variety of different sources, online, written, people/ networks, and education and training courses. Internet/online sources were very widely used, but personal contacts are more important, and there was also a heavy use of internal Trust data.

A great deal of information is passed on verbally and acquired through direct observation such as visits to other Trusts, "doing" (experiential

learning), and contact with frontline staff and service users. For most managers, seeing "what works" is critical information.

Most decision-making and information gathering is performed in groups or teams and these were mechanisms for knowledge sharing, and repositories of information. In addition, formal and informal networks, both internal and external to Trusts, are a primary source of information for all managers and these important knowledge sharing relationships were being disrupted by organisational and service restructuring.

There has been growth in NHS and healthcare evidence-based sources, although only a few Trusts and libraries have significant management collections. Whereas some managers were frequent and enthusiastic users, many were unaware of these sources.

Managers did not report a great deal of direct use of library services, but some make very heavy use. There was much good practice, but resources and services offered varied considerably. Libraries were often seen primarily as repositories of clinical or research based information, and this was a minor source for most managers.

Sources used varied substantially by job role and profession, as did the ones managers found most useful. In particular, there were specific sources that were rarely or never used by most respondents, but were used frequently by people in certain job roles.

Overall, job role and task accounted for the most significant variations in behaviour. The only personal characteristic associated with variation was level of education, with those who had studied at postgraduate level being far more active, finding it easier to find information, and being more likely to use academic sources and those external to the Trust.

There were differences between Trusts in terms of the degree to which the culture supports information seeking and use. There was, however, little evidence linking use of information sources to measures of performance in the Trust in which respondents worked.

Models of information behaviour, while useful, underplay the importance of social and organisational processes. These are best studied through qualitative methods and investigation not bounded by a particular theoretical framework.

Quantitative data gathered in the surveys, on the other hand, were important for generalisation and testing relationships between variables. Triangulation of the three data sets proved invaluable, both in validating findings and in covering the topics from a variety of perspectives.

Conclusions

Managers are overwhelmed with too much information of various types and quality, yet often cannot find the information they need. They use many

different sources, but personal experience and seeing what works can be more influential than academic or formal sources. However, the research illustrates the difficulty of transferring models of good practice into different contexts. If managers do not have a sound set of criteria and the skills for assessing the effectiveness of what they observe, they are vulnerable to the latest fad or fashion. They need guidance in the critical evaluation of management knowledge. This is provided in some postgraduate programmes in management, but usually focuses on academic research. It needs to be extended to encompass all types of source, and input into general postgraduate education. The extent to which courses currently do so varies and requires further investigation.

Large differences were found in the types of information used and valued by job role and profession. This can be particularly problematic in such a diverse organisation as the NHS, where disagreements on the validity of different types of information can impede effective decision making. Training in critical evaluation, search, and management training undertaken in mixed groups might be expected to promote mutual understanding.

The fact that much clinical innovation has implications for management suggests that recommendations for clinical innovation should also include information relevant to management.

Other people are a major information source for managers, and mechanisms for knowledge exchange take many forms. Managers need to consider how groups, teams, learning sets etc can be used to enhance information collection and exchange.

Radical restructuring of organisations and services can lead to information loss and this suggests that measures to facilitate and replace information networks should be an important consideration in the design of new services. More research is needed on how best to meet this challenge.

While managers under pressure can benefit considerably from evidence informed toolkits, extensive use and rigid guidelines could stifle innovation. Actions to promote awareness of a range of different sources, and linkages between health care information sources and websites are required to increase use. Online and other providers have a heavy responsibility to ensure content meets high standards of validity as well as relevance. How this might be best achieved requires further investigation.

Librarians would benefit from greater expert knowledge in management and working more closely with managers in order to understand their information needs and raise awareness of the resources and services they offer. More detailed research is required on which services are most useful to managers and how to improve them.