A case study on determining and responding to health managers' priorities for research to assist health service decision making

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Abstract

The Newcastle Institute of Public Health (NIPH) is a collaboration of health service and public health research groups in the Hunter Region of New South Wales, Australia which aims to promote the use of evidence in decision making. However, use of research evidence in decision making is a complex process, with many barriers and enablers described in the literature.

Informed by strategies described in the literature around developing priority-driven research, NIPH researchers undertook to determine whether asking local health decision-makers about their needs for research information might lead to greater use of the resulting research evidence to inform health service management decisions. This paper describes a process used by NIPH to determine the research needs of 11 local senior health managers, our response to specific research questions, the communication of this research information, and the outcome.

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What is known about the topic?

Assisting health service decision makers to use health service research evidence remains a challenge.

What does this paper add?

Researchers from the Newcastle Institute of Public Health assisted health services managers to identify research information which could assist in their decision making. Research evidence answering a specific research question was then reported back to the managers, who used the information in a planning decision.

What are the implications for practitioners?

Asking local health service managers about what they want to know *before* embarking on a local health services research program may promote the use of research information by those health service managers in their decisions. ◆

ACHIEVING SUCCESSFUL research or knowledge transfer — that is, the process where research informs policy, management or clinical practice decision making — is a critical issue in health services and public health research.[1-3] Substantial research has been done concerning how best to frame, communicate and distribute research information to ensure maximum uptake and incorporation by decision makers.[3-6] Strategies to facilitate this process include peer-led championship of evidence into practice.[7] Lin sets out an agenda for research transfer which recognises the imperative to focus on the interests and the needs of the user of the research.[8] However, researchers and decision makers have been considered by some commentators to have differing perspectives,[1,9,10] so that accusations by researchers that policy or practice decisions are made in an evidence vacuum have been made, with some justification.[11,12]

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Recognising that a gap between researchers and health service decision-makers might impede the use of evidence for health sector decision making, the Newcastle Institute of Public Health (NIPH) was established in 1998 with a structure and operational processes to maximise the potential for research and knowledge transfer. These structures and processes included being set up as a research partnership between the University of Newcastle (the only university in the Hunter Region of New South Wales) and the then Hunter Area Health Service (HAHS) (a health service providing public health care to over 500 000 people).* In addition, a deliberate program of seeking to consult with end-users of research to generate research priorities was commenced, and two staff with qualifications and experience in clinical care, research and health services management and professional writing and communication were employed to assist research communication. Many NIPH research leaders were themselves the heads of their clinical departments in the HAHS.

In this paper, we describe how NIPH researchers sought to determine and respond to the priorities for research information of senior health service managers in our local Area Health Service (AHS). We had four aims: to identify key areas for health services research; to have managers nominate health management questions for research; to answer the nominated research questions; and to report clear information back to the health service decision makers for their use.

Methods

In 2000 and 2001 we undertook a three-step process to meet our stated aims.

1 Identifying health service manager priorities for research information

Manager priorities were determined using personal interview, a survey and a workshop. Nine of the 11 most senior HAHS managers were interviewed, for between 30 and 60 minutes, at a location convenient to them. Managers were asked "If NIPH researchers were to seek external resources to undertake health services research, what research should we do?" One person with previous experience in health services management conducted all interviews. Key themes which emerged from the interviews were identified and reported back to the nine interviewees and the two remaining senior managers. These managers were then asked to rank the themes in order of need for information to assist health service decision making. Managers were also asked to suggest specific projects and were given the opportunity to suggest additional themes.

A two-hour workshop to finalise the senior managers' information priorities and identify specific research questions, attended by 10 out of the 11 managers, was facilitated by a health services researcher external to the organisation. The research themes nominated and ranked by the 11 managers at the survey stage were discussed and the order of priority finalised. Specific health services research questions of immediate relevance to the managers were identified within the themes. In addition, the group reflected on the research priorities of major external funding agencies, such as NSW Health and the National Health and Medical Research Council (NHMRC), to determine the extent to which the managers' priorities overlapped with likely sources of funding (and therefore likelihood of attracting external funding).

2 Answering a specific health services management question on hospital-in-the-home

NIPH researchers updated an existing NIPH systematic review on hospital-in-the-home (HITH) using standard Cochrane methods.

3 Research results reported back to the managers

The results of the systematic review were reported back to the managers during their regular executive-level health planning and management meeting, using clear statements to communicate the findings.

*The Hunter Area Health Service became the Hunter New England Area Health Service on 1 January 2005. ◆

Results

Participation in the interview, survey and workshop was taken to indicate that the managers thought that setting priorities for research and generating health services research questions could be of use to them.

Priority setting and research questions

While a number of issues were nominated at interview, the survey gave managers the chance to consider issues raised by their peers, and rank them. These rankings were then discussed and finalised at the workshop. The key themes and their ranking in order of priority are set out in the Box.

Specific ideas and research questions generated by health service managers around the idea of quality and safety of health care included the need to understand variation in care patterns and services; the need to manage effectively the process of change in structures for health service delivery; how to consult with staff and the community to gain an understanding of the needs of all stakeholders; and how best to train staff to embrace and improve the quality of health care.

Helping managers and clinicians use evidence to inform health care delivery was the second highest priority area nominated by the managers. Proposed research concerned two areas: how to engage clinicians in evidence-based practice; and a range of questions around delivery of health care in various settings, including the appropriate setting for delivering care to patients needing chronic care.

Linked with deriving, communicating and implementing the best evidence for care and service delivery were issues of demarcation and integration of care across the private and public health sectors — the third-ranked priority. Consideration of this area identified for research the challenge to really understand what such integration and cooperation would demand of practitioners and the health system.

The health of Aboriginal and Torres Strait Islander Peoples was ranked fourth by participants in the workshop, recognising the imperative of the widely acknowledged inequality in health status between Aboriginal and Torres Strait Islander Australians and non-Aboriginal and Torres Strait Islander Australians. Key issues for research discussed were the need to determine culturally appropriate public health care services for Aboriginal and Torres Strait Islander people and the need for a critical appraisal of models for a health service to work in partnership with Aboriginal and Torres Strait Islander Peoples.

Research themes identified by managers, in order of priority, as determined at the workshop

1 Quality and safety of health care (including quality use of medicines and workforce training)
2 Evidence-based health care (clinical and service delivery)
3 Private versus public health service provision
4 Health of Aboriginal and Torres Strait Islander peoples
5 Aged care ◆

Aged care and associated issues were ranked fifth. Managers raised specific questions concerning acute and community care integration models, potential fragmentation of services to the aged, and appropriateness and quality of services to the aged.

Answering a specific question

By the time of the consultation described in this paper, the idea of HITH had become a popular structure internationally for delivering health care;[13] and plans to shape and implement such a program were under consideration although the HAHS senior managers volunteered at the priority-setting workshop that they did not have a clear understanding of benefits and costs. Answering questions about the policy was considered critical as it cut across four of the top five priority theme areas of quality of health care, evidence-based care, public and private provision of care, and aged care. Accordingly, in response to the managers' self-identified need to know whether HITH was beneficial, NIPH researchers corresponded with international experts (including the authors of prior and subsequent research in the field)[14,15] and rapidly updated an existing NIPH review on the topic.[16]

Research results reported back to managers

The research evidence was distilled to a simple message which was presented to the senior health services managers at their regular health management meeting: that with the exception of very specific circumstances, the costs of an HITH service (specifically to carers of discharged patients) outweighed the benefits (including reduced length of stay). Following the meeting, the senior health managers of the HAHS deferred plans to roll out a broad-scale HITH post-acute care management policy.

Discussion

We believe our case study, simple in idea and outcome, contributes to the literature concerning strategies to enhance research transfer in local health services settings. The process of asking the health services decision makers what they needed to know to do their job led to a decision being made that was consistent with the research information they had sought. Factors for why our research communication worked on this occasion might have included that we reported back to the managers a simple message in a form and forum that was familiar, that having asked us for specific research information the managers quickly understood its relevance to their situation, or that on this occasion the research information presented to the managers was consistent with other imperatives influencing managers' decision making. Alternatively, it might be that we had reported information which they were anticipating in any case and we had merely confirmed the inevitable. Each of these factors warrants further exploration.

It is not possible to know the extent to which the forum (the regular health management meeting of the senior health managers) or our format (a few uncluttered powerpoint slides) for reporting the information back to the managers contributed to their using it on this occasion. There is a substantial body of literature concerning communicating evidence to decision makers to promote its use in decision making; our own work has explored framing a message to resonate with a decision makers' values and beliefs to enhance its uptake.[17] We are mindful that while our approach worked on this occasion we do not assume that using the same format and forum to communicate other evidence would succeed equally well, as communication and the exchange of ideas depends on an interaction between many factors including content, context, framing, format, forum, and other agendas and imperatives exerting influence on all parties to the communication.[18] At a minimum, it appears that for research information to be incorporated into a decision it has to be communicated in such a way that it is perceived by the decision maker to fit with their needs and beliefs about a decision to be made.

The need for research information to be relevant to decision makers can be met by communicating back to managers research information specifically requested by them, although managers may need help to appreciate that an answer derived from new research or a synthesis of existing research may not be the answer they are expecting or wanting. While relevance to a decision maker is promoted as having merit in enhancing research or knowledge transfer,[10] while other researchers have advocated using a local approach similar to the one we describe in this case study,[19] and although new structures are being implemented for research responsiveness to policy decision makers' questions,[20] there are as yet scant reports in the literature of research evidence uptake (and impact) which *began* with consulting the end-users of research information to determine their needs for evidence. Researchers reporting research that examined knowledge transfer and implementation of research evidence to date frequently have used the existing evidence as their starting point and *then* determined and implemented strategies for its implementation.[4,21,22]

It is generally accepted that health services management decisions are made in a context which includes implicit or explicit political and professional imperatives acting upon that decision maker, and that those imperatives may compete or conflict with research information available to a decision maker.[10,23,24] It is possible that in our case study a key factor in managers responding to the research information given to them was that the

information was consistent with other imperatives influencing their decision making at the time. Achieving the uptake of research evidence which questions entrenched processes or conventions remains a complex challenge, although institutional sponsorship of information has been identified as key. Gibson explored the reasons influencing the uptake of information into health policy and found that when evidence was "transformed" into usable knowledge by specific government investment in structures to do so, it was more likely to be acted upon.[25]

In our case study it is possible that managers believed certain action about a health service decision was inevitable (as Gibson found in his policy case study concerning breast screening),[25] and generated a specific health services research question accordingly. We believe, however, that on this occasion this is an unlikely explanation for the outcome given that although local planning to develop an HITH program had commenced, the managers in our case study made a decision *not* to expand or roll out the idea.

Since NIPH researchers undertook this project, there have been several more occasions where specific research across the first- and second-ranked research theme areas commissioned by health managers was undertaken (either through new research or a synthesis of existing research or both), reported to managers, and subsequently acted upon. That managers sought (and paid for) answers to specific questions suggests that those managers believed the investment in research they identified as important represented value for money. Such projects, in which existing research was synthesised and packaged for communication or undertaken *de novo,* included research about models for respiratory and cardiac rehabilitation in a rural setting, and research evaluating the efficacy of a transitional care model for aged patients.

In regard to why managers in our case study nominated the themes for research that they did, we believe that the managers' priorities were not driven simply by the priorities of external funding organisations, even though those priorities were discussed at the workshop. Although the managers' priorities overlapped with the priorities of key research funding organisations, we believe that managers' preparedness to fund research themselves points to drivers other than the financial. A more likely explanation for managers setting out quality and safety of health care and evidence-based practice as their top two priorities is the now widespread appreciation that solving service delivery issues within these two policy and health management areas is critical to improving the capacity of the health sector to deliver health care to Australians.[26,27]

Our process of consulting health service managers to determine their priorities for health services research in an attempt to help bring evidence to health services decision making is a local example of health sector professionals in both academic and service delivery roles actively seeking to close the evidence–policy–practice loop. However, we do not claim that consultation, targeted research and communication back to the decision makers will always lead to decisions consistent with that evidence. It has long been argued that research information can be important but remain unused or limited in its relevance due to political or pragmatic factors external to the researcher or local decision maker.[28]

Methods canvassed in the literature to enhance research uptake by decision makers include special education and training sessions for managers about interpreting research, bombarding decision makers with volumes of information in the hope that some element of it might be remembered, and providing incentives to practitioners for using evidence in decision making. In his monograph *Beyond the sound of one hand clapping*, Lomas [29] dissected the issue and offered solutions to the problem of bridging research and policy. Although his view has been challenged by Gibson,[30] Lomas argued that researchers and decision makers working in different sectors and having different information requirements was core to the problem, therefore requiring solutions with deliberate strategies to bring researchers and decision makers together, such as identifying a specified research broker and audience-specific priority setting. Using interviews, a review of literature and a case study approach, researchers in the United Kingdom found that

increasing the usefulness and impact of health services research required improving the alignment of commissioners, researchers and users of health services research,[2] a strategy identified also as key by Moynihan in case studies concerning research evidence and national policy making.[10]

Consulting health service decision makers about their needs for information can produce a research agenda which reflects the priorities of decision-makers in a position to use that research information. In our experience, the simple process begun by initiating this loop of communication — asking, being told what to research, and communicating research back to managers to answer a specific question — made a difference to a health service decision. Even where it is possible to undertake targeted health services research, the remaining challenge for promoting the use of evidence in decision making is to understand that policy and practice decisions are made in a context of political, professional, consumer and resource imperatives and to provide research information which meets the needs of decision makers in that environment.

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Competing interests

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