

Increasing the influence of one's research on policy

Kathryn M. Dwan^{1,2} BA, BSc(Hons), PhD, Research Fellow

Peter C. McInnes¹ BA (Hons), LLB, MA, Dip Ed, PHCRED Liaison Officer

¹Australian Primary Health Care Research Institute, Australian National University, Canberra, ACT 2600, Australia.
Email: peter.mcinnnes@anu.edu.au

²Corresponding author. Email: kathryn.dwan@anu.edu.au

Received 14 March 2012, accepted 24 September 2012, published online 15 March 2013

The problem

We would all like to believe that the best possible evidence informs health policy. Unfortunately, the translation of evidence into policy is not a simple process. Numerous factors influence policy development because decision making is an inherently social process, not just a technical exercise. Expert opinion, political sensitivities, organisational constraints, primary research and systematic reviews may all contribute to a given decision, but the priority accorded some elements over others rests well outside the bounds of a researcher's influence.¹ Even more sobering is the fact that the importance of evidence in the policy-development process may erode over time.²

The good news is that the Australian government wants to improve the quality of policy, and a 2010 document entitled *Ahead of the Game: Blueprint for the Reform of Australian Government Administration* expressly directed public servants to establish or reinvigorate partnerships with academia and research.³ Moreover, in 2011, 21 Australian Public Service department heads endorsed the call for public servants to employ 'the most up-to-date thinking and approaches' and to 'more effectively use the innovative capacity of a much broader base.'⁴

At both the national and state levels, health departments have been trying to improve exchange at the research-policy interface for some time. The Commonwealth Department of Health and Ageing established the Australian Primary Health Care Research Institute, at the Australian National University, in 2003 (www.anu.edu.au/aphcri/)⁵ and in 2011 it created a knowledge-brokerage position located at Australian Primary Health Care Research Institute, which is currently held by one of the authors (PMcI). Similarly, the Sax Institute (www.saxinstitute.org.au) was created with core funding from NSW Health, and operates a knowledge-brokerage service that has completed 87 evidence checks since 2005. Furthermore, National Health and Medical Research Council funding has been provided to establish the Centre for Informing Policy in Health with Evidence from Research (<http://acc.cochrane.org/cipher>).

Australian governments are clearly expressing a desire to improve the research-policy interface through promotion of partnerships and increased interaction between researchers and policy makers. However, any health researcher keen to seize this

opportunity is likely to face two problems: the apparent cultural differences between knowledge producers and users, and the rapid cycling of individuals through various positions within health departments.

The former problem can be explained by the 'two communities' theory, which posits that the producers and users of knowledge 'live in separate worlds with different and often conflicting values, different reward systems, and different languages.'⁶ Research into the attitudes of upper-level executives in the US government provided the empirical base for this theory. A multivariate analysis demonstrated that the difference between users and non-users of data external to government departments was explained by the cultural gap between government officials and social scientists, rather than the specific knowledge required for a given policy problem or by the real or imagined constraints of working within a bureaucratic system.

The 'broken link' phenomenon arises when a research producer establishes a good working relationship with a potential research user, only to have that individual move to another position and be replaced by someone with little or no content knowledge. The regular movement of departmental staff between positions is a deeply embedded cultural phenomenon, which can be traced back to the 1976 *Royal Commission on Australian Government Administration*.⁷ The review recommended, among other things, that public servants move across areas and departments to break down the silos that had developed.⁷ The movement among multiple roles, departments and areas continues today and is promoted at the highest level with the notion of a single leadership cadre across the Australian Public Service, as expressed in *One APS – One SES*.⁸ Anecdotally, we know that some researchers see the regular movement through positions as more than just a practical problem, but rather as a fundamental challenge to the possibility of promoting partnerships and increasing interaction between research producers and users.

In this article we describe knowledge exchange, one approach to promoting evidence-informed decision making. We have chosen this approach because of its roots in the 'two communities' theory, because it embraces the social realities of the policy process, and because it offers an ideal framework to develop solutions that complement and support the interactional agenda

currently promoted by key government policy documents on innovation. Additionally, it is widely discussed in the academic literature,^{9–17} promoted by practitioners who work at the research–policy interface,^{18,19} and we have direct experience of operationalising this approach. The challenge for knowledge producers is to package one’s research for easy policy consumption and to manage the frequent turnover of people within positions. To this end, we offer advice on how researchers can improve the likelihood of their findings influencing government policy.

One solution: knowledge exchange

Knowledge exchange is an iterative, two-way process that results in mutual learning;²⁰ those who produce the research (e.g. academics and health care researchers) and those who use the research (e.g. decision makers, planners and administrators) benefit from speaking with each other. This exchange happens at the research–policy interface, that is, where members of two very different professional work environments interact.⁶ Consider for a moment the differences. A typical research producer employed in an academic institution will produce documents of 2000–100 000 words, which may take years to move from the initial idea, through research, to publication. By and large the individual is free to determine the content, structure and timing of his or her work. In contrast, a typical research user employed in the public sector will rarely produce work more than four pages in length, often at very short notice, and the information therein will be presented as succinctly as possible. Furthermore, the substance and nature of the work will be influenced by political imperatives, the budget cycle and departmental hierarchy, all of which lie beyond his or her influence. We have summarised the elements of the cultural gap between research producers and users in terms of the priorities and constraints that face them (Table 1).

Critics of this approach argue that interpersonal communication may also promote selective and inappropriate use of evidence,^{12,21} and that there is little data on which strategies increase the use of evidence.²² Furthermore, case studies have demonstrated that meaningful decision-maker involvement in research varies in nature and degree.²³ Notwithstanding these critiques, supporters of the interactional approach to knowledge exchange believe that research users gain access to good-quality, relevant information, whereas the research producers improve their understanding of the users’ priorities and the constraints under which they operate. This information then allows the producers to frame and present their research better in the future. Evidence suggests that instrumental uses for research, such as drawing on research to inform technical decisions, are more likely to influence policy than research that may have a conceptual or symbolic influence on policy.^{11,14}

Ideally, knowledge exchange takes place at every stage from research planning, through dissemination, to application in a decision-making context.²⁰ Sustained interactions between research producers and users are considered central to this knowledge-exchange model,^{14–16} and the involvement of knowledge brokers is also important.¹⁶

Knowledge brokers are individuals or organisations that act as intermediaries, seeking to build positive relationships between the producers and users of research. The broker attempts to foster

Table 1. Priorities and constraints under which research users and producers work
Draws heavily on Wiseman¹⁹

Priorities and constraints	Research producers	Research users
Knowledge	Depth	Breadth
Documents	Long, prose	Short, multiple headings, dot points
Timeframes	Medium–long	Short–medium
Outputs	Few and far between	Regular
Responsibility and freedom	Individuals	External parties and processes
Rigor versus pragmatism	Rigor	Pragmatism
Authorship	Personal	Usually anonymous

a mutual understanding of each group’s goals and cultures, to identify areas where research is needed, and to create networks of people with common interests.¹⁶ The skills required of a knowledge broker are considerable.^{10,16,17} The time and resources required for effective brokering, the lack of distinction between brokering roles, and our current poor understanding of how knowledge brokerage works and of which factors influence its effectiveness are further challenges faced by the broker.¹⁷

In its entirety, the knowledge-exchange process is believed to increase the likelihood that research evidence will be used in policy and practice decisions, and to enable researchers to identify practice and policy-relevant research questions. In reality the ideal of sustained interaction over time is rarely achieved. Nevertheless, there are ways to increase the likelihood of knowledge exchange at the research–policy interface.

Ways to increase the impact of your research

The international literature,^{9–17} anecdotal evidence^{18,19,24} and our own experience trying to improve interactions at the research–policy interface suggest that policy influence requires both compelling subject matter and good relationships between departmental officers and researchers (see Box 1). By definition, knowledge exchange requires the engagement of both research producers and users but this article is written for research producers.

Ensure your subject matter is compelling

Your subject matter appears more compelling when framed in terms of how it will help address current or future policy issues.¹² To a large degree, the relevance of the subject matter will be determined by government policy, the annual budget cycle and the electoral cycle.^{2,11,12} You are well advised to regularly review government publications and websites, so that you can frame your research findings in terms of how it will help address current policy priorities, and arrange to do so at the most apposite time. Policy is invariably developed in a contested space of multifarious views and differing demands. By pointing out the pros and cons of a range of policy options you will provide departmental officers with alternatives rather than dogma, and enhance your credibility.^{9,11,12} Options accompanied by some loose costings are particularly welcome.¹²

Box 1. Advice for improving the use of evidence in the development of health policyDraws heavily on Clayton and Culshaw¹⁸**Make your subject matter compelling**

- Frame your research findings in terms of how it will help address the current **policy** issues and government **priorities** (e.g. regularly check websites, read strategic departmental documents, review party political statements)
- Understand the political and administrative cycles that influence the **timing** of policy development (e.g. when speaking with departmental officers ask them to explain the budget cycle)
- Understand the **priorities** of departmental officers and the **context** in which they work (e.g. political imperatives, administrative hierarchies)
- Ensure you are speaking with the right **person** (e.g. cultivate relationships at different levels in the hierarchy)
- Present your ideas in a **brief and easily digestible** way (e.g. point out the pros and cons of a range of responses based on your research, provide written dot points under headings such as 'issues and considerations' and 'options and costs')

Build productive relationships

- Be proactive and even persistent in initiating and maintaining contact
- Be honest and balanced in all your communications
- Keep abreast of staff changes and do not underestimate the value of old contacts
- Follow up face-to-face or telephone meetings with a thank you letter or email that **briefly** restates your main points

Understanding the mechanics of government departments and respecting the constraints imposed on departmental officers will also help secure a receptive audience. Departmental officers are more likely to be responsive to what you have to say if they are both responsible for the issue and they have the capacity, that is, the authority, to do something about it.²⁵ The departmental hierarchy will influence an officer's ability to advance your research within the department. There is not, however, a straightforward answer to what level in the hierarchy works best, as it comprises a potential trade off between influence (senior officers) and capacity to absorb new research (junior officers).^{12,26} Ultimately, the better the departmental officers are apprised of the evidence, the more influential and effective they will be in advocating and promoting it within the department.

Having considered the timing, packaged your message appropriately and chosen your audience carefully, deliver the information in a brief and easily digestible way.^{12,18} Leaving behind a handful of dot points under headings such as 'issue and considerations', 'strengths, weaknesses, opportunities and threats' and 'options and costs', will go a long way in promoting your work (see Box 2 for an example).

Build productive relationships

As stated earlier, the process of policy development and implementation takes place as a result of human interactions. Therefore,

it pays to maintain positive relationships with research users. Be proactive and even persistent in initiating and maintaining contact.¹⁸ As frustrating as it might be for outsiders, regular movement of personnel through different positions and even fields is common in the Australian Public Service as organisational priorities change and individuals seek professional development in different roles and areas. Therefore, expect the personnel to change and simply begin to develop good relationships with the replacement personnel. Do not, however, underestimate the usefulness of old contacts, as they may be able to identify the right person with whom to speak on a given topic, or even be a conduit for additional influence if promoted within the department.^{11,18} Be honest and balanced in all your communications; you will earn the respect of research users and, in the future, you may be identified as a useful source for advice.^{11,12,18} Finally, after face-to-face or oral meetings, follow up with a thank you email that briefly restates your main points;¹⁸ this will help build the relationship while gently prompting for action (see Box 2 for an example).

Improving the research–policy interface in the future

There are multiple ways to improve the use of evidence in developing policy; knowledge exchange, knowledge-system transfer and social-change frameworks are the best known.¹⁷ Options for getting evidence into policy range from the

Box 2. Examples from researchers working at the research–policy interface**Ensure your subject matter is compelling**

Research users are interested in what the findings mean for them; the research itself is of secondary interest. Hence, all Australian Primary Health Care Research Institute-funded research teams are required to produce reader-friendly reports for research user consumption.³¹ In framing the recommendations that emerged from a systematic review, **Research Team A** established the prevalence and importance of **Topic A**, while noting that the evidence for interventions on the topic was mixed. Rather than saying 'more research is required', its advice to government was to coordinate consensus building by peak organisations and governments, and it outlined the four foci around which discussions could productively take place. All this was achieved within 2.5 pages of text, which contained dot points, only one paragraph on methods, and no references.

Build productive relationships

Despite being scattered across regional and rural centres, **Research Team B** regularly held their meetings in Canberra. The additional cost and the inconvenience of travel were balanced against the desire to maximise the involvement of Commonwealth officers in their research. When the research team were unsuccessful in engaging the nominated departmental officer in the study, they used their previous contacts to facilitate access to the resources they needed. The team leaders also attended workshops and gave papers at conferences where they knew departmental officers would be present. In this way they came to be recognised, known and trusted by departmental officers in the area.

straightforward activity of undertaking consultancies²⁷ to a legislatively protected ‘deliberative’ approach to policy development.² The latter proposal is conceptually and politically challenging, and exists only in theory at present. However, the Victorian government went some way to adopting this approach last year, when it established the Health Innovation and Reform Council under legislation. The Council’s purpose is to ‘provide independent advice on the effective and efficient delivery and management of quality health services’.²⁸

We have chosen the knowledge-exchange model because it accepts the messy reality of policy development, its theoretical roots have an empirical basis, and it has traction within Australian policy-research networks. (For an overview of the tools available to assist you in knowledge exchange and translation see *Health Research Policy and Systems* 2009, Vol. 7, Supplement 1)²⁹. Knowledge brokers, also known as knowledge-exchange professionals, exist in a poorly defined space between the academic and policy worlds, and these roles do not fit neatly into either government or academic institutional contexts. More work needs to be done defining their necessary skills, as well as their role in an environment that is demanding better policy based on evidence, to address complex issues and challenges.^{10,17}

Establishing just how much influence research has on policy is a difficult empirical question that few have even attempted to answer.²² Similarly, assessing the success of knowledge brokerage is difficult because of the poor concordance between theoretical models and brokerage in practice.¹⁷ If we hope to improve knowledge exchange at the research–policy interface, we need clearly conceptualised goals, a strong theoretical base,¹⁷ sound performance measures¹³ and adequate data.³⁰ Only then can we assess the veracity of the knowledge-exchange model.

References

- Crouch SR. Opportunistic evidence: evidence-based policy in the setting of the Australian Government’s chlamydia screening pilot. *Aust Health Rev* 2012; 36(1): 57–60. doi:10.1071/AH10942
- Flitcroft K, Gillespie J, Salkeld G, Carter S, Trevena L. Getting evidence into policy: the need for deliberative strategies? *Soc Sci Med* 2011; 72(7): 1039–46. doi:10.1016/j.socscimed.2011.01.034
- Commonwealth of Australia. Ahead of the game: Blueprint for the reform of Australian government administration. Canberra: Commonwealth of Australia; 2010.
- Department of Innovation Industry Science and Research. APS Innovation Action Plan. Canberra: Commonwealth of Australia; 2011.
- Glasgow NJ, Marley JE, Kristjansson LJ, Donovan JA, Hall SJ, Harris MF, et al. Bringing evidence to bear on policy processes: the challenge of the Australian Primary Health Care Research Institute. *Med J Aust* 2008; 188(8, Suppl): S46–9.
- Caplan N. The two-communities theory and knowledge utilization. *Am Behav Sci* 1979; 22(3): 459–470. doi:10.1177/000276427902200308
- Coombs HC. Royal Commission on Australian Government Administration. Canberra: Australian Government Publishing Service; 1976.
- Commonwealth of Australia. Senior Executive Service of the Australian Public Service, One APS – One SES. Canberra: Commonwealth of Australia; 2005.
- Baumbusch JL, Kirkham SR, Khan KB, McDonald H, Semeniuk P, Tan E, et al. Pursuing common agendas: a collaborative model for knowledge translation between research and practice in clinical settings. *Res Nurs Health* 2008; 31(2): 130–40. doi:10.1002/nur.20242
- Dobbins M, Robeson P, Ciliska D, Hanna S, Cameron R, O’Mara L, et al. A description of a knowledge broker role implemented as part of a randomized controlled trial evaluating three knowledge translation strategies. *Implement Sci* 2009; 4: 23. doi:10.1186/1748-5908-4-23
- Gilson L, Di M. The interface between research and policy: experience from South Africa. *Soc Sci Med* 2008; 67(5): 748–59. doi:10.1016/j.socscimed.2008.02.005
- Jewell CJ, Bero LA. ‘Developing good taste in evidence’: Facilitators of and hindrances to evidence-informed health policymaking in state government. *Milbank Q* 2008; 86(2): 177–208. doi:10.1111/j.1468-0009.2008.00519.x
- Kothari A, MacLean L, Edwards N, Hobbs A. Indicators at the interface: managing policymaker-researcher collaboration. *Knowledge Manag Res Prac* 2011; 9: 203–14. doi:10.1057/kmnp.2011.16
- Lavis J, Ross S, Hurlley J, Hohenadel J, Stoddart G, Woodward C, et al. Examining the role of health services research in public policymaking. *Milbank Q* 2002; 80(1): 125–54. doi:10.1111/1468-0009.00005
- Lavis JN, Moynihan R, Oxman AD, Paulsen EJ. Evidence-informed health policy 4—Case descriptions of organizations that support the use of research evidence. *Implement Sci* 2008; 3(56).
- Lomas J. The in-between world of knowledge brokering. *BMJ* 2007; 334(7585): 129–32. doi:10.1136/bmj.39038.593380.AE
- Ward V, House A, Hamer S. Knowledge brokering: the missing link in the evidence to action chain? *Evid Policy* 2009; 5(3): 267–79. doi:10.1332/174426409X463811
- Clayton H, Culshaw F. Science into policy: Taking part in the process. Swindon: Natural Environment Research Council; 2011.
- Wiseman J. Dancing with strangers: Understanding the parallel universes of academic researchers and public sector policy makers. Occasional Paper No. 11. Melbourne: Australia and New Zealand School of Government and the State Services Authority of Victoria; 2010.
- Canadian Health Services Research Foundation. Glossary of knowledge exchange terms as used by CHSRF. Ottawa: CHSRF. Available from: <http://66.240.150.14/glossary/k/view-eng.html> [verified 30 January 2013].
- Innvaer S, Vist G, Trommald M, Oxman A. Health policy-makers’ perceptions of their use of evidence: a systematic review. *J Health Serv Res Policy* 2002; 7(4): 239–44. doi:10.1258/135581902320432778
- Moore G, Redman S, Haines M, Todd A. What works to increase the use of research in population health policy and programmes: a review. *Evid Policy* 2011; 7(3): 277–305. doi:10.1332/174426411X579199
- Mitchell P, Pirkis J, Hall J, Haas M. Partnerships for knowledge exchange in health services research, policy and practice. *J Health Serv Res Policy* 2009; 14(2): 104–11. doi:10.1258/jhsrp.2008.008091
- Edwards M. Social science research and public policy: narrowing the divide. *Aust J Public Adm* 2005; 64(1): 68–74. doi:10.1111/j.1467-8500.2005.00417.x
- Gibson B. Beyond ‘Two Communities’. In Gibson B, Lin V, eds. *Evidence based health policy: Problems and possibilities*. Oxford: Oxford University Press; 2003. pp. 18–30.
- Parker R, Davies P. Priority driven research in primary health care: how well has the Australian Primary Health Care Research Institute performed in knowledge translation? *Intl Public Health J* 2011; 3(2): 167–77.
- Jacobson N, Butterill D, Goering P. Consulting as a strategy for knowledge transfer. *Milbank Q*. 2005; 83(2): 299–321. doi:10.1111/j.1468-0009.2005.00348.x

- 28 Department of Health Victoria. Health Innovation and Reform Council. Melbourne. Melbourne: Department of Health Victoria; 2011. Available online at: <http://www.health.vic.gov.au/hirc/> [verified 24 September 2012]
- 29 Kalucy EC, Jackson-Bowers E, McIntyre E, Reed R. The feasibility of determining the impact of primary health care research projects using the Payback Framework. *Health Res Policy Syst* 2009; 7: 11. doi:10.1186/1478-4505-7-11
- 30 Lavis J, et al. SUPPORT Tools for evidence-informed health Policymaking (STP) *Health Research Policy and Systems* 2009; 7(Suppl 1): p. 1.
- 31 Canadian Health Services Research Foundation. Reader-friendly writing – 1 : 3 : 25. 2010. Ottawa: Canadian Health Services Research Foundation. Available from: http://www.cfhi-fcass.ca/Migrated/PDF/CommunicationNotes/cn-1325_e.pdf [verified 30 January 2013].