



Understanding the policy cycle and knowledge translation for researchers (A researcher's guide)

Keep up to date with new Australian primary health care research

ISSN 1839-6348

Issue 45
December 2015

L Brown
C Hagger
P Bywood

This **RESEARCH ROUNDup** introduces knowledge translation, suggests avenues where research evidence can inform different stages of the policy cycle, and provides some practical tips for researchers.

Knowledge translation (KT)

The essence of KT relates to the co-production and communication of research evidence for policy or practice. It has been defined as “a dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health care system”.¹ Part of the process is engaging with groups of research users, such as health policy decision-makers.

Often research evidence is underutilised in policymaking,² sometimes reflected in perceptions of policymakers and researchers as ‘two communities’. KT and its affiliated concepts (e.g. knowledge exchange, knowledge mobilisation, implementation science) address this challenge. Timing, timeliness, relevance and accessibility of research evidence are critical to effective KT. It is important to acknowledge that evidence is only one element in policy development; other factors include the broader political, economic and social context, ideologies, views of constituents, media, and government institutions.^{3,4}

The policy cycle

One example of the policy cycle is depicted in Figure 1.³ It indicates the various phases in which researchers may be involved. In the real world, the process is complex and typically non-linear.

Anticipation: The issue identification phase allows researchers to align their research to windows of opportunity. It provides occasions to introduce policymakers to new ideas, raise awareness of problems, and stimulate discussion. During this phase, policymakers may communicate potential future needs to researchers to inform research directions.^{2,5} This approach strengthens the research and enhances its relevance, accessibility and timeliness.

Formulation: In the information-gathering phase, policymakers may obtain evidence directly from a range of sources and use it to inform options for future policies. Researchers may be instrumental in problem solving in this phase,⁶ enabling access to evidence, providing details to frame a potential policy issue as well as helping to define a particular question, highlight different approaches, evaluate previous policies and/or balance recommendations.⁷ To do this, researchers synthesise targeted information into accessible formats.

Consultation: Policy options may be discussed through consultation with key stakeholders. Researchers may advise on proposals or

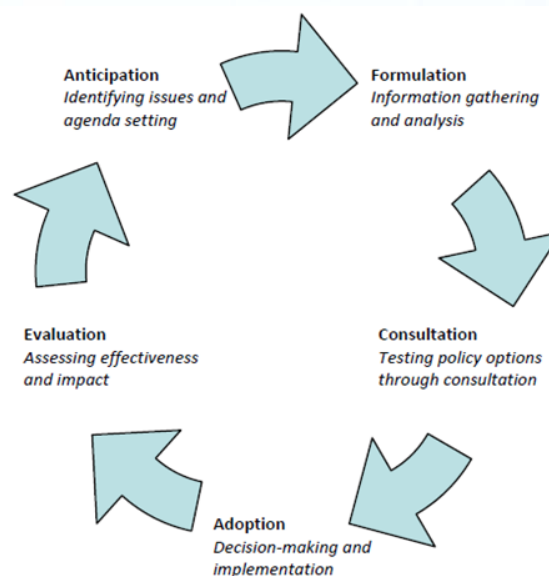


Figure 1 The Policy Cycle

provide information to clarify a specific position, project or the field more broadly.^{2,5} This stage may include activities coordinated by knowledge brokers in which researchers can discuss implications of the available evidence and policymakers can ask questions about application of the knowledge.^{8,9}

Adoption: At the implementation phase, policy options are presented to government decision-makers. During this time, the relevance/quality of the evidence used to develop the options may be assessed and researchers may have a role to play in championing a particular policy.^{2,5} Once a decision has been made, researchers may inform the process for rolling out a policy.³

Evaluation: Evidence from evaluations is used to inform future anticipation and formulation stages. Researchers may contribute to designing an evaluation framework, monitoring an initiative, collecting data and conducting final evaluations.³

KT mechanisms

There are some key mechanisms which can be employed to encourage KT between researchers and policymakers. However, these activities need to be facilitated by adequate institutional arrangements and organisational resources.⁴

Conversations: Consistent evidence supports the value of transparent, timely conversations for encouraging effective collaboration and

exchange of knowledge between researchers and policymakers.^{4,9,10} Conversations can involve informal or formal schemes such as deliberative dialogues,¹¹ knowledge brokering,¹² or exchanges of personnel. Expert opinion is highly valued in policy development, particularly when available research evidence is not sufficient and when such conversations can be conducted rapidly with trusted sources.⁶ Regular discussions can inspire new ways of thinking, reflective learning and the challenging of assumptions at individual and organisational levels, in addition to building trusted relationships and capacity within systems and staff.¹³

Networks: Formal or informal communities of practice, taskforces, advocacy coalitions, advisory committees or transdisciplinary teams offer researchers and policymakers the chance for co-production, working together to set agendas, refine questions, and consider policy options. These networks depend on the development and maintenance of trust and respect.^{4,14} They involve extensive engagement not only with researchers and policymakers but also with other key stakeholders including community representatives and practitioners.¹²

Synthesis: Research synthesis involves delivering key messages in concise, plain language, within specified (often brief) time frames.^{7,15} There are a range of formats including rapid responses, systematic reviews, meta-analyses, gap maps or policy briefs; each with a different purpose, scope and focus.⁸ Policymakers need clear, relevant, reliable, quality⁴ evidence that is pooled (rather than a focus on single studies) and emphasising content (rather than methodology).¹ Examples include the 1:3:25 format (e.g. 1 page 'policy recommendations', 3 page 'executive summary', 25 page 'full report').^{10,15,16} Technical infrastructure developments have seen the introduction of repositories for easy access to such syntheses (e.g. KT Clearinghouse,¹⁷ Cochrane Library¹⁵).

Incentives: Commissioning research represents a tactical approach by policymakers to answer specific questions and set priority areas.^{2,18} Increasingly international funding agencies are mandating grant applicants to include explicit detail about how KT initiatives, including engaging with research users and informing policy/practice, will be embedded in research projects. While such activity is only emerging in Australia, these practices are rapidly gaining momentum in the UK and are well-established in Canada.¹⁹

Education/training: To avoid the potential for fragmentation, effective researchers and policymakers work to gain a greater understanding of each other's contexts.²⁰ For KT this often reflects a need to build capacity among policymakers for valuing, appraising and using research; and among researchers for understanding the policy cycle, policy levers and implications in the wider context.²¹ This skill building can be acquired through training sessions or joint academic-practitioner seminars.^{4,13} There are a number of toolkits, guides and programs available (e.g. Public Health Insight's KT training for researchers,²² SUPporting Policy relevant Reviews and Trials [SUPPORT] Project Tools for evidence-informed health policymaking,²³ Supporting Policy in health with Research: an Intervention Trial [SPIRIT] Action Framework²⁴).

Conclusion

Policy development is complex but it does value engagement with research and researchers to inform the process.⁵ Researchers can contribute most effectively with relevant, timely, clear messages. Such evidence-informed policymaking is a key step in the process towards achieving the main outcome of improving health.²

Acknowledgement: Thank you to expert reviewer Dr Anna Williamson for her advice and comments on a draft of this paper.

References

- 1 Straus S, et al. (2009). Defining knowledge translation. *CMAJ*, 181, 165-8.
- 2 Hanney S, et al. (2003). The utilisation of health research in policy-making: Concepts, examples and methods of assessment. *Health Res Policy Syst*, 1, 2.
- 3 Department of Industry, Innovation, Science, Research, and Tertiary Education. (n.d.). *APS200 Project: The place of science in policy development in the public service*. Canberra: Australian Government.
- 4 Oliver K, et al. (2014). A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC Health Serv Res*, 14, 2.
- 5 Haynes A, et al. (2011). Galvanizers, guides, champions, and shields: The many ways that policymakers use public health researchers. *Milbank Q*, 89, 564-98.
- 6 Greenhalgh T, Russell J. (2009). Evidence-based policy making: A critique. *Perspect Biol Med*, 52, 304-18.
- 7 Brownson R, et al. (2009). Understanding evidence-based public health policy. *Am J Public Health*, 99, 1576-83.
- 8 Campbell S. (2012). *Knowledge translation curriculum*. Ottawa: Canadian Coalition for Global Health Research.
- 9 Dwan K, McInnes P. (2013). Increasing the influence of one's research on policy. *Aust Health Rev*, 37, 194-8.
- 10 Innvær S, et al. (2002). Health policy-makers' perceptions of their use of evidence: A systematic review. *J Health Serv Res Policy*, 7, 239-44.
- 11 Boyko J, et al. (2012). Deliberative dialogues as a mechanism for knowledge translation and exchange in health systems decision-making. *Soc Sci Med*, 75, 1938-45.
- 12 Choi B, et al. (2005). Can scientists and policy makers work together? *J Epidemiol Community Health*, 59, 632-7.
- 13 Cairney, P. (2015). How can policy theory have an impact on policy making? The role of theory-led academic-practitioner discussions. *Teaching Public Administration*, 33, 22-39.
- 14 Haynes A, et al. (2012). Identifying trustworthy experts: How do policymakers find and assess public health researchers worth consulting or collaborating with? *PLoS ONE*, 7, e32665.
- 15 Grimshaw J, et al. (2012). Knowledge translation of research findings. *Implement Sci*, 7, 50.
- 16 Lavis J. (2009). How can we support the use of systematic reviews in policymaking? *PLoS Medicine*, 6, e1000141.
- 17 Canadian Institute of Health Research. (2011). KT Clearinghouse. Retrieved August 27, 2015, from <http://ktclearinghouse.ca/>
- 18 Head B. (2008). Three lenses of evidence-based policy. *Aust J Publ Admin*, 67, 1-11.
- 19 Ward V, et al. (2010). Planning for knowledge translation: A researcher's guide. *Evid Policy*, 6, 527-41.
- 20 Petticrew M, et al. (2004). Evidence for public health policy on inequalities: 1: The reality according to policymakers. *J Epidemiol Community Health*, 58, 811-6.
- 21 Redman S, et al. (2015). The SPIRIT Action Framework: A structured approach to selecting and testing strategies to increase the use of research in policy. *Soc Sci Med*, 136-137, 147-55.
- 22 Jones K, et al. (2015). Knowledge translation for researchers: Developing training to support public health researchers KTE efforts. *J Public Health*, 37, 364-6.
- 23 Lavis J, et al. (2009). SUPPORT Tools for evidence-informed health policymaking (STP). *Health Res Policy Syst*, 7(Suppl 1), I1.
- 24 Campbell S, et al. (2008). *Knowledge translation. A 'Research Matters' toolkit. Bridging the 'know-do' gap. A resource for researchers*. Ottawa: IDRC/CRDI.