Case studies of policy influence for the Knowledge Hubs for Health initiative: Design and analytic framework

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The Australian Agency for International Development (AusAID) has established four Knowledge Hubs for Health, each addressing different dimensions of the health system: Health Policy and Health Finance; Health Information Systems; Human Resources for Health; and Women’s and Children’s Health.

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Case studies of policy influence have been identified as a potential method for monitoring and evaluating the impact of knowledge communications produced by the Knowledge Hubs for Health Initiative on policy. This paper reviews the challenges of identifying and measuring policy influence, defines the scope and develops an analytic framework for conduct of a case study on policy influence; and proposes a template to guide the conduct and documentation of such case studies.

Challenges for measuring policy influence include the difficulties of objective identification of policy change; establishing causal links between knowledge or evidence and that policy change; and practical difficulties of collecting and documenting evidence. The case study methodology has a number of advantages for this type of situation, but also brings its own issues of credibility and dependability of findings.

The analytic framework developed identifies the following elements as requiring consideration in the case studies:

- Policy context: type of decision; political context; policy maker interest in evidence & relation with the researcher;
- Knowledge or evidence input: type of knowledge and extent to which this is generalizable or context specific
- Communication: method and factors influencing communication
- Potential influence on policy: ranging from changes in attitudes of policy makers to procedural changes, and changes in policy content or policy implementation.

Based on a consideration of these elements, the paper proposes a template for collection and documentation of case studies of policy influence. The template defines the objectives of the case studies as to:

1. identify and describe policy changes (or where changes did not occur);
2. identify and describe research or knowledge evidence provided through Hub activities; and
3. evaluate the extent to which research or knowledge inputs are related to policy change in the specific context and identify factors which might have constrained or facilitated policy influence.

It provides some criteria to assist in selection of case studies, and then lists questions to consider for the following aspects: policy issue; policy context; research inputs; communications; policy influence or change; and implications. To assist in describing the policy context, the annex contains tables of characteristics of stages of the policy cycle and relationships between researchers and policy makers.

It is hoped that the template can be tested and refined through the conduct of case studies by each of the Knowledge Hubs in their own particular areas.
INTRODUCTION

A key challenge for researchers seeking to influence policy is how to identify, document and evaluate the impact of research on policy.

This is one of the issues confronting the researchers of the Knowledge Hubs for Health initiative, an innovative program funded by AusAID, through which four teams of researchers from Australian academic institutions were asked to synthesise and communicate evidence on selected aspects of health systems. Influencing policy through the provision of knowledge is an important part of the aim of the initiative, as reflected in the aim statement: “To contribute to the quality and effectiveness of Australia’s engagement in the health sector in the Asia Pacific region through expanded expertise and an expanded knowledge base that is of practical value and used by stakeholders in development”.

This formulation acknowledges that the Hub initiative is one contributor among many to changes in the health sector, and that this contribution of expertise and knowledge changes policy and practice. While such changes take time, the aim includes encouraging a progressive shift towards greater use of knowledge and evidence in policy making and greater coherence between knowledge, evidence and policy.

Given the complexities of the policy process and the multiple contextual factors that operate on policy makers, documenting policy changes and identifying and evaluating the contribution from knowledge or evidence is not easily undertaken through standard evaluation methods such as the development of measurable indicators.

One potential way in which the policy impact of knowledge and evidence on health systems could be documented is through case studies. The International Initiative for Impact Evaluation (3ie) used case study methodology in a series of studies of policy influence in 2010 (Weyrauch and Langou 2011).

This paper has been developed by one of the Knowledge Hub members to explore how the methodology of case studies could be used for the documentation and evaluation of the policy impact of knowledge and evidence, for the consideration of the other Knowledge Hubs and development partners. It proposes a scope and framework for the design of case studies that could be used to document the context of a particular policy issue and the policy makers involved, the knowledge contribution from the Hubs and how this was conveyed to the policy makers, other factors in the operating environment that might influence policy makers and any changes in policy maker attitudes, policy decisions or implementation.

We suggest that this documentation, if standardised across the Hubs, could be used to identify changes in policy or the policy environment, to assess the extent to which the Hubs might have contributed to these changes and thus to contribute to an evaluation of the Knowledge Hubs initiative.

The paper begins by reviewing the challenges of identifying and measuring policy influence, then reviews the potential for case studies to evaluate impact on policy and some of the methodological and design issues that need to be considered. It then develops an analytic framework for such case studies by reviewing the literature on current ideas and concepts of how evidence might influence policy and the factors and contexts involved in that influence. From this review a template is developed to guide the collection of data and the analysis for the proposed case studies.

Challenges in measuring the influence on policy of evidence or research

A recent systematic review of literature on the translation of knowledge and research findings into health practice and policy found only 18 studies (20 per cent of the studies identified) that reported on policy impacts. Most of the studies identified were non-implementation studies that focused on development of organising frameworks and identification of barriers and facilitators. The reviewers concluded that there were insufficient studies that measured policy impact to enable identification of effective mechanisms. They recommended more research on measuring and evaluating the policy impacts of knowledge and research activities (Mitton, Adair et al 2007).

However, identifying and measuring research that aims to influence policy faces a number of challenges.
Hovland (2007) notes that conventional measures of research output, such as academic peer review and citation indices, do not capture the broader aims of policy-related research, such as ‘policy impact, changes in behaviour, or building of relationships’ with policy makers. She identifies the need for processes and methods that ‘capture the complexities of research-policy linkages’. Measuring impacts is complicated by the multitude of intermediates through which research knowledge may be transmitted and the conjunction with other events that might also influence policy decisions and policy maker attitudes.

Harry Jones explores the implications of the complexities of policy change for monitoring and evaluation. He identifies a series of challenges for M and E of policy influence:

(1) Conceptual and technical challenges resulting from the non-linear and non-rational policy process make it difficult to establish causal links and to attribute policy changes to research outputs.

(2) The nature of policy-influencing work, where specific changes are rare, and identifying the extent of change entail an element of subjectivity. Policy objectives may also shift during the period of observation, in response to external forces and changes in context.

(3) Practical difficulties constrain collection of M and E information, including lack of clear objectives and data collection methods at the outset, and there are difficulties in interpreting accounts of different actors who may have different views of the policy process.

He concludes that there is a need for ‘more in-depth studies, using frameworks built around a more suitable framework for understanding the messy, political interactions that influence the use of knowledge in the policy process. These will generally involve carrying out interviews and participatory exercises with a variety of stakeholders, drawing on available grey and published literature, and carrying out a significant level of analysis of this “raw data”’ (Jones 2011).

The case study methodology may provide an appropriate framework to consider the design and methodology of such in-depth studies.

**CASE STUDIES: DESIGN AND METHODOLOGY**

A case study has been defined as ‘an empirical investigation of a contemporary phenomenon within its real life context using multiple sources of evidence ... especially valuable when the boundaries between the phenomenon and context are blurred’ (Gilson 2012).

Case studies are particularly valuable ‘where a planned change is occurring in a messy real world setting’; where intervention depends on involvement of several different parties; where events are not under the control of the researchers; and where the intervention may not be fully defined at the outset of the research (Keen 2006).

Thus case studies are considered a useful methodology for health policy and systems research, because health systems are ‘strongly influenced by and embedded in contextual factors that must ... be part of the focus of inquiry’ and require ‘study of the complex behaviours of and relationships among actors and agencies; and how these relationship influence change’ (Gilson 2012).

These methodological advantages have caused case studies to be considered a useful methodology for monitoring and evaluation, particularly when trying to answer questions about how an initiative achieves its outcomes and why certain outcomes were achieved or not, and where quantitative data are not available (EuropeAid 2005).

The advantages that case studies bring to monitoring and evaluation include:

- richness of description, particularly of context, made possible by detailed qualitative information;
- flexibility, making continuous adaptation to various situations possible;
- relatively short implementation, compatible with that of a country/region evaluation (a few months);
- opportunity to obtain and understand information at a sufficiently deep level, such as the logic of the various actors and the different perspectives they have about what is at stake;
- accessibility; it is one of the few tools within the reach of non-specialists, enabling them to understand complex situations (EuropeAid 2005).
However, case studies also have limitations and methodological issues that need attention. These are well described by Gilson (2012), and particularly relate to the rigour or trustworthiness of the research. While the limitations described here are based on general considerations of case study methodology, they also need to be considered when using case studies for monitoring and evaluation.

**TABLE 1. METHODOLOGICAL ISSUES OF CASE STUDIES AND HOW THEY MIGHT BE ADDRESSED**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Case study tactic</th>
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<tbody>
<tr>
<td>Confirmability</td>
<td>Conduct literature review, identify key concepts. Use multiple sources of evidence. Ask key informants to review draft research report (member checking).</td>
</tr>
<tr>
<td>Dependability</td>
<td>Develop case study protocol, documenting methodology decisions. Develop and maintain database of data collected.</td>
</tr>
<tr>
<td>Credibility</td>
<td>Look for patterns in data and across cases (pattern matching). Consider various explanations for findings (explanation building). Consider rival explanations (alternative explanations). Use logic models to think through causal mechanisms. Triangulation: compare and contrast data across respondents, data courses, data types and cases. Consider negative cases (seek out cases that contradict potential explanation).</td>
</tr>
<tr>
<td>Transferability</td>
<td>Use theory in single-cased studies. Use replication logic in multiple-case studies (test ideas from one case against subsequent cases).</td>
</tr>
</tbody>
</table>

Source: Yin 2009, quoted in Gilson 2012

Gilson’s references to identification of key concepts and use of theory are supported by Keen. He emphasises the importance of an ‘analytic framework’ based on a ‘synthesis of the available evidence, combined in a way that helps to describe and explain how the different elements of the cases being studied fit together’. This framework guides data collection and also the interpretation of the findings; it is not imposed, but derived from the data in an iterative process, yet is an important early step in the development of the study (Keen 2006).

As a step towards developing an analytic framework for the case studies of the Knowledge Hub initiative, the next section reviews the literature on describing and analysing knowledge and policy, and on the ways in which knowledge might influence policy making.

**Knowledge to policy influence: An initial analytic framework**

**Policy development**

There are many definitions of policy, but a good starting point is that used by Weyrauch and Langou (2011) in the framework for the 3ie case studies on policy influence, quoting the literature: a ‘purposive course of action followed by an actor or set of actors’.

This definition suggests that policy making goes beyond documents or legislation and is not restricted to governmental courses of action but could also include those of international organisations, bilateral agencies and civil society organisations.

There is considerable literature that describes and attempts to analyse the policy making process. While there is some agreement on the main functions of the ‘policy cycle’, most commentators note that this cycle is not linear or rational, but is rather iterative and variable. The four main components of the ‘policy cycle’ identified in the literature (Weyrauch and Langou 2011) are:

- problem identification and agenda setting: awareness of and priority given to an issue or problem;
- policy formulation: how (analytical and political) options and strategies are constructed;
- policy implementation: the forms and nature of policy administration and activities;
  - policy monitoring and evaluation: of policy need, design, implementation and impact.

The 3ie framework also distinguishes different levels of policy:

- Particular project, program or policy: this refers to a concrete public intervention, with a particular objective, defined beneficiary population, budget and set of activities and specific benefits.
- Specific policy areas: these are broader, comprising
a set of policies that relate to programs or interventions that contribute to particular outcomes in an area, such as maternal and child health or family welfare.

- **Policy regime or system:** this can include the whole framework and the underlying policy approach used to address the provision of programs and services.

Different types of evidence or knowledge may be required for different phases of the policy cycle.

**Policy context**

The literature frequently refers to the importance of context in understanding policy change. However, there are a range of approaches to describing this context or identifying the factors that mediate policy influence. The 3ie conceptual framework identifies the following contextual factors:

- **political system:** degree of democracy, degree of competitiveness within the political system, extent of decentralisation of policy making;
- **policy maker attitudes, beliefs and capacity to use evidence,** particularly responding to evidence that is contrary to beliefs;
- **organisational culture and interests:** extent to which learning, innovation and risk taking are valued or encouraged;
- **changes in the political, social and economic conditions relevant to the policy;**
- **opportunity for researchers or non-policy makers to engage in the policy making process:** the different types of ‘policy communities’ and their degree of concentration and organisation (Weyrauch and Langou 2011).

These factors relate to the overall policy process and the potential opportunities for policy to be influenced by knowledge or evidence.

Another aspect of policy context is the type of decision being considered and the readiness of policy makers to make more substantial changes to the policy regime. Carden and the 3ie authors refer to this as the decision-making regime or prevailing decision-making mode, which will determine to some extent the readiness to consider evidence or knowledge. They identify three key modes:

- **Routine decision regimes** focus on matching and adapting existing programs and policy repertoires to emerging demands. There is scant debate on overall policy design, and none on fundamental underlying principles or objectives.
- **Incremental decision regimes** will debate options and values on selected issues as they emerge onto the policy agenda. But these regimes seldom engage in deeper questioning of choices when they can avoid it. And they evade, whenever possible, comprehensive re-examination of issues spanning the whole policy horizon. They advance carefully, in small steps.
- **Fundamental decision regimes** embrace thoroughgoing and even radical reconsiderations of policies and strategies, not least when authorities want to give expression to revolutionary political change (Carden 2009).

The 3ie authors add a fourth category of ‘emergent’ decisions and relate the decision regime to characteristics of the policy context and to the type of information likely to be sought in Table 2.

A further aspect that influences the readiness of policy makers to make decisions on evidence is the extent of political attention the issue receives. Contandriopoulos and colleagues have referred to this as the ‘polarisation’ of an issue. Low polarisation occurs when potential users share similar opinions and preferences on the issue, its priority and salience and the criteria for reaching solutions. This context enables a more technical dialogue and debate, where evidence has more likelihood of being considered. High polarisation occurs when this consensus is absent, leads to political debates and is unlikely to encourage ‘evidence use’ (Contandriopoulos, Lemire et al, 2010).

This link between the type of knowledge or evidence and the policy use is further explored by Hanney, Gonzalez-Block et al. They define the decision contexts in terms of: the extent to which the decisions are explicit and specific, or implicit and diffuse; the extent of choice available; and the extent to which the decision is influenced by technical or political considerations. This leads to four situations:

1. **Conceptual modelling:** complex situations where the decisions are explicit, there is choice and the considerations are largely technical. In these situations data-based knowledge or evidence can contribute.
2. **Constrained frameworks:** complex situations
(3) **Symbolic payback:** in situations where there is limited choice, evidence is largely required to support decisions already made and knowledge is used more to support the policy decision (symbolic argumentation).

(4) Occasionally there may be opportunities for consideration of the implicit assumptions and broader policy paradigm. In this case policy makers are likely to fall back on ‘practice wisdom’ rather than seek scientific evidence (Hanney, Gonzales-Block et al. 2002).

Another way of conceptualising the policy context is as a balance between ‘researcher push’ and ‘policy maker pull’ or supply and demand, Carden defines five different contexts according to different levels of push and pull:

1. **Clear policy maker demand,** where the policy maker seeks knowledge, is prepared to act and may approach trusted and credible researchers directly.

2. **Policy makers are interested in research but have not taken the lead in deciding what to do or established a clear decision making process.** Researchers can foster policy leadership by actively engaging policy makers.

3. **Policy makers are interested in research but have low capacity to engage with researchers.** Policy makers acknowledge the problem but have not invested resources in adoption or implementation, because of resource shortages or other priorities. Researchers have to build capacity to translate research into action.

4. **A new and emerging issue activates researchers,** but the issue has not aroused interest of policy makers, or creates controversy or jeopardises vested interests. This is a high risk situation, frequently found, where researchers need to seek to ‘open’ the policy window.

5. **Policy makers treat research with disinterest or hostility.** Researchers are ahead of time, and need patience and luck in order to get on the policy agenda (Carden, 2009).

Development researchers are likely to maximise their influence on policy by designing and conducting research, and communicating results to the policy community, so as to fit the policy/political context of the issue.

**Knowledge or evidence input**

The literature also identifies different types of knowledge inputs into the policy process, which range from data to information, evidence and knowledge. Defining and understanding these terms and the differences between them is important.

Greenhalgh, in her commentary on the article by Contandriopoulos, refers to Tsoukas and Vladimirou

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### TABLE 2. POLICY DECISION REGIMES AND INFORMATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Decision regime</th>
<th>Routine</th>
<th>Incremental</th>
<th>Fundamental</th>
<th>Emergent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status of consensus</td>
<td>Intact</td>
<td>Largely intact but marginal issues</td>
<td>Core principles open to scrutiny</td>
<td>No consensus—the field is open to development of broad vision</td>
</tr>
<tr>
<td>Number of actors involved in decisions</td>
<td>A few actors with responsibility to implement policy</td>
<td>A few policy makers with stakes in the marginal issues</td>
<td>All policy makers and actors potentially affected</td>
<td>Relatively small number at outset</td>
</tr>
<tr>
<td>Type of information sought</td>
<td>Data to determine when to switch to other routines</td>
<td>Analysis of selected issues—successive limited comparisons for the issues in hand</td>
<td>Information on fundamental variables and probing assumptions with wide scope</td>
<td>Broad inquiry for perspective, then proceeds on selected issues</td>
</tr>
</tbody>
</table>

(Source: Weyrauch and Langou 2011)
(2001), distinguishes between data (an ordered sequence of given items or events), information (context-based arrangement of items whereby relations between them are shown) and knowledge (the judgment of the significance of events and items, which comes from a particular context and/or theory) (Greenhalgh 2010).

Contandriopoulos and colleagues distinguish information and evidence by stating that evidence has internal validity, which they define as ‘scientific plausibility of causal links’ (Contandriopoulos, Lemire et al. 2010).

The definition of knowledge itself is contested. Greenhalgh quotes Tsoukas and Vladimirov for this definition: ‘Knowledge is a flux mix of framed experiences, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knower’s. In organisations, it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices, and norms’ (Tsoukas and Vladimirov 2001).

This suggests a strong link between knowledge and the contexts in which it is developed and used, and raises issues about the extent to which knowledge can be separated from context or be generalisable.

McPake and Mills (2000) attempt to address this issue by identifying knowledge with different levels of contextual dependence:
• generalisable conclusions: can be applied to other contexts;
• specific conclusions: specific to particular contexts;
• categorisable conclusions: transferable to other contexts with specific conditions.

Another way of looking at this issue is to distinguish between theoretical and practical knowledge as distinct types. Van de Ven and Johnson (2006) define theoretical knowledge as that produced by research and documented in scholarly articles. They regard practical knowledge as ‘tacit, embodied in action’, ‘typically customised, connected to experience, and directed to the structure and dynamics of particular situations’.

This distinction can then be related to context, in that theoretical knowledge is more independent of context and practical knowledge more closely tied to context.

‘The purpose of practical knowledge is knowing how to deal with the specific situations encountered in a particular case. The purpose of scientific and scholarly knowledge is knowing how to see specific situations as instances of a more general case that can be used to explain how what is done works or can be understood’ (Van de Ven & Johnson, 2006).

Contandriopoulos and colleagues emphasise the importance of linking knowledge to what they term ‘action proposals’. ‘To be relevant, usable, and meaningful, evidence needs to be embedded in what political science calls policy options and could generically be called action proposals.’ This is ‘collective level knowledge use’. Action proposals employ rhetoric to embed information in arguments to support a causal link between a given action and consequences (Contandriopoulos, Lemire et al. 2010).

While there is a tendency to value generalisable or theoretical knowledge more highly, it is likely that much of the knowledge arising from studies of health system function is more of a practical nature and thus closely linked to context and less likely to be generalisable. Provision of knowledge appropriately linked to context may be more effective in influencing policy making.

Communication methods

There is a growing body of research and studies on communication between researchers and policy makers, which has been summarised in literature reviews.

A review by Mitton, Adair et al. (2007) provided a useful table on the barriers and facilitators for communication. These included four levels or categories:
• individual—largely related to relationships, trust and values;
• organisational—culture, interests, resources;
• communication methods and materials;
• timing.

Contandriopoulos and colleagues (Contandriopoulos, Lemire et al. 2010) summarised these in three key factors:
• relevance—timeliness, salience and actionability, which are context dependent;
• legitimacy—credibility of the information;
• accessibility—availability, formatting.
They emphasised that these factors operate primarily through users’ individual perceptions, opinions, preferences and interests. This leads to an examination of the quality of the relationships between researchers and policy makers. The authors emphasise the link between communication and trust: ‘interpersonal trust facilitates and encourages communication and ... repeated communications create trust’. Mitton, Adair et al (2007) echoed these comments in their review: ‘The quality of relationships and the trust developed between the research partners were critical components’.

The Overseas Development Institute in its approach to research communication has emphasised the importance of ‘links’ between researchers and policy makers. ‘The sources and conveyors of information may be as influential as the content: for example, people accept information more readily from those they trust.’ ‘The nature of the relationship between researchers and policy makers shapes how much influence they have over each other. Policy networks usually share some common values and outlooks and consciously work together to take advantage of policy “spaces” and “windows”’ (Perkins and Court, 2005).

In discussion of the relationships between researchers and policy makers, two mediating structures or mechanisms are often referred to: knowledge ‘brokers’ and knowledge networks. Mitton and colleagues define a knowledge broker as one ‘who is trained specifically in information exchange and has set aside time for the process ... [and] helps potential knowledge users determine their knowledge needs and helps researchers translate, influence, and initiate Knowledge Transfer and Exchange (KTE)’. However, both Mitton and colleagues and Contandriopoulos and colleagues are sceptical of brokers’ effectiveness in contexts of polarisation and competing interests, where information needs to be linked to action proposals.

Networks have also received a good deal of attention. Networks can be defined as ‘formal or informal structures that link actors (individuals or organisations) who share a common interest on a specific issue or who share a general set of values’ (Perkins and Court 2005). Networks are seen as operating in the ‘links’ space between researchers and policy makers. Networks can undertake the following roles in relation
to policy influence:
- **Filters** decide what information is worth paying attention to, and organise unmanageable amounts of information.
- **Amplifiers** help take little known or little understood ideas and make them more widely understood.
- **Conveners** bring together people or groups of people.
- **Facilitators** help members carry out their activities more effectively.
- **Community builders** promote and sustain the values and standards of the individuals or organisations within them.
- **Investors/providers** offer a means to give members the resources they need to carry out their main activities (Perkin and Court 2005).

Networks can take a variety of structures and operational forms. Mendizabal (2006) provides a useful series of categories for describing networks, including: functions, localisation and scope, membership, governance, resources, capacity and skill, communications and strategic and adaptive capacity.

Networks may provide a structure to support communication and the development of relationships between researchers and policy makers. As Bowen and Zwi (2005) comment: ‘Effective knowledge transfer is not a “one off” event, rather it is a powerful and continuous process in which knowledge accumulates and influences thinking over time. The ability to sustain this process and a focus on human interactions is essential. Differences in conceptual understanding, scientific uncertainty, timing and confusion influence the response to evidence.’

**Potential policy influence**

Finally, the literature provides some ideas about the type of changes that might result from policy influence. Carden identifies three broad areas where policy can be influenced (based on Lindquist 2001):

1. Research can expand policy capacities. Research can strengthen the institutional framework supporting policy making by enhancing the policy community’s collective ability to assess and communicate innovative ideas and by cultivating new talents for analysing and applying incoming research advice.
2. Research can broaden policy horizons. Policy is often frustrated by a scarcity of choices. Research can improve the intellectual framework surrounding policy making by introducing new ideas to the policy agenda, by ensuring that information comes to policy makers in a form and language they can quickly grasp and use, and by fostering helpful dialogue between researchers and decision makers.
3. Research can affect decision regimes. The quality of a policy can be determined as much by the procedures of deliberation and decision as by its content. Research findings can improve the policy process framework by helping to open and rationalise the procedures of legislating, administering and evaluating government policies and programmes (Carden 2009).

The 3ie framework identifies five ‘dimensions’ of policy that could potentially be influenced by research evidence and which expand some of these areas:

- ‘Framing debates and getting issues on the political agenda: this is about attitudinal change, drawing attention to new issues, affecting the awareness, attitudes or perceptions of key stakeholders.
- ‘Encouraging discursive commitments from states and other policy actors: affecting language and rhetoric is important, for example promoting recognition of specific groups or endorsements of international declarations.
- ‘Securing procedural change at domestic or international level: changes in the process through which policy decisions are made, for example opening new spaces for policy dialogue.
- ‘Affecting policy content: while legislative change is not the sum total of ‘policy change’, it is an important element.
- ‘Influencing behaviour change in key actors: policy change requires changes in behaviour and implementation at various levels in order to be meaningful and sustainable.’ (Weyrauch and Langou 2011).

Bowen and Zwi (2005) note that the literature has identified at least three key stages in the influence of knowledge on policy and practice: introduction, interpretation and application. Table 4 identifies changes in policy and practice that might occur at each stage.
Thus, in identifying potential impacts of policy influence, it is important to look beyond the formal policy instruments and to consider policy maker attitudes, the policy process itself and policy implementation.

DISCUSSION

This review has demonstrated some of the complexities of describing and analysing policy, policy making, knowledge and the relationship between them. It demonstrates the importance of context, and the many factors within the context that might influence the way knowledge and evidence are used by policy makers and impact on policy decisions and implementation. This is the type of research environment in which the case study methodology might be expected to make a useful contribution.

We suggest that the case study methodology can contribute to the evaluation of the Knowledge Hubs initiative in two ways:

1. The methodology of in-depth studies of particular policy issues, and the influence of the knowledge or evidence produced by one of the Hubs on that issue (single case studies) can provide a structure for the description and analysis of the policy issue and its context; the knowledge or evidence generated by the Hub and how it was communicated; any changes in the policy context, policy decisions or implementation; and an assessment of the possible contribution of the Hub outputs or communication efforts to any policy changes. However, in order to address the issues of methodological rigour raised in the section ‘Challenges’ above, it is important that the case studies document their methodology, use a range of sources of data, including interviews with key informants, and document and reflect on differences in the information obtained from different data sources and the perceptions of different informants.

2. Individual case studies can then be analysed as a multiple case study to identify where and what sort of policy influence can be attributed to Knowledge Hub work, to identify common factors and to contribute to improved understanding of the relationship between knowledge and policy change. In order to support this second comparative level of analysis, it is important that the individual case studies document their methodology, use a range of sources of data, including interviews with key informants, and document and reflect on differences in the information obtained from different data sources and the perceptions of different informants.

We have developed a template to guide the conduct of case studies, which will support the documentation of methodology and the use of multiple sources of data, and assist the comparability of individual studies for a multiple study analysis. The template provides a framework for a
common scope for data collection and a categorisation of key aspects of the process, including the type of policy context, the type of knowledge produced and the relationship between researchers and policy makers. This categorisation is based on the literature and aims to guide description and documentation of these key aspects (see next section).

We have also considered whether we can identify any hypotheses that might be tested and used to guide the comparative multiple case study analysis. A key issue for possible exploration through the comparative case study is the relative importance of the various factors influencing policy, in particular the relative importance of the quality or trustworthiness of the evidence compared to aspects of communication, the policy making process and the actors involved.

Contandriopoulos and colleagues concluded that while researchers consider the internal validity of the evidence (a measure of its quality) as of prime importance, this was not necessarily so for policy makers. They comment that ‘scientific evidence is treated no differently than other types of information’ by policy makers. This does not mean that internal validity is not important, but they propose that knowledge exchange needs to be viewed as separate from the scientific quality of the knowledge. ‘Knowledge exchange interventions should be conceptualised as generic processes unrelated to the internal validity of the information exchanged.’ (Contandriopoulos, Lemire et al 2010).

If this is so, the question arises as to what factors other than the scientific quality of knowledge might facilitate or inhibit the influence of knowledge on policy. One hypothesis advanced by Contandriopoulos and colleagues is that the likelihood of policy influence is proportional to the priority and salience of the issue in the view of the policy makers. ‘If a given issue’s salience and prioritisation are high enough for users to initiate knowledge exchange efforts and invest resources in them, then the probability of its use and impact can, from the outset, be presumed to be high.’ Conversely, when an issue has low priority and salience, the likelihood of policy influence is reduced.

While we suggest that the analysis of multiple case studies should remain open in regard to hypotheses, these ideas advanced by Contandriopoulos and colleagues can be used a starting point in the exploration of the relative strength of different factors in determining policy influence.

**CONCLUSIONS**

The case study methodology provides an appropriate method for identifying and documenting the policy influence of knowledge outputs from the Hub Initiative. In particular, the case study methodology enables identification and description of the many different aspects of policy that might be influenced, documentation and analysis of the extent to which particular Hub knowledge products or communication activities might have had a causal influence on the policy changes, and the important influence that the overall context might have had on this process.

However in order to ensure methodological rigour and potential comparison between case studies of different policy changes, it is important to use an analytic framework that is defined a priori, and guides the collection and presentation of the data. This ensures that all potential factors that could influence the outcome are identified, described and documented.

Based on the analytic framework developed in the paper, a template for the collection and documentation of the case studies is proposed.

**Proposed template for case studies of policy influence**

The case study methodology offers an approach to the description and analysis of the complex process of interaction between knowledge generation, communication with policy makers and changes in policy context, decisions and implementation. It appears well suited to the needs of the Knowledge Hub initiative in the documentation and evaluation of the policy influence of the initiative.

We provide a template to guide the conduct of such studies, which can support a clear and rigorous methodological approach for individual case studies and provide comparable data for a multiple case study. Such a study could provide the basis for evaluation of the extent and manner in which the Knowledge Hub initiative influenced policy, assist in identifying lessons from the experience and contribute to improved
understanding of the complex relationships between knowledge and policy.

**Purpose of the case studies**

This template provides guidelines for the scope and content of individual case studies to be undertaken by each Hub of selected policy issues where the Hub has undertaken synthesis or analysis of existing evidence or generated new knowledge or evidence, with a view to influencing decisions by policy makers or policy implementation. The objectives of the case studies are to:

1. identify and describe policy changes (or where changes did not occur);
2. identify and describe research or knowledge evidence provided through Hub activities; and
3. evaluate the extent to which research or knowledge inputs are related to policy change in the specific context and identify factors which might have constrained or facilitated policy influence.

This document provides criteria for the selection of policy issues for case studies, a proposed structure and content for the case studies and a series of questions to be considered in data collection and analysis. The data used in the case studies can be obtained from documents, statistical data and reports, but should be supplemented with interviews of those directly involved in the intervention and its outcomes.

The extent of description and analysis for each of the suggested content sections of the case study should be guided by the questions raised by the changes or lack of changes in the policy issue. However, decisions on the focus of the case study and the extent of information collection and analysis of content aspects should be documented and justified in the case study report.

**Selection of policy issues for case studies**

It is expected that the case studies will cover a range of different contexts and types of policy or practice outcomes, including both situations in which changes in policy or practice have occurred and situations in which changes have not occurred or the changes were not those anticipated. Contexts to be covered include:

- country level or regional or international level;
- changes in the policy process or policy agenda;
- changes in policy formulation;
- changes in implementation or practices.

Selection of case studies should consider the following criteria:

1. Is there evidence or data available relating to changes in policy or practice—whether or not changes occurred (documentary evidence, or policy makers who could be interviewed)?
2. Is there evidence or data on the contribution of Knowledge Hub outputs (documentary evidence or stakeholders or intermediaries who could be interviewed)?
3. Is the policy issue significant (related to AusAID priorities or to global/regional priorities)?
4. Has sufficient time elapsed that policy or practice change might be expected to have occurred?

It is anticipated that each Hub would undertake two or three case studies, which should cover different contexts.

**Aspects and questions to be covered**

The following aspects and issues have been identified from a brief literature review as relevant to understanding how knowledge or evidence might influence policy and practice. It is proposed that each case study provide information on each of these aspects, although the depth of exploration can be varied depending on the degree of relevance.

**Policy issue**

1. What is the rationale for focusing on this issue (in relation to potential contribution to country health system goals, AusAID-nominated priorities, regional/global priorities)?
2. What is the current status of the policy issue in the policy making process? Assess using the policy making classification (Table 1 in Appendix).
3. What were the anticipated outcomes? How was it thought that Hub research would influence these outcomes?
Policy context
(1) Identify policy makers and stakeholders involved in the issue and describe their involvement and attitude to the issue.

(2) What type of decision making did this issue entail—routine, incremental or fundamental? Routine: A focus on matching and adapting existing programs and policy repertoires to emerging demands, with little debate about overall policy design and none on fundamental underlying principles or objectives. Incremental: Will debate options and values on selected issues as they emerge on policy agenda, but will avoid deeper questioning of choices where possible. Fundamental: Thorough and even radical reconsiderations of policies and strategies, particularly when authorities want to engage in revolutionary political change.

(3) What is the status of the relationship between researchers and policy makers? (See Table 2 in Appendix.)

(4) Were any aspects of the political, economic, social or cultural environment likely to be impacted or to influence the policy issue or proposed policy change?

Research inputs
(1) What type of knowledge was produced (using the classification: literature review or conceptual framework; tool or guidelines; specific country study; comparative or synthesis study);

(2) Why was this type of knowledge provided? (What was the rationale for providing this type of knowledge in relation to current knowledge and knowledge needs?)

(3) What were the results? Did they reflect previous knowledge? Was there anything new or unexpected?

(4) What, if any, was the engagement with potential users or policy makers in the design, process or analysis of the findings?

Communications
(1) Was there a communications strategy? If so, who was the target audience? What was the rationale for selection of this target?

(2) What were the materials and methods of communication? What was the rationale for their selection?

(3) What were the changes, if any, in the relationships and mutual perceptions of researchers, stakeholders and policy makers during the communication process?

(4) How effective was the communications strategy? Which audiences were reached, how many people were there, and what was their feedback?

Policy influence
(1) Were there any changes in the policy issue that might be related to Hub activities or knowledge and evidence generated by the Hub, including:
   i) changes in attitudes and behaviour of policymakers or key stakeholders
   ii) changes in the policy decision-making process or structures
   iii) policy options or strategies considered
   iv) policy articulation or instruments
   v) implementation of policy or changes in practice

(2) How much can these changes be attributed to Hub inputs or communication? What other factors may have influenced the policy outcome?

Implications
(1) for health system performance—what might be the impact of the policy change, particularly in relation to priority AusAID health assistance or country goals or objectives?

(2) for Hub/research engagement—what have we learned about influencing policy?
REFERENCES


Greenhalgh, T. 2010. Commentary: What is this knowledge that we seek to ‘exchange’?, Milbank Quarterly 88, 4: 492-499.


APPENDIX

TABLE 1. ASSESSING THE STATUS OF THE POLICY CYCLE

<table>
<thead>
<tr>
<th>No.</th>
<th>Purpose</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Research priority setting</td>
<td>Changes in research directions or priorities, or introduction of new research approaches, methodologies or capacity relevant to health policy priorities.</td>
</tr>
<tr>
<td>2</td>
<td>Evidence filtering and dissemination</td>
<td>New trends or emerging priorities receive attention from researchers and/or policy makers.</td>
</tr>
<tr>
<td>3</td>
<td>Expanding policy capacity and improving policy making processes</td>
<td>Changes in the attitudes or understanding of policy makers in regard to particular policy issues. Changes in the engagement of government and civil society on health policy making. Changes in the use of evidence and knowledge in policy making or the engagement of local researchers in policy issues. Adoption of new approaches to measure and monitor policy requirements.</td>
</tr>
<tr>
<td>4</td>
<td>Agenda setting</td>
<td>Policy makers make changes in (1) strategic direction and (2) proposing priority technical themes. New ideas introduced to policy debates. New issues included in policy or planning discussion.</td>
</tr>
<tr>
<td>5</td>
<td>Policy formulation</td>
<td>Increased range and examination of the options and strategies for policy action. Improvements in coordination and alignment among policy instruments. Improvements in documentation and increased clarity in policy statements or instruments.</td>
</tr>
<tr>
<td>6</td>
<td>Policy implementation</td>
<td>Improvements in capacity of implementers and regulators. Improvements in the supporting materials, technical standards, guidelines and documents for implementation. Improvements in the attitudes and commitment of policy implementers. Changes in practices of service providers or health service managers resulting from policy. Increased allocation of budget and resources to the policy issue.</td>
</tr>
<tr>
<td>7</td>
<td>Policy evaluation</td>
<td>Identification of constraints, influencing factors and lessons from the implementation of policy. Identification of impacts of policy on targeted services or behaviours. Identification of unexpected side effects or changes from policy changes. Responses of policy makers to evaluation lessons.</td>
</tr>
</tbody>
</table>

TABLE 2. ASSESSING THE RELATIONSHIP BETWEEN RESEARCHERS AND POLICY MAKERS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Level of research/policy engagement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clear policy maker demand for research</td>
<td>Policy maker seeks knowledge, is prepared to act and may approach credible researchers directly.</td>
</tr>
<tr>
<td>2</td>
<td>Policy maker interest in research</td>
<td>Policy maker demonstrates interest in research but has not taken lead in engagement or established clear decision-making process. Opportunity for researchers to foster policy leadership by engaging policy maker.</td>
</tr>
<tr>
<td>3</td>
<td>Policy maker interest but low capacity to engage</td>
<td>Policy makers acknowledge problem and have an interest in research, but have not invested resources in adoption or implementation (due to resource shortages or prioritisation).</td>
</tr>
<tr>
<td>4</td>
<td>Issue is not on policy makers’ radar or priorities</td>
<td>Policy makers demonstrate unwillingness to engage with issue—a contentious situation requiring strategic and sustained efforts by researchers to ‘open’ the policy window.</td>
</tr>
<tr>
<td>5</td>
<td>Disinterest or hostility</td>
<td>Issue is controversial or jeopardises vested interests. Researchers work towards long-term goals.</td>
</tr>
</tbody>
</table>
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