

Knowledge Management: How can policy makers improve the use of data in policy discussions and development?

May 2011

This rapid response was prepared by the Uganda country node of the Regional East African Community Health (REACH) Policy Initiative.

Key messages

There are five questions that policymakers and those who support them should consider when reflecting on how to improve support for the use of research evidence to inform health policy decisions in their organisations:

1. What is the capacity of your organization to use research evidence to inform decision making?
2. What strategies should be used to ensure collaboration between policymakers, researchers and stakeholders?
3. What strategies should be used to ensure independence as well as the effective management of conflicts of interest?
4. What strategies should be used to ensure the use of systematic and transparent methods for accessing, appraising and using research evidence?
5. What strategies should be used to ensure adequate capacity to employ these methods?



Who requested this rapid response?

This document was prepared in response to a specific question from a policy maker in Uganda.

! This rapid response includes:

- **Key findings** from research
- **Considerations about the relevance** of this research for health system decisions in Uganda

X Not included:

- Policy or practice related recommendations
- Detailed descriptions

What is SURE Rapid Response Service?

SURE Rapid Responses address the needs of policymakers and managers for research evidence that has been appraised and contextualised in a matter of hours or days, if it is going to be of value to them. The Responses address questions about arrangements for organising, financing and governing health systems, and strategies for implementing changes.

What is SURE?

SURE – Supporting the Use of Research Evidence (SURE) for policy in African health systems - is a collaborative project that builds on and supports the Evidence-Informed Policy Network (**EVIPNet**) in Africa and the Regional East African Community Health (**REACH**) Policy Initiative (see back page). SURE is funded by the European Commission's 7th Framework Programme. www.evipnet.org/sure

Glossary

of terms used in this report:

www.evipnet.org/sure/rr/glossary

Background

Aside from high income countries like Australia, United Kingdom and Canada demonstrating the benefit and improvement in their health systems from the use of research evidence in policy making and practice several low and middle income countries like Columbia, Mexico, Chile, South Africa, Thailand, Philippines are also documenting the same (1). Despite the increasing practice in low- and middle-income countries, these face lots of barriers in trying to practice evidence based decision. This makes their use of research insufficient yet they require more effective and efficient decisions considering their low resource base. The World Health Organization's Regional Office for the Eastern Mediterranean and the Global forum for Health Research conducted a study to explore the demand for health research by national policymakers in low- and middle-income countries from which they concluded and recommended several options including strengthening demand for research from policymakers (2).

Several theories are proposed in the literature to explain the role of research evidence in policymaking. These theories in addition to ordinary judgment about how to improve the appropriate use of research evidence although abundant are in need of more rigorous research to support them. And indeed, there is an increasing number of studies going on in low- and middle-income countries as the more common evidence still comes from interview studies in high-income countries. Systematic reviews of these studies suggest that the following are vital for policymakers to use research evidence: Interaction between researchers and policymakers increases the likelihood of research being used by policymakers; Good timing and timely research increase (and poor timing or lack of timeliness decrease) the likelihood of research being used by policymakers; When policymakers have negative attitudes towards research evidence, the likelihood of research being used by them decreases; When policymakers lack relevant skills and expertise, the likelihood of research being used by them decreases; Policy networks and trust in researchers increase the likelihood of research being used by policymakers; A lack of perceived relevance, the use of jargon, and the production of publications aimed at a scholarly audience are all factors that decrease the likelihood of research being used by policymakers (3, 4). These factors or conditions in fact pose a lot of barriers for policymakers in all countries not just low income ones. This paper will look at how policymakers and institutions can guide efforts to improve their own use of research evidence in policy decision making. The paper is based on the SUPPORT Tools for evidence-informed health Policymaking (5), in particular Support Tool 2: Improving how your organization supports the use of research evidence to inform policymaking (6). SUPPORT tools are a series written for people responsible for making decisions about health policies and programs and for those who support these decision makers. The series is intended to help such people ensure that their decisions are well-informed by the best available research evidence.

Summary of findings

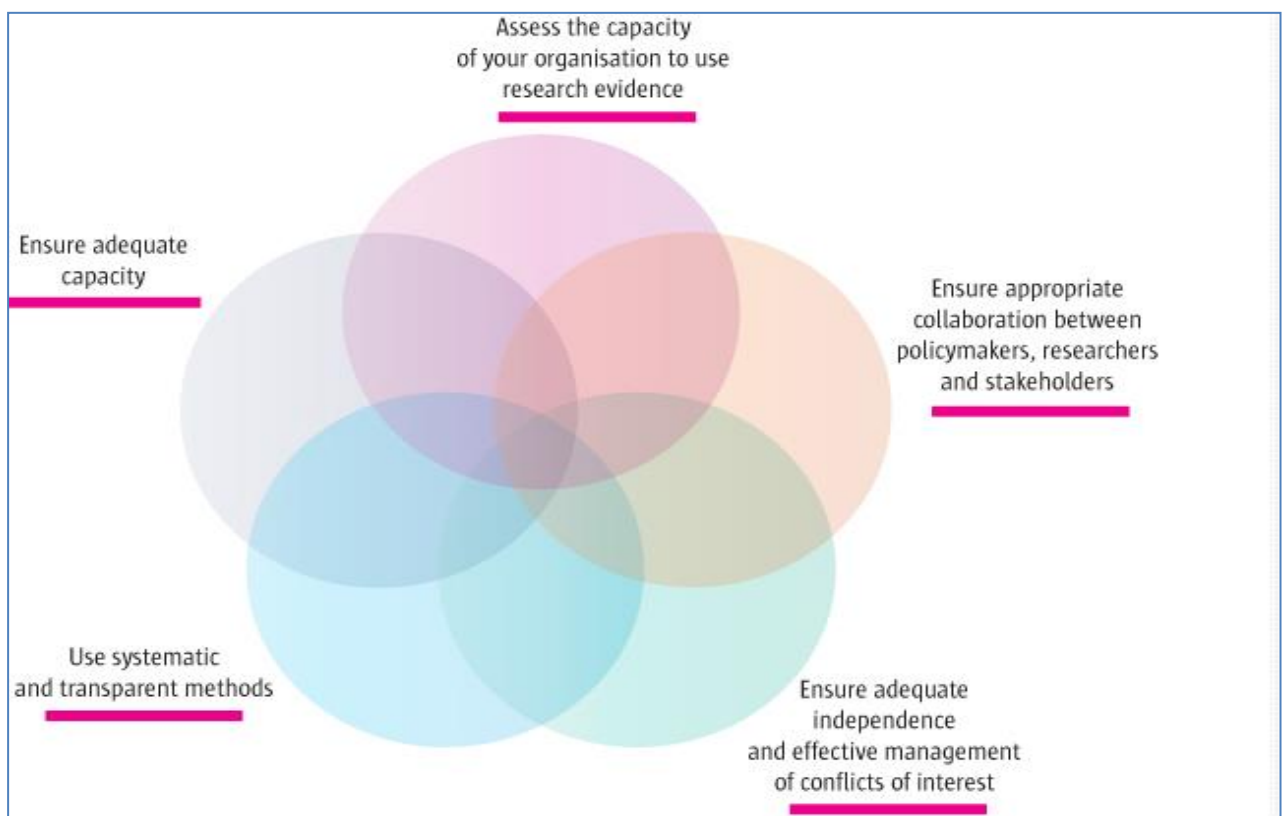
There are five questions that policymakers and those who support them should ask or consider when reflecting on how to improve support for the use of research evidence to inform health policy decisions. The questions presented here focus on lessons learned from the experience of organizations engaged in activities to support evidence-informed health policymaking and drawing on the lessons, five questions can then be asked considering how to improve support for the use of research evidence to inform health policy decisions, addressing key strategies to improve how support for evidence-informed health policymaking is organized, as shown in the figure below.

How this Response was prepared

After clarifying the question being asked, we searched for systematic reviews, local or national evidence from Uganda, and other relevant research. The methods used by the SURE Rapid Response Service to find, select and assess research evidence are described here:

www.evipnet.org/sure/rr/methods

Strategies to improve how support for evidence-informed health policymaking is organized



Source: Oxman et al. Health Research Policy and Systems 2009

The questions are:

1. What is the capacity of your organization to use research evidence to inform decision making?

2. What strategies should be used to ensure collaboration between policymakers, researchers and stakeholders?
3. What strategies should be used to ensure independence as well as the effective management of conflicts of interest?
4. What strategies should be used to ensure the use of systematic and transparent methods for accessing, appraising and using research evidence?
5. What strategies should be used to ensure adequate capacity to employ these methods?

1. What is the capacity of your organization to use research evidence to inform decision making?

In order for organizations to improve the degree to which their decisions are well-informed by research evidence, sufficient capacity is needed to recognize the need for research evidence. This is necessary for acquiring research when it is needed, critically appraising it, using it to inform decisions, and measuring the impacts of policies and programs that are implemented. Capacities in these different areas vary widely both in governmental and non-governmental organizations. A first step in the process of improving organizational capacity is therefore the assessment of an organization's current capacity. There are a number of validated instruments for measuring the competence of individuals to practice evidence-based medicine for example that by Taylor and colleagues (7).

Although the SUPPORT tool focuses on organizational capacity rather than the competence of individuals, the latter may also have to be assessed and improved. There are several tools that have been developed to assist this. A self-assessment tool is presented in appendix 1. It draws on two frameworks, addressing the key steps needed to ensure the appropriate use of research evidence to inform decisions related to health policies and programs. It is intended to help organizations assess and improve their capacity to use research evidence. It has evolved through iterative revisions based on workshops involving a variety of groups. This tool is a 'scorecard' intended to provide the basis for discussion and for reaching agreement about the priorities and strategies needed for improvement. Often people in the same organization have divergent perceptions of how well the organization is doing. Identifying and discussing these discrepancies can help to develop a shared vision and a plan of action. The scorecard can be applied across departments in a large organization as well as within a department, or a combination of both. The scorecard can also be used to monitor how well an organization is doing in its efforts to improve its use of research evidence.

The two frameworks it is based on are that from the Canadian Health Services Research Foundation (CHSRF) and that by John Lavis and colleagues which included Ugandan co-authorship (8, 9). That by

CHSRF, is a self-assessment tool for healthcare organizations to assist in identifying ways in which research can be gathered and used, as well as potential ways in which this can be improved. This tool includes four key areas for the assessment of research use: the acquisition, assessment, adaptation and application of evidence. That by Lavis and colleagues proposes a framework for assessing country-level efforts to link research to action and it includes a number of areas not covered by the CHSRF tool. These include the extent to which the general environment supports the linking of research to action, the production of research, efforts to communicate research findings (so-called 'push' strategies), and efforts to facilitate the use of research findings (so-called 'user pull' factors).

2. What strategies should be used to ensure collaboration between policymakers, researchers and stakeholders?

Many organizations that support the use of research evidence in policymaking commonly involve policymakers in the selection of topics and the services undertaken. Personal communication between policymakers and researchers has been found to be particularly important, both by policymakers and those who support their use of research evidence. Organizations that support evidence-informed policymaking view their close links with policymakers as a strength. However, this strength brings with it a challenge or need to manage conflicts of interest that can emerge in any close relationship between researchers and policymakers.

Strategies that can help to ensure collaboration between policymakers and researchers include:

- Locating those who support the use of research by policymakers (by accessing, appraising and summarizing evidence) within or close to those organizations responsible for policymaking
- Involving policymakers on an advisory board or steering committee in instances when organizations are located outside government or policymaking organizations
- Formal agreements linking academic organizations to policymaking organizations
- Using trusted individuals as 'knowledge brokers' to build relationships among researchers and policymakers
- Involving policymakers in research processes such as the preparation of policy briefs
- Involving researchers in policy-informing processes such as policy dialogues
- Skill development programs for both policymakers and researchers including exchanges where researchers are seconded to a policymaking organization and policymakers are seconded to a research organization

Organizations that support the use of research evidence in policymaking also frequently cite the involvement of stakeholders as a key strength. Stakeholder organizations include, for example, patient organizations, community groups, coalitions, advocacy groups, faith-based organizations, charities or voluntary organizations, professional associations, trade unions and business associations. However, managing stakeholder involvement can be both challenging and demanding. There is a paucity of evidence comparing alternative ways of involving stakeholders in policymaking or research processes including:

- The degree of involvement (consultation or collaboration)
- Different forums for communication (e.g. committee membership, permanent panels, town meetings, interviews, written consultation)
- Different methods for recruiting stakeholders (e.g. targeted personal invitations, advertisements, or the use of mass media)
- Different ways of training and supporting consumers or other stakeholders to ensure effective involvement
- Different degrees of financial support to facilitate the involvement of consumers or other stakeholders

There is a range of different types of collaboration that may be appropriate for different stakeholders. For some groups, ongoing interaction may be more useful than involving them directly in policymaking (e.g. groups that have an interest in one aspect of a policy, such as professional regulatory issues). For other groups, it may be desirable to keep them at “arm’s length” (for example pharmaceutical companies with a vested interest in a policy decision). For certain groups, it may be justifiable to exclude them completely from deliberations (e.g. tobacco companies that have falsified research results on the harmful effects of tobacco).

Strategies that can help to ensure appropriate levels of stakeholder involvement are similar to those highlighted above for ensuring collaboration between policymakers and researchers. These may include, for example, the involvement of stakeholders on an advisory board or steering committee, in research processes, and in policymaking processes. They may also include consultation with stakeholder groups, the use of skill-development programs for stakeholders, and the communication of evidence to the wider public via the mass media.

3. What strategies should be used to ensure independence as well as the effective management of conflicts of interest?

Independence is the most commonly cited strength of organizations that support the use of research evidence in policymaking. Conversely, conflicts of interest are seen as a key weakness. Financial and intellectual independence and freedom from government and industry influence are viewed as the key strengths of such organizations. But these need to be balanced against the desirability of arrangements that can ensure collaboration between policymakers and researchers. Independence is, of course, relative. No organization is entirely independent.

Mutually agreed processes and methods are essential in order to manage possible competing tensions arising from the demands of both collaboration and independence. They are also important as ways to ensure the systematic and transparent access and appraisal of evidence as an input into the policymaking process.

Conflicting interests frequently underlie tensions arising between policymakers, researchers and other stakeholders. Although there is little empirical evidence to guide arrangements for managing conflicts of interest, the key options that warrant consideration include the following:

- Specific, detailed, structured disclosure forms that solicit as much information as possible about the nature and extent of competing interests. Minimal or open-ended formats for disclosure forms are likely to be uninformative
- Explicit criteria to make decisions easier about whether a disclosed interest constitutes a conflict of interest
- A range of management strategies to address disclosed conflicts of interest, ranging from the public disclosure of conflicts associated with each meeting as a minimum prerequisite, through to the recusal of conflicted individuals as the most extreme measure
- A standard policy requiring all financial ties to be made public (e.g. that they be recorded in meeting minutes), may reduce the number of problematic cases
- A standing committee to review all financial disclosure statements prior to the commencement of committee meetings or hearings, to make management recommendations when necessary, and which can help to ensure that conflict of interest policies are enforced

Organisational arrangements should ensure responsiveness to the information needs of policymakers. At the same time, it is important to ensure independence with respect to the methods used to access, appraise and summarise research evidence. Arrangements to ensure that independence is maintained may include:

- Financial arrangements that minimise the risk of inappropriate influence on what evidence is summarised, or how it is summarized
- Management arrangements, including the involvement of independent stakeholders in advisory boards or steering groups

- Mechanisms for managing disputes such as independent arbitrators or appeal processes, particularly for governmental agencies that fund the work and for industry
- Ensuring that decision making is transparent in terms of how evidence is accessed, appraised, summarised and publicly reported

4. What strategies should be used to ensure the use of systematic and transparent methods for accessing, appraising and using research evidence?

The majority of organizations supporting the use of research evidence in policymaking use systematic reviews. In addition to their independence, such organizations commonly state that their use of systematic and transparent methods (sometimes they are referred to as “being evidence-based”) is one of their key strengths. However, organizations that support governments to use research evidence in the development of health policies and programs are less likely to have guidelines describing the methods they use. They are also less likely to conduct or use systematic reviews relative to organizations that produce health technology assessments (HTAs) or clinical practice guidelines. In addition, using systematic and transparent methods brings a related challenge: the time-consuming nature of using more rigorous methods. As a consequence, many organizations, particularly HTA agencies, have attempted to develop more rapid methods that are “quick but clean enough”.

Given that evidence-informed health policymaking is characterized by the use of systematic and transparent methods to access and appraise evidence as an input into the policymaking process, it therefore follows that the use of agreed-upon methods for doing this is key for any organizational arrangement to support evidence-informed policymaking. Such methods should be described in easily accessible documents. Moreover, although organizational arrangements are likely to vary widely, a great deal of commonality in the methods that are used is likely, as is the case for clinical practice guidelines. Thus, in addition to helping to ensure the use of agreed-upon methods, accessible manuals that describe these methods can also benefit other organizations with similar interests.

Stakeholders who feel that they have lost out as the result of a particular decision are still likely to challenge the methods used if there is a substantial amount at stake, irrespective of the rigor and transparency applied. Nonetheless, the use of agreed-upon methods that are described in easily accessible form can make it easier to respond to such challenges.

5. What strategies should be used to ensure adequate capacity to employ these methods?

The most commonly cited weakness of organizations that support the use of research evidence in policymaking are a lack of financial and human resources. How adequate funding for supporting the use of research evidence can be ensured is a major challenge, particularly in low- and middle-income

countries. Partly, this may be because this function falls between two stools – it is typically not funded by research funders, or by those interested in strengthening policymaking. Identifying appropriate sources of funding is critical to developing and sustaining adequate capacity for supporting evidence-informed health policymaking.

Three of the key messages that emerged from a review of these organizations relate to ensuring adequate capacity:

- Collaborate with other organizations, both informally and formally, to learn from their experience in order to avoid the unnecessary duplication of efforts, to draw on their capacity, *and* to help build capacity
- Build capacity among those working in the organization through training, making the best use of available staff (numbers are often limited), and actions aimed at retaining skilled staff, and
- Start small, have a clear scope, and address important questions in order to ensure that available resources are focused on areas where they are needed most

As noted above, another strategy that many organizations identified was the use of more rapid methods that are rigorous but less resource-intensive – especially those that would result in a reduction in the time required of skilled staff.

Conclusion

Policymakers are encouraged to use research evidence and data during decision making, and its benefits have been demonstrated in the health systems of several high-income countries. It is however clear that there are barriers that stall the process especially in low- and middle-income countries. This paper has presented some issues (in form of questions) generated from the experience of activities to support evidence-informed health policymaking and these would act as a guide for organizations wanting to improve support for the use of research evidence to inform health policy decisions, addressing key strategies to improve how this support is organized.

References

1. Moynihan Ray, Oxman Andrew David, Lavis John N, Paulsen Elizabeth. Evidence-Informed Health Policy: Using Research to Make Health Systems Healthier. Oslo: Nasjonalt kunnskapssenter for helsetjenesten; 2008. Report No.: Rapport Nr 1-2008.
2. Global Forum for Health Research, World Health Organization Regional Office for the Eastern Mediterranean. Policy Brief: The Use of Evidence in Policy-making. 2008 [cited 2011; Available from: www.globalforumhealth.org/.../1/.../policy_document_use_evidence.pdf]
3. Lavis JN, Davies HTO, Oxman A, Denis JL, Golden-Biddle K, Ferlie E. Towards systematic reviews that inform healthcare management and policymaking. *J Health Serv Res Policy*. 2005;10:35-48.
4. Simon Innvær, Gunn Vist, Mari Trommald, Andrew Oxman. Health policy-makers' perceptions of their use of evidence: a systematic review. *J Health Serv Res Policy*. 2002;7:239-44.
5. John N Lavis, Andrew D Oxman, Simon Lewin, Atle Fretheim. SUPPORT Tools for evidence-informed health Policymaking (STP). *Health Research Policy and Systems*. December 2009;7(Suppl 1):1.
6. Andrew D Oxman, Per Olav Vandvik, John N Lavis, Atle Fretheim, Simon Lewin. SUPPORT Tools for evidence-informed health Policymaking (STP) 2: Improving how your organisation supports the use of research evidence to inform policymaking. *Health Research Policy and Systems*. 2009;7(Suppl 1):S2.
7. Taylor R, Reeves B, Mears R, Keast J, Binns S, Ewings P, et al. Development and validation of a questionnaire to evaluate the effectiveness of evidence-based practice teaching. *Med Educ*. 2001;35(544-7).
8. Lavis JN, Lomas J, Hamid M, Sewankambo NK. Assessing country-level efforts to link research to action. *Bull World Health Organ*. 2007;84:620-8.
9. Thornhill J, Judd M, Clements D. CHSRF Knowledge Transfer: (Re)introducing the self-assessment tool that is helping decision-makers assess their organization's capacity to use research. *Healthc Q* 2008;12:22-4.

This summary was prepared by

Rhona Mijumbi, Supporting Use of Research Evidence for Policy (SURE Project), Office of the Principal, College of Health Sciences, Makerere University, New Mulago Hospital Complex, Administration Building, 2nd Floor, P.O Box 7072, Kampala, Uganda

Conflicts of interest

None known.

Acknowledgements

The following people provided comments on a draft of this response: **Dr. Andy Oxman**, Norwegian Knowledge Centre for the Health Services, Oslo, Norway; **Dr. Harriet Nabudere**, Makerere University, Kampala, Uganda; **Dr. Anthony Batte**, Makerere University, Kampala, Uganda.

This Rapid Response should be cited as

Rhona Mijumbi, MPH, MSc. **Knowledge Management: How can policy makers improve the use of data in policy discussions and development?** A SURE Rapid Response. May 2011.

For more information contact

Rhona Mijumbi, mijumbi@yahoo.com



The **Regional East African Community Health-Policy Initiative (REACH)** links health researchers with policy-makers and other vital research-users. It supports, stimulates and harmonizes evidence-informed policymaking processes in East Africa. There are designated Country Nodes within each of the five EAC Partner States. www.eac.int/health



The **Evidence-Informed Policy Network (EVIPNet)** promotes the use of health research in policymaking. Focusing on low and middle-income countries, EVIPNet promotes partnerships at the country level between policymakers, researchers and civil society in order to facilitate policy development and implementation through the use of the best scientific evidence available. www.evipnet.org