

Proposed Networks to Support Health Decision-Making and Health Policy Formulation in Low and Lower Middle Income Countries & Considerations for Implementation

World Health Organization

A significant gap exists between what is known about effective health interventions or health system design and what evidence is used in health decision and policy-making. There are a number of explanations for this discrepancy but key among them is the issue of accessing evidence when it is needed and applying it to local context. Many senior policy-makers have stressed that access to high quality evidence that is timely and relevant to their needs is critical to their ability to make evidence-informed decisions¹. It is essential that we examine the barriers to effective use of evidence and the opportunities for action to decrease the gap between knowledge and practice. To that end, this paper highlights the fundamental principles that are required to effect change and with those principles in mind, delineates a model for a network intended to help strengthen the links between the creation and use of knowledge. Essential to success is adapting the model based on local capacity, needs and expertise. Therefore, the second part of this paper will outline the critical implementation issues that need to be considered.

Principles

Many studies have been conducted on identifying the key factors to strengthen the research to action link. These findings, along with expert opinion, suggest some common principles.

- ✓ The needs for evidence must be articulated by local decision-makers.
- ✓ It is critical that the evidence be analyzed and interpreted based on local context.
- ✓ The evidence must be trusted by local decision-makers; therefore it must be of high quality and from credible sources.
- ✓ Decision-makers need access to evidence in a timely manner.
- ✓ Evidence needs to be disseminated using proven methods.
- ✓ Information must be packaged in a user-friendly format.
- ✓ Evidence needs to be valued in order for it to be used. Therefore, encouraging a culture that is supportive of the importance of evidence (both creating it and using it) is key.
- ✓ To be truly responsive, it is essential that mechanisms exist to influence new research when a gap in evidence has been identified.
- ✓ Decision-makers should participate in setting objectives and formulating the agenda for both research and dissemination activities.
- ✓ More opportunities for local researchers and decision-makers to work together are needed.
- ✓ Concerted efforts and dedicated resources are required to develop and evaluate methods to decrease the gap.

¹ It is important to recognize that different types of information are used in decision-making (e.g., personal experiences, expert and public opinion, surveys, case studies, surveillance data, and research studies using various designs). Appendix IV outlines the factors that contribute to decision-making.

These principles form the foundation of a proposed model for a network that is intended to bridge the gap between the creation and use of knowledge.

The Proposed Network²

Mission:

To improve health and reduce health inequities by increasing decision and policy-makers' access to and use of high quality evidence

Main Functions:

1. Acquire, assess & adapt evidence
2. Enhance linkages among producers & users of research
3. Provide training
4. Design & advise on strategies to promote the uptake of evidence
5. Advocate for evidence use
6. Identify health research gaps & communicate the need for new research & reviews

1. Acquire, assess and adapt high quality evidence:

The proposed network would function as a well known clearinghouse for evidence and would have access to relevant databases such as the Cochrane Library or the Health Evidence Network. It would seek out synthesized information on the priority health issues as identified by local decision-makers (e.g., malaria control measures, effective health system financing schemes). Therefore, key to the functioning of the network will be implementing priority-setting methods with local decision and policy-makers to identify domains where high quality evidence is needed as a complement to local understanding of context and values.

It would have the ability to provide quick access to knowledge and could provide decision-makers with evidence summaries in user friendly formats. Turn-around times would be dependent on the complexity or the time sensitivity of the request. For instance, a decision-maker may only need to know whether there is evidence in a particular topic area. This could be addressed in a short period of time (e.g., a two page brief in a few days). Longer briefings would naturally take more time to compile (e.g., a few weeks). A more complete evidence response summary report (e.g., if a new synthesis needs to be commissioned) could take between six and twelve months. All information products (e.g., websites, policy briefings, factsheets, and presentations) would be developed in user-friendly formats and would be disseminated and made available for quick (and confidential) retrieval through well-designed systems.

Access alone to research evidence is not sufficient to effect change. Through this new network, decision-makers would have access to local experts and specialists who could help analyze and interpret the evidence and assist in developing appropriate interventions or policies based on local context. These specialists could include health service researchers, knowledge synthesis experts, and communication specialists from the region (e.g., staff) or from the global community (if necessary). This team could also help develop modeling exercises to assess the potential impact of different intervention or policy options on health and economic outcomes.

² The term network is used broadly. A network can have various configurations and compositions in order to perform the functions outlined in this paper.

2. Facilitate and develop linkages among producers and users of research

This new network will offer numerous opportunities for local researchers and decision-makers to work together to learn about each others needs, share priorities, test interventions, and examine and identify various options. Examples of such interactions include the formation of teams around a specific topic (e.g., health system financing) or holding joint workshops or conferences. In addition, it is important that opportunities exist for users of research to participate in the setting of objectives and timelines for research projects.

3. Provide training opportunities

In order to enhance a culture of research use, the network would provide training opportunities for local decision-makers in such areas as acquisition of health research results and assessment of effective application of evidence within the local context. This could be modeled on a train the trainer approach to efficiently increase capacity within the catchment area (i.e., workshop participants would be trained to hold similar training sessions with colleagues in their work settings).

4. Design and advise on effective implementation of evidence as well as study new methods for knowledge dissemination and application

It is important that this new network use an evidence-informed approach to its knowledge dissemination role. Therefore, it will keep abreast of proven methods in influencing policy change and implementing effective interventions. The network will also study new approaches and contribute to the body of knowledge in effective dissemination and application. Collaborative arrangements among networks in different locations should be in place to facilitate the exchange, of training and information dissemination strategies.

5. Advocate for the use of evidence

To be effective, the network must help create an environment that values the use of high quality evidence. Methods to accomplish this goal include such activities as promoting case studies that highlight the benefits of incorporating evidence; or speaking with health system managers on the points in the decision-making process where evidence could be helpful. It may also be beneficial to identify and advocate for incentives for policy-makers and health system managers to use evidence more effectively and more often.

6. Identify health research needs and communicate the need for new research and systematic reviews:

If the knowledge required by decision-makers does not exist or available research is not locally relevant, a mechanism would be developed that would alert international funders of health research and would trigger a call for proposals in that area of need. Ideally, the implementation of a network will help stimulate a more systematic approach to increasing funds for relevant health research. One example could be allocating a percentage of overall national health expenditures for research. In addition, a strategy to increase the allotments to health systems research by global organizations (e.g., the World Bank, Global Fund) would help increase the supply of evidence that could be used to support decision-making.

If there is research in the area of interest but it has not been synthesized (i.e., a review of the literature has not been conducted and the common findings have not been extracted from studies deemed of high quality), then a mechanism would be in place to trigger a call for a systematic review.

Primary users

- Policy Makers
- Health System Managers
- NGO's & Practitioners

Depending on the particular country and the scope of problems being addressed, the network can serve the needs of local policy-makers, health system managers (representatives from community health centres, hospitals, and health districts), practitioners and NGO's. Recognizing that health policies often are influenced from knowledge or opinion from other sectors, the network could also serve the needs of policy-makers from non-health Ministries (e.g., Education, Transportation, and Finance)

Implementation Considerations

The previous section outlined the main functions and users of the network. It is anticipated that such a network could be implemented anywhere in the world. However, it is critical that the network be adapted to match local capacity and needs. Therefore, the following section outlines the necessary considerations when assessing the ease of implementation within an area and the resources required to maximize the potential for success. Appendix 1 provides a number of questions that will help guide the thinking from the conceptual stage to that of operation.

Local champions

Perhaps the first question that needs to be addressed when assessing whether such a network could be successful in a particular area is whether there are decision-makers and supporters that are keenly interested in working on analyzing how the network could play out in their area. It must be 'owned' by the users in order to ensure that it meets their needs and is wanted in the catchment area. If there are no obvious champions, are there people who have the potential to become strong advocates?

Catchment Area

It is important the network adequately serve the needs of its jurisdiction. In some areas of the world it may be possible that one network can serve the needs of multiple adjoining countries especially if they are small in size and have similar priorities for evidence. However, in other cases a network may serve one country or only regions within a country.

Shared governance

The network would benefit from a governance body that is comprised of its end users such as local authorities (policy-makers in government, health system managers, NGO representatives), information specialists (e.g., people with expertise in knowledge synthesis, management and communication), and funders.

Support

Success will hinge upon the degree of political and user support for the initiative. It may be necessary to develop and implement social marketing strategies to ensure that key opinion leaders and users understand the goal of the new network, its advantages and potential impact and therefore commit resources. To that end it is important to identify the reasons why various

stakeholders may want the new network. The potential benefits to stakeholders are outlined in Appendix II.

The value of evidence

If evidence-informed decision-making is not highly valued, the network will not be successful. The incentives to use evidence need to be in place or easily adopted. If the value of evidence is perceived to be low then this may be one of the first goals to tackle.

Priority setting

It is important that the network work on the needs of the region as identified by decision-makers. If the priority needs have already been established this will accelerate the goal of accessing evidence.

The ease with which priority needs can be identified will also help focus the work of the network. Success is more likely in regions where consensus can be achieved on the core needs for evidence that may have the greatest impact on health. It will also be important that a new network not try to tackle too many issues especially in the first few years of operation.

Linkage and exchange

If linkages already exist between researchers and users of research the network will more easily be implemented. Mapping of existing collaborations and networks will be helpful in identifying initiatives that could be used as possible case studies. From the outset, this new network should establish methods to influence the development of new networks and relationships among the users and creators of research.

Available human resources

The new network needs to have dedicated staff. Areas of possible specialties include: information specialists (to search for evidence), research interpretation experts, trainers (on critical appraisal, and effective dissemination and application of evidence), health communication specialists – writers, editors, web designers (to develop and evaluate information products), and professionals to develop and implement priority-setting methods to keep informed of local needs. Staff should be familiar with the health needs of the area and the health system context. It is important that the network be able to access health experts locally, as well as internationally, to assist with analysis and interpretation of evidence. Therefore, staff recruitment and identification of external experts will be important.

Budget

Funds will be needed for administration (staff, office space, supplies, and travel), information products, workshops, commissioned reviews, research and evaluation. Identification of possible sources of funds and cash flow needs will be necessary to ensure ongoing sustainability. It is important that some funds for the network come from local sources to ensure commitment.

Location

When thinking about the best location for this new network one needs to assess where it would have the greatest chance of sustainability and where it would it could best meet the needs of its catchment area. For example the work of the network may be curtailed if it was housed in a Ministry of Health and there was a change in leadership which was not as supportive of evidence, or it may only serve the needs of policy-makers and not other decision-making groups within the

area such as NGO's or health service managers. Therefore, consideration should be given to the pros and cons of the degree of autonomy the network possesses, as well as the potential for building on existing capacity and infrastructure.

Evaluation support

Evaluation should be carried out by an arms length, independent evaluation team (including local and international experts). Expected results could include short term process measures such as use of the services by decision-makers, number of searches for evidence, number of consultations, any change in the linkage and exchange among creators and users of evidence, and the degree of interest in training workshops. More medium and longer term outcomes could be the degree to which evidence helped inform policies and health system management, organization or functioning, and any change in decision-makers awareness, knowledge and attitudes towards evidence. It is important that the implementation of the network be viewed as an experiment in order to study inputs and outputs.

Conclusion

Studies have been conducted on the reasons why decision-making does not always benefit from the results of research. In addition, there is considerable interest from policy-makers, researchers and organizations in strengthening the linkages between research and practice in order to tackle the world's most serious health issues and to build the necessary health system structures to effect change, and thereby improve health and reduce health inequalities.

This paper proposes a model for a network that is based on what we know and then examines the necessary factors for effective implementation. Its goal is to shift the focus of discussion and analysis from concepts to practical implications. In keeping with the theme of this paper, we have the evidence on what works. The next step is to contextualize that evidence based on the needs of local decision-makers and the capacity within countries to help support health decision-making.

Appendix I

Questions to consider when assessing how the proposed network could be implemented:

1. What is the appropriate catchment area for the network (Serves multiple countries, single country or region(s) within a country)?
2. How valued is the use of evidence in decision-making? Are there examples of success or failure that may predict the degree to which the new network will be accepted?
3. How acceptable will the network be to key stakeholders (e.g., potential users, funders)? Would there be political support?
4. Are there local champions that are willing to direct the development of the network? If not, can potential advocates be identified?
5. Can a governance structure be formed that involves both users and funders?
6. Do decision-makers and researchers interact frequently within the region? Are there existing collaborations that could be built upon?
7. What work has been done to assess the type of evidence required within the region (i.e., the topic areas of greatest need)? Is there general consensus on needs?
8. How stable are the information needs? Is it possible to choose a few high need priorities where there is potential for improvement in health status or health system functioning?
9. Are there specialists from the area who could either help staff the network or who could be supporters of the network (e.g., health service researchers, information and communication specialists, etc.)?
10. Are there dedicated resources that could be accessed for the new network? Is there local commitment of resources?
11. Where could the network be housed? Is it advantageous to have the network autonomous, semi-autonomous or should it be located in an existing organization?
12. Are there program evaluation experts that could be used to develop the evaluation protocol and guide its implementation?

Appendix II

This table outlines the potential benefits for stakeholders:

Stakeholder Group	Possible Benefits
Government officials (senior policy-makers, politicians)	More informed decisions about expenditures on new or existing health system proposals or interventions.
Health system managers (community health, regional or hospital staff) or professional organization or NGO representatives	Timely access to evidence that informs the development of new policies, or the continuation of effective policies, as well as learning about proven interventions or health system design (this could provide a linkage function in that one could more easily communicate with people in other parts of the world who have had similar experiences).
Health researchers	Enhanced knowledge of the research needs of decision-makers and more opportunity for interaction with them. They may also be able to use the services of the new network to access synthesized evidence in order to identify gaps in research and to develop appropriate proposals of study.
General public	It is not envisioned that the network would provide direct-to-the-public information since there would most likely be other intermediary organizations that are better positioned to undertake that role (e.g., NGO's, Ministry of Health). However, the network could be an ideal supplier of information on which those organizations could rely to develop tailored messages and interventions for the public. Consumers may have increased confidence that public resources are being used more effectively if there was an increased use of evidence.
Funders	The opportunity to be actively involved in shaping the design and ongoing functioning of the network(s). They could also be users of the network's services (e.g., they could get information on effective interventions they are considering supporting).

Appendix III

An example of how the network could work:

Staff would work with decision-makers within the catchment area to identify key people to attend a priority-setting workshop(s) to develop the long term areas of focus for the next 3-5 years. This process may include a few fact finding steps leading up to the workshops including health surveillance and opinion surveys.

Once the long term priorities are set, small multi-disciplinary teams would be formed on each issue to focus on the specific evidence required. For example one of the priority issues identified could be effective malaria control measures. Staff would seek out relevant evidence on what has proven successful in reducing malaria in low and lower middle income countries. If necessary, the staff may need to work with decision-makers to further define the information required (e.g., effective control measures in rural areas). Staff would operate as an advisory committee to help analyze and interpret the research results within the local context (e.g., how does the information relate to the health system infrastructure within the particular country), determine the best way to format the information (e.g., what are the key messages from the evidence and what methods would prove most useful to disseminate that information), and identify people who could benefit from this information (e.g., rural health workers, health practitioners, NGO's).

There may be circumstances where the appropriate evidence is not readily available. Therefore, a systematic review may be commissioned. If the review did not identify relevant work, then a global body would be notified on this need for more research. Alternatively, local researchers could be approached to determine their level of interest in carrying out such research (provided there is enough local capacity).

After relevant research results are obtained, analyzed, interpreted based on local context, formatted appropriately and disseminated according to evidence-based strategies, staff would work with decision-makers to evaluate the degree to which the evidence was useful to the decision-making process. Using the example of malaria control, it would be important to assess whether accessing, analyzing and disseminating the evidence on effective control measures resulted in any change in attitudes, knowledge or behaviours with respect to malaria interventions by the key target audiences. Information gained could inform both the current dissemination strategy for the health topic of focus, and future dissemination methods (e.g., what works in reaching health workers). It is expected that the network would be regular contributors to the knowledge translation literature.

A rapid response service example:

A senior member from a Ministry of Health may want to know the answer to a health systems question such as how best to implement an immunization program. Because of the particular political context, she needs to have information about what has worked in other countries and needs a reply within the week. She contacts the network and an information specialist is available to search a database to find such information. Alternatively, the Ministry person might access the database herself and work with the staff person from the network to analyze and interpret the findings. The response time would correlate with the complexity and specificity of the information needs.

APPENDIX IV

Components of Decision-Making

