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EVIDENCE-INFORMED DECISION-MAKING:

Experience from the design and
implementation of community health
strategy in Kenya

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ABSTRACT

Objective: We describe how a collaborative research involving health decision-makers, service providers, communities and research institutions provided a pathway for getting evidence into the design of Kenya's community health strategy as part of wider health systems improvement.

The case study: The process started with a review of community-based health care in the eastern Africa region, followed by pilot projects in western Kenya. More demand for evidence by national decision-makers arose when a window of opportunity emerged to develop a national community health strategy. The decision-makers were engaged in the follow-up studies to inform further development of the strategy. Challenges included competing work interests of the decision-makers, delays in getting research results, and financial modalities.

Conclusions: Decision-makers can utilise locally generated research evidence to address a major health systems problem if they are engaged in the study from the beginning. Their continued engagement in the study can also lead to more resource mobilisation for additional evidence generation. The involvement of influential development partners and strengthening decision-makers' capacity in knowledge translation are also critical for effective research utilisation.

KEYWORDS

evidence, policymaking, community health.

BIOGRAPHIES

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1.1 INTRODUCTION

Community-based health care (CBHC) was taken up by many sub-Saharan African countries following the Alma Ata declaration on health by the year 2000 (Kaseje and Sempebwa 1989). However, Kenya lagged behind other countries in the region in the 1980s. In many sub-Saharan African countries, non-governmental organisations (NGOs) trained and supported community-based health workers to implement primary health-care activities with positive outcomes (Haines *et al.* 2007). Scaling-up of the initiatives was hindered by the lack of a national policy framework. More formal recognition of CBHC by the public sector occurred with the development of the second Health Sector Strategic Plan 2005–2010 (MOH 2005), which incorporated a community strategy, but with no clear framework to guide implementation. The objective of the national community health strategy was to provide health-care services for all life cohorts and socioeconomic groups at household and community level. The community strategy was being developed against the backdrop of a persistently weak national health system coupled with weakness in implementation of previous health sector policies and poor resource allocation in the sector (MOH 2005). While the country's health policy documents and strategic plans have consistently emphasised issues of access and equity, inadequate human resources for health remains a major challenge.

Although Kenya has performed better than some countries in the region in terms of human resource numbers, there are still major challenges in the distribution of health workers, particularly to the rural and hard-to-reach areas (MOH 2005). Community-based initiatives implemented in the past, mainly by NGOs, emphasised engagement with communities, but did not adequately engage policymakers in planning and implementation. Furthermore, actions were not based on local research evidence. Recent health sector efforts led to the development of the community health strategy, which aimed at enhancing access to health care by providing health-care services for all cohorts and socioeconomic groups at household and community levels; building the capacity of community health extension workers (CHEWs) and community health workers (CHWs) to provide community-level services; strengthening health facility and community linkages; and raising the community's awareness of its rights to health services. At the point of developing the second Health Sector Strategic Plan in 2005, it was not clear how the sector was going to operationalise the community health strategy; thus there was a need for evidence to inform implementation of the strategy.

The Tropical Institute of Community Health and Development (TICH), currently under the Great Lakes University of Kisumu, had engaged in a CBHC initiative in the western region of the country. The initiative became necessary as it was clear that efforts to deliver effective and essential health care by the formal health system had grossly limited coverage (Nganda, Wangombe, Floyd and Kangangi 2004). In this chapter, we share experiences that illustrate how a collaborative approach to research, involving health decision-makers, health service providers, communities and research institutions, provided a pathway for getting evidence into the design of Kenya's community health strategy as part of a wider district health systems

improvement programme. We illustrate the role of evidence and other factors in focusing Kenyan health decision-makers on community health and how a collaborative research approach built on this window of opportunity to generate evidence that informed the design of Kenya's first community health strategy. We reflect on the intricacies of research-to-policy and practice, and the iterative and interactive experiences of co-creating knowledge with decision-makers.

2.1 THE INTERVENTION

2.1 Design of the intervention

The overall initiative adopted an implementation-science approach, where interventions are developed, tested for effectiveness and disseminated to enhance uptake and scaling-up of research findings to achieve better population health outcome (Brownson, Colditz and Proctor 2012). The focus is to test what, why and how interventions work in real-world settings and approaches to improve them (Peters *et al.* 2014). In implementation research, a mix of methods is applied to generate evidence on how interventions work. Thus, in this initiative, a mix of evidence was generated through surveys and spin-off studies, including a quasi-experimental study that set out to develop and test the effectiveness of CBHC (Olayo, Innvaer, Lorenc, Woodman and Thomas 2014). The case documents the partnership that brought together national-level health decision-makers, community representatives, health service managers and an academic institution in generating and sharing evidence for improving CBHC.

2.2 Implementation

We will describe the intervention process in three main phases. The first phase was the evaluation of CBHC in the eastern African region. In the second phase, the researchers and communities were engaged in knowledge generation and application while the policymakers played an advisory role. In the third phase, policymakers became *bona fide* partners in knowledge generation and application, eventually taking over leadership of the research process.

2.2.1 Phase 1: Generating evidence and design of the CBHC model

Evaluation of CBHC in the eastern African region

Between 2000 and 2001, we reviewed the effectiveness of CBHC in Tanzania. This review was commissioned by UNICEF, because they had been supporting CBHC projects in the country. Through a cross-sectional sample survey covering 12 districts implementing CBHC and 12 comparison districts, we found that the populations covered by the CBHC approach had better health indicators. Based on these findings, the Tanzanian Ministry of Health elaborated a strategy for scaling up CBHC nationwide. With the support of the Rockefeller Foundation, we extended the CBHC review to the other countries in the region in 2001–02, notably the then Southern Sudan region, Malawi and Ethiopia and the findings were considered. From this review, CBHC was associated with improvement in child health indicators such as immunisation.

Engaging decision-makers in the design of the CBHC model

Using the findings from the multi-country review, we commenced the design of a study to test CBHC effectiveness in Kenya in 2003/2004. At the time, there was a window of opportunity, because Kenya was completing the second national Health Sector Strategic Plan (KNHSSP II). It emerged that the health indicators had reversed downwards in Kenya from the early 1990s (MOH 2005). This realisation became a powerful incentive for the involvement of Kenyan policymakers in designing the project. The purpose was to strengthen community-based health services and to generate evidence to guide the implementation of the Kenyan health policy framework. Evidence was needed on how to bridge the complex interface between the community and the health system to enhance timely access to care at times of need (KNHSSP II, 2005). The process began with the invitation of the national directors of health services from Kenya, Uganda and Tanzania and a representative from the World Health Organization (WHO) Kenya Country Office to participate in the design of the study and share their experiences of CBHC implementation. The regional directors testified to the contribution of the community-based approaches in improving health status in other contexts, with the WHO representative adding evidence of its effectiveness in Ghana as an example. This set the stage for the engagement with the Kenyan Ministry of Health (MOH) and WHO Country Office, which led to a concerted effort to address the glaring health and development inequities in Kenya. They formed the Technical Advisory Group (TAG), which was brought together in a workshop to share experiences and evidence from various reviews and design the CBHC model for Kenya. Several meetings involving other major partners were held to design the model, led by MOH and WHO representatives. WHO, UNICEF, community representatives and the MOH became strategic allies in influencing policy change. The WHO representative was primarily involved throughout, not only as a member of Technical Advisory Group and Technical Advisory Committee (TAC), but also as an adviser in the process.

2.2.2 Phase 2: Testing and adoption of CBHC model

Testing the effectiveness of CBHC in western Kenya

The CBHC model designed at the TAG workshop was tested in six districts in western Kenya between 2004 and 2007. This was to answer the question 'What is the effectiveness of CBHC in reversing the trends of poor health indicators?' The pilot study was funded by the Rockefeller Foundation. The design of the study was quasi-experimental, consisting of a CBHC intervention in selected sites and a comprehensive assessment of selected indicators before and after the intervention. The interventions included: establishment of community units with governing structures to act as a link between communities and the health system, CHWs and their supervisors; identification and training of CHWs to support households in improving health-seeking behaviour and disease prevention, as well as to maintain the village register (covering 20–50 households per CHW) and facilitate health dialogue at the household level; and establishment of village registers of all households to provide community-based information on health status aspects targeted for improvement such as health facility delivery, antenatal

care, water treatment, use of latrines, use of insecticide-treated nets and family planning service utilisation.

The information collected in the household registers was updated every six months by the CHWs to monitor change in health-seeking behaviour among the household members. The information was analysed and displayed on chalkboards within sub-locations. Once collected at sub-location level, reports were submitted to the district level for electronic processing. Manual analysis of relevant health facility data for posting on chalkboards at the sub-location level was also done. The results were used during quarterly dialogue meetings that were attended by health managers, service providers and community representatives for each community unit. The dialogue process included reflections of data from health facilities within the catchment area and from the community chalkboard to clearly depict the current situation in the community. This was then followed by discussion towards consensus building on what actions to take to address the situation. A plan of action was then developed, with targets to be achieved before the next dialogue session. Since the sessions at the community and sub-district levels were as large as 50 people or more, the action-planning stage of the process was undertaken in groups of eight to 12 participants.

Cross-sectional surveys were carried out in 2004 and 2007 at intervention and non-intervention sites in the six study districts to assess performance using the assessment framework approved by the TAG. The surveys covered three health centres in intervention and non-intervention sites in each district. Each assessment team included three researchers, one provincial health manager and six district health managers to ensure the participation of health managers in data collection. After data analysis, we wrote reports highlighting key findings, which included improvement in priority indicators identified by the TAG such as the performance of governing structures, service delivery and coverage, performance of CHWs in service provision and information collection (Akinyi *et al.* 2014; Otieno-Odawa and Kaseje 2014). The outcome measures included health facility delivery, antenatal care, water treatment, latrine use and utilisation of insecticide-treated nets and family planning services. These were disseminated to the TAG members, and through them to the Director of Medical Services. Through community dialogue, research results were discussed with the communities, leading to decisions and actions based on emerging issues. In this way, the public participated in interpretation and application of findings to drive continuous improvement in health indicators at community levels (Akinyi, Nzanzu and Kaseje 2015; Buong *et al.* 2013; Kaseje *et al.* 2010; Moth, Kamiruka and Olayo 2015).

The TAG meetings were often held at study sites for members to observe sub-district dialogue days in order to gain insights into practical aspects of the intervention process and thus be able to provide inputs for the refinement of policy propositions. In this way, the meeting brought all stakeholders together, including a representative of the Parliamentary Committee on Health, to discuss the findings and their policy implications. This was part of the iterative process bringing together decision-makers, researchers, managers, service providers and communities into the dialogue. These sessions created public awareness and political engagement.

Adoption of and implementation of CBHC

By 2008, the Ministry of Health and all the stakeholders had been convinced that the CBHC model was effective in improving the health status of populations and the strategy was approved for country-wide implementation. In policy formulation, the MOH termed it Community Health Strategy for delivering the Kenya Essential Package for Health (KEPH). The structures to sustain effective linkage included the TAG, which was the key policy dialogue mechanism. At the time of adoption, the MOH had not budgeted for the implementation of the strategy and tended to expect partners to finance its implementation. This led to many questions, such as whether all the elements of the strategy were applicable in the different sociodemographic contexts in Kenya and what modifications were required in different contexts; how cost-effective was the strategy; what were the mechanisms for sustainable task-shifting to community health volunteers in different contexts; and what was the reliability and validity of data collected by community health workers. This set the stage for the next phase of our research-to-policy engagement, since these questions were not addressed in the original study. It is because of the importance of these questions to the policymakers that they were willing and interested to be co-principal investigators in the next phase to provide leadership, not as advisers but as part of the research team. In the end, the Ministry of Health established a Research Unit to enable it to lead CHS research and commissioned us as advisers, and they invited University of Cape Town and Nagasaki Universities, supported by the Japan International Cooperation Agency (JICA), to join the consortium. JICA had a much more direct influence than any other donor, as it also commissioned further studies and supported the running of the Community Health Research Technical Working Group. JICA invited us to be members of the working group it spearheaded.

2.2.3 Phase 3: Engaging policymakers and managers as co-investigators

The collaborative research team designed a new phase of the study to address the questions about the uptake and effectiveness of the strategy, the cost-effectiveness of the model, the appropriateness and sustainability of task-shifting to community health volunteers, and the validity of data collected by community health volunteers in different sociodemographic contexts in Kenya – nomadic, rural and urban slums. Our collaborative study focused on western and north-eastern Kenya, areas with the worst child mortality rates (according to Kenya Democratic and Health Survey 2008–09, see KNBS and ICF Macro 2010), and was implemented with funding from the Global Health Research Initiative and the Consortium for National Health Research. It was our contention that if this strategy could improve health status in these areas, it would probably improve health indicators anywhere in the country.

The study design was again quasi-experimental, with three intervention districts and three control districts in urban slums, rural agrarian and nomadic areas to represent the main sociodemographic contexts in which the strategy was being implemented. The interventions were similar to those covered in

the section above. The methodological details have been described by Olayo *et al.* (2014). The research team included responsible personnel from each of the study regions to spearhead relationship development with communities, managers and service providers at the study sites. The involvement of the Director of Primary Health Care as a co-principal investigator facilitated engagement with government policymakers and managers at all study sites.

There was value in providing platforms and an environment for quality deliberation between decision-makers and research stakeholders. When debating and making decisions, public policymakers and stakeholders drew not only on research, but also on many other types of evidence. These included engaging those locally involved in or affected by a decision in the research synthesis process through a deliberative process based on the research synthesis. Furthermore, involving local policymakers and other stakeholders led to better local ownership of decisions and improved implementation of policies. Additionally, they advised research teams on local priorities and the cultural and contextual relevance of knowledge generated, and acted as fulcrums for evidence uptake.

The processes led to the finalisation of the revised community strategy by the National Community Health Services Technical Working Group in 2012/2013. Following the implementation of the new constitution in Kenya in 2013, in which governance was devolved to counties, the research team undertook a series of county dissemination workshops in an effort to accelerate the implementation of the policy by the counties. The new community health strategy was disseminated to the counties that we worked with and dialogue held with the stakeholders to enhance adoption and implementation of the strategy by the county health team. The workshops brought together the members of the county assemblies, the county ministers of health, county health management teams, service providers and consumers.

3.1 DISCUSSION

3.1 Relating process to existing evidence uptake theories

Key concepts and themes that have emerged from this experience can be explained in relation to the existing policy development theories. First, the theory around the ‘policy window of opportunity’ described by Kingdon (2005) is explicit. Second, the policy cycle and evidence use throughout the process is described (Buse, Mays and Walt 2012), and lastly, the research uptake theory around push and pull factors have also featured in this experience (Lavis, Posada, Haines and Osei 2004).

3.1.1 The ‘policy window’

Kingdon (2005) uses a political science approach to propose ‘policy windows’ – agenda setting where changes in policy can be made because of opportunistic circumstances or available windows of opportunity where components of the policy process are connected, for example, the policy solution and the political climate surrounding the issue. The windows of opportunity may be defined by environmental factors, gaps in achieving desired policy objectives, or the availability of effective interventions

not included in contemporary policies. In this study, the main problem was reversal of health indicator trends as demonstrated by the Kenya Demographic and Health Surveys of 1993, 1998, 2003 and 2008 (see CBS, MOH and ORC Macro 2004; KNBS and ICF Macro 2010; NCPD, CBS and Macro International 1994, 1999), which demanded urgent policy action. It was clear that the existing health sector policy was no longer meeting desired objectives as demonstrated by the reversal in indicator trends and other health sector issues. Furthermore, there was the need to meet not only national health targets, but also international commitments such as the millennium development goals (MDGs) by 2015. This realisation created a policy window and thus CBHC strategy was available as a policy solution. There was a clear political will to facilitate change, and community strategy became an agenda in national health forums. Key stakeholders such as politicians, sector decision-makers and the media were willing to engage in policy formulation or change, as was the case in this collaborative initiative.

3.1.2 The policy cycle and research influence

Policy process often occurs in stages, which include problem identification and agenda setting, policy formulation, implementation, and monitoring and evaluation. Evidence played a role at all four stages of the policy cycle (Buse *et al.* 2012). The CBHC agenda featured during the second health sector strategic planning stage. At the agenda-setting stage, decision-makers were grappling with the idea of developing effective community strategy to link health service delivery between the communities and formal health-care system. Research evidence, particularly from national surveys and health service reviews, was used to identify the problem, but did not provide adequate solutions. Thus, evidence from the CBHC surveys and experiences from other contexts were brought in to inform the agenda and strategy development. This was achieved through several consultative meetings and workshops involving various stakeholders. Research evidence was crucial in identifying policy options, particularly on community-based interventions and organisation of the community-level structures. At implementation stage, the pilot studies informed the implementation design and further review of community health implementation guidelines. New evidence also informed revision of the final strategy based on the emerging issues from the study.

Participation of the research team in the Interagency Coordinating Committee, a policymaking body in the Ministry of Health, created opportunity for sustained engagement with the policy processes beyond the Technical Advisory Committee as members. In addition, the Technical Advisory Committee influenced the creation of the Technical Working Group on research to policy, which provided another sustainable mechanism for research into policy engagements. Several organisations, particularly NGOs, became members of the Technical Working Group and shared evidence from specific pilot studies. Data from the studies were fed continually into these mechanisms to enable continuous adaptation of the policy guidelines as contexts changed with geography and time. Other bilateral organisations, particularly UNICEF, WHO, USAID and JICA, were crucial actors in the process. They provided funding and technical support during the meetings, but also brought in experiences and evidence from the other contexts as

well as from global consultations on the work of community health workers who were key in this strategy. In particular, WHO/UNICEF guidelines for community-based health care, including the guidelines on integrated case management for childhood illness, were very useful during the development and review of the community strategy implementation guidelines.

3.1.3 Research to policy efforts

A combination of research uptake efforts was applied, including push and pull efforts and exchange efforts described by Lavis *et al.* (2004). 'Push efforts' are typically unilateral strategies, led by researchers to encourage the uptake of research findings in policy-oriented decision-making. In the past, these were typically academically oriented approaches such as peer-reviewed publications and presentations. More promising approaches that are tailored to the working realities of policymakers include the preparation of evidence briefs and sharing policy-relevant messages arising from research, as we did in this study. Through these strategies public policymakers and stakeholders draw not only on research, but also on many other types of evidence and values (Lavis *et al.* 2004). These approaches may also engage those locally involved in or affected by a policy decision, through a deliberative process, which considers synthesised research. Such interactions between research producers and users have been shown to increase research use by policymakers (Innvaer *et al.* 2013; Oliver *et al.* 2014; Lomas 2005). Although contextualising the evidence and ensuring its applicability increases the likelihood of its use by policymakers and managers (Lavis *et al.* 2004; Oxman, Fretheim and Schünemann 2006), single strategies are rarely adequate to bridge the 'know-do' gap.

Systems were developed to encourage the 'pull' efforts, recognising that, in decision-making, policymakers and stakeholders draw not only on research, but also on many other types of evidence. Such interactions between research producers and users have been shown to increase the prospects for research use by policymakers. This approach is noted as becoming more common and increasingly recognised as a strategy for supporting the decision-making process for policymakers. Research users have a critical role, as they advise research teams on local priorities and the cultural and contextual relevance of knowledge generated and act as fulcrums for knowledge translation, expansion and scaling-up. The activities included preparation of briefs with tailored policy-relevant messages from evidence arising from their research.

Policy space was jointly identified by key stakeholders. The platform for the interaction and exchange between policymakers and researchers was the TAG, which included policymakers from Uganda and Tanzania; both of these countries had longer experience with CBHC as part of their national health policy. Kenyan policymakers were thus more likely to listen to their peers from the other countries than to researchers. These external policymakers became powerful policy influencers in the desired direction. The group facilitated results-driven dialogues based on the research findings and other relevant experiences (Lavis *et al.* 2004). Interactions between research producers and users have been shown to increase the prospects for research use by policymakers (Innvaer *et al.* 2013; Oliver *et al.* 2014). Research

syntheses, contextualising evidence and ensuring the applicability to context have been shown to increase the likelihood for evidence to be used by policymakers and managers (Dobrow, Goel and Upshur 2004).

Involving local policymakers and other stakeholders provided additional benefits, such as better local ownership of decisions and improved policy implementation (Estabrooks, Thompson, Lovely and Hofmeyer 2006). The CBHC policy was adopted even before the study was completed because of the demonstrated effectiveness of the model. There were indications that the ownership of the policy was not fully internalised by the policymakers. This necessitated further research to address frequently asked questions. It has been shown that training decision-makers in knowledge translation strategies can enhance leadership skills and in addition strengthen organisational or community capacity to use research more effectively. The lack of skilled human resources to undertake research-to-policy initiatives has been found to be a main challenge to supporting evidence-informed health policy efforts.

3.2 Facilitators and challenges

3.2.1 Facilitators

High decision-maker interest in addressing major health systems issues, including the reversal in health indicators, created a demand for evidence on the best options to address the issue. In addition, regional competition among countries and the fact that Kenya, in spite of a slightly better economy than most of the countries in the region, was lagging behind in CBHC created an impetus for change in the country. Carrying out research within the framework of the Kenya Health Sector Strategic Plan KNHSSP II (2005) captured and sustained the interest of the end users in the Ministry of Health policy, management and service delivery levels, as they saw the research project providing answers to questions they were asking. In addition, early engagement and collaborative approach in the research-to-policy process enhanced research knowledge uptake. Researchers interested in influencing policies have demonstrated that early collaboration on health systems research is important (de Savigny, Kasale, Mbuya and Reid 2008). This includes the joint development of research questions and how to answer them, which strengthens research relevance and facilitates a deeper appreciation and utilisation of research findings at the policy level (Lavis *et al.* 2006). Furthermore, the approach creates a common purpose for research and frames the research to support decisions of interest to all partners, thereby generating action-oriented results of interest to all parties (Lomas 2005). In this study, the decision-makers and other actors participated actively, becoming co-creators of knowledge.

Another factor was the research approach. The research applied implementation research design where CBHC intervention evidence was generated, and a package was developed to suit the Kenyan context and tested and taken to scale in the country. The broad nature of the initiative allowed integration of evidence from various sources and pilot studies with an intention to improve the health-care system at the lower levels. Finally, we recognised that decision-makers at programme level who acted as the change champions did not have adequate knowledge in research-to-policy

uptake. Since they were the link between the more senior decision-makers, such as politicians, and the research community, it was necessary to train them on tools for evidence use such as policy briefs.

3.2.2 Challenges

Challenges in this research-to-policy process included numerous programmes competing for the attention of service providers, managers and policymakers, which made them miss meetings or appoint representatives rather than attending in person. These programmes diverted the attention of personnel from their core roles in the study. The activities with more funds and allowances to staff tended to take priority. However, there were a few champions who remained focused on supporting the study process through attending the meetings and the field visits. Another challenge was the timing of the research results. Policy development does not always go harmoniously with research processes and time frame. Often results were too late, but having a policymaker as co-investigator enabled greater understanding of such delays and hence tolerance. This underlines the importance of making policy engagement an iterative process that needs to be mutually reinforcing. The joint process of developing policy briefs with policymakers and community representatives increased their relevance to the policy implementation context and hence improved evidence uptake. In addition, the decision by the Ministry of Health to take over the leadership of CHS research and establish a unit to generate research questions and conduct research that would complement our work, accelerated steps towards implementation, specifically the development of the schemes of service for community health personnel, and a training curriculum for community health assistants. This process also brought in other stakeholders including NGOs who were implementing community health programmes.

Even though the evidence process was successful and the emerging community strategy and guidelines were widely accepted, adequate implementation of the strategy is still challenged by existing contextual factors. These challenges include inadequate resources and failure to pay CHWs, leading to attrition, supervision challenges, inadequate geographical coverage and inadequate community awareness (McCollum *et al.* 2015; Oliver *et al.* 2015). These challenges should be addressed by the decision-makers to ensure effective community-based health care.

4.1 CONCLUSION

In this case study, we demonstrate how an iterative and collaborative research approach involving policymakers, health services providers, communities and research institutions is possible and effective in influencing policy change. Each partner contributed to the research process at all stages and according to their unique and shifting capacities and perspectives. Often, data collection and analysis was guided by demand for evidence by the end users. Over time, structures were established within the Ministry of Health to take responsibility for generating research questions. The study yielded information on policy-influencing mechanisms that changed the way that community health services were being planned for and offered to households. We were thus able to accelerate the implementation of the community-based health-

care approach supported by communities and strategic partners. In addition, it demonstrated the critical role played by strategically positioned individuals contributing to policy windows that researchers should pay attention to, such as persisting or worsening health indicators.

The initiative illustrates how research users can advise research teams not only on local priorities, but also on the cultural and contextual relevance of knowledge generated. They act as fulcrums for change, expansion and scaling-up, as described by many implementation researchers (Bennett et al. 2011; Lomas 2005). Collaborative implementation research approach optimises the means by which the research itself acts as an instrument for capacity building for both the individuals involved and their institutions, acting as levers for change (Edwards et al. 2009).

From the issues raised in this initiative, the gaps and bottlenecks in the uptake of research findings into policy and practice may be due to competing priorities, lack of resources for research and lack of technical know-how in how to synthesise research evidence for use in policy planning and implementation, and ultimately to improve the health of populations. Political support for undertaking research and using outcomes is key in a research-to-policy continuum, particularly where there is a need to change policy directions or to formulate strategies and frameworks for service delivery. Involvement of key stakeholders in the research design, data generation, analysis and use of the findings to inform policy is crucial in fostering interactions and partnership in devising workable solutions.

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