Call for Expressions of Interest

HIGH-RES AWARD

Heightening Institutional capacity for Government use of Health Research

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1. **Summary of call**

This is a joint call for proposals from the Alliance for Health Policy and Systems Research and Wellcome to enhance the capacity of ministries of health in lower-middle and low-income countries to use health research evidence in policy-making.

Expressions of interest are invited from consortia – including participants from both research institutions and ministries of health – proposing to explore and recommend effective and sustainable strategies for strengthening institutional capacity for the uptake of health research into policy. This call will fund one consortium up to US$ 1,000,000 for a maximum duration of 36 months.

2. **Background to call for proposals**

This call responds to the areas highlighted in the 2017 WHO World Report on Health Policy and Systems Research (HPSR):

- The generation and use of health research relevant to policy-making in low- and middle-income countries (LMICs) continue to face significant challenges, particularly at the institutional level.
- Efforts to understand the demand and use of research by decision-makers have largely focused on strengthening individual capacities through training programmes and engagement with policy-makers. However, just as research capacity-building involves more than just training researchers, building the capacity of policy-makers to demand and use research evidence must include efforts to strengthen institutional capabilities.

In order to guide and inform this call for proposals, Wellcome and the Alliance commissioned a review of the literature supplemented by key informant interviews with a view to 1) identify key sources that document interventions or strategies aimed at enhancing institutional capacity for the use of research in decision-making, and 2) inform the development of an overarching conceptual framework – a theory of change (ToC) – that outlines key outcomes expected to enhance institutional capacity within a ministry of health (see Annex 1).

The ToC derived from this review is available to all grantees (Annex 1) and serves as a preliminary guiding framework for this call for proposals, capturing the landscape of strategies that may enhance institutional capacity for research uptake. The review identified a range of considerations and recommendations for the development and implementation of diverse strategies to promote evidence-informed decision-making capacity. It also identified that evidence of empirical effectiveness remains scarce. The work of the consortium selected under this call will 1) apply the existing ToC and 2) generate new evidence about the effectiveness and sustainability of identified strategies in different contexts, refining the ToC as appropriate.

Wellcome and the Alliance expect applicants to utilize the World Report, literature review and ToC when developing their applications.

3. **Objectives of this call**

This call focuses on **strengthening institutional and government use of health research to systematically demand and use evidence in decision-making in lower-middle- and low-income countries**. Each consortium should address two objectives:

1. Implement innovative and sustainable interventions in ministries of health at the national or sub-national level that address specific needs for enhancing capacity to use research evidence in decision-making.
2. Use robust methods to evaluate the effectiveness and impact of these interventions.

**Scope of call**

This call is focused on strengthening the capacity of ministries of health in lower-middle- and low-income countries – including fragile states (see more information in Section 4: Eligibility to apply for the call).
As a result of this call, the Alliance and Wellcome intend to fund the establishment of one consortium comprising multiple research and policy-making partners. The consortium should comprise both those conducting health research (e.g. research and academic institutions) and using health research (e.g. ministries of health) with the goal of implementing and evaluating sustainable interventions to enhance institutional capacity to use evidence in decision-making.

The proposed interventions must strengthen institutional capacity for the demand and use of research evidence in health. Interventions focused exclusively on strengthening the capacity of individual policy-makers will not be funded under this call. Interventions may focus on national or sub-national (in other words, state or provincial) level decision-making bodies, and can include decision-making bodies from different countries, either from one region (i.e. region-specific) or from one or more regions (i.e. inter-regional). Other relevant stakeholders (e.g. civil society representatives, knowledge brokers) may also be included in the consortium.

A total of US$ 1,000,000 is available to fund one consortia for a maximum duration of 36 months.

Outside the scope

The following proposals are beyond the scope of this call and will not be considered eligible:

- Programmes addressing capacity of clinicians to use evidence in clinical decision-making.
- Interventions that focus on individual capacity building only, outside of a broader programme.
- Consortia comprising only research institutions.

4. Eligibility criteria

The collaborating research or academic teams must be based at recognized institutions with the capacity to undertake high-quality research. This means an institution that possesses an existing in-house capacity to host a grant and can demonstrate an independent capability to undertake and lead on research programmes.

Ministries of health must engage as implementing partners and are required to co-lead the consortium. Applications that include capacity building and comparison across several different institutions and/or countries are encouraged.

The primary applicants must be based in a least developed, lower-income or lower-middle-income country (based on the OECD DAC List of ODA recipients, although up to 20% of the grant can be used to support the involvement of participants from upper-middle-income countries or high-income countries).

5. Assessment process and criteria

Expressions of interest will be assessed per the following criteria:

- Understanding of local capacity development needs with respect to enhancing the demand and use of evidence in policy-making (30%)
- Soundness, innovativeness and likely impact of interventions identified (30%)
  - Awareness of possible strategies to promote capacity for research use in policy-making and experience conducting robust evaluations of such interventions
  - Reference to the literature review and ToC (Annex 1)
- Organizational capabilities (15%)
  - Experience in managing large, multi-country studies
- Commitment of policy-makers to the project (15%)
  - Leadership, engagement and commitment of policy-makers as co-investigators
- Appropriateness of budget (10%)
6. Selection process

Calls submitted under this call will be reviewed in two stages.

Stage 1

Interested parties are requested to submit brief expressions of interest (please see the application template below) by 15 August 2018. Shortlisting decisions will be made by a selection committee. Applicants will be notified in September 2018.

Stage 2

Up to three proposals will be shortlisted. Applicants are expected to hold a workshop to develop the full proposals. The costs of the proposal development workshop, not exceeding US$ 15,000, must be included in the budget proposal as a separate line item. The workshop costs will not count toward the US$ 1,000,000 funding from this call. The deadline for full proposals will be mid-November 2018. Proposals will be technically reviewed by a selection committee. Applicants will be notified in December 2018. Grants are expected to commence around February 2019.

7. Technical support

The Alliance and Wellcome are engaged funders and aim to ensure work of high standard is conducted through their programmes. The funders will work closely with grantees to support their work, promote opportunities for South-to-South learning through workshops and online fora, and if appropriate, identify technical support to assist grantees in their efforts.

8. How to apply

Submissions of bids should be made to alliancehpsr@who.int.

Please use the subject: WHO Bid Ref. Heightening Institutional capacity and Government use of Health Research (HIGH-Res) Award

Hard copies of submissions will NOT be accepted. Submissions must be written in English.

Please direct all questions concerning this call for expressions of interest by email to the Alliance (alliancehpsr@who.int).

The deadline for applications is 15 August 2018.

WHO may, at its own discretion, extend this closing date for the submission of proposals by notifying all bidders thereof in writing. Any proposal received by WHO after the closing date for submission of proposals may be rejected.

WHO may, at any time before the closing date, for any reason, whether on its own initiative or in response to a clarification requested by a (prospective) bidder, modify the call by written amendment. Amendments could, inter alia, include modification of the project scope or requirements, the project timeline expectations and/or extension of the closing date for submission.

All prospective bidders that have submitted a proposal with regard to the call will be notified in writing of all amendments to the call and will, where applicable, be invited to amend their proposal accordingly.

WHO may, at its discretion, ask any bidder for clarification of any part of its proposal. The request for clarification and the response shall be in writing. No change in price or substance of the proposal shall be sought, offered or permitted during this exchange.
9. Award of Contracts

Contracts shall be awarded based on a combination of criteria including the bidder’s motivation statement, exposure to or experience of, working in the area of evidence synthesis, the content of the proposal in terms of comprehensiveness, and value for money.

However, WHO reserves the right to:

• Award the contract to a bidder of its choice, even if its bid is not the lowest;
• Award separate contracts for parts of the work, components or items, to one or more bidders of its choice, even if their bids are not the lowest;
• Accept or reject any proposal, and to annul the solicitation process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders and without any obligation to inform the affected bidder or bidders of the grounds for WHO’s action;
• Award the contract on the basis of the Organization’s particular objectives to a bidder whose proposal is considered to be the most responsive to the Organization’s needs and the activity concerned;
• Not award any contract at all

WHO has the right to eliminate bids for technical or other reasons throughout the evaluation/selection process. WHO shall not in any way be obligated to reveal, or discuss with any bidder, how a proposal was assessed, or to provide any other information relative to the evaluation/selection process or to state the reasons for elimination to any bidder.

NOTE: WHO is acting in good faith by issuing this call. However, this document does not obligate WHO to contract for the performance of any work, nor for the supply of any products or services.

WHO reserves the right to enter into negotiations with one or more bidders of its choice, including but not limited to negotiation of the terms of the proposal(s), the price quoted in such proposal(s) and/or the deletion of certain parts of the work, components or items called for under this call.

Within 30 days of receipt of the contract, the successful bidder shall sign and date the contract and return it to WHO according to the instructions provided at that time. If the bidder does not accept the contract terms without changes, then WHO has the right not to proceed with the selected bidder and instead contract with another bidder of its choice.

10. About the funders

Wellcome exists to improve health for everyone by helping great ideas to thrive.

The Trust is a global charitable foundation, both politically and financially independent. It supports scientists and researchers, to take on big problems, fuel imaginations, and spark debate.

Further information about Wellcome can be found at www.wellcome.ac.uk.

The Alliance for Health Policy and Systems Research (the Alliance) is an international collaboration based in Geneva at the World Health Organization (WHO). It has its origins in the recommendations of the 1996 report of WHO’s Ad Hoc Committee on Health Research, which identified the lack of health policy and systems research as a key problem impeding the improvement of health outcomes in low- and middle-income countries. A key strategic objective of the Alliance is to strengthen institutional capacity for the conduct and uptake of health policy and systems research generation and use of evidence as a mechanism for strengthening health systems in low-and-middle income countries.

Further information about the Alliance can be found at http://www.who.int/alliance-hpsr/en/
PART I. ADMINISTRATIVE INFORMATION

Name of the proposed consortium, the consortium partners including name and contact details (postal address, email, phone) of a key contact person.

PART II. STRUCTURE OF EXPRESSIONS OF INTEREST

Expressions of Interest should be no more 3,000 words in length excluding annexes. The expression of interest comprises four sections: 1) technical proposal, 2) organizational and individual capabilities, 3) organizational commitment and 4) timeline and budget.

1. Technical Proposal (maximum 1,650 words)

1.1 Rationale

Briefly describe the current landscape of evidence in policy-making in the ministry/ministries of health in the country/countries responding to this call. This may include assessing the strengths and weaknesses of policy-making structures, and identifying additional institutional capacity required to strengthen the use of evidence in policy-making. Drawing on the ToC, describe the nature of currently available evidence in this area and explain the basis for your selection of the particular country/countries.

1.2 Intervention design

Present the interventions/strategies that you will be implementing and evaluating. For the expression of interest, it is acceptable to present a range of different strategies that are being considered for implementation. If this is the case describe what additional information you will be considering to choose between competing strategies. Describe the evidence-base for pursuing these strategies, how they fit the context and capacity constraints described above and the evidence-base for their potential for efficacy and sustainability.

1.3 Preparatory activities

Describe what work would be undertaken during the preparatory phase of the project after the consortium grant has been awarded. For example, what special assessments (assets and needs assessment), consultations with policy-makers, further research on interventions would you anticipate making?

1.4 Evaluation

Briefly outline the methods that will be used to evaluate the interventions. All proposals should involve a robust evaluation element designed to assess the effectiveness and impact of the suite of interventions on strengthening institutional capacity to employ research evidence in health policy-making. The appropriate evaluation design will depend upon the nature of the capacity-enhancement interventions selected. Teams should ensure that the necessary skills to conduct the evaluation are available to the team, and present the proposed evaluation methodology.

1.5 Outcomes

Describe the anticipated outcomes and products of the proposed programme of work. Assess the sustainability of the interventions that would be supported under the grant programme, once Wellcome and Alliance support ends.
2. Organizational and individual capabilities (maximum 350 words)

Provide a brief description of the capacity of the consortium submitting the proposal, particularly as it pertains to the conduct of research, policy-making and the use of evidence, and expertise in evaluating such interventions. Describe the status and nature of the applicant organizations. Briefly describe the organizational capabilities of all organizations (research institutions and policy-makers) involved and what role each organization will play.

Identify key staff who will lead the project and explain what role each of the core team members will play and how partners will work together. In the Annex provide a summary CV for all key staff included in the proposal detailing their relevant experience (i.e. education, research or policy). CVs should not exceed 3 pages, including publication list.

3. Organizational commitment (maximum 350 words)

Describe the commitment to the work of the policy-makers/ministries of health who will be involved (or targeted). Proposals demonstrating existing leadership among policy-makers promoting evidence use, resource commitment towards evidence uptake and existing collaborations with research institutions will be given higher consideration for funding under this call. If appropriate append letters from key stakeholders that demonstrate their commitment (leadership and/or financial) to the project.

4. Timeline and budget (maximum 650 words)

A total of US$ 1,000,000 is available for this call for a maximum duration of 36 months. Outline a three-year plan based on the objectives of this call, including a proposed start date. Using the format in the table below, provide a high-level budget breakdown and justification for costs requested in US$.

If there are possibilities of leveraging additional resources (e.g. through existing grants and/or ministry of health) then please describe and list these.

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<tr>
<th>Budget item</th>
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Annex 1: Theory of Change for enhancing the capacity of decision-makers to use research evidence

Author: Ilona Varallyay
A report commissioned by the Wellcome Trust

I. Introduction

Without delving into the rich and extensive literature on ‘capacity’ and ‘capacity development,’ the concept of ‘capacity’ as understood here in the context of evidence-informed decision-making (EIDM) merits brief definition. A broadly accepted definition of capacity in the context of development work is “the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner” (United Nations Development Program, 2006).

For the purpose of this review, capacity for research use is understood in a very broad sense and therefore the strategies and interventions that “enhance” it are understood to be those that in some way facilitate or promote research use at the institutional level. ‘Capacity’ at the institutional level can be developed through approaches that affect the system more amply, such as processes that are sustained over time and not as easily derailed by changes in individual staff, or structures that ‘institutionalize’ these processes across a wide range of decision-making stakeholders (Potter, 2004). ‘Capacity’ therefore goes beyond a mere technical issue; at the individual level it also one of attitudes, motivation, and ability to assume a desired behavior while at the institutional level it is also about governance and incentives (Walters, 2007).

II. Theory of Change (ToC)

A. ToC development

The ToC is comprised of two main streams, one focusing on individual level capacity; the other focusing on institutional level capacity (see Figure 1). For each of these streams, key capacity domains and enabling factors are presented. These two streams are understood to be interconnected and mutually reinforcing.

The high level outcome in the ToC is “enhanced institutional capacity to systematically use research evidence in public health decision-making.” The institutionalization of this capacity is expected to further stimulate and increase the use of evidence in decision-making, which in turn should produce positive cases that demonstrate the concrete (and measurable) benefits of using evidence in policy making. These successful experiences can foster greater appreciation among decision-making stakeholders of the value of evidence as a resource to improve programs and policies (Armstrong, 2013). All of these should generate greater demand for and sustained use of evidence in decision-making so that a broader ‘culture of evidence’ permeates the public health sphere (see Figure 2).

To achieve this ultimate goal, two broad intermediate outcomes are identified: one focusing on specific individual level competencies for research engagement, the other focusing on the institutional level mechanisms through which research uptake capacity can be exercised.

1. Skilled, competent MOH civil servants who value the use of research in decision-making and are supported to do so

2. Well-structured, designed and funded systems and institutional mechanisms to facilitate access, appraisal, adaptation and application of evidence in decision-making by civil servants
While the focus of this call is on institutional level capacity, we recognize that ultimately it is individuals who must be enabled in the use of research evidence, through processes that influence their behavior and practice (Armstrong, 2013). The individual level and the institutional level outcomes feed into and influence each other (Newman, 2013; Kislov, 2014): the more capable decision-makers (namely, civil servants) are in using research, the stronger the institutional culture for research uptake and the more entrenched the relevant strategies become within the system. Conversely, the stronger the institutional mechanisms for research uptake, the better individuals will be supported to exercise these functions routinely in decision-making processes.

At the individual level, five core competencies related to research use for decision-making have been identified in the literature—this is essentially the “what” of research uptake. These have been adapted from the SPIRIT Action framework “research engagement functions” (Redman, 2015) and include: 1) articulating research needs and generating the needed research (either directly or indirectly, such as through commissioning), 2) accessing needed research in a timely manner, 3) appraising the relevance and quality of available evidence through systematic and transparent processes, 4) adapting, synthesizing, and presenting evidence in a form suitable for key decision-making stakeholders, all of which should contribute to 5) acting upon and applying research evidence at various stages of the decision-making process.

These core competencies are supported by several key enabling conditions. First, individuals have both the technical skills related to each of the core competencies as well as the knowledge of the processes and structures that enable them to engage with research evidence. Second, they must be motivated to seek out research evidence to inform programme or policy decision—this requires that they either value the intrinsic utility of evidence in decision-making, or that external mechanisms incentivize this use. Third, individuals need to be oriented and trained to use the available institutional tools and mechanisms that support research uptake. Finally, those that are expected to engage with research in decision-making need to be embedded within structures and linked to resource persons that support research engagement at the institutional level. It is expected that under such conditions, civil servants within a health system should successfully be able to engage with and apply research evidence in decision-making processes.
At the institutional level, five key systems, structures, and processes that promote “research engagement” were identified—these relate to the “how” of research uptake. In section III the strategies or interventions that promote the capacity of research uptake documented in the literature are organized according to the five elements, or blocks, outlined here. The first block refers to institutionalized structures or platforms that promote interaction between researchers, decision-makers, and other key stakeholders at various stages of the decision-making process. The rationale, in essence, is that by bringing together researchers with the actors that play a critical role in decision-making at various stages, not only is the research more relevant, but the ‘buy-in’ it cultivates among decision-makers helps to facilitate its use. A critical structural element is the availability of locally appropriate and readily accessible infrastructure to house the existing evidence (e.g. online research evidence databases or repositories); while this is clearly linked to the research engagement domain of “access,” it also permits an appraisal of the available evidence and an evaluation of the current research needs. The third element, mechanisms to synthesize and disseminate research evidence, is essential to ensure routine and regular knowledge exchange with decision-makers in such a way that information relevant for decision-making is easily interpreted and actionable. The fourth block captures the tailored tools that facilitate research engagement functions and can equip civil servants with guidance and a standardized structure to implement the core research engagement functions. Finally, institutionalized strategies to develop research use capacities contribute to the sustainability of efforts to promote research use capacity in health policy/programme decision-making.

At the institutional level, the key enabling conditions include: sufficient resources—both financial and human resources—allocated by the MOH to support evidence use strategies; a supportive leadership that not only promotes, but also models the use of evidence in decision-making (Liverani, 2013; Hemsley-Brown, 2004); governance structures that are favorable to the use of evidence in the decision-making space (e.g. legislation, regulatory frameworks, systems to foster accountability, etc.) (Armstrong, 2013; Peirson, 2012); and, lastly, institutionalized mechanisms that incentivize or mandate the use of research in decision-making processes (e.g. policies, staff performance appraisal requirements).

**Contextual Factors**

Numerous contextual factors may influence the institutionalization of research use capacity and therefore need to be articulated and examined. While these factors will be specific to each health system—even within the health system, relevant contextual factors may depend on the level of the system targeted—it is useful to present a few generic factors that may need to be considered. For example: the existence of well-established and respected structures or institutions within which to embed capacity strengthening initiatives; the stability of the targeted personnel within each organization (i.e. degree of turnover) (Liverani, 2013); receptivity of personnel to research evidence as a decision-making resource (openness to change); political will and internal politics; the degree of decentralization of decision-making and information management processes within the MOH (Liverani, 2013); the predominant political system ideology (e.g. democratic versus authoritarian); the political economy in which decision-makers are operating (Stewart, 2015); the degree of complexity associated with the specific policy/programme content area (e.g. diversity of stakeholders implied; level of priority within health system; etc) (Kothari, 2014); social pressures by civil society groups to act on available evidence (Yehia, 2015); and the influence of external donors and organizations (Liverani, 2013). It is expected that other more specific contextual factors will be identified by each grantee.

**Limitations**

This framework has several limitations, the first and most important of which is that it has not been tested empirically. Its elements have been drawn from the available literature, but it has not been applied to real world cases. Second, the perspective assumed in this ToC is that of a Ministry of Health; this may or may not be the target entity of all grants, as other public or non-governmental organizations may be relevant in attaining the goal of enhanced institutional capacity for research uptake within a given health system. In addition, given that this ToC was developed as a generic, overarching framework, it does not delve into the nuances of the specific strategies and their underlying causal assumptions; such aspects are context-specific and will need to be explored further by the grantees.
Relevance and Use by Grantees

This theory of change presents a comprehensive picture of an ideal scenario for institutionalized research use capacity within a health system. It is not intended as prescriptive guidance that should be translated in its entirety to a given context, but rather it presents the ‘lay of the land’ of relevant strategies documented in the literature. The expectation is that grantees can use this framework as a reference point in the development of their proposals, primarily in the identification and selection of the capacity areas and mechanisms that they may consider. Grantees will subsequently be tasked with a rigorous examination of the detailed causal mechanisms and underlying assumptions for the strategies they decide to pursue, and in this way, will contribute to either validating or refuting the logic prosed in this ToC.

B. Overarching Considerations Emerging from the Rapid Literature Review

Key findings and considerations gleaned from the literature review are documented here to further aid call applicants to engage with the ToC and its underlying strategies as well as to orient them to the body of literature on evidence-informed decision-making.

While there is increasing interest in evidence-informed decision-making initiatives for the public sector, there continues to be a dearth of evidence about which strategies strengthen capacity for the use of evidence in population health policy and programs (Moore, 2011) and which aspects of capacity most influence the use of research (Brennan, 2017)—particularly in the context of low income countries. Many studies are based on qualitative analysis of the perceptions of researchers, policy makers or other research users, aimed at informing the design of EIDM strategies, assessing intermediate outcomes, or documenting lessons learned through structured reflection, and do not assess the effectiveness of strategies to build capacity. Further, with the
broad range of publications sourced, there is a great degree of heterogeneity in the specific outcomes (or outputs) that are analyzed for any given intervention: changes in knowledge, skills, or practice; perceptions or experiences with a specific strategy; implementation processes; intermediate effects or proxies, such as those indicating increased value and awareness of evidence in decision-making, or intention to use research, etc.

In spite of this variation, there is value in analyzing the landscape of current approaches in different settings for the purpose of informing the design and development of new strategies. It is important to acknowledge the context-dependent nature of the approaches identified, as each is strongly embedded in specific political, socio-economic, and institutional contexts (Contandriopoulos, 2010); no strategy can be expected to have the same effectiveness in all contexts (LaRocca, 2012). For this reason, it is important to articulate and examine the specific contexts in which decision-makers operate (Stewart, 2015; Bombaum, 2015).

A cross-cutting theme throughout the literature is the notion that developing capacity is most effective through multi-faceted approaches. The need for multi-level, multi-strategy approaches that address multiple, complementary capacity dimensions and are delivered through well-integrated interventions is highlighted (Armstrong, 2013; Humphries, 2013; Kislov, 2014; Punton, 2016).

III. Interventions and Strategies to Enhance Capacity for Research Use in Decision-Making

This section summarizes the various interventions and strategies drawn from the literature that contribute to enhancing the capacity for research use in health programme or policy decision-making processes. The intention is to present both the breadth of the interventions used for this broad purpose, as well as key highlights of the empirical evidence and programmatic learning that is shaping the field of evidence-informed decision-making; it is not intended to be exhaustive, but rather presents a lay of the land of the relevant strategies.

While the strategies are presented according to the ToC systems, structures, and processes ‘blocks,’ a number of them are multi-pronged and could be included in more than one ‘block.’ For simplicity these are presented separately according to one of the corresponding blocks.

A. Institutionalized structures or platforms that promote interaction between researchers, policymakers, and other key policy-relevant stakeholders

This block pertains to a wide range of strategies that foster linkages between researchers and research users with decision-making purview at various levels of the health system. It is widely cited—across all categories of literature reviewed—as one of the most critical aspects of evidence-informed decision-making, with growing emphasis on ‘knowledge exchange’ or ‘integrated knowledge translation’ (IKT) (Gagliardi, 2016) as the means through which to bridge public health decision-making objectives and processes with those of health system research field. These linkage mechanisms can take on a wide range of forms with varying degrees of formality (Mizroev, 2012).

One of the most direct ways to foster this linkage is through formal partnerships between researchers and decision-makers that focus on the co-production of evidence. Actively engaging decision-makers in various steps of the research process for—from identification of research questions to analysis and interpretation of findings—is thought to result in more relevant, actionable evidence (Gagliardi, 2016; Mizroev, 2012) as well as to build trust in the evidence among decision-makers (Langer, 2015). A partnership between an NGO and MOH proved to be a viable model for EIDM in LMIC context, successfully bringing together a wide range of stakeholders in communities of practice focused on supporting evidence-informed national health policy (Berman, 2015); health programme personnel engaged in partnership through communities of practice also reported improved capacities to identify and use evidence in solving implementation problems (Langlois, 2015). Knowledge translation partnerships have also contributed to increased awareness of the importance of EIDM (El-Jardali, 2014).
While this review identified several conceptual frameworks that may be useful in the design and evaluation of such partnership strategies (Mitchell, 2009; Mizroev, 2012), the empirical evidence on the specific mechanisms and effectiveness of such collaboration models across different contexts is scarce and remains inconclusive (Kothari, 2014; Mitchell, 2009; Gagliardi, 2016a). On the whole, it is important to recognize that partnerships and other formalized strategies to foster collaboration among researchers and decision-makers require lengthy and complex processes to take root and become established (Gagliardi, 2016a); this may contribute to challenges in demonstrating effect.

Mediated interaction through knowledge brokering is also widely mentioned in the literature, implemented either through individual focal persons or more broadly through brokering organizations (Liverani, 2013). Qualitative research on the perspectives of decision-makers about the key supports for evidence informed decision-making in healthcare organizations identified ties to knowledge brokers as one of the top four supports (Ellen, 2013). Understood to move beyond simply the diffusion of evidence, knowledge brokering has shown success in facilitating this interaction by enhancing mutual understanding across researchers and decision-makers (Dagenais, 2015), particularly when the broker has insider experience as a practitioner or knowledge user (Elueze, 2015). Beyond connecting key stakeholders, the role of a broker is critical in mentoring, tailoring messages, developing skills, and facilitating access to information (Bruce, 2016; Elueze, 2015; Pettman, 2016; Ward, 2009; Waqa, 2013). Knowledge brokering mechanisms have also been shown to enhance the perceived value of knowledge products among policy makers (Campbell, 2011). There is some evidence that knowledge brokers may be most effective in promoting evidence informed decision-making in contexts where the organizational research culture is perceived as low (Dobbins, 2009; Traynor, 2014). The institutional embedding of the brokering process through an intermediary organization has been shown to be a promising mechanism, even in LMIC (Van Kammen, 2006).

Secondment strategies embedded in institutional programs, such as fellowship programs that support the direct involvement of health care managers in research projects (Bullock, 2012) or formalized reciprocal secondments between university researchers and health department staff (O’Donoughue, 2017), can facilitate the exchange of researchers and decision-makers across professional settings. Qualitative findings from case studies suggest that such strategies can effectively contribute not only to interaction, collaboration, and relationship building between researchers and decision-makers (O’Donoughue, 2017), but also more broadly to strengthen their research engagement competencies, to improve the relevance of the research produced (Bullock, 2012), and to gain better understanding of the other’s perspective. Similarly, a one-on-one ‘buddying’ mechanism linking knowledge translation experts and programme decision-makers appears to have contributed to increased value of and demand for research in decision-making among these stakeholders (Langlois, 2015).

B. Locally appropriate and easily accessible infrastructure that houses up-to-date evidence

To facilitate one of the central research engagement functions—‘access’—appropriate infrastructure and technology are needed to house, source, and transmit newly emerging evidence to research users. This infrastructure and technology are often capitalized on for additional related purposes, such as creating a virtual space for exchange of ideas across a range of stakeholders or housing data bases that store not only publications and other information products, but also directories of public health investigators to facilitate connections for decision-makers seeking research expertise. This type of infrastructure that offers opportunity for ‘pull efforts’ was also cited among the top four supports for EIDM in qualitative interviews with decision-makers in healthcare organizations (Ellen, 2013).

Online knowledge platforms in appropriately equipped contexts are useful in facilitating access to a wide range of resources to support EIDM. An online registry of knowledge translation method and tools was shown to facilitate access to these resources that help decision-makers integrate research knowledge into practice (Peirson, 2013). A systematic literature review of eight publicly available online knowledge exchange ‘portals’ concluded that there is considerable evidence suggesting that the use of such platforms in combination with tailored, targeted messaging can
increase the use of evidence in policy and programme decision-making at the organizational level (Quinn, 2014). A study looking at the key drivers of usage of an online knowledge platform (Web CIHPER) aimed at improving access to up-to-date information on health research and policy, also identified the value of other channels such as blogs written by trusted experts and targeted email reminders that link users to the site (Makkar, 2015). It appears that such portals can serve not only to facilitate ‘access’ to information, but also stimulate knowledge creation and exchange by establishing virtual communities of practice (Quinn, 2014).

The literature, however, consistently emphasizes the need to couple such strategies—which tend to be more passive—with complementary strategies that help decision-makers engage in action (LaRocca, 2012; Hawkes, 2016). Simply having access to an online registry of research evidence appears to have no impact on evidence-informed decision-making (Dobbins, 2009). It is also noted that these online platforms require organizations to have ready access to the appropriate technology such as computers, tablets, smartphones and high-speed internet access, which may be challenging for certain LMIC (Makkar, 2016); in some contexts an additional challenge may be a lack of capacity to use this technology.

C. Mechanisms to synthesize and disseminate research evidence

A critical cornerstone in research use capacity is the adaptation, synthesis, and communication of the available evidence to research users. While many strategies that establish infrastructure for research repositories can also be exploited as a channel through which to disseminate research evidence, several interventions more specifically targeted for this aim are documented in the literature. One of the most commonly cited approaches is the development of evidence briefs, which are often coupled with and serve to inform deliberative dialogues that permit a guided, structured discussion on policy issues or programme decisions. A historical case study of two knowledge translation platforms housed in African government institutions (EVIPNet Cameroun and REACH-Uganda) highlights the perceived effectiveness of both policy briefs and policy dialogues among stakeholders implicated in the targeted policy decisions (El-Jardali, 2014; Ongolo-Zogo, 2014). Policy dialogues implemented through distinct mechanisms—for example, through a knowledge platform established in a university context as an intermediary between researchers and MOH decision-makers (Yehia, 2015), or through endogenous MOH-led, WHO-supported policy formulation initiatives (Dovlo, 2016), or through an independent knowledge translation NGO (Kasonde, 2012)—have been effectively used to review and integrate the available evidence into policy development processes while also stimulating knowledge sharing and relationship building among key stakeholders (Dovlo, 2016; Yehia, 2015; Kasonde, 2012). They are perceived to contribute to contextualizing policy options as well as validating evidence synthesizes (Yehia, 2015). Furthermore, deliberative dialogues have been perceived to increase awareness of the value of evidence-informed decision-making more broadly (Yehia, 2015). Evaluation work by a leading author in the field of EIDM suggests high promise that these types of deliberative dialogues can lead to action, based on the intention to use evidence in policy formulation expressed by participating decision-makers (Lavis, 2014). An exploratory study on the processes involved in policy dialogues suggests the need to institutionalize such dialogues within routine governance processes to ensure continuity (Dovlo, 2016). Despite the increasing use of deliberative dialogues in policy making and other decision-making processes, further research is still needed to understand the nuances about which design elements work in which situations (Lavis, 2014).

Another intervention that has shown promise with regard to dissemination of available evidence is the ‘rapid response services’ (RSS, also referred to as ‘rapid evidence synthesis’) which in short time frames synthesize a wide range of evidence in a form suitable for consumption by decision-makers and other lay (non-research) audiences. This is one of the core strategies of the WHO-supported Evidence-Informed Policy Network (EVIPNet) which has been implemented in a wide range of contexts. A recently documented example of the success of this approach is that of EVIPNet Chile, where the RSS was widely perceived by decision-makers as providing timely, relevant, and easily digestible evidence for policymaking (Mansilla, 2017). Because of the high value placed on this approach by users, the authors suggest that it can serve as a sound launching point for the introduction of a new knowledge translation platform, fostering buy-in among key MOH stakeholders (ibid). A recent review of the literature concluded that there is emerging
evidence that rapid reviews may effectively improve access to and interpretability of research evidence for decision-makers (Haby, 2016); promise of their feasibility and acceptability in LMICs has also been documented (Mijumbi, 2014). In general, research products that contain more practical outcomes, recommendations and specific tools are perceived to be most useful by users (Kothari, 2014); embedding research synthesis units within existing government structures has shown success in LMIC context (Hawkes, 2016).

D. Institutionalized strategies to develop research use capacities and skills

This rapid literature review identified few sources that documented the implementation or effectiveness of institutionalized professional development mechanisms focused specifically on research uptake capacity among civil servants. This is nonetheless included as one of the key ‘blocks’ of the ToC as the literature emphasizes that any efforts to promote EIDM at the institutional level depend on capacity to acquire, appraise, adapt and apply research results within individuals—both among stakeholders directly involved in decision-making, as well as those needed to train and support these actors. While one-off trainings or capacity development workshops are abundant (Yost, 2014; Jacobs, 2014), it appears they are not typically scaled up at the organizational level. Building a sound culture of evidence requires strategies that are integrated and sustained within public service processes and structures.

Mentorship programs have also been demonstrated to have appeal among both researchers and research users as a learning strategy that is flexible and tailored to specific knowledge translation needs (Gagliardi, 2015; Gagliardi, 2014a). Gagliardi et al (2015) developed a conceptual framework based on qualitative findings that could be used to guide the design and evaluation of such mentoring programs. Apart from such evidence of the acceptability of and potential for these strategies in enhancing EIDM capacity, this review did not identify evidence of the effect of these strategies on competency development.

The four other intervention category ‘blocks’ mentioned previously often incorporate some form of skills building or training activities as a secondary component; however, permanent structures and processes delivering continuous capacity development to targeted decision-making stakeholders—such as through professional continuing education curricula (Hawkes, 2016)—are needed for system capacity (Potter, 2004). Further, public health institutions need to design training or skills development programs at the individual level in a manner that stimulates transfer of skills to other members of an organization (Champagne, 2014); the notion of achieving a ‘critical mass’ of trained professionals within the system is advanced in this literature as a means to cultivate systematic use of evidence in organizational decision-making (ibid). It is important to acknowledge the limited value of such individual level capacity strengthening efforts—even when they are institutionalized—in the absence of other institutional level supports that permit individuals to act upon and apply knowledge and skills are lacking (Peirson, 2012); conversely, such infrastructure and mechanisms for EIDM are useless if individual level competencies to engage in EIDM processes are lacking. Interventions targeting individual level skills development are most valuable when delivered in tandem with strategies that provide opportunities for and supports to apply such learning.

E. Standardized tools to facilitate research engagement functions

Standardized tools to facilitate research engagement functions are typically but built into broader strategies intended to promote use of research in decision-making. Their importance in supporting a consistent and replicable organizational process for EIDM has been highlighted (Yost, 2014). The most commonly mentioned tools include guidelines, templates, checklists, assessment criteria, and other decision-support type tools. A comprehensive series of standardized tools developed through the Supporting Policy Relevant Reviews and Trials (SUPPORT) project address a wide range of topics ranging from identifying the need for research evidence in policymaking processes, sourcing and assessing various types of evidence, and acting on research evidence in decision-making (Lavis, 2009). While this review was not able to identify formal assessments or evaluations of the effectiveness of these tools, they have undergone iterative improvements through early applications and are widely cited in the
literature. As these tools target several of the research uptake strategies mentioned previously—for example, guidance for developing evidence briefs or for implementing policy dialogues—and together address all of the key research engagement functional domains, they may also directly serve the grants under this call.

Tools developed to assist in the various steps of the EIDM process were also reported to strengthen individual capacity in EIDM (Yost, 2014). The delivery of such tools through a knowledge broker in a government health department demonstrated success in facilitating individuals’ ability to engage systematically in the EIDM process, while also increasing staff confidence in formulating recommendations for decision-making (Yost, 2014). The role of the knowledge broker in this case was essential in facilitating the adoption of the tools. It is important to recognize that learning how to use and apply such tools takes time and requires adequate infrastructure.

**Importance of assessing local capacity needs/assets**

One of the most widely mentioned recommendations in the literature pertaining to any EIDM capacity development initiative is the importance of formally assessing existing local capacity needs and assets associated with local decision-making or policy making processes and contexts (Contandriopoulous, 2010; Dagenais, 2015; Kasonde, 2012). This should be the starting point to inform the selection and design of any such strategy (Oxman, 2009; Newman, 2013)—whether through contextual or environmental scans, situational analyses, organizational capacity assessments, or individual competency evaluations—so as to ensure that interventions are appropriately targeted, resourced, and situated within the local system. Such formative work can also help gauge receptivity to capacity development strategies and, in some cases, contribute to fostering buy-in among key stakeholders. The SPIRIT initiative was identified as an exemplary strategy based on extensive and multi-level capacity diagnostics conducted using rigorously developed instruments (Redman, 2015; Makkar, 2016b; Makkar, 2016c; Brennan, 2017). Others were also identified but not reviewed in detail (CHSRF, 2005 and Kothari, 2009; Catallo, 2014). Such formal assessment at the outset of any intervention can also serve as a baseline against which to measure progress in capacity development.

**IV. Conclusion**

This rapid literature review has identified a range of considerations and recommendations for the development and implementation of diverse strategies that promote evidence-informed decision-making capacity; however, empirical effectiveness evidence remains scarce. The theory of change derived from this review serves as a preliminary guiding framework for this call for proposals, capturing the landscape of strategies that may enhance institutional capacity for research uptake. The work of the grantees selected under this call will contribute not only to testing this framework, but also in generating new evidence on the effectiveness of these strategies in different contexts.

A few big picture ‘take-aways’ are proposed. First and foremost, context is key and therefore needs to be explicitly considered in the design of the interventions and its effects formally assessed. With respect to the five systems, processes, structures ‘blocks’ of the ToC, the one emerging as paramount is that of ‘interaction’ which brings together researchers and decision-makers through various means—without such strategies, it is unlikely that research evidence can be acted upon meaningfully in the decision-making realm. Whether conceived of as linking “two communities” (Caplan, 1979) or embedding one in the other, these mechanisms are at the heart of EIDM. Another key ‘take-away’ is the need to think systemically about institutional level strategies, identifying multi-faceted approaches that address capacity needs at different levels of the system and that target various dimensions of EIDM capacity. In addition, these strategies should be developed based on explicit and systematic capacity needs and assets assessments to ensure not only their relevance and appropriateness, but also their acceptance and feasibility.

Regarding the general paucity of research evidence on the effectiveness of strategies to enhance institutional capacity for EIDM, two contributing factors may be 1) the difficulty in measuring many of the related outcomes, some of which are more intangible (value of evidence, organizational
culture) or more abstract (conceptual use of evidence or intention to use), and also 2) the long time frames required to actually observe measurable organizational changes (Moore, 2011). It appears that measurement in this field continues to be relatively inchoate, leaving an important challenge to be addressed through this funding scheme.

In considering the various organizational arrangements supporting the use of research evidence to inform health policy or programme decisions, careful attention is required to ensure that form follows function. No single strategy is expected to address all aspects of institutional capacity for EIDM highlighted by this review; rather, demonstrated need and opportunities to build upon existing resources should drive their inclusion in the design and development of these interventions.

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