



Knowledge Brokering for the Implementation Science Initiative A Guidance Note for Country Team

Background

The International Initiative for Impact Evaluation (3ie) and the Society for Implementation Science in Nutrition (SISN) have partnered to carry out the Implementation Science Initiative (ISI) that aims to improve the implementation and scaling-up of anemia control programs (ACPs) for women in Kenya and Uganda. This initiative has been developed to address: 1) the profound gap between knowledge of what works and the implementation of proven interventions to achieve coverage and impact atscale; and 2) a major gap in utilization of existing knowledge (of many forms). This initiative will apply implementation science (IS) principles to address these gaps and create an effective coalition of policy makers, program actors, and researchers to strengthen ACPs during implementation. Iron-folic acid supplementation (IFAS) has been selected as the focal intervention and one focal program in each country has been selected to provide the implementation arena.

In each country, a core team is being created with a senior nutrition expert from an NGO, a senior Ministry of Health (MOH) official, a researcher and a program manager to:

- 1. Identify implementation bottlenecks in the focal program
- 2. Facilitate access to and utilization of existing knowledge to address them, when possible
- 3. Conduct Implementation Research (IR) and facilitate the use of findings, when necessary
- 4. Facilitate capacity building for IS/IR, through learning-by-doing
- 5. Cultivate interest in IS/IR within the larger nutrition community in the country

ISI will support these national core teams by providing access to user-friendly knowledge, frameworks, guidance and tools to address implementation bottlenecks and assistance to carry out IR. This initiative involves undertaking six core components: 1) forming a national core team to apply the IS principles; 2) create and continuously update a bottleneck inventory; 3) apply a knowledge brokering (KB) strategy; 4) conduct IR study(ies); 5) form an IS network to build national interest and capacity for IS/IR; and 6) document experiences in an on-going manner.

The overall goal is to strengthen program implementation by: 1) closing the utilization gap through technical assistance, mentoring and KB, and 2) when necessary, conducting practical IR study in the form of rapid assessments, operations research, process evaluation or other exercises, as appropriate to address the critical challenges facing implementers and policy makers.

A transversal component at the center of ISI is KB because various forms of knowledge are likely to be needed regarding each of the other components. This KB Guidance Note has been developed to help country teams develop and implement their KB strategy.

A major conclusion from the literature on KB is that finding an individual who possess all the qualities necessary to perform KB activities appears daunting and unlikely. This has led to the suggestion that KB should be undertaken by collectives or teams rather than a single individual. Thus, one innovation in the ISI is to include KB as a core component of the work and a second innovation is to use a team rather than individual approach to KB.

The first step is for the national core team to assess if the ISI team members as a whole possess all the necessary qualities to play the various KB roles. To assist this assessment, Table 1 presents the main qualities and skills required for the initiative. This tool will help identify which qualities already are present on the team as well as gaps or weaknesses. The gaps and weaknesses can be addressed by hiring part-time consultants to carry out specific KB roles or activities.

The core team members could discuss the following questions¹:

- Does the team have the combination of skills required for the realization of all KB activities?
- What skills are currently weak or lacking and how can their development be supported?
- What arrangements need to be put in place to ensure the mobilization of the brokered knowledge into actual practice?
- Does the team have credibility with researchers, clinicians, managers and decision-makers at different organizational levels?
- How can individuals already playing the role of informal KB roles locally be identified and engaged?

Once a strong team is built with those qualities among its members, the next step is to determine who will play the specific roles and carry out the various KB activities. Table 2 describes the main role domains and KB activities envisioned for this project. Note that these are illustrative at this point, and additional ones may be required as the initiative unfolds; and, since KB as an intentional strategy will require considerable learning-by-doing, the country KB teams will be supported by SISN staff throughout the process.

¹ Adapted from Kislov, Roman, Wilson, Paul, & Boaden, Ruth. (2017). The 'dark side' of knowledge brokering. *Journal of Health Services Research & Policy*, 22(2), 107-112.

Table 1: Qualities and Skills among the Core Team Members

	Characteristics	Coordinator	NGO lead	MOH official	Researcher	Other
1	Respect (seniority, reputation, authority)					
2	Credibility					
	Research					
	Topic (IFAS)					
	Government					
3	Accessibility, responsiveness and flexibility for KB roles and activities					
4	Reliability					
5	Self-confidence					
6	Motivational skills (enthusiastic and creative)					
7	Interpersonal skills and team builder					
8	Oral and written communication skills					
9	Tact, diplomatic and mediator					
10	Tireless commitment and determination					
11	Problem-solving skills					
12	Networking skills and an existing network					
13	Change management skills					

List of key attributes inspired from various sources: (Canadian Health Services Research Foundation, 2003; Catallo, 2015; Dagenais, Somé, Boileau-Falardeau, McSween-Cadieux, & Ridde, 2015; Dobbins et al., 2009; Hoens, 2018; Kislov, Wilson, & Boaden, 2017; Olejniczak, Kupiec, & Widawski, 2016; D. Phipps & Morton, 2013)

Table 2: Role Domains and Knowledge Brokering Activities

Indige manager Indige manager Indige share knowledge from different sources related to implementation bottlenecks the the formulation of research questions to design IR Indige platform for information sharing among the core team members the research syntheses and facilitate the use of emergent findings from IR Indige manager In			
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inicate effectively with actors at the district level			
e key actors engaged at the national level			
opportunities to connect different actors and foster trust and relationship			
the IS network and link with existing groups			
y builder			
entify the topics for which training appears needed			
gaps in knowledge and skills and find ways to address them			
IS principles/concepts to guide the initiative (in collaboration with SISN)			
tor			
te agreement on modalities for the functioning of the core team			
t the change process and update of research findings			
te the development of research proposals			
it relevant support when gaps in KB activities are identified			
or			
t initial assessments (e.g. baseline assessment at the individual, organizational			
vironment levels, bottleneck assessment, strengths and gaps in the KB team)			
r progress (responding to the various assessments)			
the bottleneck inventory in an ongoing manner			
entify and assess the system-level factors creating the bottlenecks			
ate in the documentation of the experience (log book, skype calls, reflective			
te and evaluate change			

Table inspired from the following sources on knowledge brokering: (Bornbaum, Kornas, Peirson, & Rosella, 2015; Bowen, Martens, & Team, 2005; Canadian Health Services Research Foundation, 2003; Dagenais, Laurendeau, & Briand-Lamarche, 2015; Dagenais, Somé, et al., 2015; Dobbins et al., 2009; Glegg & Hoens, 2016; Hering, 2016; Kislov et al., 2017; Olejniczak et al., 2016; D. J. Phipps, Brien, Echt, Kyei-Mensah, & Weyrauch, 2017; Ridde, Dagenais, & Boileau-Falardeau, 2013; Van Eerd et al., 2016; Van Kammen, de Savigny, & Sewankambo, 2006; Ward, House, & Hamer, 2009).

References

- Bornbaum, Catherine C, Kornas, Kathy, Peirson, Leslea, & Rosella, Laura C. (2015). Exploring the function and effectiveness of knowledge brokers as facilitators of knowledge translation in health-related settings: a systematic review and thematic analysis. *Implementation Science*, 10(1), 162.
- Bowen, Sarah, Martens, Patricia, & Team, Need to Know. (2005). Demystifying knowledge translation: learning from the community. *Journal of Health Services Research & Policy*, 10(4), 203-211.
- Canadian Health Services Research Foundation. (2003). The Theory and Practice of Knowledge Brokering in Canada's Health System: A Report Based on a CHSRF National Consultation and a Literature Review December 2003: Canadian Health Services Research Foundation.
- Catallo, C. (2015). Should Nurses Be Knowledge Brokers? Competencies and Organizational Resources to Support the Role. *Nursing leadership (Toronto, Ont.), 28*(1), 24-37.
- Dagenais, Christian, Laurendeau, Marie-Claire, & Briand-Lamarche, Mélodie. (2015). Knowledge brokering in public health: a critical analysis of the results of a qualitative evaluation. *Evaluation and Program Planning*, 53, 10-17.
- Dagenais, Christian, Somé, Telesphore D, Boileau-Falardeau, Michele, McSween-Cadieux, Esther, & Ridde, Valéry. (2015). Collaborative development and implementation of a knowledge brokering program to promote research use in Burkina Faso, West Africa. *Global health action*, 8(1), 26004.
- Dobbins, Maureen, Robeson, Paula, Ciliska, Donna, Hanna, Steve, Cameron, Roy, O'Mara, Linda, . . . Mercer, Shawna. (2009). A description of a knowledge broker role implemented as part of a randomized controlled trial evaluating three knowledge translation strategies. *Implementation Science*, 4(1), 23.
- Glegg, Stephanie M, & Hoens, Alison. (2016). Role domains of knowledge brokering: a model for the health care setting. *Journal of Neurologic Physical Therapy, 40*(2), 115-123.
- Hering, Janet G. (2016). Do we need "more research" or better implementation through knowledge brokering? *Sustainability Science*, *11*(2), 363-369.
- Hoens, AM. (2018). Knowledge Brokers Are they the answer to knowledge translation challenges in healthcare? Retrieved May 2018, from https://ktcanada.org/seminar-series-april-12-2018/
- Kislov, Roman, Wilson, Paul, & Boaden, Ruth. (2017). The 'dark side' of knowledge brokering. *Journal of Health Services Research & Policy*, 22(2), 107-112.
- Olejniczak, Karol, Kupiec, Tomasz, & Widawski, Igor. (2016). Knowledge Brokers in Action: A Game-Based Approach for Strengthening Evidence-Based Policies *Simulation and Gaming in the Network Society* (pp. 427-441): Springer.
- Phipps, David J, Brien, Derek, Echt, Leandro, Kyei-Mensah, Glowen, & Weyrauch, Vanesa. (2017). Determinants of successful knowledge brokering: A transnational comparison of knowledge-intermediary organizations. *Research for All*, 1(1), 185-197.
- Phipps, David, & Morton, Sarah. (2013). Qualities of knowledge brokers: reflections from practice. *Evidence & Policy: A Journal of Research, Debate and Practice, 9*(2), 255-265.
- Ridde, Valéry, Dagenais, Christian, & Boileau-Falardeau, Michèle. (2013). Une synthèse exploratoire du courtage en connaissance en santé publique. Santé publique, 25(2), 137-145.
- Van Eerd, Dwayne, Newman, Kristine, DeForge, Ryan, Urquhart, Robin, Cornelissen, Evelyn, & Dainty, Katie N. (2016). Knowledge brokering for healthy aging: a scoping review of potential approaches. *Implementation Science*, 11(1), 140.
- Van Kammen, Jessika, de Savigny, Don, & Sewankambo, Nelson. (2006). Using knowledge brokering to promote evidence-based policy-making: the need for support structures. *Bulletin of the World Health Organization*, 84, 608-612.
- Ward, Vicky L, House, Allan O, & Hamer, Susan. (2009). Knowledge brokering: exploring the process of transferring knowledge into action. *BMC health services research*, *9*(1), 12.