The Implementation Science Initiative in Kenya and Uganda

BACKGROUND

The Implementation Science Initiative (ISI) in Kenya and Uganda is a collaborative and learning initiative developed by the Society for Implementation Science in Nutrition (SISN) in partnership with the International Initiative for Impact Evaluation (3ie) thanks to a grant from the Bill and Melinda Gates Foundation. The initiative is lead in country by implementing agencies that work with key stakeholders: University Research Co, LLC (URC) in Uganda and FHI360 in Kenya.

OBJECTIVES

ISI has four interlinked objectives in each country:

1. Strengthen capacity on implementation science (IS) at the country level

2. Strengthen interaction and knowledge exchange among policy, program, and research actors

3. Strengthen implementation of iron and folic acid supplementation (IFAS)

4. Increase knowledge at country and global levels about how to apply IS in nutrition programs

Despite the academic literature containing solid evidence on multiple efficacious interventions to improve nutrition among women and children, many challenges are being experienced during their implementation. Six components are carried out to apply the core principles of IS and operationalize SISN's framework on IS.[1]

1. National Core Team

2. Bottleneck Assessment and Inventory

3. Knowledge Brokering

4. Implementation Research

5. Implementation Science Network

6. Documentation of Emergence

DESCRIPTION OF THE IMPLEMENTATION SCIENCE INITIATIVE (ISI)

1. National Core Team

Each actor has a different understanding and knowledge of diverse parts of the national system through which the intervention of interest is delivered. In order to address the challenges experienced in the implementation of the intervention, a national core team composed of policy, program and research actors will allow to build a collective understanding of the system and to overcome challenges.

Critical activities:

- Jointly mobilize stakeholders and decision makers
- Create a holistic understanding of the context that will be shared by all

2. Bottleneck Assessment and Inventory

An initial assessment allows identifying current challenges, referred to as bottlenecks, in order to prioritize the ones that could be addressed. An inventory of these bottlenecks, continuously updated, allows keeping track of the factors that are creating the bottlenecks, the efforts that have been made to address them, the experiences and outcomes from those efforts and the next steps. This will enable a learning curve to be created among actors throughout the process.

Critical activities:

- Undertake baseline assessment with key stakeholders
- Prioritize bottlenecks with key stakeholders
- Update the inventory continuously

3. Knowledge Brokering

Knowledge brokers are people specifically tasked with facilitating the access, interpretation, adaptation and utilization of new and existing knowledge to meet the needs of implementers or policy makers. They play five role domains: evaluator, information manager, linking agent, capacity builder and facilitator[2]. Considering that it is difficult to identify one person with all key qualities and skills, ISI uses a knowledge brokering team that include some members of the national core team.

Critical activities:

- Mobilize existing knowledge, frameworks and tools, whenever possible, before undertaking any new research
- Take into account local context
- Build capacity of actors whenever needed
- Reinforce relationships between stakeholders or create links with specific experts

4. Implementation Research

Once gaps in the existing knowledge on prioritized bottlenecks have been identified, additional knowledge will be gathered through various forms of IR, assessments or inquiries.

Critical activities:

- Collaboratively identify research topics based on priority implementation bottlenecks
- Articulate research questions
- Develop IR study
- Apply and evaluate solutions and innovations
- Ensure researchers and implementers collaborate at many points in the research

5. Implementation Science Network

The field of IS in nutrition is developing and there is no current network on this topic in country. By creating such a network, it allows to share about the approach and learn on its application. It also allows drawing insights and strengthening the system, which could benefit other interventions. ISI is seeking to use and leverage existing network and foster an interest on IS in nutrition.

Critical activities:

- Facilitate formal and informal interaction, knowledge exchange and collaboration between members of the core teams
- Build interest and capacity about IS at various levels

6. Documentation of Emergence

Seeking to improve the delivery of IFAS requires taking a system's perspective, in which many things cannot be anticipated. Working within complex system requires a careful documentation of many things that emerge to allow adaptation. In addition, in order to draw insights from ISI and to generate lessons for national and global audiences, there is a need to document carefully the experiences in both countries. The implementing agency will participate in the documentation of its experience.

Critical activities:

- Document emerging findings from the context
- Document the overall initiative
- Generate lessons for national and global audiences

WHAT WILL ISI BRING TO NATIONAL AND GLOBAL LEVELS?

Outcomes of ISI at national level

ISI will lead to various outcomes that will be more or less tangible. Intangible outcomes can be difficult to assess, but those are not less important. The following definitions can help discern and value two types of outcomes:

➢ *Intermediate accomplishments* are outcomes that may appear of small importance (e.g. relationship created among partners), but that are often a pre-requisite for the attainment of a major accomplishment.

➢ *Major accomplishments* are outcomes that are easily recognized as they are the most expected ones for which actors strive for (e.g. high coverage of antenatal care visits).

Intermediate accomplishments	*Major accomplishments*
• Shared vision for the IS approach • Effective working relationship among key stakeholders • Increased leadership role by the core team members on IS in the country • Common agenda on bottlenecks to address • Agreement on the research questions for IR • Trust among key stakeholders • Enhanced skills of local knowledge brokers in the five role domains • Enhanced capacity for IS in country • Policy briefs to share key insights	• Enhanced understanding of bottlenecks related to IFAS (bottleneck assessment report and bottleneck inventory) • Creation of a platform for IS in country • Increasing recognition of core team members as emergent leaders of IS • IS network in country and linked to global level

Products of ISI at global level

A set of tangible products will emerge from the whole ISI experience:

Tool box for building capacity and applying an IS approach at the country level	This toolbox includes various guidance notes that can be used by other countries for nutrition interventions at large: theory of change, knowledge brokering, bottleneck assessment and inquiry, focused ethnographic study, effectiveness-implementation hybrid design, strategic system thinking, etc.
Webinars on diverse aspects of ISI	Components and principles of ISI, methodology, insights on IFAS delivery system, etc.
Journal articles	1. Effectiveness of the enhanced interventions for IFAS (one article per country) 2. Process and experience of trying to apply an IS approach in country 3. Contribution of using an IS approach in country (contribution analysis)

REFERENCES

[1] Tumilowicz, Alison, Ruel, Marie T, Pelto, Gretel, Pelletier, David, Monterrosa, Eva C, Lapping, Karin, . . . Arabi, Mandana. (2018). Implementation science in nutrition: concepts and frameworks for an emerging field of science and practice. *Current Developments in Nutrition, 3*(3), nzy080.

[2] 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.

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