

Introduction to Implementation Research

WHAT IS IMPLEMENTATION RESEARCH (IR)?

Implementation research is a field of study that focuses on understanding and addressing the challenges associated with the adoption, integration, and sustainability of evidence-based interventions, policies, and practices in real-world settings. It aims to bridge the gap between research and practice by identifying effective strategies to implement and scale up interventions that have been proven to work in controlled or experimental conditions.

FUNCTIONS OF IR

- Identify implementation barriers that limit access to interventions, service delivery, and usability of evidence-based approaches, and their root causes
 - Develop and test practical solutions tailored to specific systems or regional challenges.
 - Identify methods to adapt evidence-based interventions, tools, and services for lasting health impacts in real-world settings
 - Identify effective strategies for integrating solutions into health systems and support their implementation, evaluation, and adjustment
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CHARACTERISTICS OF IR

- **Context-Specific:** IR considers the unique cultural, social, economic, and organizational factors of the setting where the intervention is implemented.
 - **Multidisciplinary:** It integrates theories, frameworks, and methods from various disciplines to address the complex nature of implementation challenges.
 - **Focus on Process and Outcomes:** It examines both the implementation process and the impact of interventions to determine what works, for whom, and under what circumstances.
 - **Stakeholder Engagement:** Engaging policymakers, practitioners, and community members ensures the research is relevant, feasible, and likely to be adopted.
 - **Iterative and Adaptive:** IR involves continuously refining interventions and strategies based on feedback and emerging evidence to adapt to changing conditions.
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WHAT IR IS NOT!

- **Not program evaluations:** IR focuses on how interventions are delivered, not just what outcomes are achieved.
 - **Not routine monitoring:** IR aims to understand mechanisms, barriers, and facilitators that affect intervention delivery, beyond describing a process. However, routine monitoring often contributes to identifying IR needs.
 - **Not quality improvement:** While IR can contribute to improving quality of intervention delivery, it seeks generalizable knowledge and is more systematic and theoretical than quality improvement approaches.
 - **Not process evaluation:** IR focuses on understanding and improving the strategies, barriers, and facilitators for the systematic uptake and sustainability of interventions, while process evaluation focuses on assessing the fidelity, quality, and actual delivery of the implementation process of a specific program or intervention.
 - **Not operations research:** IR focuses on understanding and addressing barriers and facilitators to the adoption, implementation, and scale-up of evidence-based interventions, while operations research focuses on optimizing the operations of a system, process, or program.
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WHEN IS IR APPROPRIATE?

Whether IR is the appropriate approach to respond to a project's learning agenda depends on several factors, including the strength of existing evidence that supports the intervention, the type of implementation challenges anticipated or encountered by policy makers and program implementers, and the research questions prioritized by stakeholders.

IR is well-suited to address the following programmatic challenges:

- **Real-world effectiveness:** Ensure interventions proven effective in controlled environments maintain their effectiveness in routine conditions across diverse settings
- **Replication:** Adapt and effectively modify programs to suit different regions or countries
- **Program integration:** Link together health, education, and social support services typically offered by siloed systems to provide a cohesive program for adolescents
- **Scale up:** Expand successful pilot programs to a national level while ensuring quality and accessibility across diverse regions and adolescent groups
- **Sustainability:** Secure ongoing funding, build robust institutional capacities, and ensure community ownership and engagement to maintain program's long-term impact
- **Equitability:** Address disparities and ensure marginalized and vulnerable adolescent groups – such as those based on socioeconomic status, gender, ethnicity, disability, or geographic location – have equitable access to programs and services

WHAT QUESTION CAN IR ANSWER?

A well-designed IR study responds to research questions that stem from implementation challenges. An IR question is a focused inquiry aimed at understanding the implementation context, strategies, processes, and outcomes involved in effectively adopting, delivering, and sustaining evidence-based interventions.

Implementation challenge	Sample implementation research question
Scale-up	How can coverage and usage of a proven intervention be improved to meet set targets? How can a program be scaled up to broader regions or populations?
Sustainability	Why do established programs lose effectiveness over time? How can sustainability or health maintenance be achieved?
Replication & robustness	Why do tested programs exhibit unintended effects in a new setting? What factors explain variable success across different contexts? How can implementation be improved to assure replicability?
Program integration	How can multiple interventions be effectively packaged and delivered within health systems? How can interventions be delivered to ensure integration?
Equitability	How can program delivery be more equitable in resource-constrained settings? What is the differential impact across race, class, education, gender, age, geography, and other relevant factors?
Real-world effectiveness	What are the unintended consequences (positive or negative) of the program? Under what conditions does the program work? Is the intervention cost-effective and achieving its intended public health impact?

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