

Implementation Science:

A guide to getting started



All about implementation science:

- What it is
- When to use it
- How to use it
- How to apply it
- Resources
- Examples



reachnexus



What is Implementation Science?

“

Implementation science can be defined as “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and hence, to improve the quality and effectiveness of health services.”

”



When can I use it?

From looking at past research it has been demonstrated an intervention is effective. You want to implement this as a program of your own, but where do you start? You want to make sure the research is implemented in the best way possible - but there are many things to consider:

What are barriers to uptake?

How do we reach those it's intended for?

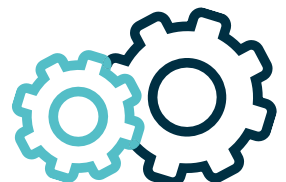
What are the logistic requirements to implement the program?

How will adaptations and modifications be tracked over time?

**This is where
implementation
science can help**



research



practice

How do I use it?



The first step is to pick an implementation science framework. This will help organize your evaluation/research plan into actionable categories. One example is the RE-AIM framework.

There are 5 domains defined as:

Reach



The absolute number, proportion, and representativeness of individuals who are willing to participate in a given initiative, intervention, or program, and reasons why or why not.

Effectiveness



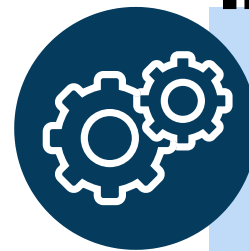
The impact of an intervention on important individual outcomes, including potential negative effects, and broader impact including quality of life and economic outcomes; and variability across subgroups.

Adoption



The absolute number, proportion, and representativeness of settings and intervention agents (people who deliver the program) who are willing to initiate a program, and why.

Implementation



Fidelity to the various elements of an intervention's key functions or components, including consistency of delivery as intended and the time and cost of the intervention. Also, adaptations made to the implementation strategies.

Maintenance

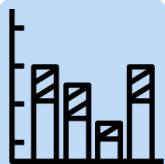


The extent to which a program or policy becomes institutionalized or part of the routine organizational practices and policies. Also, the long-term effects of a program on outcomes after a program is completed.



How do I apply it to my program?

The following are resources to guide the research/evaluation of your RE-AIM implementation science program at various program stages. Check out the [RE-AIM website](#) for more resources.



Reporting

- **RE-AIM Visual Displays:**
 - Example charts to illustrate the results of the RE-AIM domains of your program
- **Recommended RE-AIM Slides:**
 - Example presentation slides to help you effectively communicate your RE-AIM study findings



Planning

- **RE-AIM Measures and Checklists:**
 - Program elements to consider incorporating in your RE-AIM program
- **RE-AIM Planning Tool:**
 - Questions to consider when planning your program in each domain

Analysis

- **Analysis Tips for Different RE-AIM Contexts:**
 - e.g. how to calculate adoption fields if sites decline to participate
- **Figures & Tables that Illustrate RE-AIM Concepts:**
 - Example study analysis plans and calculations for RE-AIM domains



Data Collection

- **RE-AIM Qualitative Guide:**
 - Considerations for Qualitative Data with RE-AIM, interview guides, and qualitative approaches of the RE-AIM Framework
- **RE-AIM Articles and Guidance:**
 - Resources for operationalizing the RE-AIM domains



Example: The REACH Nexus I'm Ready Program

Completed in March 2020, a REACH Nexus-led clinical trial for bioLytical's INSTI HIV Self Test demonstrated that it was effective for individual use, leading to the test's approval by Health Canada in Nov. 2020. Now, REACH Nexus is preparing to launch their I'm Ready research program in spring 2021. This implementation science study is distributing 50,000 HIV self-test kits across Canada and asking the people who will use them questions through an innovative mobile app. The I'm Ready program also includes a secure telehealth-style platform for peer navigation support and connections to care for participants, and a website with comprehensive program information.

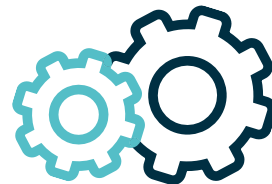


The implementation science approach of the program helps us:



move what we know:

HIV self-testing has been shown to be effective for individual use.



into what we do:

Implement HIV self-testing by collecting data about participants and program use to increase what we know about HIV self-testing and connecting to care.



“Dr. Sean Rourke, director of REACH Nexus and leading the I'm Ready program says:
"Self-testing opens many doors by removing some of the barriers people face in getting tested for HIV. By using an implementation science approach, we can systematically evaluate our program to best implement self-testing and connect people to the appropriate care.”

Example: The REACH Nexus I'm Ready Program

The following are the RE-AIM domains defined for the I'm Ready program:

Reach



The absolute number, proportion, and representativeness of individuals who participate in I'm Ready who used HIV self-testing who are undiagnosed from priority populations including Gay, Bisexual, and other men who have sex with men, African, Caribbean, Black people, Indigenous people, and People Who Use Drugs.

Effectiveness



This includes comparative effectiveness between participants who use peer navigators compared to those who only use the mobile app. Also, how clinical and knowledge-based outcomes vary by key population, equity and geography.

Adoption



Absolute number, proportion, and representativeness of settings and intervention agents who are initiating the I'm Ready program. This includes study participants, distribution sites, and staff/peers/front-line implementers.

Implementation



Fidelity to the various elements of the program. This includes consistency of delivery as intended as well as the program costs.

Maintenance



The extent to which the I'm Ready research program becomes a part of routine organizational practice and policies, and how can we make this type of program work in other settings.