Achieving Solutions for Change that Overcome Obstacles and Get to Impact

Melanie Barwick, PhD, CPsych

Senior Scientist, Child Health Evaluative Sciences, Research Institute, SickKids

Professor, Department of Psychiatry, Temerty Faculty of Medicine Social and Behavioural Health Sciences, and the Institute for Health Policy, Management, and Evaluation, Dalla Lana School of Public Health University of Toronto

May 23rd, 2023 Scientific Meeting of the Canadian DOHaD Society, Chateau Montebello, Quebec. Virtual.







Your questions

- 1) How to make choices with respect to knowledge translation activities that target healthcare professionals and consumers.
 - Follow a methodology for effective dissemination KT Planning Template.
- How to create a story that brings meaning to complex ideas, making them feel palpable and connect with our audiences, especially policymakers.
 - Know your audience; <u>learn how to tell a story</u>.
- 3) Ways to identify and secure collaborations across divergent fields that would enhance the knowledge gained.
 - Dissemination and implementation planning methods are universal.
- 4) We need politicians and other policymakers to hear about our research, to really listen, and to act.
 - <u>Disseminate and share implementation how-to</u>.
- 5) Some of our work has direct relevance for the general public, and so we want our trainees to learn about engaging with the public in an accessible way with the hope of impacting their thinking and, ultimately, their behaviour.
 - Disseminate and share implementation how-to.

Knowledge Translation is Dissemination & Implementation Science and Practice



Dissemination involves process and strategies that make evidence accessible and understandable to benefit the knowledge user.

[synthesis]

Implementation involves a DIFFERENT process and strategies that promote the adoption and delivery of evidence-based innovations within specific settings.



Know what you are doing, why you are doing it, how you are doing it, and how you will know you were effective.

Dissemination requires:

- Recognize who could <u>benefit</u> (not just use) using standardized dissemination practices and with a clear communication goal (know your why).
- Track and evaluate how knowledge users benefit from disseminated evidence (important for academic promotion, performance evaluation and accountability).

Implementation requires:

- Sufficient evidence that the innovation is ready for application (caveat*).
- That implementers understand **WHAT** is being implemented (the innovation's core components).
- An understanding that **organizational functions** enable individuals to deliver the innovation; [training is only one component].
- Planning and engaging in an intentional, explicit and structured implementation **process** informed by implementation science.
- Implementers **evaluate** the quality of the implementation, intervention, policy and system outcomes as appropriate and plan on sustainment.

Despite established implementation methods, 30-70% of health discoveries fail to take hold and have an impact.

Complex change initiatives often have moderate to poor success rates: 33% median success rate (much lower in some sectors and for some initiatives).

Implementation science can ensure we focus on quality from the start, but we must look beyond discovery.

Helfrich et al. 2011; Smith, 2002



Image credit: Nuthawut Somsuk, iStock

Stanford SOCIAL INNOVATION Review Informing and inspiring leaders of social change

			SPONSORED -		
	nent & Evalua				
The	Prom	nise of	Impact S	cience	
			ENGINE PRESE		
Imagine	if nonprofit le	eaders, philant	hropists, and policy m		to guess what
		the production control	The state of the s	Carlo Call Carre	
		ct success with	scientific certainty. Er	nter the field of impa	ct science.
			o scientific certainty. Er	nter the field of impa	ct science.



(Illustration by Hugo Herrera)

How do you realize the promise of innovations?

According to Google Scholar, there are 5.7 million published studies on "behaviour change."

The Social Science Research Network includes 1.7 million studies.

Yet publishing articles doesn't necessarily translate to accessible knowledge or changes in practice.

Nor do other forms of dissemination.

Implementation processes are required.

COVID-19 has shown the world that knowing what to do does not ensure doing what we know.

It showed us that discovery is only the start of the scientific journey, and not the end.



Proctor & Geng 2021, https://www.science.org/doi/full/10.1126/science.abno184

Dissemination gets us part way through the journey. It provides access to the evidence and communicates what the innovation is, why it's important or relevant, who it's for, and it's intended or proven benefits.

Knowledge Translation Planning Template®







INSTRUCTIONS: This template was designed to assist with the development of Knowledge Translation (KT) plans for dissemination of research evidence. It is universally applicable to health and other disciplines. Begin with page one and work through subsequent columns to address the essential components of the KT dissemination planning process. Feel free to work through the components in a non-linear fashion. Two e-learning modules are available for additional support, as well as the latest version of the template for download at: https://bit.lv/2RH3U]. Links to implementation planning support are found on page 2 of this template.

Which partners will help you plan and execute your KT activities? Some partners may be targeted knowledge users. Researchers Practitioners/service providers Public Patients/consumers Patients/consumers Policy makers/government Private sector/industry Research funders Volunteer health sector/NGO Other: What will partner(s) bring to the project? How will they assist with developing, executing and/or evaluating the KT plan? What will partner(s) bring to the project? How will they assist with developing, executing and/or evaluating the KT plan? Scientist(s) with KT expertise how will this be accessed? Scientist(s) with KT expertise and/or evaluating the KT plan? Knowledge broker/specialise KT supports within the organization(s) KT supports within partner organization (s) KT supports within the organization (s) KT
involved only for specific activities. requested. imperimentation specialist of scientist.

 $\underline{https://www.sickkids.ca/en/learning/continuing-professional-development/knowledge-translation-training/knowledge-translation-planning-template-form/}$

Also available in French, Spanish, and Portuguese.

Implementation requires innovation developers to describe 'what's in the box,' figure out how the core elements can be applied in real-world settings and execute an implementation process based on implementation science.



How things are now...

"This innovation works; here you go!"





How things need to be...

Tell users what it is, who it's for, where to find it, and how to make use of it.

What you need



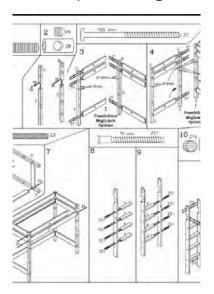
How to transfer to your setting



Where to find it



How to put it together



How to access it



Usable outcome

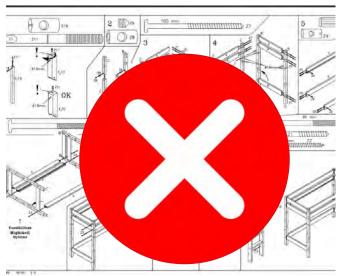


Very often, we only get part way through the journey.

We may know where to find the innovation, what it is, if it works and for whom, and how to access it.

Instructions for application are often missing.











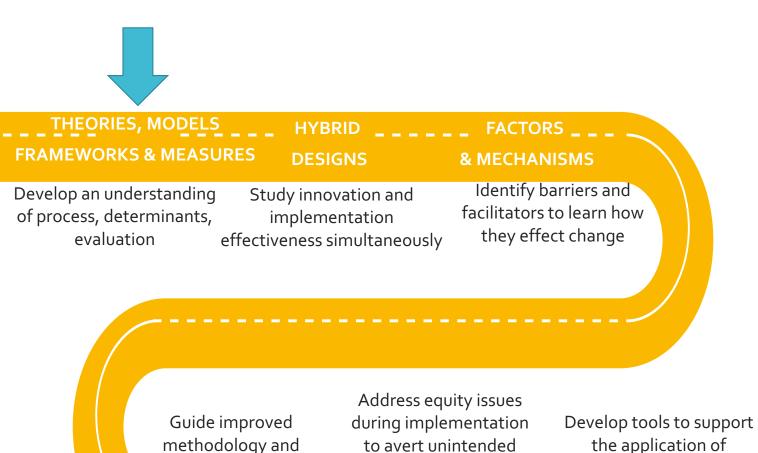
Implementers need to be clear, early on, about who will use the innovation, in what context, how they will do this, and to what end.

Change methods often focus solely on the individual.
But this common "Train and Hope" approach to practice change doesn't work.



Beidas, R. S., Edmunds, J. M., Marcus, S. C., & Kendall, P. C. (2012). Psychiatric Services, 63, 660–665. Herschell, A. D., Kolko, D. J., Bauman, B. L., & Davis, A. C. (2010). Clinical Psychology Review, 30, 448–466. Jackson, C.B., Quetsch, L.B., Brabson, L.A., & Herschell, A.D. (2018). Administration and Policy in Mental Health and Mental Health Services Research 45:587–610.

Advances in Implementation Science



methodology and reporting of IS research

disparities

IMPLEMENTATION

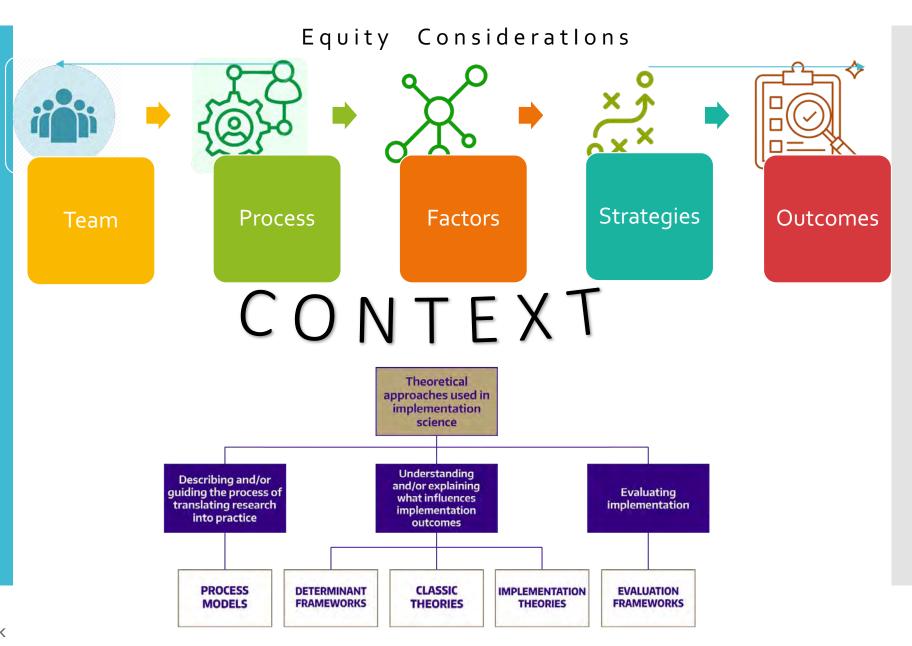
the application of implementation science

REPORTING-**STANDARDS** **EQUITY INL _ _ _ IMPLEMENTATION _ _ _ _**

PRACTICE

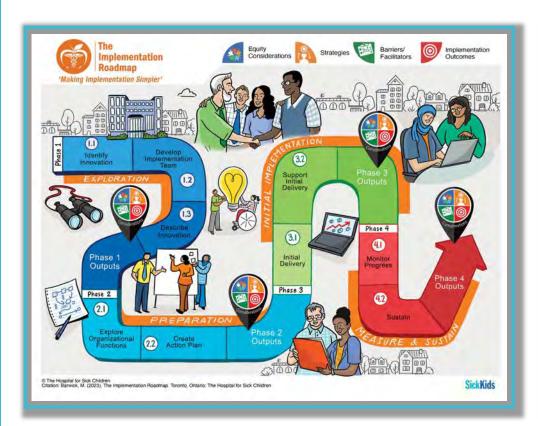


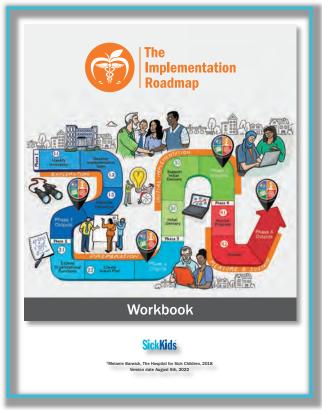
Implementation research evidence can be distilled into five core elements.



Barwick M (2023) .The Implementation Roadmap. Toronto, ON: The Hospital for Sick Children. The Implementation Roadmap[©] picks up where dissemination ends and takes us the rest of the way.

It walks us through how to apply an innovation in a setting.





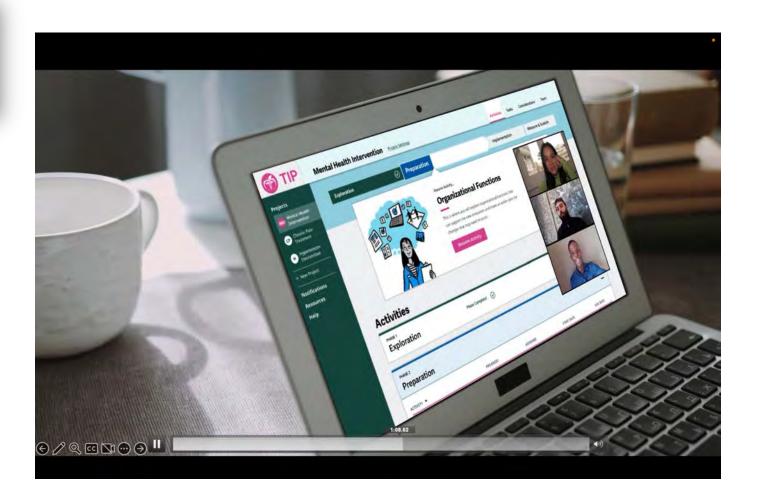
https://www.sickkids.ca/en/learning/continuing-professional-development/knowledge-translation-training/#tools

implementationplaybook.ca is a totally awesome idea still being worked on.

Check back later.

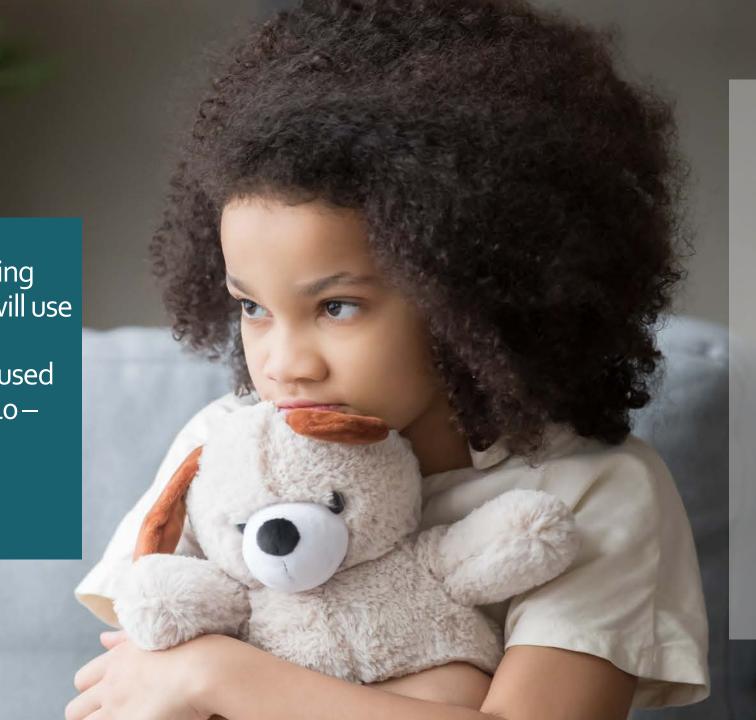
The Implementation Playbook© (digital software)

A digital tool blending implementation science + project management



Unless we focus on how groundbreaking innovations are implemented — who will use them, where, and how - discoveries developed today will not be routinely used in practice and other settings until 2040—17 years* from today—if at all.

*Balas & Boren, 2000 Image credit: fizkes, iStock





Melanie Barwick, Ph.D., CPsych Senior Scientist, Child Health Evaluative Sciences, Research Institute Scientific Director, KT Program, Learning Institute The Hospital for Sick Children Toronto, Canada

Professor, Department of Psychiatry, Temerty Faculty of Medicine Social and Behavioural Sciences, and Institute for Health Policy, Measurement and Evaluation, Dalla Lana School of Public Health University of Toronto

Vice President Board of Directors, Children's Mental Health Ontario

Editorial Board, *Implementation Research and Practice* Associate Editor, *Frontiers in Health Services – Implementation Science*

Email: melanie.barwick@sickkids.ca

Web: www.melaniebarwick.com

Twitter: @melaniebarwick

YouTube: https://tinyurl.com/ef3b488p











