Implementing & Sustaining Practice Change Following Research Outcomes

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SickKids® UNIVERSITY OF TORONTO

FICare Family Integrated Care Modèle d'intégration de la famille dans les soins | Family Integrated Care Leeds | CPBF Canadian Premature Babies Foundation | Mount Sinai Hospital Sinai Health System Joseph & Wolf Lebovic Health Complex | UCSF School of Nursing | University of Toronto | CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

4th International Family Integrated Care Conference

Moving Forward with FICare: Sustainable Implementation

Thursday October 14th & Friday October 15th, 2021 | Virtual

Medicine will advance more in the next 10 years than it did in the last 100

Vivek Wadhwa
Carnegie Mellon University
Centre for Entrepreneurship & Research Commercialization, Duke University

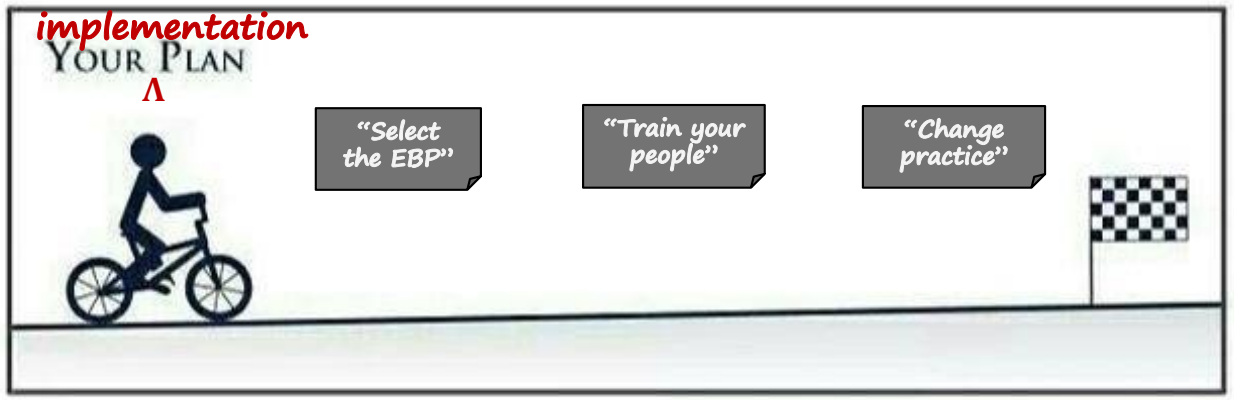
https://singularityhub.com/2016/10/26/medicine-will-advance-more-in-the-next-10-years-than-it-did-in-the-last-100/

Will your discoveries have impact?

30-70% of health discoveries fail to have impact

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

Helfrich et al. 2011; Smith, 2002


implementation
YOUR PLAN
"Select the EBP"
"Train your people"
"Change practice"


the
REALITY of your implementation journey
Preparing for the journey
Sustainability

The typical "Train and Hope" approach to practice change doesn't work.

Foa et al. Implementation Science (2020) 15:59
https://doi.org/10.1186/s13012-020-01014-x

Implementation Science

RESEARCH Open Access

The effects of a prolonged exposure workshop with and without consultation on provider and patient outcomes: a randomized implementation trial

Edna B. Foa[1*], Carmen P. McLean[2,3], Lily A. Brown[1], Yinyin Zang[1,4], David Rosenfield[5], Laurie J. Zandberg[1], Wayne Ealey[6], Brenda S. Hanson[7,8], Lora Rose Hunter[6], Ivett J. Lillard[6,9], Thomas J. Patterson[6,10], Julio Rosado[7,11], Valerie Scott[6,12], Charles Weber[13], Joseph E. Wise[6], Charles D. Zamora[7], Jim Mintz[14], Stacey Young-McCaughan[14], Alan L. Peterson[14,15,16] and for the STRONG STAR Consortium

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Clin Psychol Rev. 2010 June ; 30(4): 448–466. doi:10.1016/j.cpr.2010.02.005.

The Role of Therapist Training in the Implementation of Psychosocial Treatments: A Review and Critique with Recommendations

Amy D. Herschell[a], **David J. Kolko**[a], **Barbara L. Baumann**[a], and **Abigail C. Davis**[b]
Amy D. Herschell: HerschellAD@upmc.edu; David J. Kolko: KolkoDJ@upmc.edu; Barbara L. Baumann: BaumannBL@upmc.edu; Abigail C. Davis: abbiedavis618@hotmail.com
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Valenstein-Mah et al. Implementation Science (2020) 15:40
https://doi.org/10.1186/s13012-020-00998-w

Implementation Science

SYSTEMATIC REVIEW Open Access

Effectiveness of training methods for delivery of evidence-based psychotherapies: a systematic review

Helen Valenstein-Mah[1*], Nancy Greer[2,3], Lauren McKenzie[2,3], Lucas Hansen[3,4], Thad Q. Strom[5], Shannon Wiltsey Stirman[6,7], Timothy J. Wilt[2,3,8] and Shannon M. Kehle-Forbes[2,3,8,9]

Published in final edited form as:
Psychiatr Serv. 2012 July ; 63(7): 660–665. doi:10.1176/appi.ps.201100401.

Training and Consultation to Promote Implementation of an Empirically Supported Treatment: A Randomized Trial

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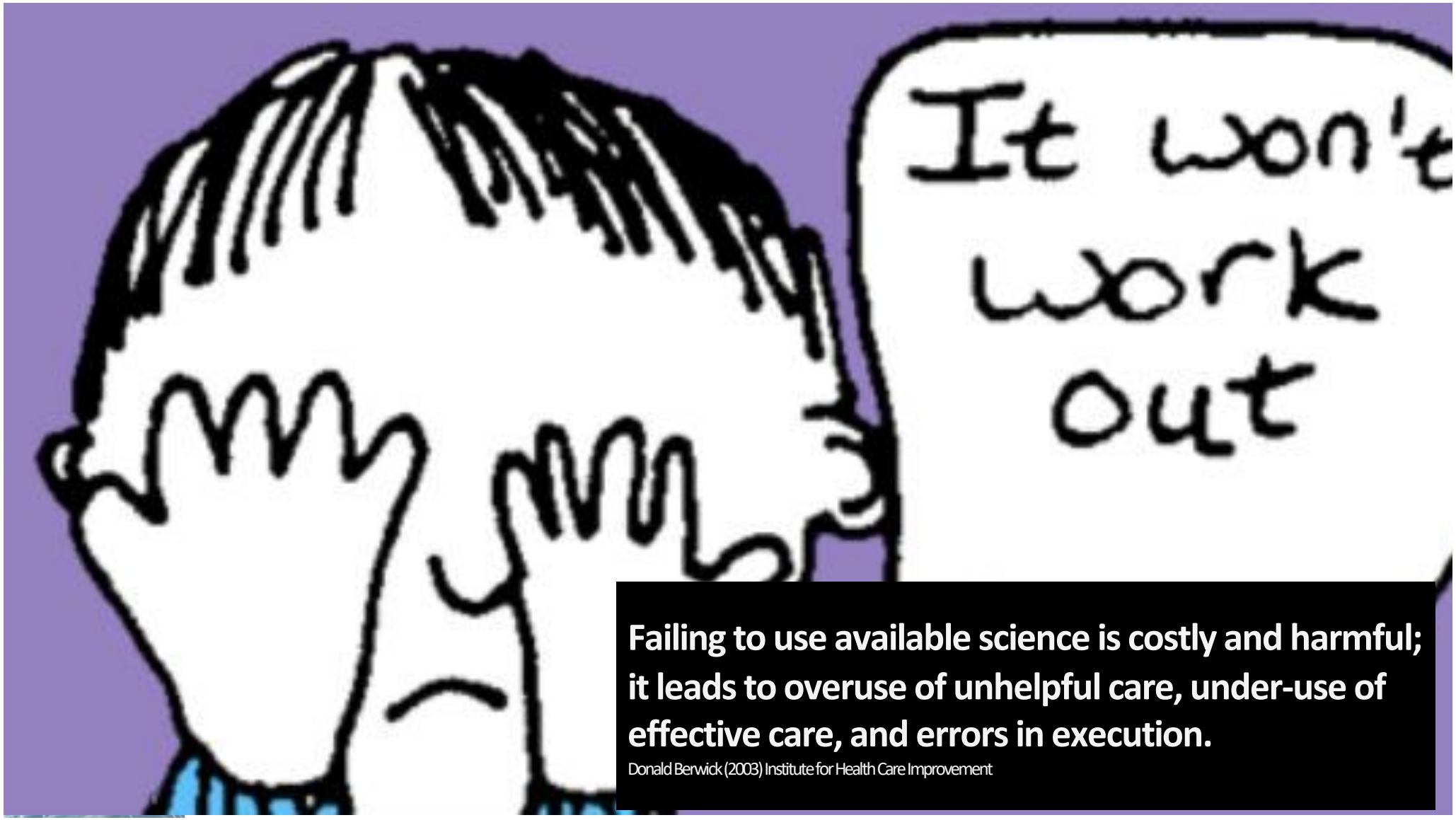
Dr. Philip C. Kendall, Ph.D., A.B.P.P.
Department of Psychology, Temple University, Philadelphia



Failing to use available science is costly and harmful; it leads to overuse of unhelpful care, under-use of effective care, and errors in execution.

Donald Berwick (2003) Institute for Health Care Improvement

Viewpoint

Avoidable waste in the production and reporting of research evidence

Iain Chalmers, Paul Glasziou

Lancet 2009; 374: 86–89
Published Online
June 15, 2009
DOI:10.1016/S0140-6736(09)60329-9

s Lind Library, James Lind Initiative, Oxford, UK
Chalmers DSc); and Centre vidence-Based Medicine, artment of Primary Care, versity of Oxford, Oxford, K (Prof P Glasziou RACGP)

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Without accessible and usable reports, research cannot help patients and their clinicians. In a published Personal View,[1] a medical researcher with myeloma reflected on the way that the results of four randomised trials relevant to his condition had still not been published, years after preliminary findings had been presented in meeting abstracts:

> "Research results should be easily accessible to people who need to make decisions about their own health... Why was I forced to make my decision knowing that information was somewhere but not available? Was the delay because the results were less exciting than expected? Or because in the evolving field of myeloma research there are now new exciting hypotheses (or drugs) to look at? How far can we tolerate the butterfly behaviour of researchers, moving on to the next flower well before the previous one has been fully exploited?"

This experience is not unusual: a recently updated systematic review of 79 follow-up studies of research reported in abstracts estimated the rate of publication of full reports after 9 years to be only 53%.[2]

research involving patients have been disincentives for those who might otherw become involved in research in treatment evalu recent years, there has been recognition of th address both of these disincentives. In the Cooksey enquiry concluded that governmen for applied research should be increased,[3] National Institute for Health Research (NI responded rapidly to this policy (its funding fo trials will soon be £80 million a year).[4] In the U currently before Congress calls for federal su evaluations of treatments independent of indu in Italy and Spain, independent research on t of drugs is being supported with revenue fron pharmaceutical company drug promotion.[5]

This increased investment in independent t evaluation is laudable. Irrespective of who research, this investment should be protected avoidable waste of inadequately produc reporting research. We examine the causes an of waste occurring at four successive stages: t of research questions; the quality of researc

Why are we missing the target?

AWARENESS

we don't do a good job of sharing what we know in ways people want and understand

COMPREHENSION

when we do share, it's not with an intention to guide how users will benefit

RELEVANCE

research does not always address the problems faced by decision-makers or knowledge users

COMPLEXITY

behaviour change is difficult to achieve, time-consuming and expensive

POOR TRANSLATION

we don't use implementation science to guide use of scientific discoveries

READINESS

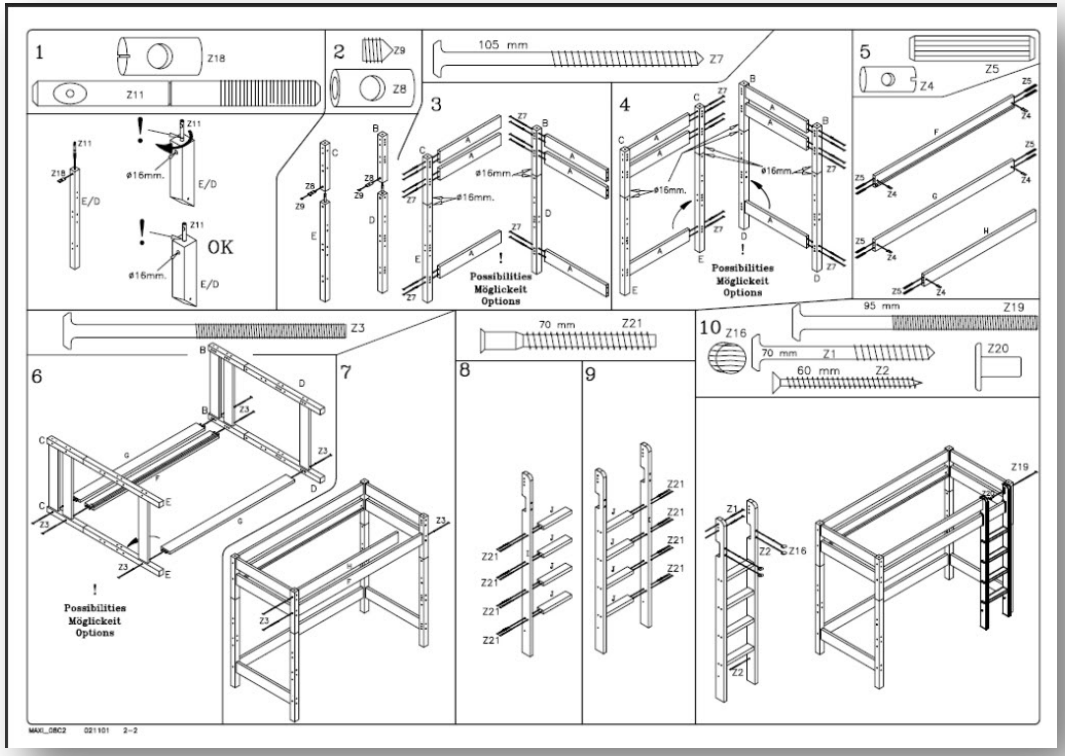
there is variable awareness, tension for change, and multiple barriers to change

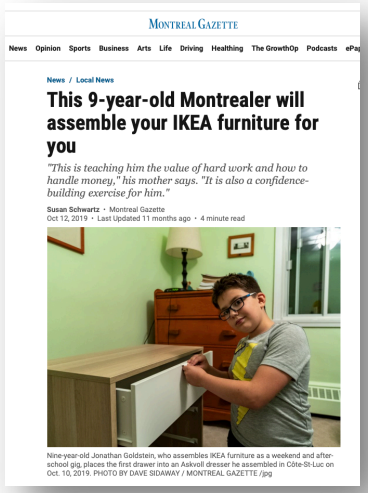
We often fail to be evidence-based in our approach to disseminating & applying the evidence

We don't use the science of implementation to guide the application of evidence


How will people know how to use or benefit from your intervention?

Is your intervention fully evidence-based? Consider IKEA




MONTREAL GAZETTE

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News / Local News

This 9-year-old Montrealer will assemble your IKEA furniture for you

"This is teaching him the value of hard work and how to handle money," his mother says. "It is also a confidence-building exercise for him."

Susan Schwartz · Montreal Gazette
Oct 12, 2019 · Last Updated 11 months ago · 4 minute read

Nine-year-old Jonathan Goldstein, who assembles IKEA furniture as a weekend and after-school gig, places the first drawer into an Askvoll dresser he assembled in Côte-St-Luc on Oct. 10, 2019. PHOTO BY DAVE SIDAWAY / MONTREAL GAZETTE /jpg

IKEA

Evidence-based practices are not fully *evidence-based* unless we can articulate and demonstrate *how they can be implemented*.

Implementation

The use of strategies to adopt and integrate evidence-based interventions and change practice within specific settings.

Informed by Implementation Science, the scientific study of methods and strategies that facilitate the uptake of evidence-based practice and research into regular use.

Implementation Science should inform Implementation Practice

Implementation Science

A fundamental goal is to integrate research and practice experience in ways that improve the outcomes of those being served.

For this to happen, implementation scientists must work with communities and embrace the diverse experiences that both drive and shape implementation efforts.

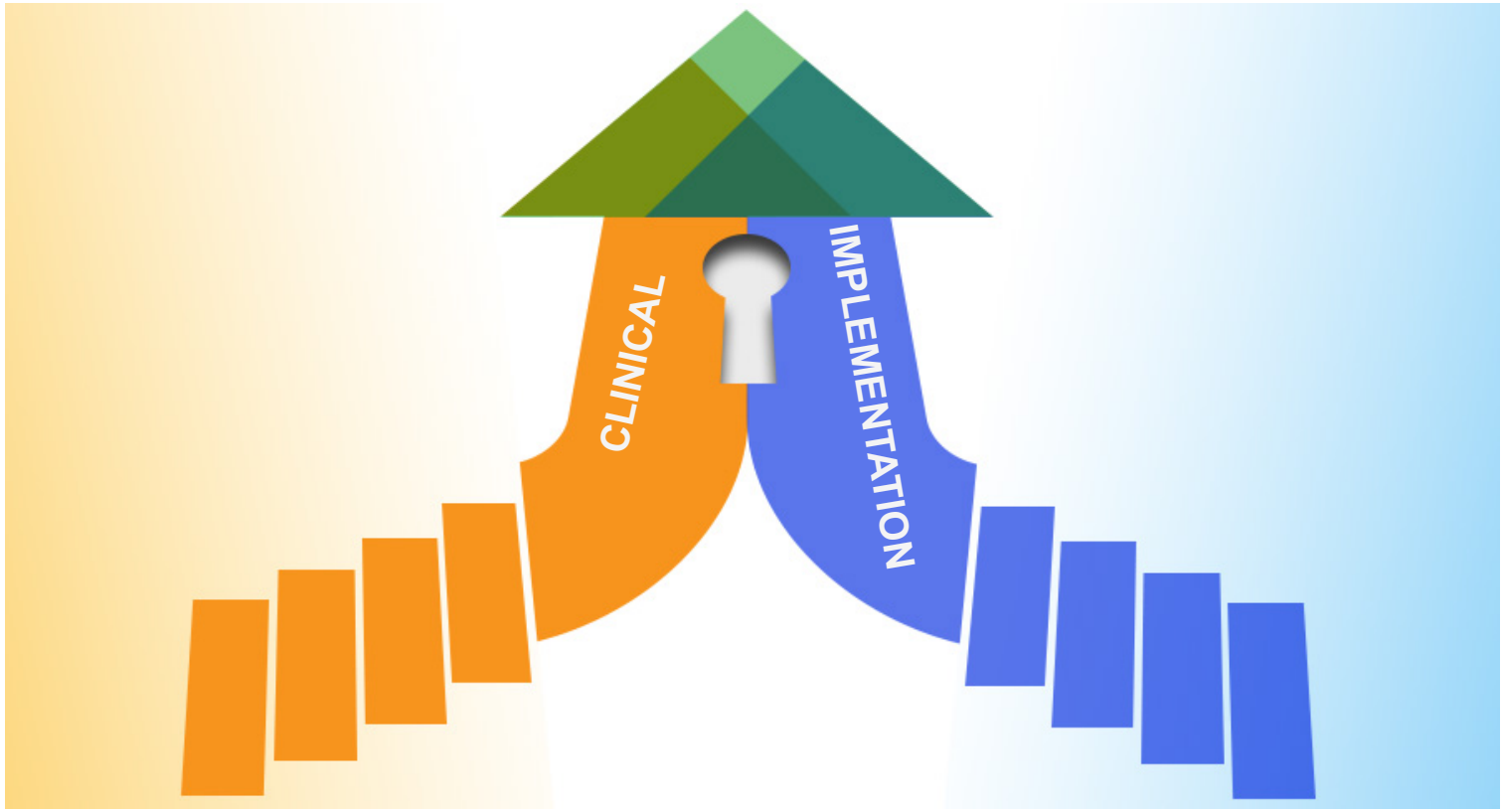
This requires competent implementation practice and an explicit commitment to equity.

Implementation Practice

The application of evidence emerging from implementation science by people (individuals and teams) with the skills and competencies to tailor implementation frameworks, strategies and approaches to different contexts and settings to meet the unique needs of communities and people and to improve outcomes.

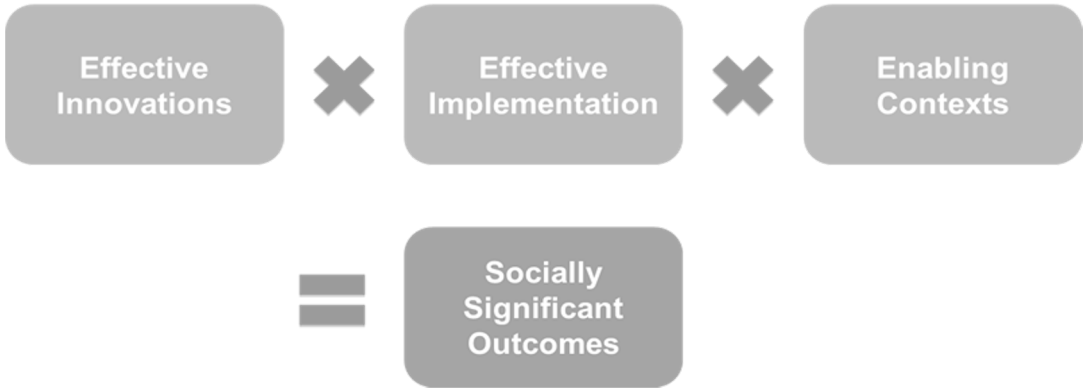
Intentional – Explicit - Structured

Implementation involves (at least) two sets of evidence, methods, procedures, analyses, and outcomes



Implementation Success

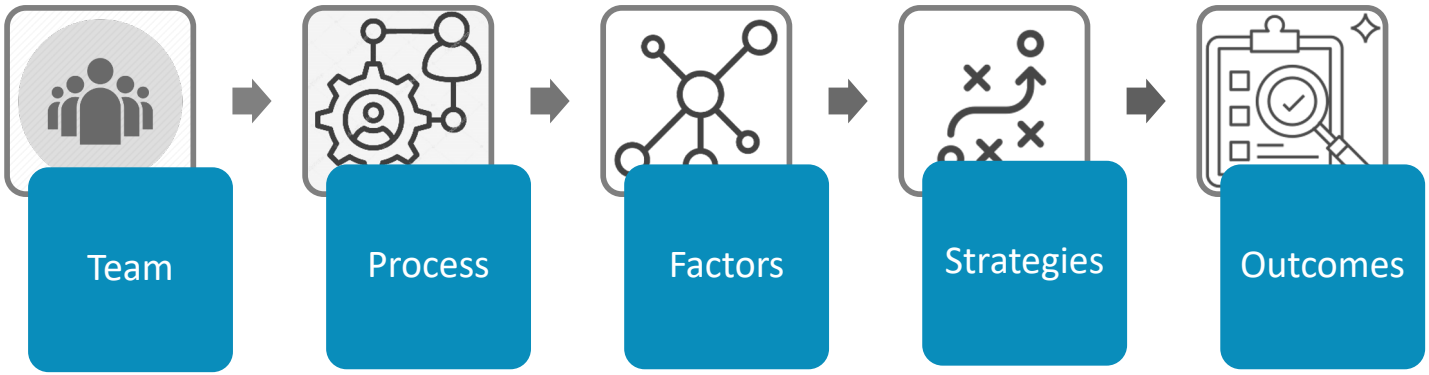
Implementation of evidence-based programs in typical human service settings can be characterized as a formula:



If any component is weak then intended outcomes will not be achieved, sustained, or used on a socially significant scale.

Source http://nirn.fpg.unc.edu/learn-implementation/implementation-defined

Simplifying Implementation into Core Components©



CONTEXT

Implementation Kitchen Analogy©

Cooking

- A kitchen
- The right tools (oven, sink)
- A cook with the right skills
- A recipe
- Ingredients & chemistry
- Adaptation to the recipe
- Evaluation of taste, nutrition

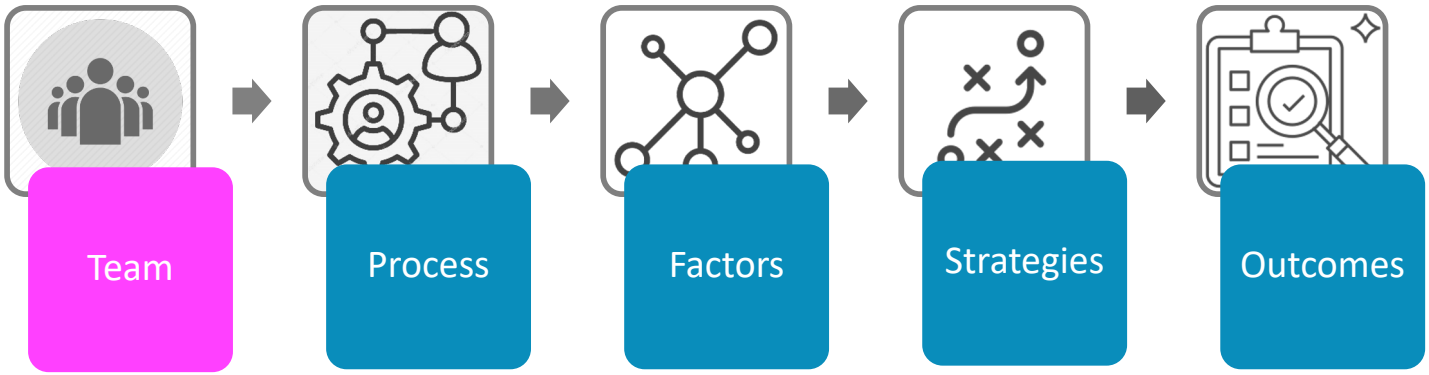
Implementing

- A setting
- A receptive context
- Implementation team with the right skills
- A step-by-step implementation process
- Factors & mechanisms
- Adaptation (fidelity vs going rogue)
- Evaluation of outcomes (clinical/service, implementation)

Team → Process → Factors → Strategies → Outcomes

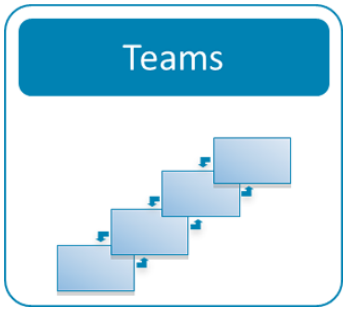
Core Components of Implementation Science & Practice©

Core Components of Implementation



CONTEXT

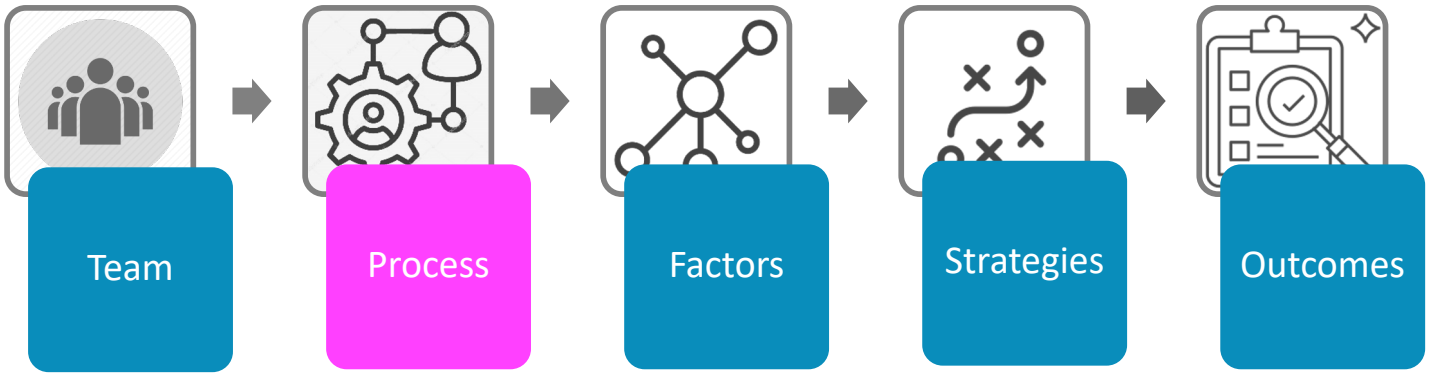
Implementation Teams



- Implementation work is lead by purposefully selected *Implementation Teams*.
- Implementation Teams can be different:
  - EBP developers and purveyors
  - intermediary organizations that help others implement EBPs
  - developed on site with support from groups outside the organization or system, sometimes in the context of active research
- All compositions of Implementation Teams have implications for EBP sustainability.

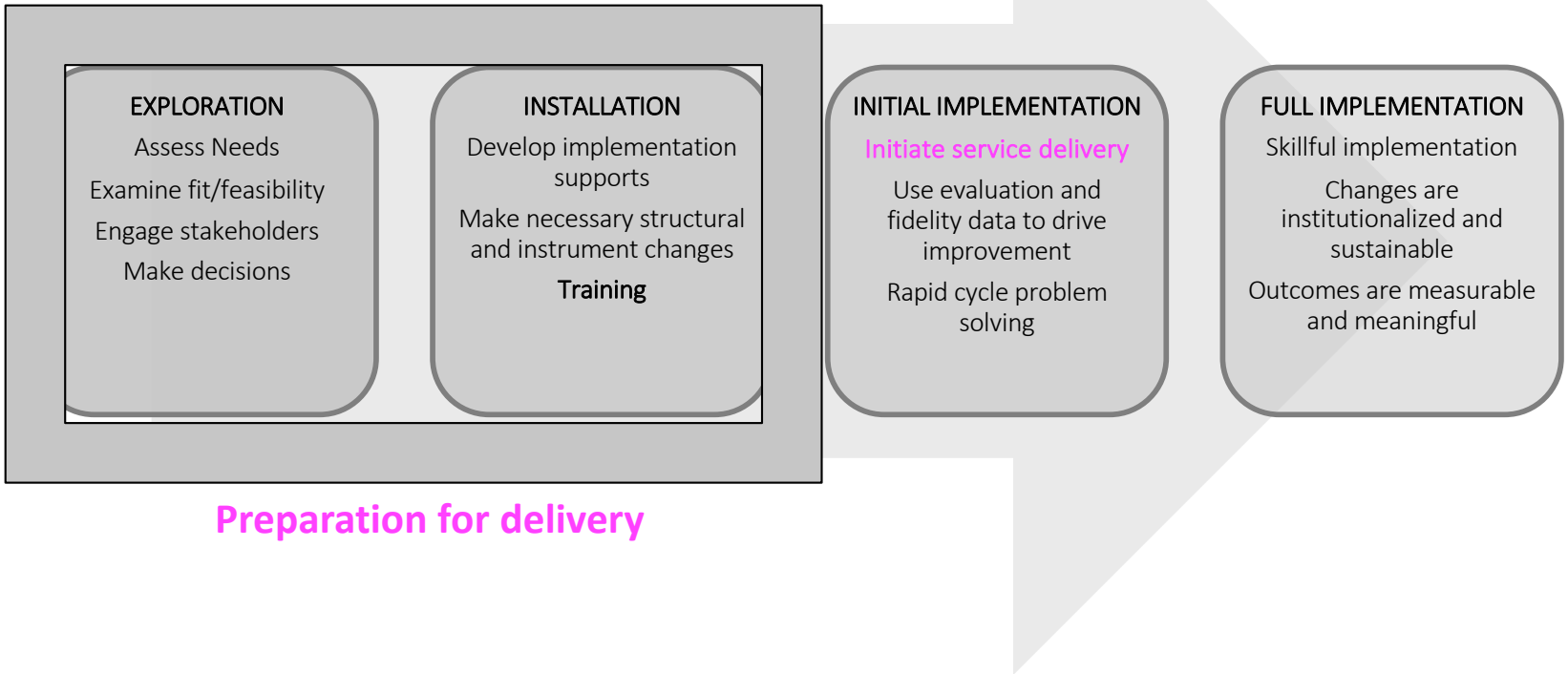
Fixsen, D.L., Naoom, S.F., Blase, K.A., Friedman, R.M., & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. University of South Florida, Louis de la Parte Florida Mental Health Institute, Tampa, FL, The National Implementation Research Network (FMHI Publication #231).

Core Components of Implementation



CONTEXT

Implementation Stages



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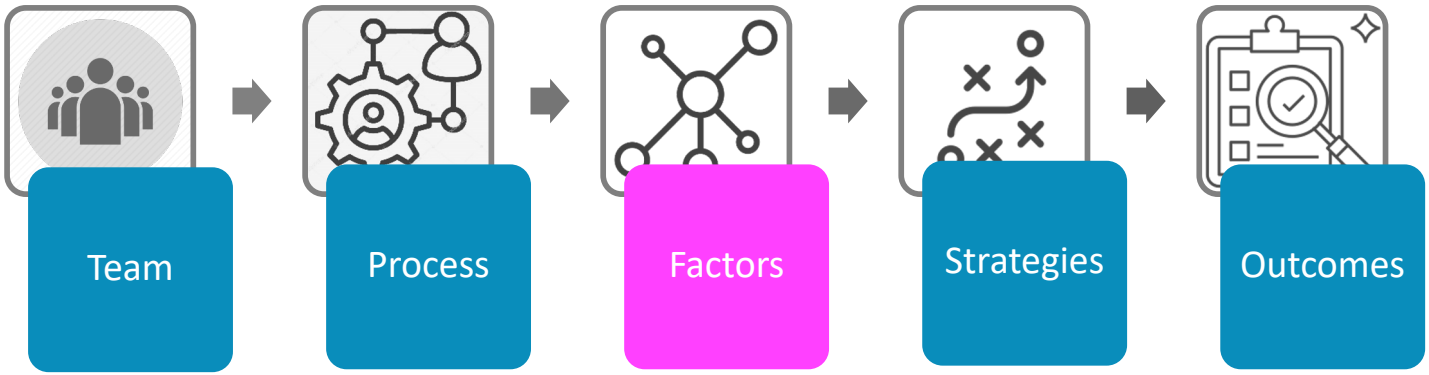
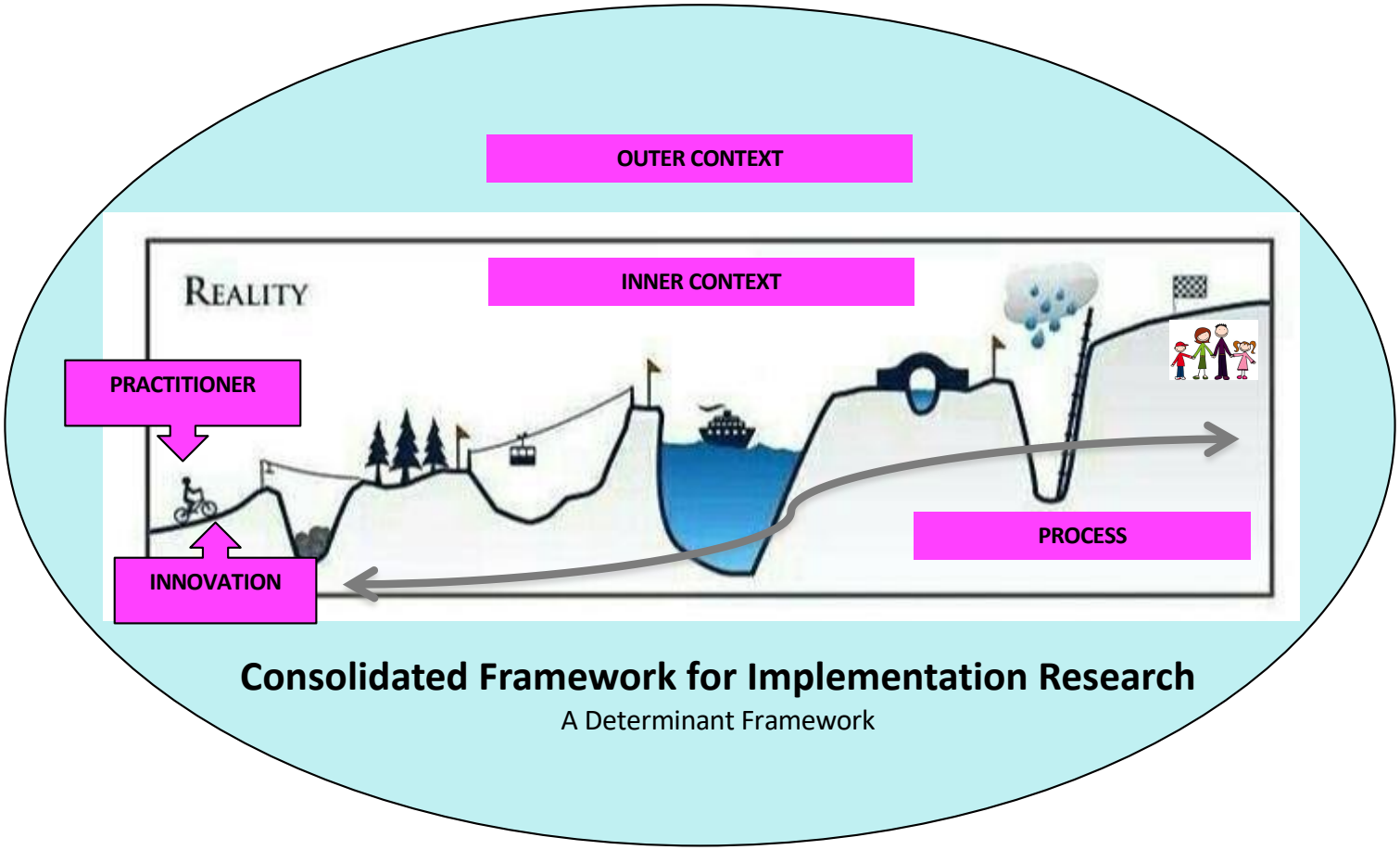
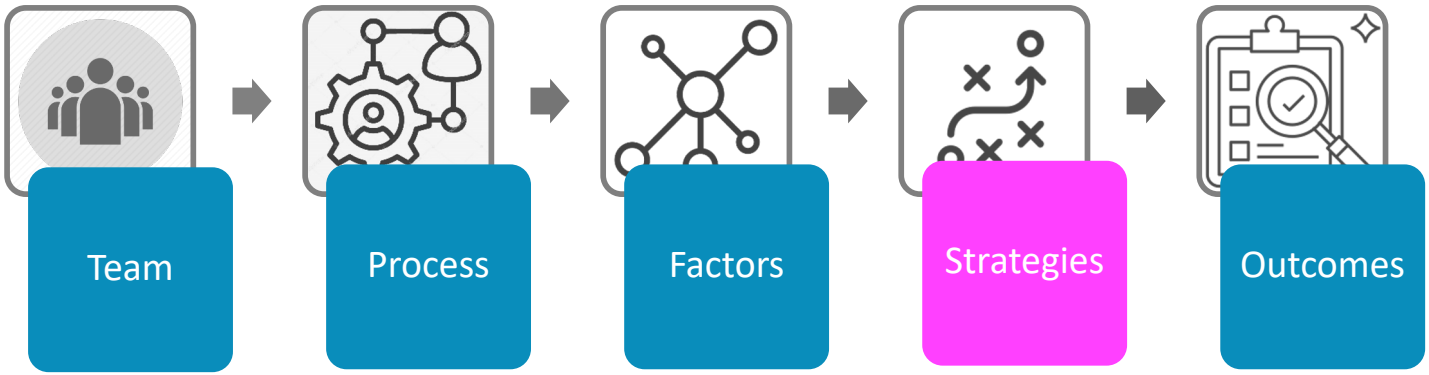


CONTEXT



SOURCE: Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Implement Sci. 2009 Aug 7;4:50.

Core Components of Implementation



CONTEXT

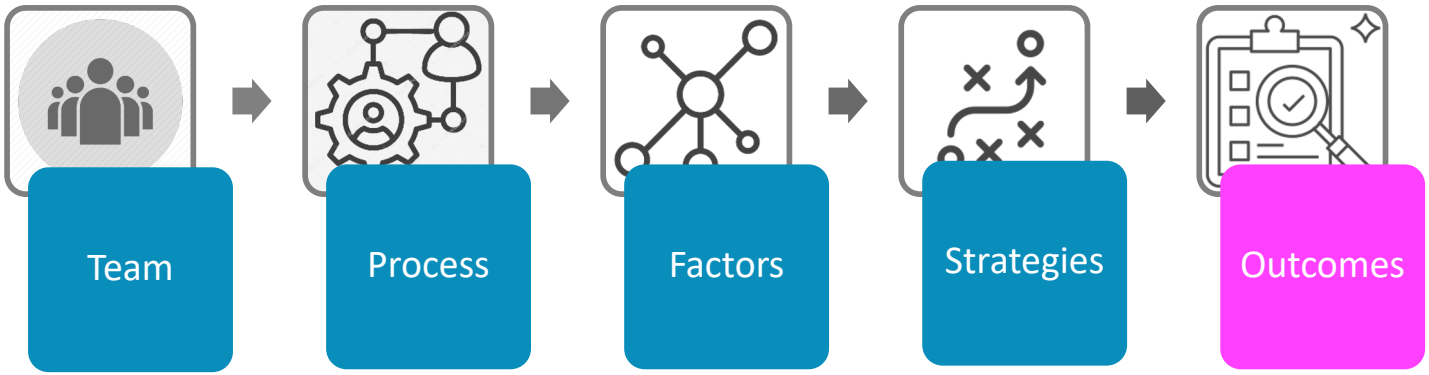
Implementation Strategies

73 discrete implementation strategies can serve as building blocks for constructing multifaceted, multilevel implementation strategies for implementation efforts.

Powell BJ, Waltz TJ, Chinman MJ, Damschroder LJ, Smith JL, Matthieu MM, Proctor EK & Kirchner JE. (2015). A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. I*mplementation Science 10*:21.

Powell BJ, McMillen C, Proctor EK, Carpenter CR, Griffey RT, Bunger AC, Glass JE, & York JL. (2012). A compilation of strategies for implementing clinical innovations in health and mental health. *Medical Care Research and Review, 69*(2) 123–157.

Core Components of Implementation



CONTEXT

Implementation Outcomes

The effects of the implementation.

Distinguishing implementation effectiveness from treatment effectiveness is important because if the effort fails, we need to know if the failure occurred because the intervention was ineffective in the new setting (intervention failure), or if a good intervention was deployed incorrectly (implementation failure).

Acceptability
Adoption
Appropriateness
Cost
Feasibility
Fidelity
Penetration
Sustainability

Source: Proctor et al., 2011


Unless we focus on how groundbreaking interventions are implemented, discoveries developed in 2021will not be routinely used in clinical practice until 2038…
…17 years from today

Where to learn more about dissemination & implementation

- Specialist Knowledge Translation Training (SKTT™)
- SKTT for Graduate Students
- SKTT Australia
- Knowledge Translation Professional Certificate (KTPC™)
- Tailored KT training for internal and external audiences
- eLearning modules on iLearn
  - Introduction to KT, How to Prepare a KT Plan
  - Plain Language Curriculum
- **Planning for Implementation Practice (PIP™)**
- Accessible at SickKids http://www.sickkids.ca/Learning/AbouttheInstitute/Programs/Knowledge-Translation/index.html

Specialist Knowledge Translation Training™

Specialist Knowledge Translation Training™ Australia

Knowledge Translation Professional Certificate™

Planning for Implementation Practice™

SickKids KT Resources and Tools

- KT Planning Template – tool for building your KT plan.
- KT-Plan Appraisal Tool - use to appraise your KT plan.
- KTPC Casebook: Building KT Friendly Organizations in Healthcare and Beyond – learn how other organizations have built their KT programs.
- KT game – teaching & planning tool for building KT plans.
- KT Stories – learn about KT work across SickKids.
- Plain language Checklist – use to create PL communication.
- Planning for Implementation Practice Workshop – to support implementation planning
- The Implementation Game © - resource for learning and planning

SickKids LEARNING INSTITUTE

Knowledge Translation Program

KT Program Website: https://www.sickkids.ca/learning/abouttheinstitute/programs/knowledge-translation/resources/resources.html

The Implementation Game© (TIG)

- Evidence-based teaching and planning tool
- Simplifies implementation planning process into 5 main components
- Relevant across disciplines; concepts are universal

https://www.cvent.com/d/dgq6zc

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