May 16-18
Montreal, Canada


2024

# CONFERENCE

10th Anniversary Edition

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WOMEN'S COLLEGE HOSPITAL INSTITUTE FOR HEALTH SYSTEM SOLUTIONS AND VIRTUAL CARE

# Designing for Scale: Strategies for interventions that can help more people in more ways

May 18, 2024

OFFICE OF SPREAD AND SCALE

# Plan

WCH WOMEN'S COLLEGE HOSPITAL | Office of Spread & Scale

- Introductions
- Definitions
- Frameworks for Scale
  - Break
- Tools for Scale
  - Break
- Discussion

# About Us

***Celia Laur***

*Scientist, Women's College Hospital*

*Scientific Lead, Office of Spread & Scale*

*Assistant Professor, University of Toronto*

***Zeenat Ladak***

*Trainee, Office of Spread & Scale*

*PhD Student, University of Toronto*

# Our Values

WCH WOMEN'S COLLEGE HOSPITAL | Office of Spread & Scale

***The Office of Spread & Scale values collaboration, health equity, and evidence-informed decision-making while prioritizing patient-oriented research and application of practices likely to achieve great impact.***

# The Role of the OSS

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**Implementation Practice:**
To use strategies or interventions to support individuals, organisations and/or systems to use evidence to change practice.

**Implementation Science:**
The scientific study of how to put evidence into practice. Includes development of robust theories, models, frameworks, tools etc.

***Helping individuals, groups and organizations to use the science to inform practice, specifically focusing on moving what works into new settings.***

# What do we do?

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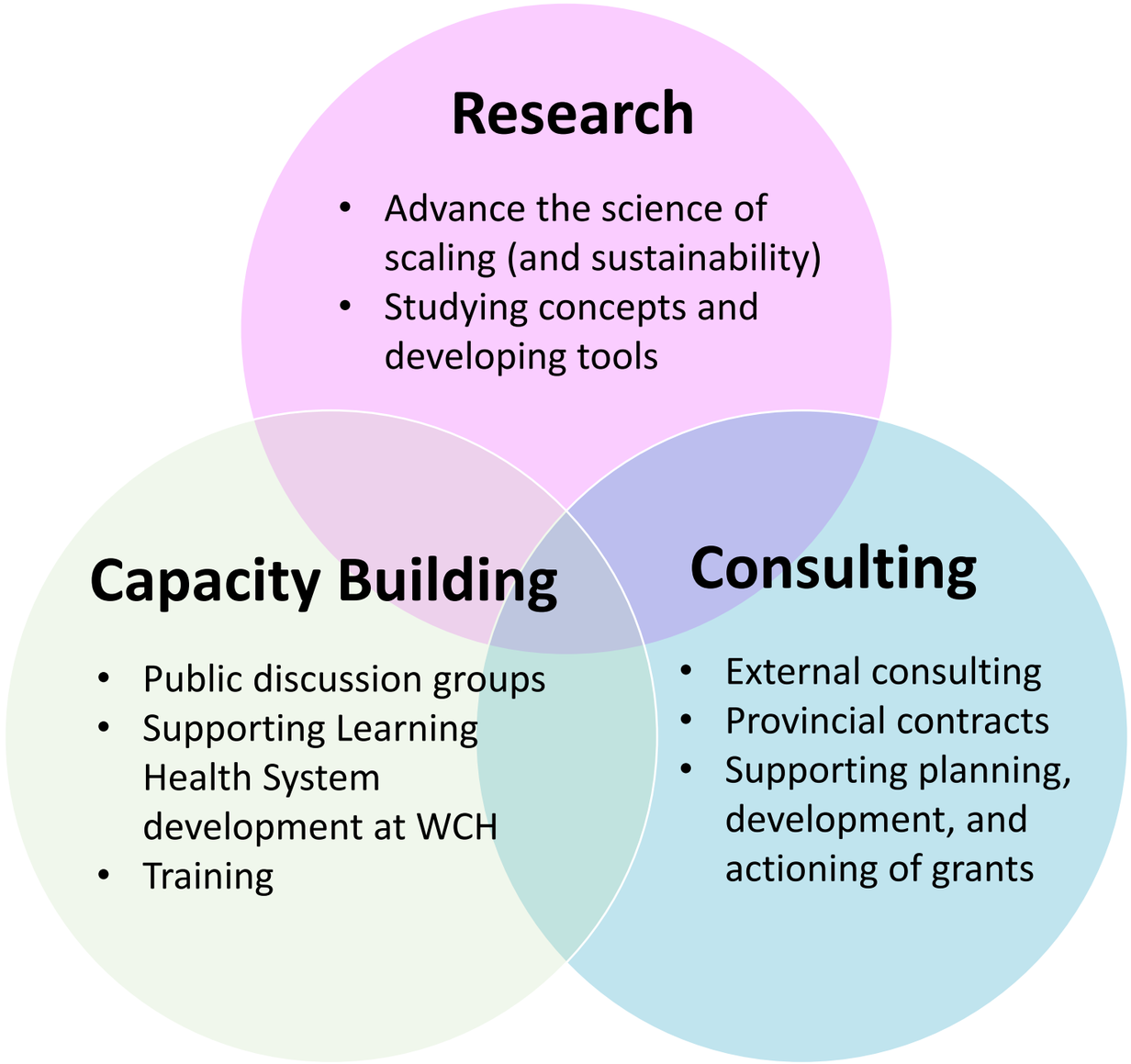


ONTARIO SPOR SUPPORT UNIT

WHV WOMEN'S COLLEGE HOSPITAL INSTITUTE FOR HEALTH SYSTEM SOLUTIONS AND VIRTUAL CARE

WCH WOMEN'S COLLEGE RESEARCH INSTITUTE
Healthcare | REVOLUTIONIZED

# ACTIVITY: Mentimeter

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**Mentimeter**

Code: 4694 5973

***What is your level of understanding about spread and scale?***

# ACTIVITY: Think-Pair-Share

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## Think-Pair-Share

***Have you ever been involved in planning for scale of a research project?***

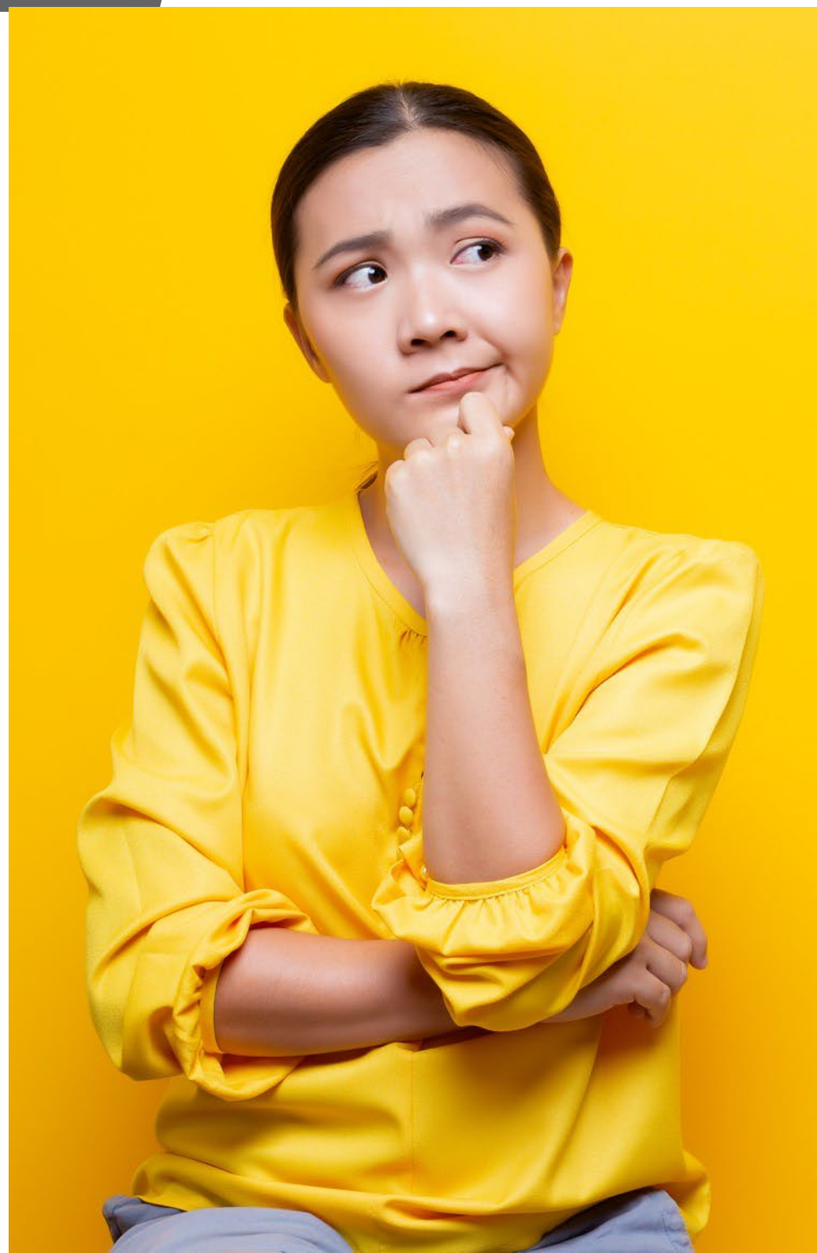
*What did you find challenging?*

*What worked well?*

*Think – 2 mins*

*Pair*

*Share – 8 mins*



# Definitions

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## Spread
(horizontal)

*Replicating an initiative somewhere else (i.e. one site to another)*

Greenhalgh & Chrysanthi, 2019

**Define what you mean in your own work!**

## Scale
(vertical)

*Deliberate efforts to increase the impact of innovations successfully tested in pilot or experimental projects so as to benefit more people and to foster policy and program development on a lasting basis.* *(ExpandNet; Simmons et al, 2007)*

*Tackling the infrastructure problems that arise during full scale implementation (i.e. implementing provincial policy)* (Greenhalgh & Chrysanthi, 2019)

# Theories, Models & Frameworks (TMF)s for Scale

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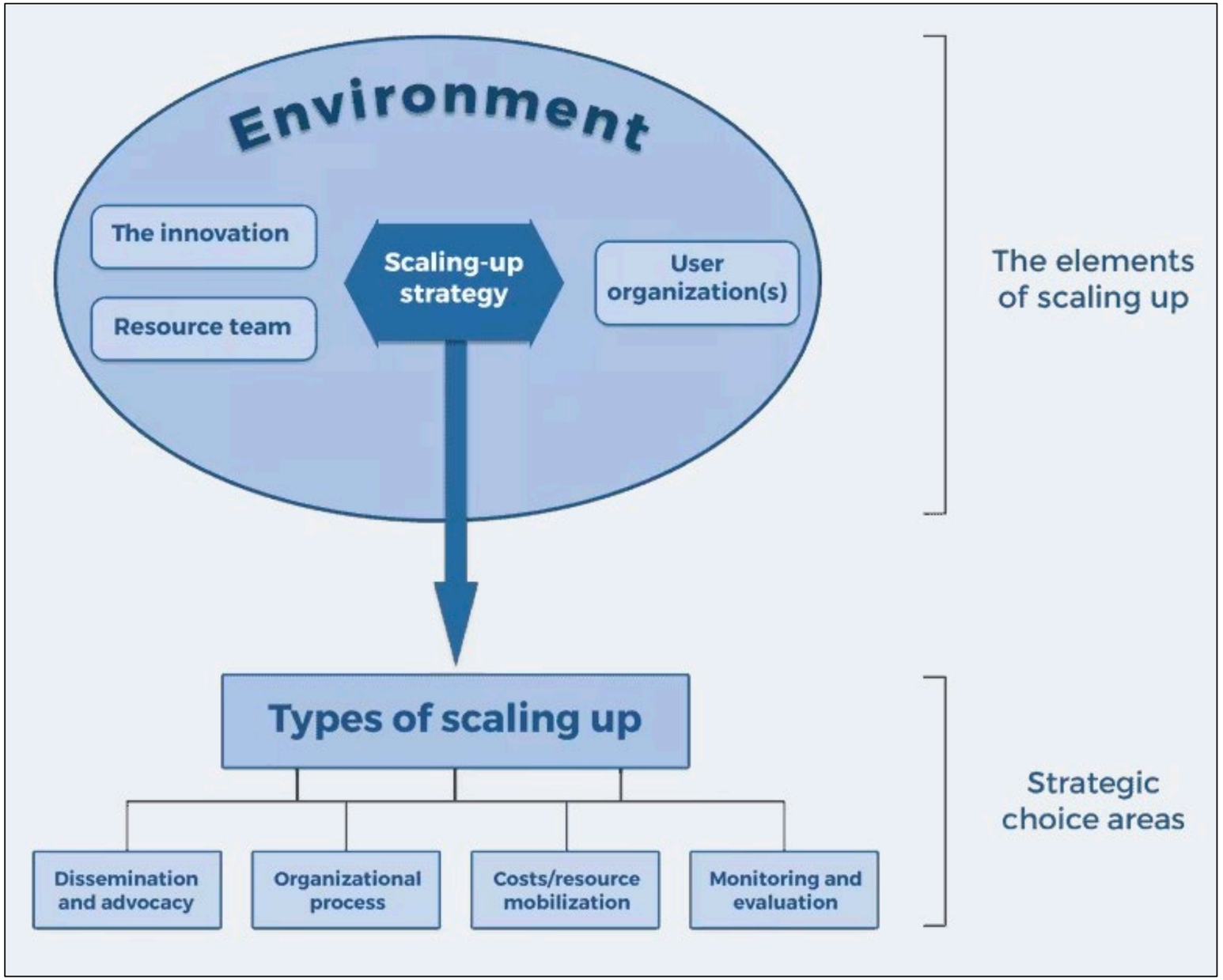
- We can use implementation TMFs for scaling interventions
- Many implementation frameworks don't consider scale
- But TMFs for scale can be helpful for planning the ***scaling process***
- The scaling process is ***different*** from initial implementation
- Examples of TMFs for scale:
  - ExpandNet Scaling-Up Framework
  - Non-Adoption, Abandonment, Spread, Scale-up, Sustainability (NASSS)
  - Framework for Going to Full Scale (FGFS)

# ExpandNet Scaling-Up Framework




- Most commonly used
- Developed based on work with the WHO
- Mostly developed based on maternal and reproductive health

# ExpandNet

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## Four key principles guide the framework

### Systems thinking

Expansion and institutionalization of innovations occurs in a complex system of interactions and influences, which should all be considered in developing a scale-up strategy and managing the process.

### A focus on sustainability

Sustainable scale up requires country ownership, building institutional capacity and embedding the innovation in the organizational structures, policies, budgets, and operational guidelines.

### Enhancing scalability

Scalability refers to the ease or difficulty of expanding and institutionalizing the innovation. Scalability can be enhanced by using what is known about the factors that ensure success to shape the scaling-up strategy.

### Respect for human rights, equity and gender perspectives

Scaling up should enhance human rights, promote the principles of dignity, gender equity and equitable access to quality services for all. It should be guided by participatory and client-centered approaches.

# ExpandNet: Types of Scaling Up

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- **Expansion or replication** (also known as horizontal scaling up) where innovations are expanded to different geographies or to serve different populations.
- **Institutionalization** (policy, political, legal or vertical scaling up) is embedding the innovations in policies, structures, and operational guidelines.
- **Diversification** is testing and adding new interventions to an existing package.
- **Spontaneous diffusion** is when innovations spread without deliberate guidance.

When you consider other literature there are likely other types or models of scale to be considered...

# Applying the ExpandNet Framework

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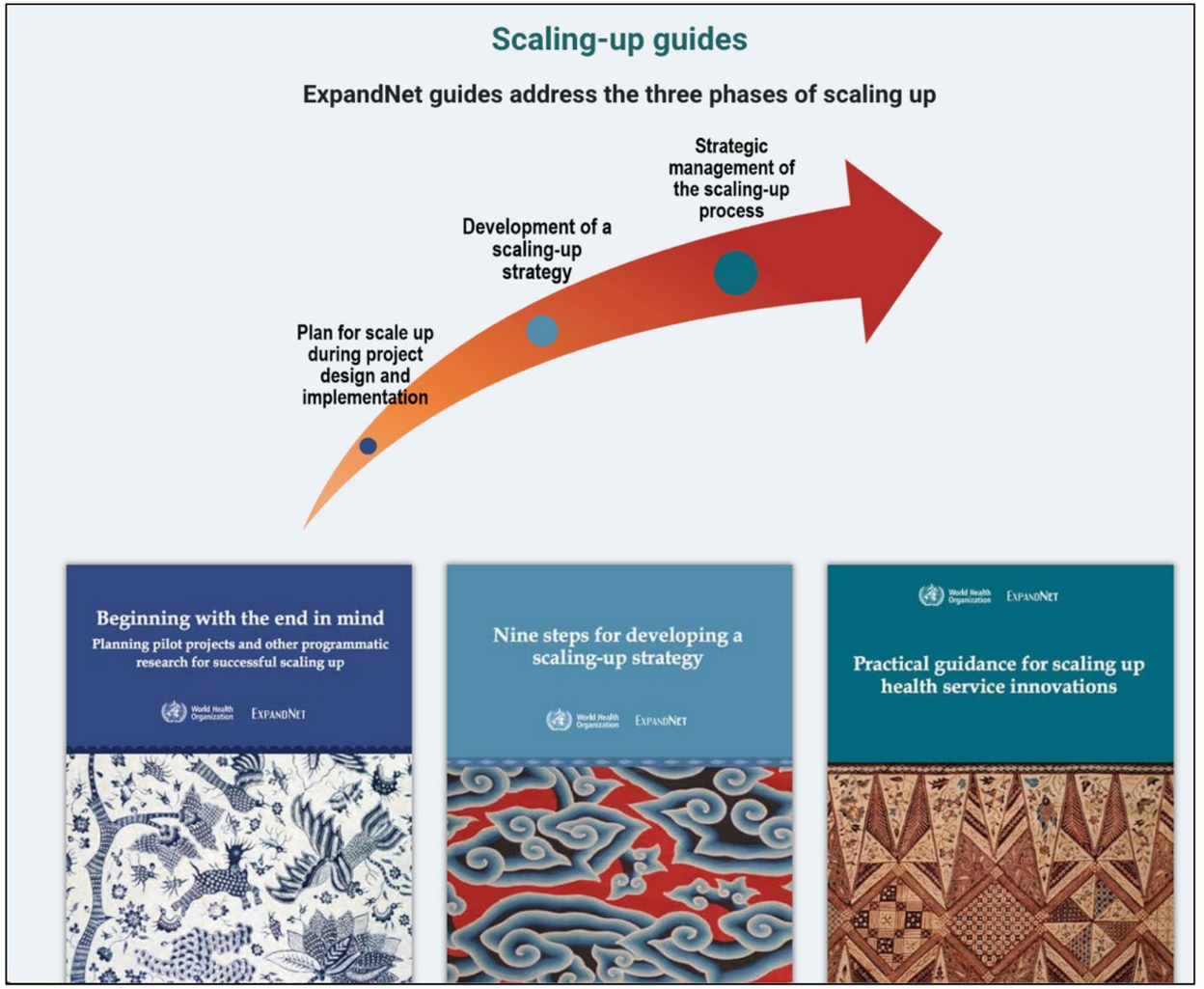
There are multiple resources that help you use this framework.



# Non-Adoption, Abandonment, Spread, Scale-up, Sustainability (NASSS) Framework

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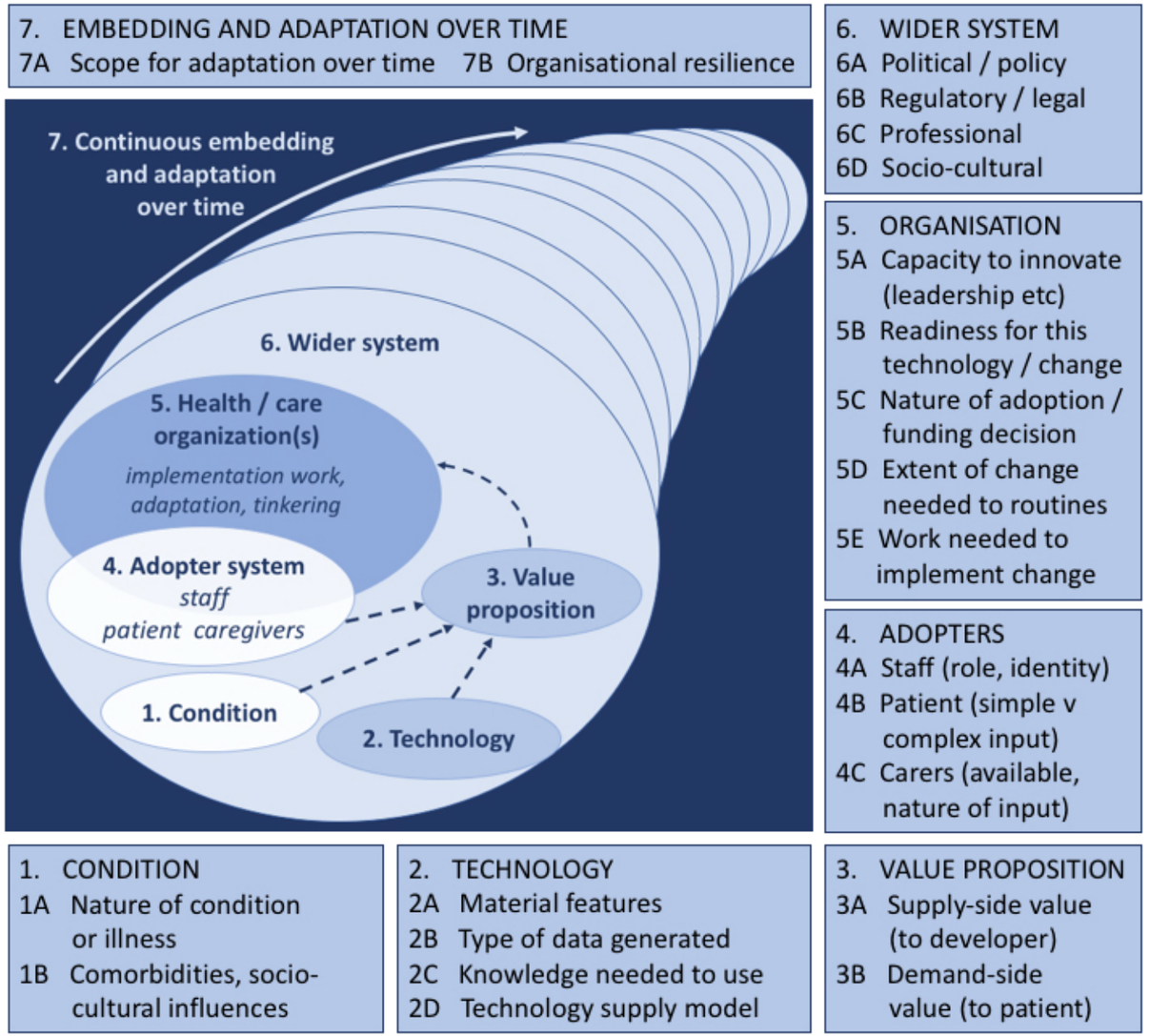
- Focused on technology-supported health or social care programs
- Helps to identify and address the key challenges in different domains and the interactions between them.




Greenhalgh et al., 2017

# Applying NASSS

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### NASSS-CAT_SHORT

A 'taster' version to illustrate the general idea of a multi-domain analysis of a complex technology challenge. It only takes a few minutes to complete (individually or in a group) with 3-5 questions for each of the 7 NASSS domains.

Download NASSS-CAT_Short (.docx)

### NASSS-CAT_LONG

This version helps with detailed reflection on your technology-supported change project and invites more free-text narrative on complexity from different perspectives (ideally by more than one contributors). You can complete this tool as a Word document (through the link below) but you can also use the full NASSS-CAT Complexity toolkit (next section) which provides a digital environment for detailed reflection and collaboration.

Download NASS-CAT_Long (.docx)

### NASSS-CAT_COMPLEXITY TOOLKIT

The NASSS-CAT Complexity toolkit has been designed to combine NASSS-CAT Short and Long. You can use this online toolkit flexibly to reach the level of detailed reflection that your project requires at different points in time and to invite contribution from distributed teams. The complexity toolkit also provides interactive visualisations you can use in presentations and meetings.

Open NASS-CAT_Complexity toolkit (Google sheets)

Open NASS-CAT_Complexity toolkit (Office 365)

### NASSS-CAT_PROJECT VERSION

You can use this tool to assess, monitor, reduce and respond to complexity in technology projects over time. It contains five sections to help map complexity and provides visual results.

Open NASSS-CAT_Project version (Google sheets)

Open NASSS-CAT_Project version (Office 365)

Download NASSS-CAT_Project (.docx)

### NASSS-CAT_INTERVIEW

A set of interview prompts to support researchers collect data across the 7 NASSS domains. It can be adapted to suit particular projects.

Download NASSS-CAT_Interview (.docx)

### ADDITIONAL RESOURCES

Please see here for ideas and resources to help you plan your implementation project and consider measures to reduce or respond to complexity in the different NASSS domains.

Additional resources

www.phc.ox.ac.uk/research/resources/nasss-cat-tools

# Framework for Going to Full Scale

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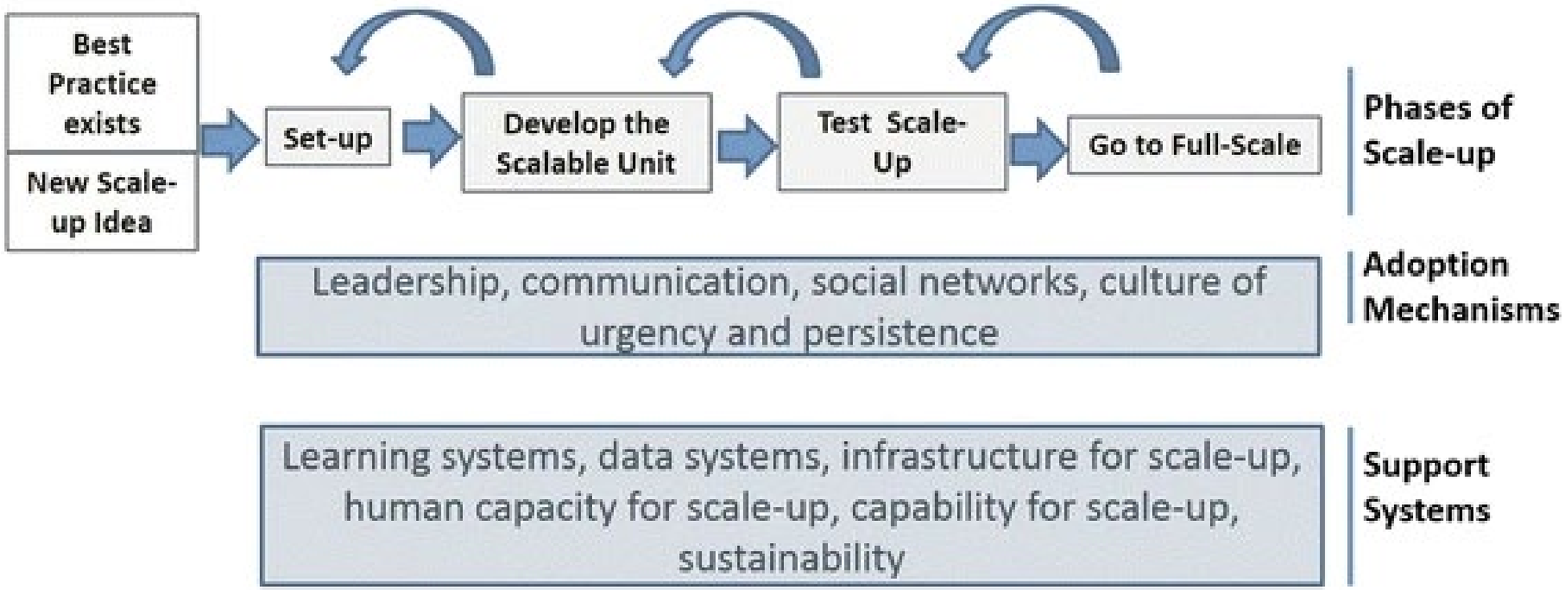


Barker et al., 2015

# Phase 1: Set Up

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- Prepares the ground for introduction and testing of the intervention that will be taken to full scale.

- Establishes an entry point for the planned intervention into the existing health system.

- Includes a clear articulation of what needs to be scaled up and defines the ambition for "full scale."

- Initial test sites, early adopters, and *potential* "champions" of the intervention are identified.

Barker et al., 2015

# Phase 2: Develop the Scalable Unit

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- An early test and demonstration phase

- If the ambition of scale is large (e.g., county, province, health system), a scalable unit could comprise multiple levels of care and the communities that are served by a large health system, or a divisional unit of care in a hospital setting or large clinic system.

*"Scalable Unit"*

Typically, a small administrative unit (e.g., sub-district/district or clinical ward/division) that includes key infrastructural components and relationship architecture that are likely to be encountered in the system at full scale.

Barker et al., 2015

# Phase 3: Test of Scale-up

- Testing the intervention or set of interventions (and their underlying theory of change), in different contexts, to be taken to scale.
- Test necessary infrastructure (e.g., data systems and supply chain).
- Build human capacity and capability (e.g., leadership, managerial, and frontline capacity needed to support the method being used to scale up).
- Important opportunity to build the belief and will of leaders and frontline staff to support the changes.

Barker et al., 2015

# Phase 4: Go to Full Scale

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- Unfolds rapidly to enable a larger number of sites to adopt and/or replicate the intervention

Barker et al., 2015

# Adoption Mechanisms & Support Systems

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## Adoption Mechanisms

- Better Ideas
- Leadership
- Communication
- Policy
- Culture of Urgency & Persistence

## Support Systems (Infrastructure)

- Human Capability for Scale-up
- Infrastructure for scale-up
- Data collection & reporting systems
- Learning systems
- Design for Sustainability

# Example of FGFS

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## Identifying the Problem

**Nutrition Care in Hospital Study**

Hospital malnutrition prevalent
Gaps in hospital and post-discharge
Malnutrition is costly

2010-2013

## Develop Scalable Unit

**More-2-Eat Phase 1**

n=5 hospitals
Implement INPAC on
1 medicine unit

2015-2017

**Integrated Nutrition Pathway for Acute Care (INPAC)**

Evidence, consensus-based algorithm
Content validated
Developed and tested
MAT (Mealtime Audit Tool) and
M-MIT (My Meal Intake Tool)

2014-2015

Set-up

## Going to Full Scale

**Development of a national Malnutrition Standard**

2019-2021

**More-2-Eat Phase 2**

n=10 hospitals
Spread and scale
Community of practice

2018-2019

Test Scale-up

## Going to Full Scale

Launch of the Advancing Malnutrition Care Mentor/Champion Model

**Primary Care Pathways**

Evidence and consensus based algorithms and toolkit

Expanding to a new area

# ACTIVITY: FGFS Barriers/Facilitators

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## FGFS Barriers & Facilitators of Phases of Scale

1. **Set-up:** planning, communicating with sites, readiness
2. **Develop the scalable unit:** core components, necessary resources, what is needed for sustainability?
3. **Test scale-up:** pilots, feasibility, does it work?
4. **Go to full-scale:** final implementation in multiple settings

**What barriers or facilitators do you anticipate within each phase?**

**Walk around the room and place your sticky notes on the respective boards for each phase ~ *15 mins***

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# BREAK!

20 mins

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# Tools for Scale

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# ACTIVITY: Mentimeter

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**Mentimeter**

Code:4694 5973

***Have you ever used any tools for scale? If so, which ones?***

# ACTIVITY: Think & Share

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**Think-Pair-Share**

***What tools do you think would be most helpful to help you plan for scale?***

*What would the tool involve?*

*How would you use the tool?*

*What barriers/facilitators would the tool apply to?*

*Think – 2 mins*

*Pair*

*Share with your partner – 5 mins*

*Share with your table – 8 mins*

# ACTIVITY: Mentimeter

WCH WOMEN'S COLLEGE HOSPITAL | Office of Spread & Scale

**Mentimeter**

Code: 4694 5973

***What tools do you think would be most helpful to help you plan for scale?***

# Tools for Scale

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- Several tools to plan for scale but…
  - Mostly low quality, not validated
  - Mostly public health, LMIC
  - Didn't involve patients in the development process

- Examples of tools for scale:
  - Intervention Scalability Assessment Tool
  - Scale-Up Reflection Guide
  - Logic Model for Scale (under development)
  - Readiness to Spread Assessment
  - Readiness to Receive Assessment
  - Innovation Scalability Self-administered Questionnaire (ISSaQ – V1.0)

Charif et al., 2022

# Intervention Scalability Assessment Tool

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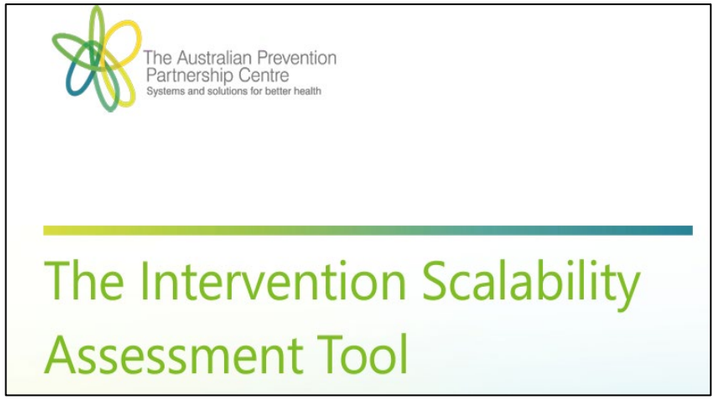
- *Audience:* Practitioners, policy makers, program managers and researchers

- Developed for population health but can be adapted

- Designed to:
  - Help **assess the scalability** of an intervention
  - Identify and assess **contextual factors** facilitating or hindering scale up
  - Provide a mechanism for **identifying gaps** in the information required to make an assessment or to inform an assessment on the scalability of an intervention
  - **Provide a structure** for working through key considerations when determining if a program is scalable.




Milat et al., 2019

# Intervention Scalability Assessment Tool

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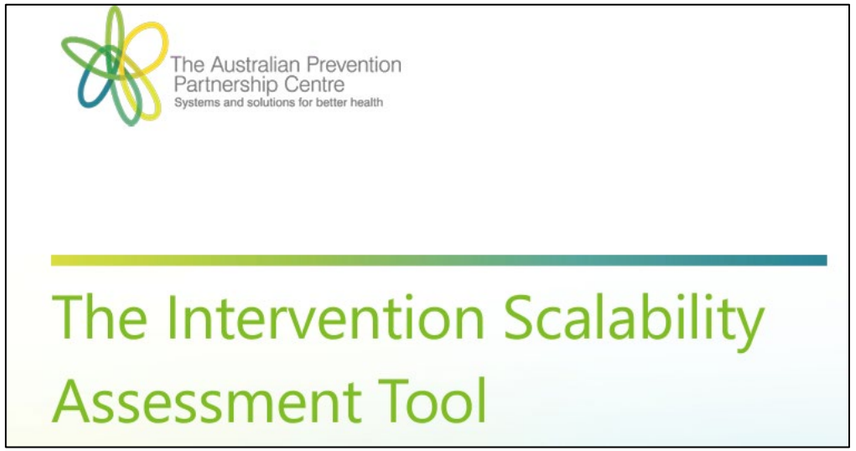
May also be used for:

- Determining how to **design** a program or intervention for implementation and future scale up
- Making **comparisons** across multiple programs and interventions being considered for scale up
- Making assessments on the **readiness** of an intervention for scale up
- **Structuring the decision-making process** on whether to fund or scale up new or pilot interventions
- **Determining the future** of current interventions, that is, whether to continue or terminate an intervention
- Informing the **strategic planning** process.




Milat et al., 2019

# Intervention Scalability Assessment Tool

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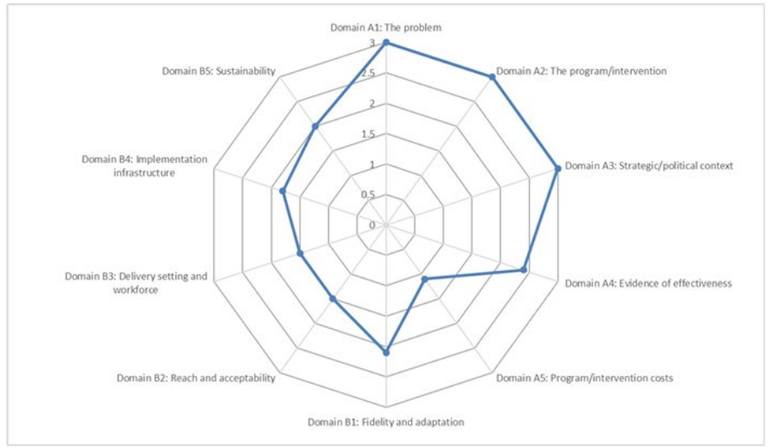
## PART A: Setting the Scene

- The Problem
- The Intervention
- Strategic/Political Context
- Evidence of effectiveness
- Intervention costs and benefits


## PART B: Intervention Implementation Planning

- Fidelity and adaptation
- Reach and acceptability
- Delivery settings and workforce
- Implementation infrastructure
- Sustainability




## PART C: Summary of the Scalability Assessment

Summarise all the information gathered to facilitate the process of making a recommendation on scalability.

**Recommendation**

- ☐ Merits scale up
- ☐ Promising, but further information/planning is warranted
- ☐ Does not merit scale up

Milat et al., 2019

# Scale-Up Reflection Guide

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- **Aims:**
  - To provide a guide for reflecting on and documenting the scale-up of public health interventions;
  - To increase the depth of practice-based information of scaling up
  - To help improve reporting
- **Audience:**
  - researchers, policymakers or practitioners
- **Sections:**
  - context of completion
  - intervention delivery, history/background
  - intervention components
  - costs/funding strategies and partnership arrangements
  - the scale-up setting and delivery
  - scale-up process
  - evidence of effectiveness and long-term outcomes.

| | |
|---|---|
| **Section 1: SRG reporting details**<br>**The Purpose of This Section Is to Document When This SRG Was Completed.** | |
| **1.1 When the SRG was completed.**<br>**1.2 Persons completing the SRG and affiliations.**<br>**1.3 Main sources of information used for reporting this SRG.** | This section describes the organisations completing th this SRG. |
| **Section 2: Intervention geographical location and scale-up approach**<br>The purpose of this section is to record the geographical location and scale-up approac | |
| **2.1 Location of the intervention (i.e., geographical location/s).**<br>**2.2 Level of scale-up achieved (i.e., city, state or national scale).**<br>**2.3 Time period of scale-up.**<br>**2.4 Type of scale-up approach taken.**<br>**2.5 Current status of the intervention (active, no longer operational).** | This section describes whe the scale-up approach take regional introduction of an simultaneous introduction recorded, i.e., whether the |

Lee et al., 2023

# ACTIVITY: Group Discussion

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**Group Discussion**

- Thinking about the ideal tools that you want, to plan for scale (previous activity)…
- Thinking about the tools that are available...

**Is there a gap? Do they align? Let's discuss!**

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# Tools for Scale:
# Logic Model for Scale

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# What is a Logic Model?

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- Also known as:
  - a program model
  - theory of change
  - theory of action

- A graphic illustration of **how a program or intervention is expected to produce desired outcomes.**

- It shows the relationships among the inputs and resources available to create and deliver an intervention, the activities the intervention offers, and the expected results.

*Agency for Healthcare Research and Quality, 2013*

# What is a Logic Model?

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| Inputs | Activities | Audience | Outputs | Short-term outcomes | Long-term outcomes |
|---|---|---|---|---|---|
| | | | | | |

*Public Health Ontario, 2016*

# Why are they helpful?

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A useful logic model:

- ✓ Identifies the intermediate and ultimate outcomes of the intervention and the pathways through which intervention activities produce those outcomes.
- ✓ Shows the interrelationships among intervention components.
- ✓ Recognizes the influence of external contextual factors on the intervention's ability to produce results.
- ✓ Helps guide program developers, implementers, and evaluators.

*Agency for Healthcare Research and Quality, 2013*

# Implementation Research Logic Model

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- IRLM helps combine and organize implementation frameworks
- Helps specify the relationships between constructs across frameworks
- **Aims to improve the rigor, reproducibility, and transparency of an implementation project.**

# Implementation Research Logic Model

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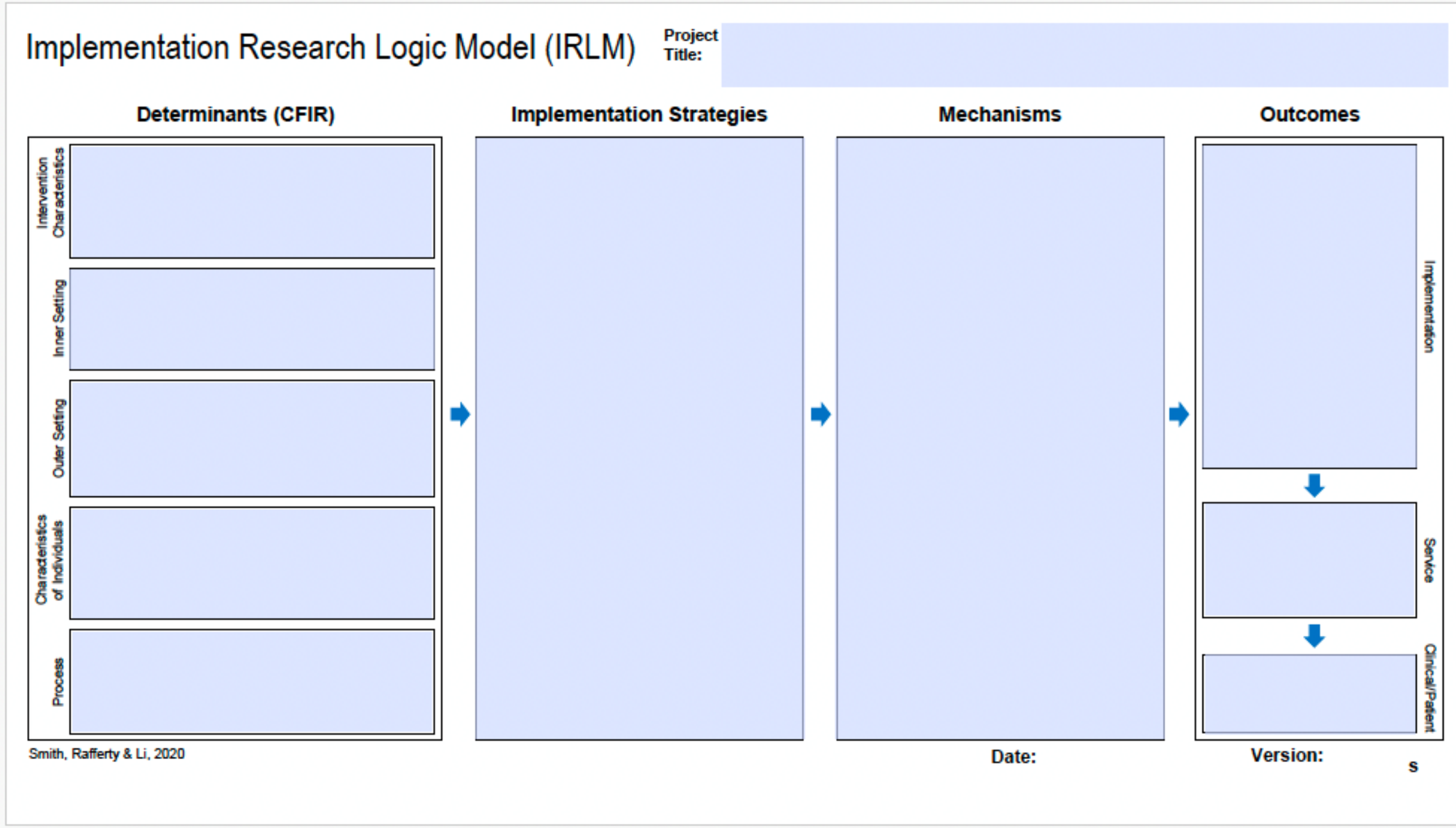

# Logic Model for Scale

Project Name:

Type of Scale:

## Determinants

**The Innovation**

The health interventions and/or other practices that are being scaled up. Can be a package of interventions and may consist of several components.

**Resource Team**

The individuals and organizations promoting scale up of the innovation.

**Implementing Organization**

The institution(s) or organization(s) that seek to or are expected to adopt and implement the innovation (aka the user organization).

**Environment**

The conditions and institutions which are external to the user organization but affect the success of scaling up.

## Strategies

The steps needed for having the intervention used in more places.

## Mechanisms

The ways the strategies are operationalized.

## Monitoring & Evaluation

Ways to make sure the innovation is still having the desired effect throughout the scaling process.

## Vision of Scale Up Impact

Short Term Vision

Long Term Vision

* This is designed to inform an overall plan for scale. The Implementation Research Logic Model should be followed for planning implementation at individual sites.

# ACTIVITY: Mentimeter

WCH WOMEN'S COLLEGE HOSPITAL | Office of Spread & Scale

**Mentimeter**

Code: 4694 5973

***Do you see yourself using this tool in your work?***

***Is there a specific project that you would want to use this tool for?***

***What should we consider as we develop and test this tool?***

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# BREAK!

20 mins

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# ACTIVITY: Discussion

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**Open Discussion – Let's chat!**

How will you use what you've learned today, moving forward?

What else do you want to know about scale?

**Any other comments or questions?**

# Tips for Planning for Scale

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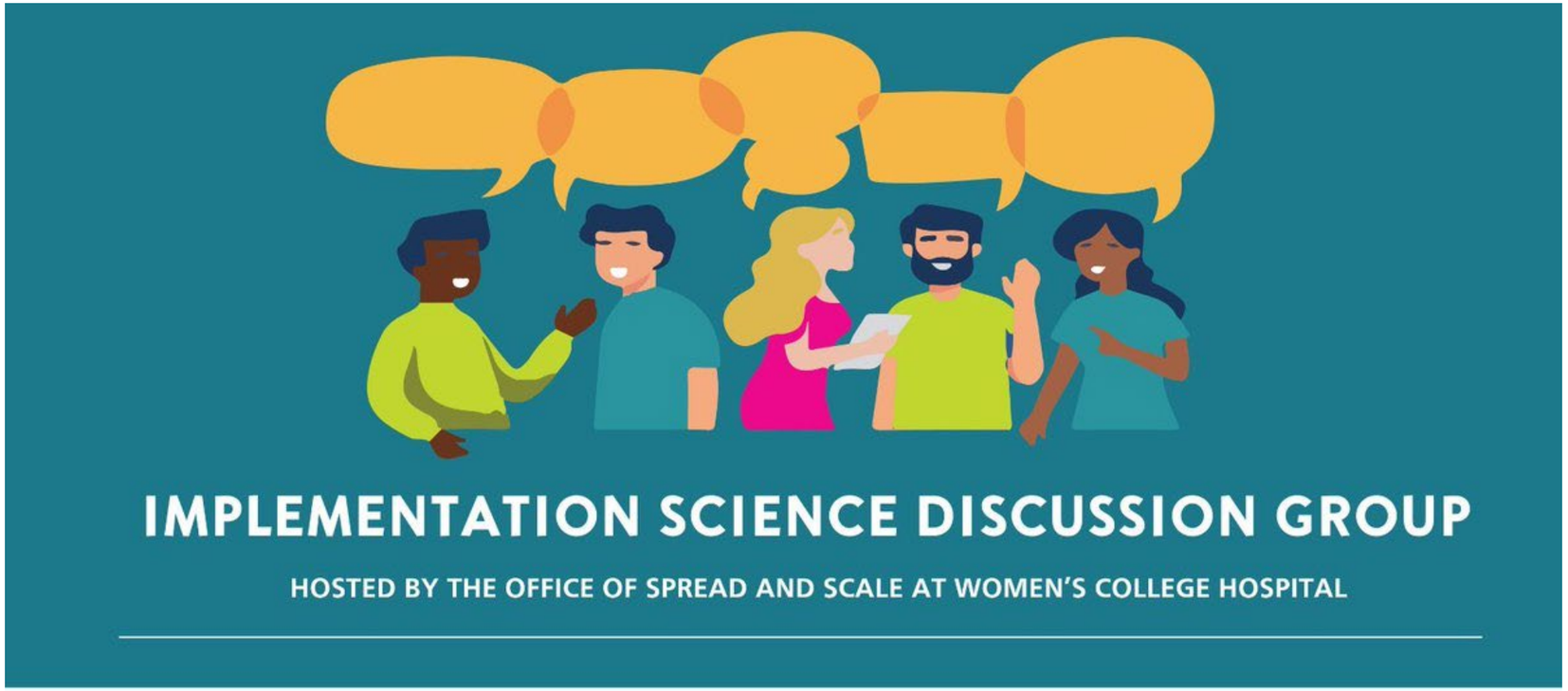
- Simplicity
- Consider core components and adaptable forms
- Scaling is not the same as initial implementation
- Use a framework to guide your work
- Use tools to be comprehensive
- Document your process
- Share what you learn!

# OSS Discussion Groups




**Next Session: June 2024**

**Contact us to learn more:**
**OSS@wchospital.ca**

**Sign up for our email list!**

# Thank you!

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