

# **Train the Trainers Workshop**

part of the

## **Be Guidelines Smart Toolkit**

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# Implementation Science

## **Presenter**

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- **What works, for whom, where, why (or why not)...? – or do you know how to make, or what makes, a sponge cake?**

### **Ingredients**

- 50 g butter
- 2 egg
- 2 dl sugar
- 1 ¼ dl milk
- 3 dl flour
- 1½ tsk baking powder

### **Activities**

Preheat oven to 175°(347 F).  
Melt butter and set aside to cool.  
Beat eggs and sugar. Add milk. Blend in flour with baking powder. Add butter. Pour into coated cake pan.  
Bake for 35-40 minutes.

### **Mechanisms**

Baking powder and liquid generates a chemical reaction, releasing carbon dioxide. The baking powder also reacts with the heat of the oven, i.e. is double-acting. Overdoing the beating will spoil the infusion of oxygen. Letting the batter wait will ruin the potential for dual action (caused by the heat of the oven). If out of baking powder, an acid liquid is needed to procure a similar reaction with baking soda.

# Some basics

Concept	Definition
Diffusion	Spreading information and natural adoption by the target group of guidelines and working methods
Dissemination	Communication of information to care providers to increase their knowledge and skills (more active than the above; directed to a specific target group)
Adoption	Positive attitude and decision to change personal routine
Implementation	Introduction of an innovation in the daily routine; requires effective communication strategies and removal of barriers to change (by using effective strategies)

(Grol, Wensing & Eccles, 2005)

*“And let it be noted that there is no more delicate matter to take in hand, nor more dangerous to conduct, nor more doubtful in its success, than to set up as a leader in the introduction of changes.”*

(Machiavelli, 1513. p 13.)

# Theories applying to Implementation Science

## Theories Focused on Individuals

*E.g.:*

- *Cognitive Theories (e.g. Rational Decision Making, Consistency)*
- *Educational Theories (e.g. Problem-Based Learning; Learning Style)*
- *Motivational Theories (e.g. Theory on Planned Behaviour)*

## Theories Related to Social

### Interactions

*E.g.:*

- *Social Network and Influence Theories (e.g. Opinion Leaders)*
- *Theories Related to Team Effectiveness*
- *Theories of Professional Development*
- *Theories of Leadership*

## Theories Related to the Organizational

### Context

*E.g.:*

- *Theory of Total Quality Management*
- *Theory of Organizational Learning and Knowledge Management*

## Theories Related to the Political and

### Economic Context

*E.g.:*

- *Reimbursement Theories*
- *Theory of Contracting*

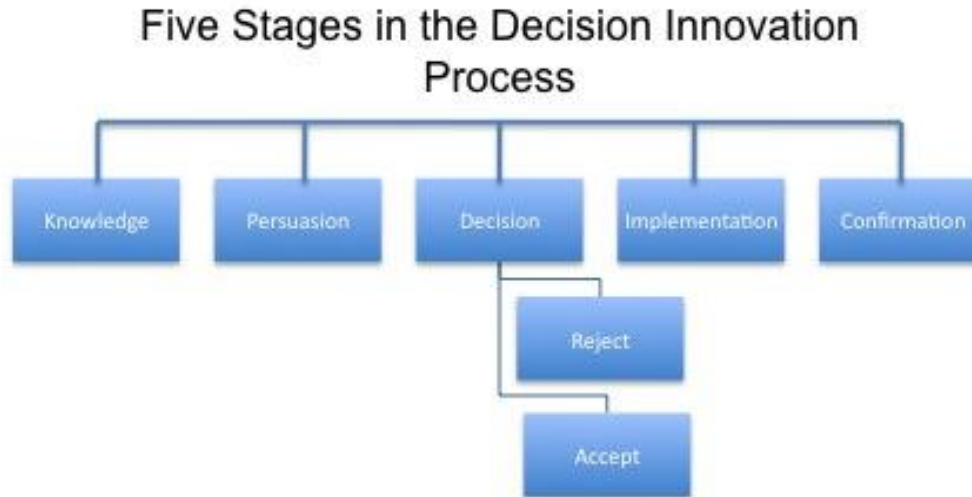
# How theories, models and frameworks can be used in knowledge implementation (KI)

1. Describing and/or guiding the KI process
2. Procuring an understanding of what influences implementation outcomes
3. Evaluation

Nilsen, 2015



# Innovation-decision process (Rogers, 2003)



# The integrated-PARIHS framework (i-PARIHS)

(Harvey & Kitson, 2016)

$$SI = Fac^n(I+R+C)$$

SI = Successful Implementation

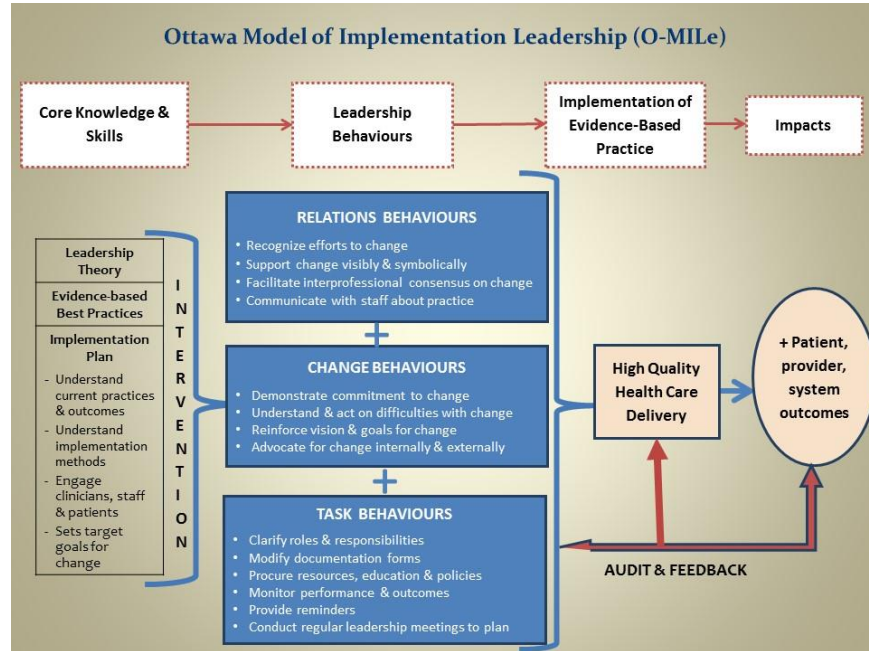
Fac<sup>n</sup> = Facilitation

I= Innovation

R = Recipients (Individual and collective)

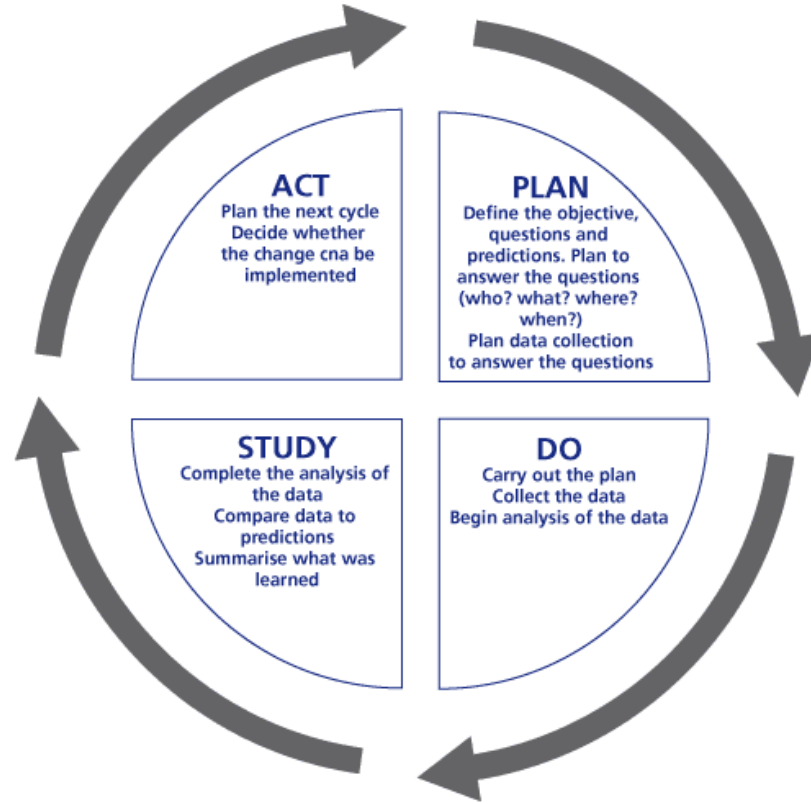
C = Context (Inner and outer)

# The Ottawa Model of Implementation Leadership model, O-MILe (Gifford, 2016)



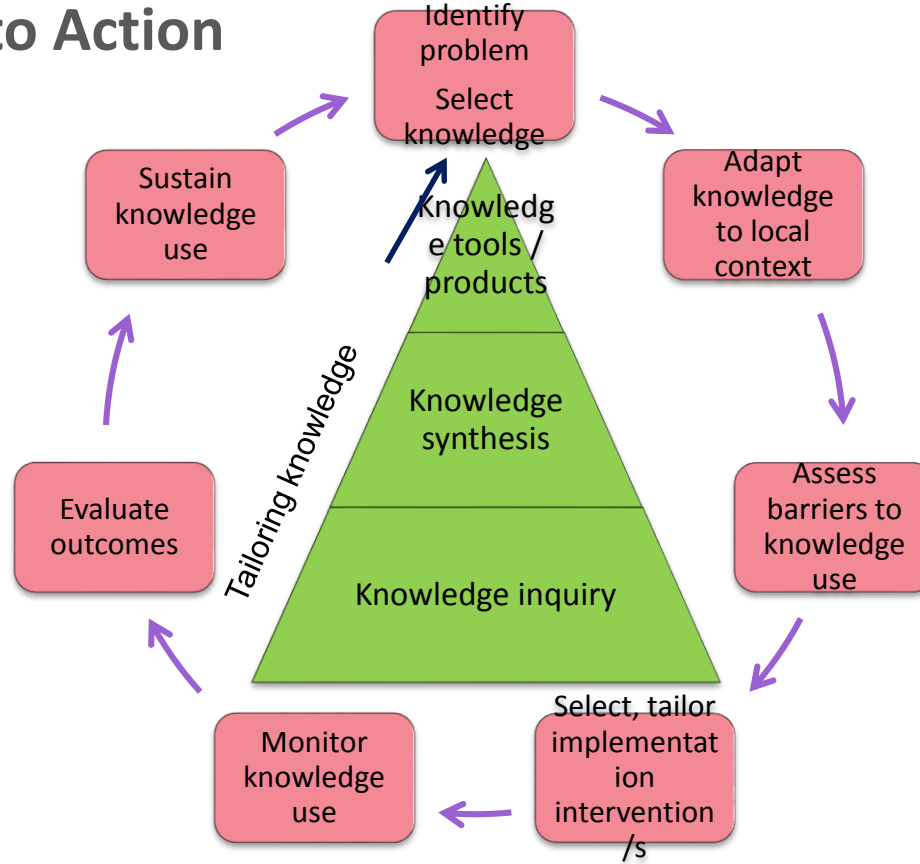
# The PDSA-cycle

(Deming Inst. 2015)



# The Knowledge to Action Cycle

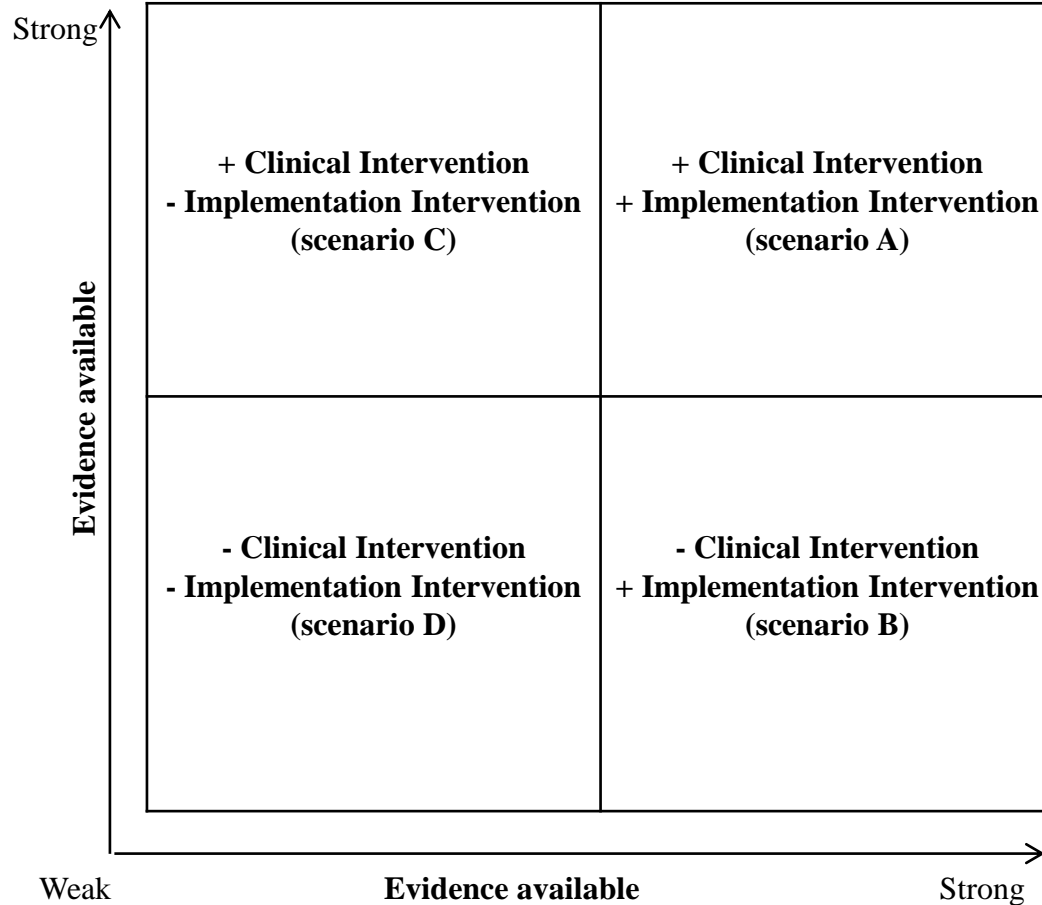
(Graham et al 2006)



# Complex Interventions – or Complex Inter- ventions?

(Eldh et al,

2017)



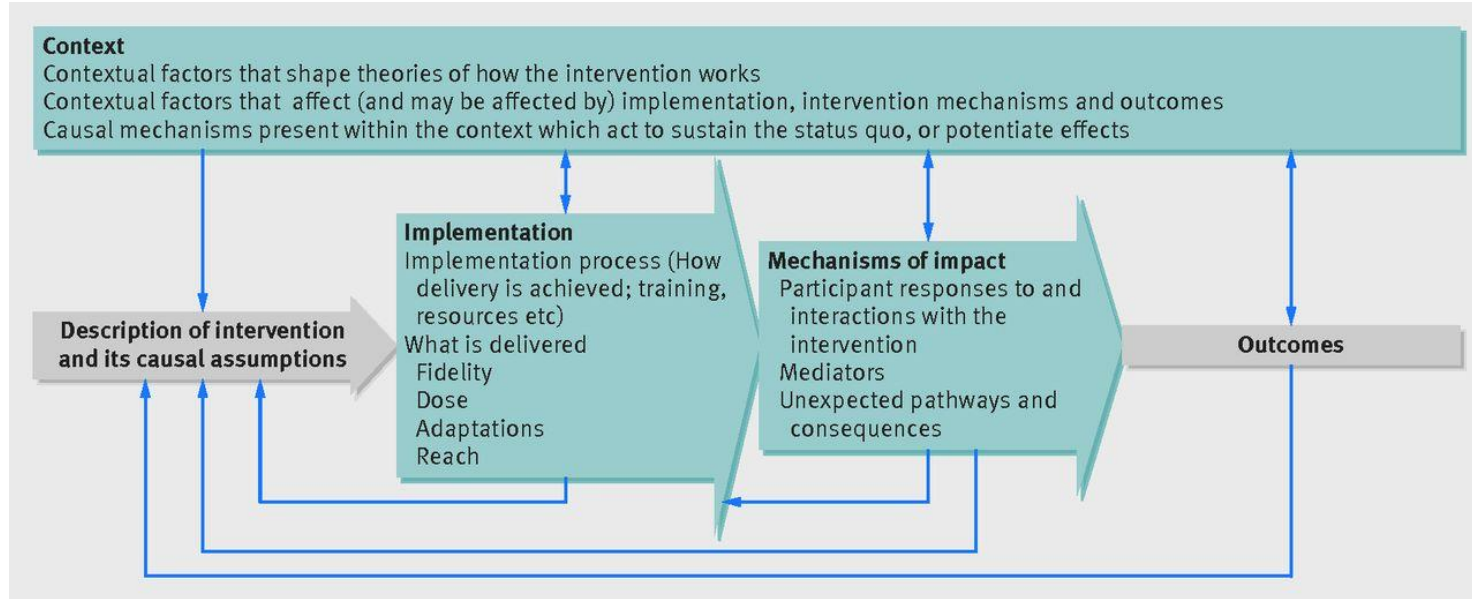
# Implementation Strategies

## – the Evidence Base...

Generally effective	Sometimes effective	Least effective
<ul style="list-style-type: none"><li>• Educational outreach visits</li><li>• Interactive education sessions based on principles of adult learning</li><li>• Targeted multifaceted interventions including 2 or more of the following:<ul style="list-style-type: none"><li>• Audit &amp; feedback</li><li>• Reminders</li><li>• Local consensus process</li><li>• Marketing</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Audit &amp; feedback</li><li>• Local opinion leaders</li><li>• Local consensus process</li><li>• Patient mediated interventions</li><li>• Dissemination using education</li></ul>	<ul style="list-style-type: none"><li>• Didactic educational meetings</li></ul>

Grimshaw et al (2004); Thompson et al (2007)

# Process Evaluation



(Moore et al, 2015)



# What I have learned about sponge cakes, and the process of making, baking – or faking –them...

- The relations between evidence – context – facilitation
- Facilitating implementation, in particular
- Tailors and sailors – and chefs and managers
- Leadership - and 93 techniques for changing behaviours... (Michie et al, 2013)
- Sustainability, perseverance – and other long words bothering me... (Milne, 1926)

# Suggested reading

- Fixsen et al. (2005) *Implementation research: A synthesis of the literature*. Tampa, Florida: University of South Florida. URL:  
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