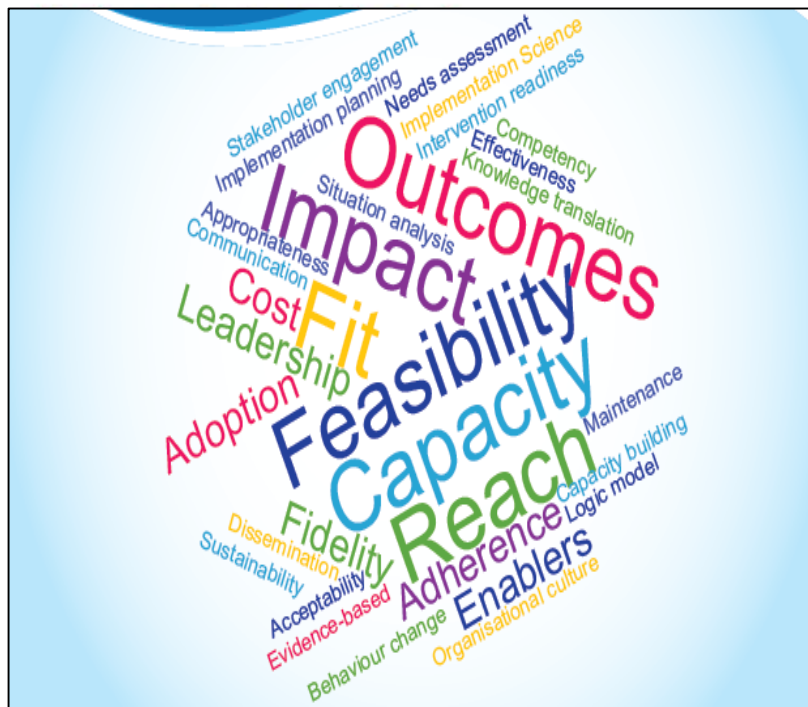




**Health  
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agus Cáilíocht Sláinte

# Implementation of PPPGs – translating evidence into practice



Niamh O'Rourke RGN MPH MSc PhD

Head of Standards

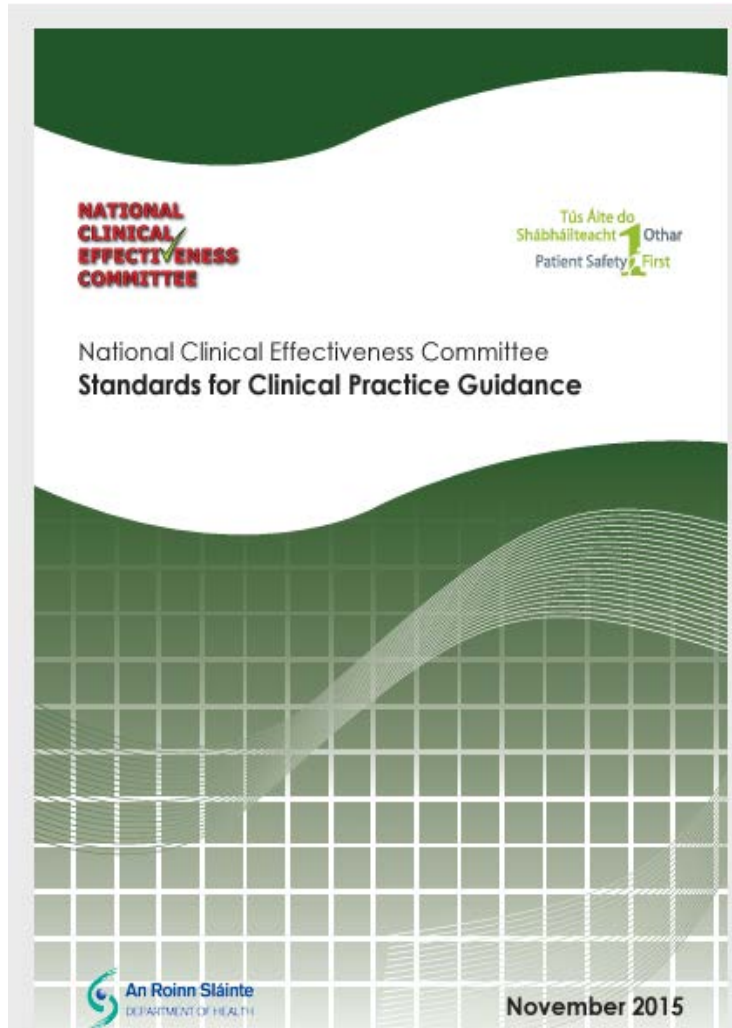
Health Information and Quality Authority (HIQA)

June 2022

[norourke@hiqa.ie](mailto:norourke@hiqa.ie)

*Safer Better Care*

# Standards for Clinical Practice Guidance



## 8. Planning and Implementation

Written implementation plan is provided with timelines, identification of responsible persons/ units and integration into service planning process.	<input type="checkbox"/>
Barriers and facilitators for implementation are identified, and aligned with implementation levers.	<input type="checkbox"/>
Information and support is available for staff on the development of evidence-based clinical practice guidance.	<input type="checkbox"/>
There is collaboration across all stakeholders in the planning and implementation phases to optimise patient flow and integrated patient care.	<input type="checkbox"/>
Education and training is provided for staff on the development and implementation of evidence-based clinical practice guidance (as required, complex CPGs).	<input type="checkbox"/>

## 9. Audit, monitoring, review & evaluation process

Process for monitoring and continuous improvement is documented.	<input type="checkbox"/>
Process for evaluation of implementation and clinical effectiveness is specified.	<input type="checkbox"/>
Audit criteria and audit process/plan are specified.	<input type="checkbox"/>
Documented process for revisions/updating and review, including timeframe is provided.	<input type="checkbox"/>

# What is 'implementation science'?

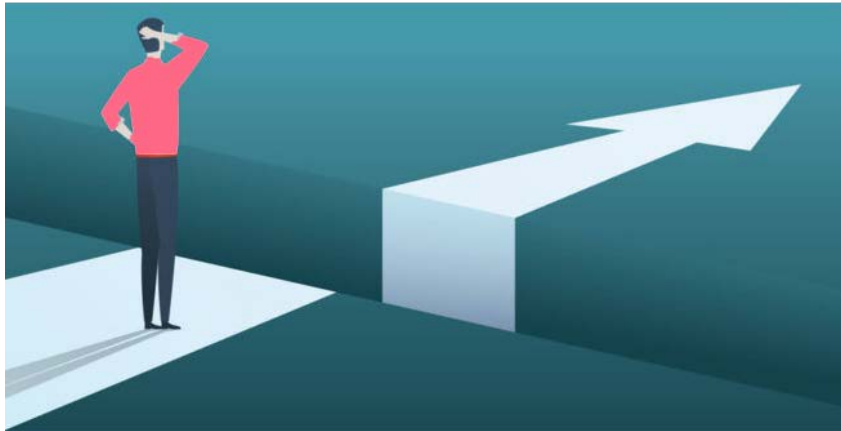
Increasing body of evidence,  
and yet...





# Mind the Gap!

## Bridging the implementation gap



The implementation gap:  
The difference between the  
evidence of what works in  
theory and what is delivered in  
practice.

Evidence based  
practice



Implementation  
Science

Evidence-based medicine should be  
complemented by evidence-based  
implementation  
(Grol & Grimshaw 1999).

# What is 'implementation science'?

Implementation refers to the art and science of incorporating innovations into typical service settings to benefit clients (children, families, adults and communities).

NIRN Implementation Brief, 2009

Implementation science is the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice to improve the quality and effectiveness of services.

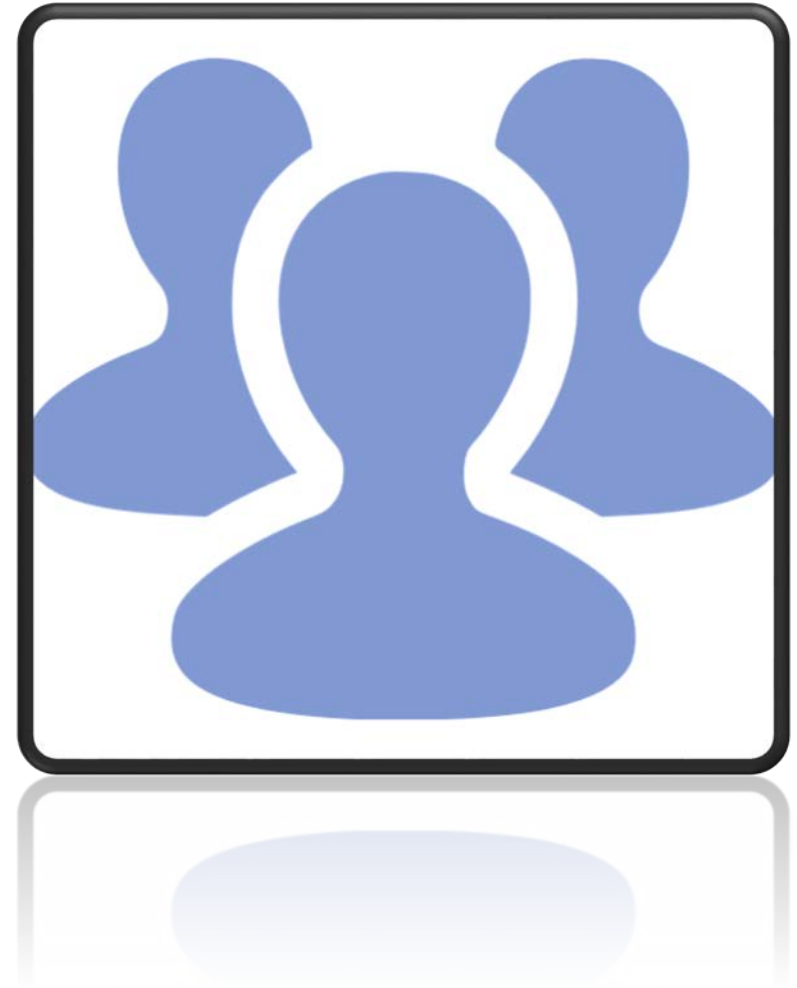
Bauer et al., 2015



**Implementation Network**  
of  
*Ireland and Northern Ireland*

# Reflect

- Think of a successful example of implementing a project or intervention - What were the key factors that helped it to be successfully implemented?
- Think of an example of a project/intervention that did not go according to plan - What were the key factors that hindered its implementation?





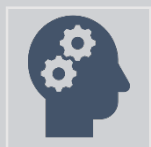
# Implementation enablers & barriers



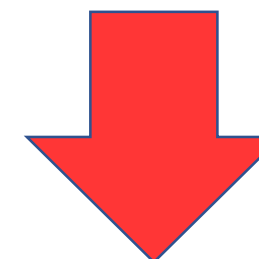
Very simply:



Enablers are factors that increase the probability of successful implementation



Barriers are factors that reduce the probability of successful implementation



# Implementation barriers

## External Environment

Existing structures not in line with the intervention.

Short policy cycles interfere with long implementation process.

## Resistance to Change

Resistance from those delivering the intervention.

Changes implemented before stakeholders are ready, or before the organisational culture is aligned.

## Vested Interests

Interests of staff, managers, lobby groups and professional bodies incongruent with the intervention.



# Implementation facilitators/ levers

- Implementation mandate
- Alignment with national systems
- Staff / Patient & public involvement
- Culture
- Accountability frameworks
- Legislation
- National policy
- Capacity building



*“Give me a lever long enough and a fulcrum on which to place it, and I shall move the world”*

- Archimedes

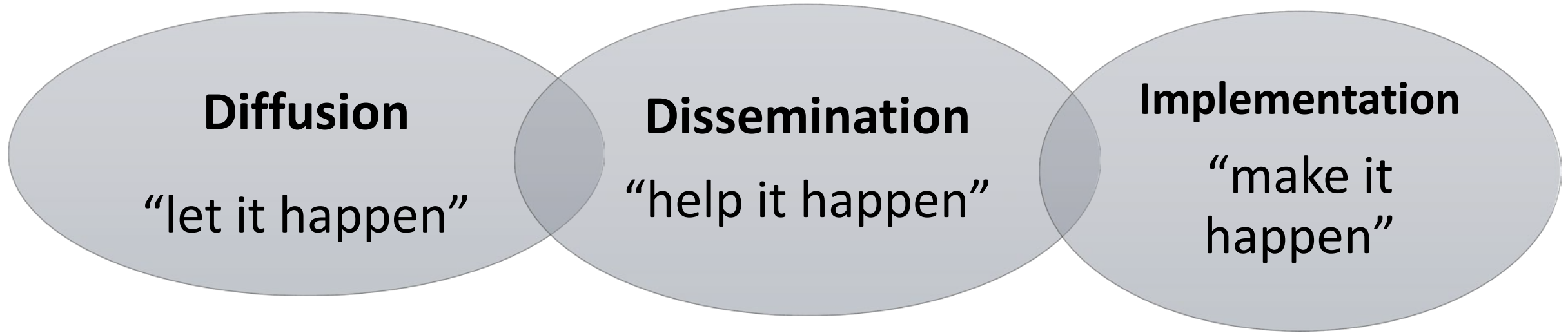
Implementation levers support the translation of research evidence into practice.

# Implementation planning

- Implementation likely to be more successful if **planning is concurrent**, rather than consecutive.  
(Gagliardi et al., 2015)
- **Allowing time for planning** how programmes (e.g. PPPGs) will be implemented is crucial in guiding the entire process.
- **Multiple stakeholders should be involved** in implementation planning and the plan should be revisited and revised regularly throughout the process.



# What is Implementation?



- Unpredictable
- Unprogrammed
- Uncertain
- Emergent
- Adaptive
- Self-Organising

- Negotiated
- Enabled
- Influenced

- Scientific
- Orderly
- Purposeful
- Planned
- Regulated
- Programmed
- Systems 'properly managed'

# Why do we need implementation science?

Effective  
interventions  
alone

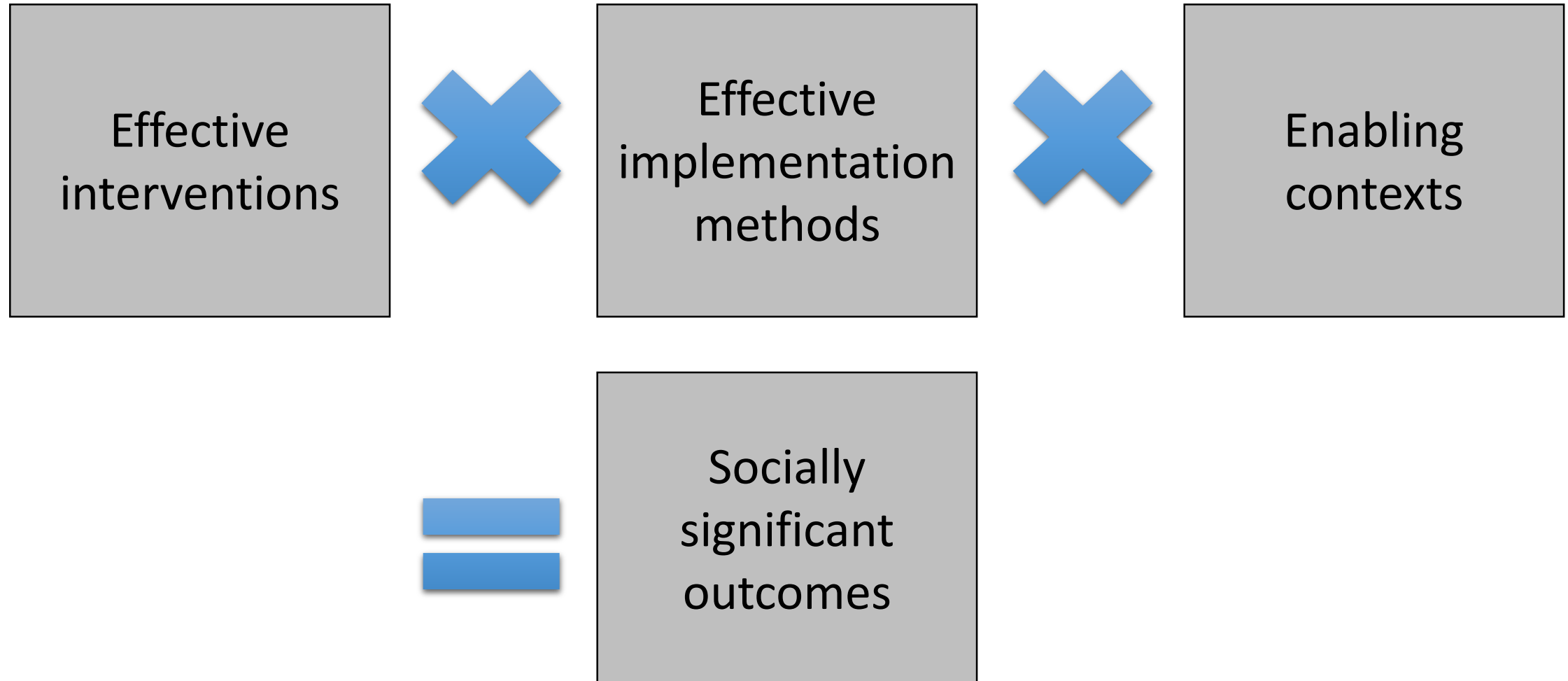


Positive  
outcomes for  
clients

**Intervention** means any evidence-informed policy, practice, service or programme being implemented, be it a change to an *existing* policy, practice, service or programme, or a *new* intervention

**Outcomes** are changes that occur in a person, group, organisation or population, as a result of something else having changed or been provided (i.e. an intervention.) They can be short-term, medium-term or long-term.

# The implementation equation



# Implementation stages



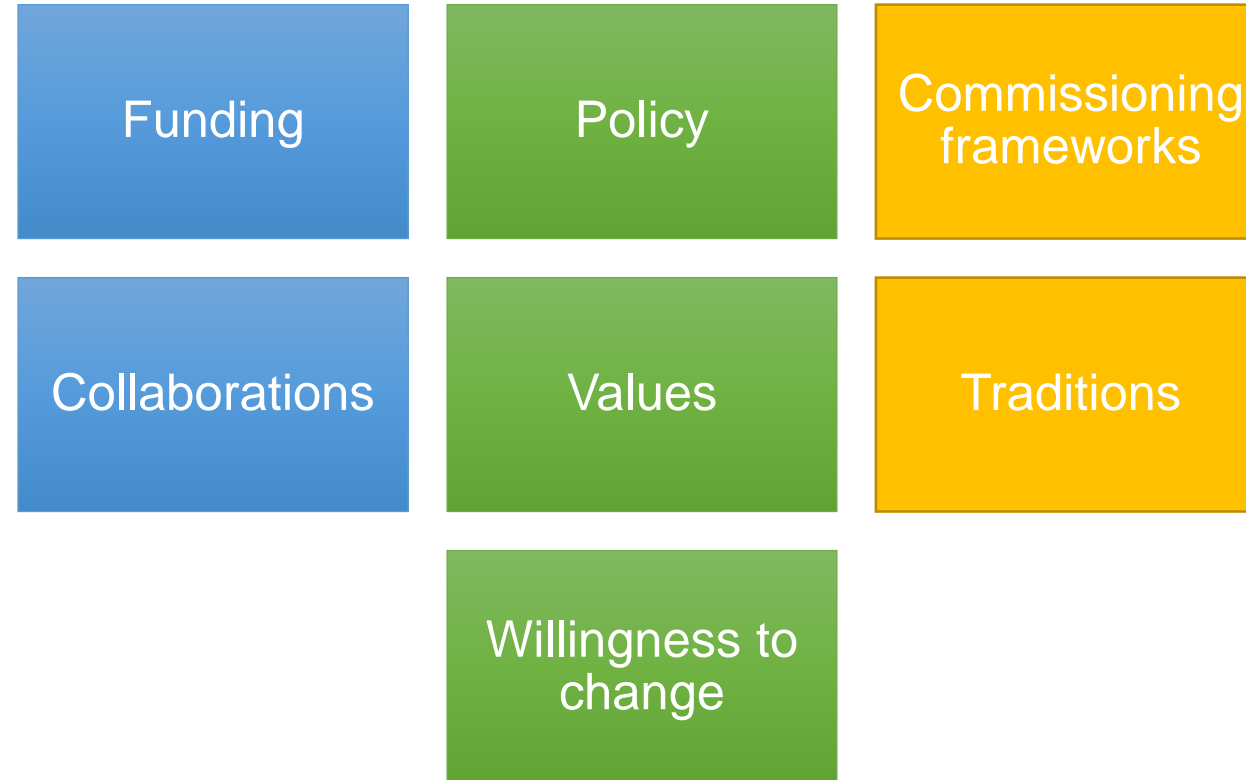
## Key messages

- You **cannot skip** any stage
- The **stages are not linear**. You may need to re-visit stages as new staff, communities and partners become involved
- Implementation takes **time**, typically 2–4 years



# The importance of context

'Context' is the set of circumstances or unique factors that surround a particular implementation effort.



Contextual influences explain the wide variation in implementation success  
(Damschroder et al., 2009)

“

## **Implementation Strategies -**

*Methods or techniques used to enhance the adoption, implementation, sustainment, and scale-up of a program or practice.*

Proctor, Powell, & McMillen (2013); Powell, Garcia, & Fernandez (2018)

# IMPLEMENTATION STRATEGIES



## PLAN

Gather data, build buy-in, and develop relationships



## EDUCATE

Inform stakeholders



## FINANCE

Incentive, train and support



## RESTRUCTURE

After staffing, physical structures and data tracking



## QUALITY MANAGEMENT

Incentive, train and support



## ATTEND TO THE POLICY CONTENT

To encourage the promotion of programs and practices through accrediting bodies, licensing boards, and legal systems

Powell et al. (2012)

# To recap....



Implementation science is the study of what it takes to implement evidence-based/informed practice and innovations



There are four stages in the implementation journey- each step is important (and may not follow each other in a linear way!)



Effective implementation methods improve the likelihood that outcomes will be achieved

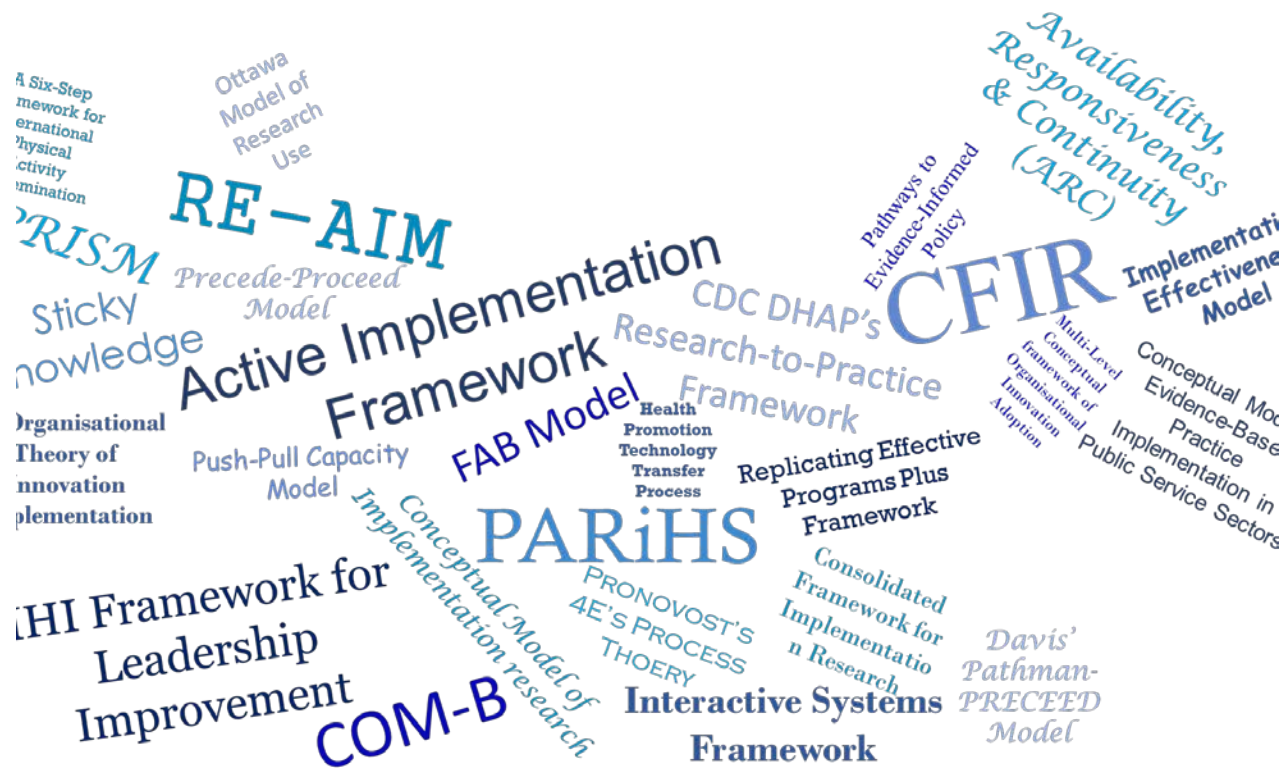


Enablers are factors that increase the probability of successful implementation. Barriers can hinder implementation



Implementation strategies provide approaches to improve implementation efforts

# Implementation frameworks



There is a **growing consensus on the core elements of implementation** (common across many of the frameworks).

Core elements include:

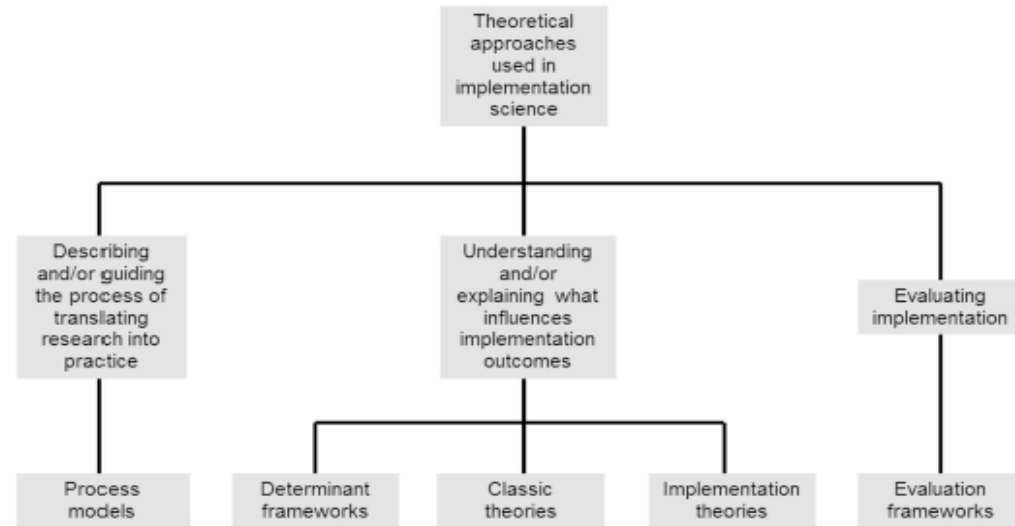
- Implementation stages
- Enablers and barriers
- Context for implementation
- Core components vs. adaptable periphery

**DEBATE**

**Open Access**

# Making sense of implementation theories, models and frameworks

Per Nilsen

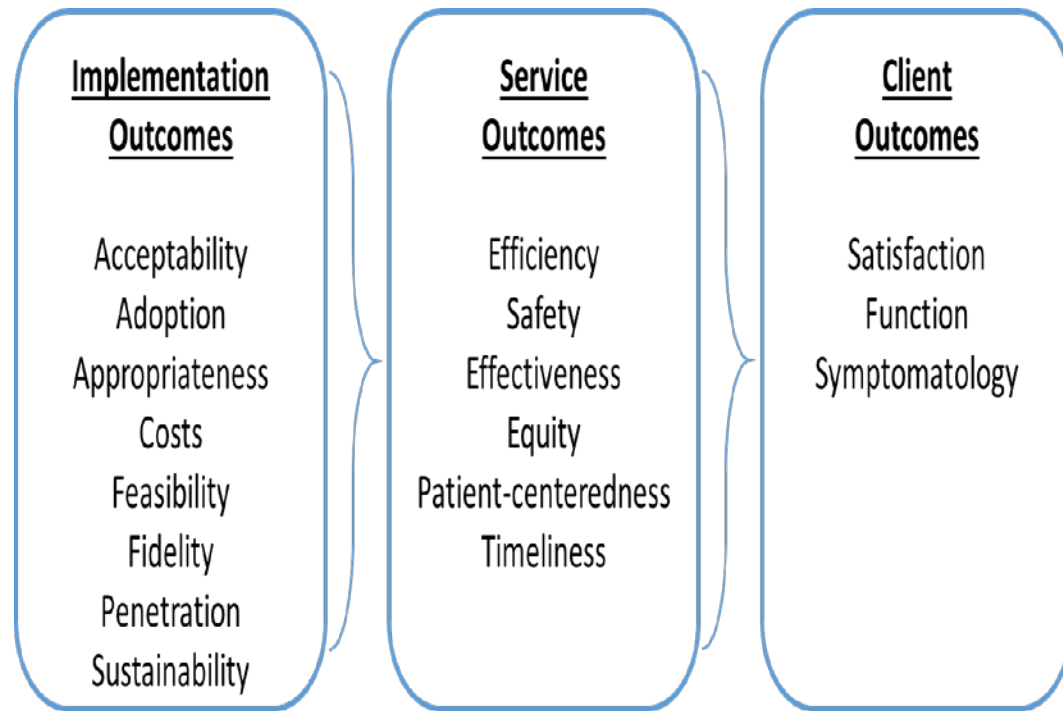


**Figure 1** Three aims of the use of theoretical approaches in implementation science and the five categories of theories, models and frameworks.

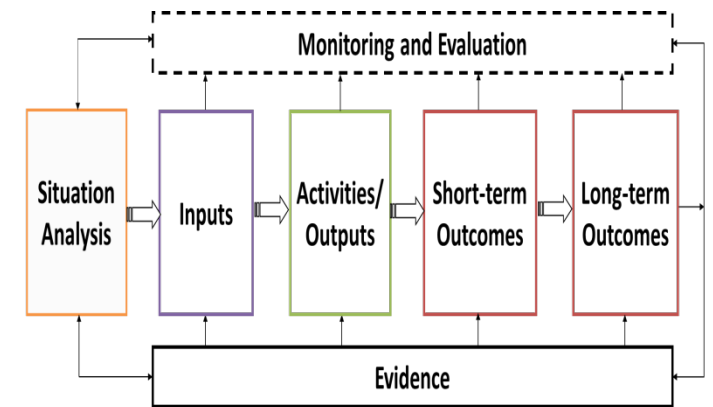
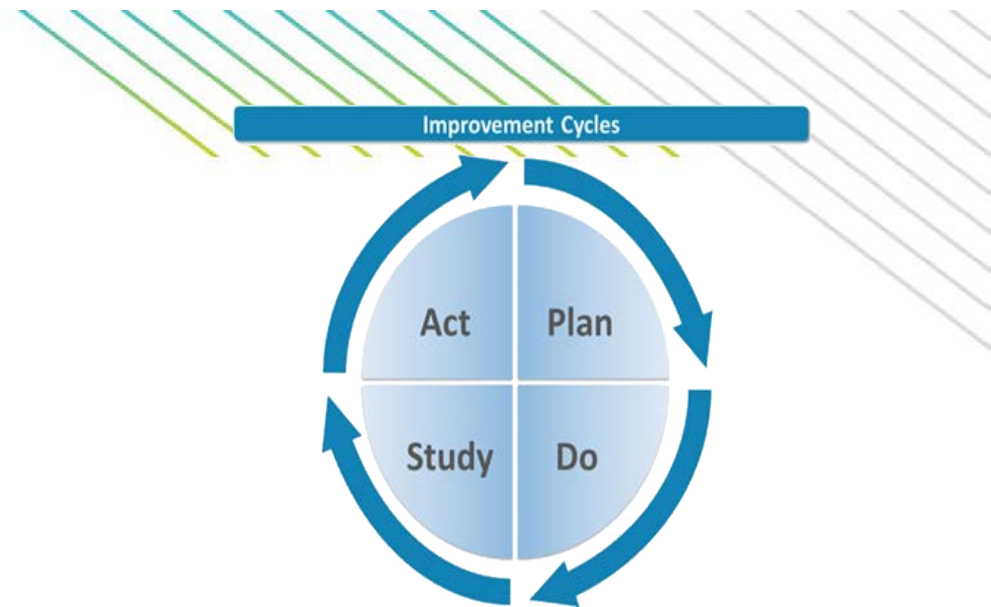
Per Nilsen  
Implementation Science 2015 10:53



# Measuring Impact



Taxonomy of Outcomes. Proctor *et al.*, 2010



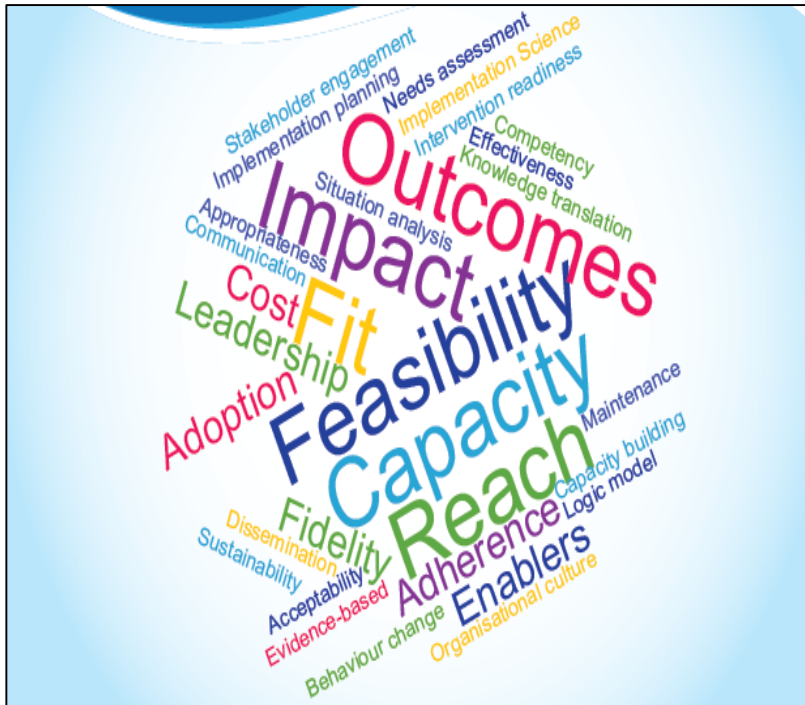
# What's in an implementation plan?

Implementation Plans map out the implementation process and provide a **course of action** for any challenges.

A comprehensive Implementation Plan should:

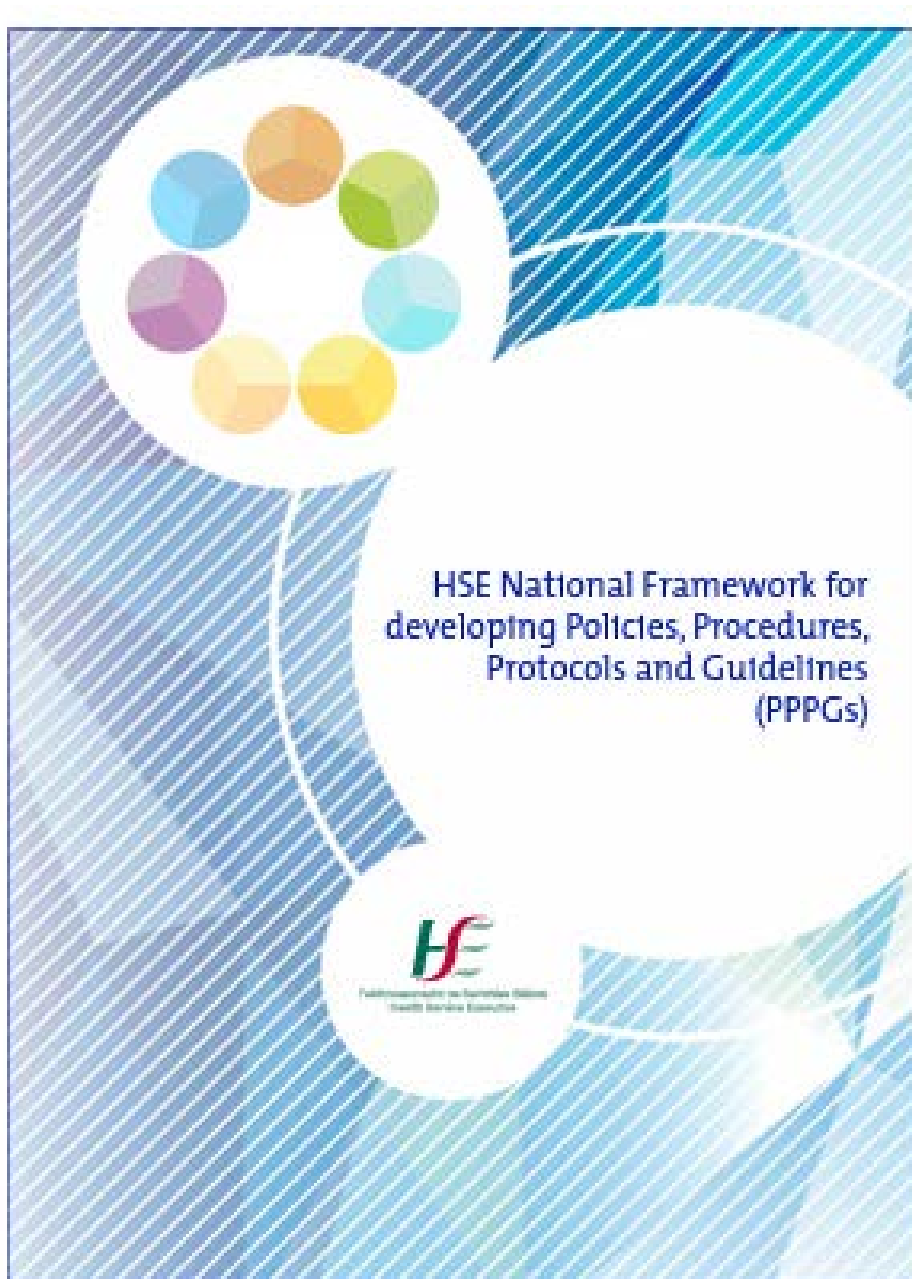
- Outline **tasks and activities** necessary for its dissemination and implementation.
- Lay out who is **responsible** for the delivery of activities.
- Outlines time-frames and milestones.
- Provide a clear outline of **governance and accountability structures**.
- Articulate the **inputs, outputs and intended outcomes** of the implementation process (a logic model may be useful).
- Identify **monitoring and reporting** processes.

# To summarise...



- The intervention/practice/innovation is **THE THING**
- Effectiveness research looks at whether **THE THING** works
- Implementation research looks at how best to help people/places **DO THE THING**
- Implementation strategies is the stuff we do to try to help people/place **DO THE THING**
- Implementation outcomes are **HOW MUCH** and **HOW WELL** they **DO THE THING**

Curran (2020)



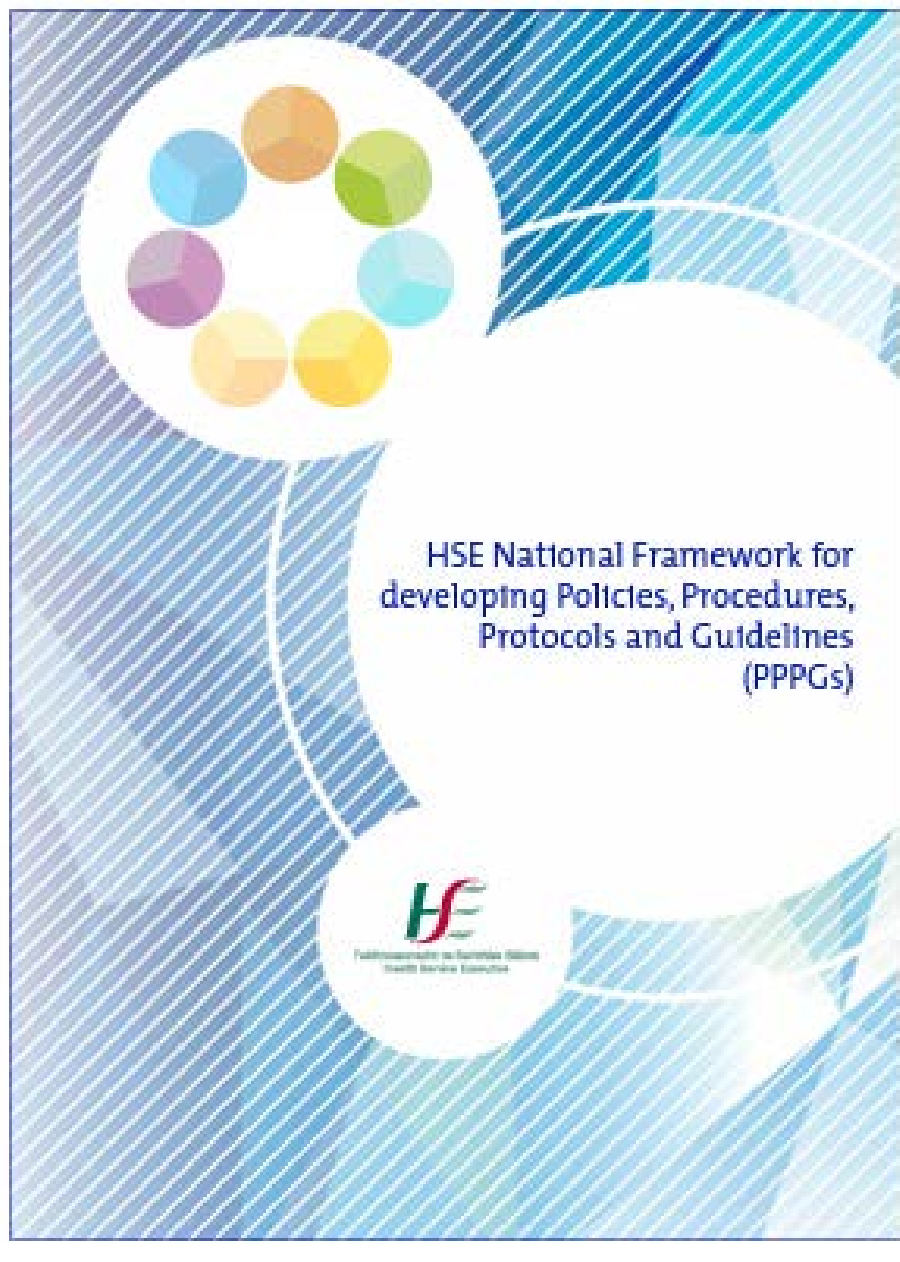
## Standards required for Implementation

- Written implementation plan is provided, with timelines, identification of responsible persons/units and integration into service planning process.
- Barriers and facilitators for implementation are identified, and aligned with implementation levers.
- Education and training is provided for staff on the development and implementation of evidence-based PPPGs (as required).
- There is collaboration across all stakeholders in the planning and implementation phases to optimise patient flow and integrated care.

## Steps to meet these standards for Stage 5

(for additional information on implementation Stage 5 refer to Appendix Ic: page 29)

- Develop an implementation plan, including identification of responsible person(s), specifying the actions to implement the PPPG and timeframes for implementation.
- Identify and record barriers and facilitators for implementation and use of the PPPG.
- Align the implementation plan with the service plan and budgetary process.
- Outline the supports required for education and training for staff on the implementation of the PPPG.
- Establish good governance structures including strong leadership for the effective implementation of the PPPG being developed.



**What to consider when developing an implementation plan:** Implementation should be considered at the initiation stage and throughout the PPPG development process.

- **Change In practice:** Identify the target behaviour change in current practice. Determine the implementation strategies that are effective and best suited to address identified needs and barriers. Consider equity, acceptability, feasibility and balance of consequences.
- **Appropriateness:** Consider the appropriateness of the intervention: Affordability, practicability, effectiveness, acceptability, side effects/safety and equity (Michie, Atkins & West, 2014).
- **Feasibility:** Ensure PPPG recommendations are implementable.
- **Resources:** Specify any resources required to implement the PPPG and incorporate into the service planning process.
- **Timeframe:** Specify milestones and timeframes for implementation. Specify when the PPPG is due to be fully implemented and embedded into practice.
- **Roles & Responsibilities:** Specify who or what group/discipline is responsible for implementing the PPPG.
- **Communication:** Effective ongoing communication is essential for implementation. All relevant employees and stakeholders must be informed of the PPPG. Effective, on-going communication is critical in motivating staff, overcoming resistance to change and giving and receiving feedback.
- **Implementation supports:** Implementation tools may be useful to assist implementation of the PPPG (e.g.) toolkits, pathways, algorithms, presentations, podcasts, patient leaflets, local champions, teaching aids and training modules for health professionals linked to CPD points. Publish implementation tools at the same time as the PPPG.
- **Education & training:** Building staff capacity is a core component of implementation. Careful staff selection, quality training and on-going assistance are all crucial in building capacity for effective implementation. Identify the current skills of the team and determine education and training needs.
- **Provision of education and training for staff on the development and implementation of evidence-based practice:** The HSE PPPG resources will include toolkits, training video, workshops, train the trainer and all other relevant information on the HSE website.
- **Identify any risks:** In relation to non-implementation of the PPPG and the associated control measures.
- **Implementation outcome variables:** Indicators of success of implementation include acceptability, adoption, appropriateness, feasibility, implementation cost, fidelity, coverage and sustainability (Proctor, 2011).
- **Implementation levers:** Levers for implementation may include endorsement from government or senior management, implementation mandate, indemnity, regulators, insurers, activity based funding, organisational culture, service plan and accountability frameworks (NCEC, 2016).



## Template (p39)

HSE National Framework for developing Policies, Procedures, Protocols and Guidelines (PPPGs) QPSD-D-015-1

### 5.0 IMPLEMENTATION

- 5.1 Describe implementation plan listing actions, barriers and facilitators and timelines (include implementation tools such as algorithms, teaching resources, checklists etc.).
- 5.2 Describe education/training plans required to implement the PPPG (attach Appendix as appropriate).
- 5.3 Identify lead person(s) responsible for the implementation of the PPPG.
- 5.4 Outline specific roles and responsibilities.

### Checklist (p52)

Stage 5 Implementation	Checklist
Written implementation plan is provided with timelines, identification of responsible persons/units and integration into service planning process.	<input type="checkbox"/>
Barriers and facilitators for implementation are identified, and aligned with implementation levers.	<input type="checkbox"/>
Education and training is provided for staff on the development and implementation of evidence-based PPPG (as required).	<input type="checkbox"/>
There is collaboration across all stakeholders in the planning and implementation phases to optimise patient flow and integrated care.	<input type="checkbox"/>

Checklist for developing Clinical PPPGs

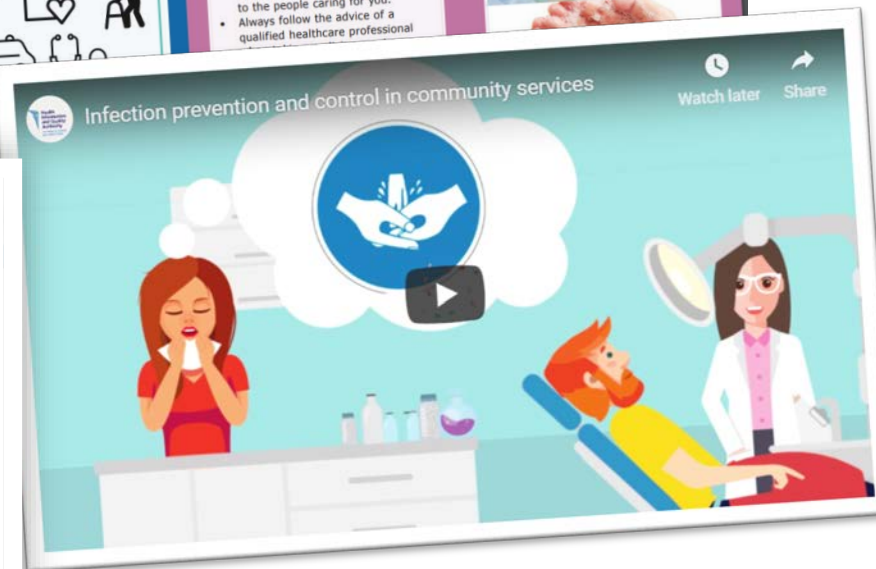
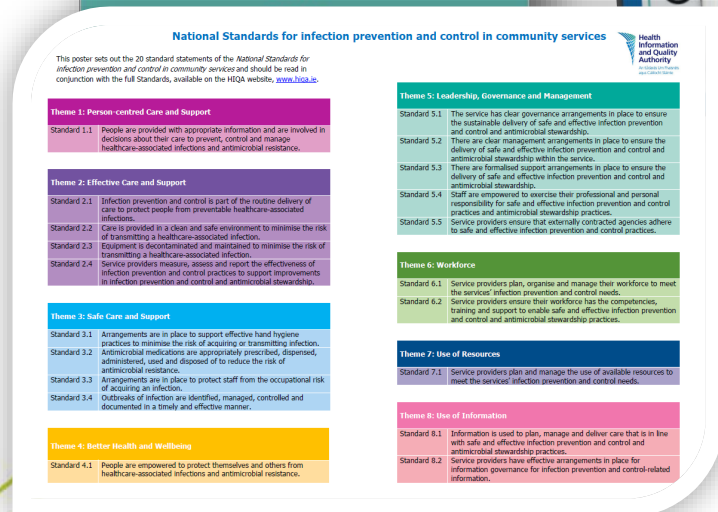
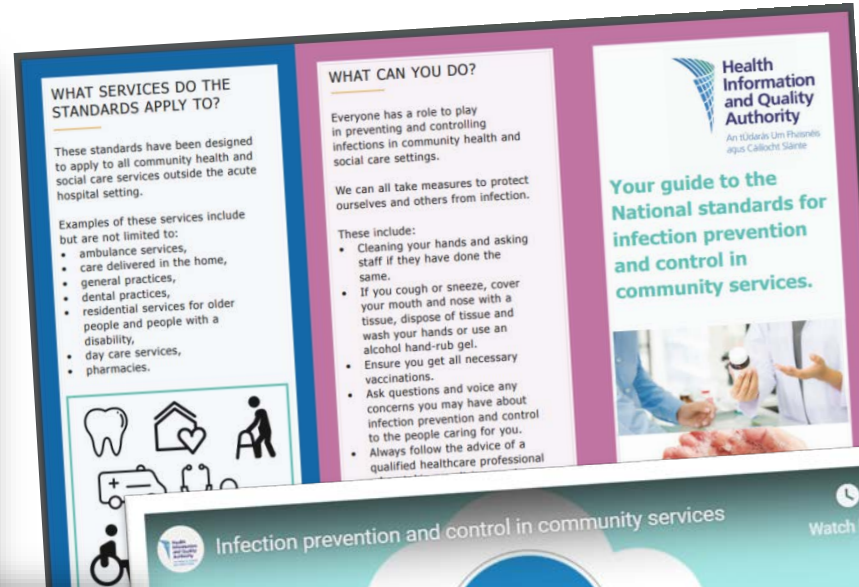
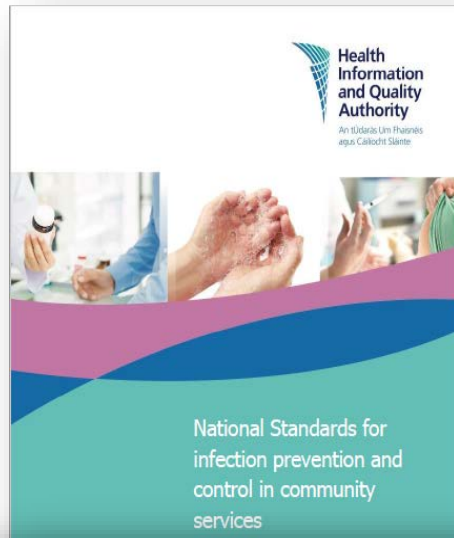


Section 3. Revised HSE National



# Further resources & information

# National Standards for infection prevention and control – examples of implementation support tools



# Further resources



- **Centre for Effective Services - Guide to Implementation**

<http://implementation.effectiveservices.org/>

Sign up for quarterly newsletters and weekly 'knowledge exchange'

- **Training Institute for Dissemination and Implementation Research in Cancer (TIDIRC)**

<https://cancercontrol.cancer.gov/is/training-education/training-in-cancer/TIDIRC-open-access>

- **Center for Implementation**

<https://thecenterforimplementation.com/courses>

Inspiring change | Designing for Implementation | Implementation Spread and Scale

A screenshot of the CES Guide to Implementation website. The top navigation bar is red with the text "CES Guide to Implementation" in white. Below the navigation bar is a large orange banner with the text "Implementation is about putting a plan into action; the 'how' as well as the 'what'." in white. Below the banner is a section titled "Find out more" with a list of links. The TIDIRC logo is visible in the bottom left corner of the screenshot.

Implementation is about putting a plan into action; the 'how' as well as the 'what'.

Find out more

The modules can be viewed together as a whole or individually by section in the facilitated course. Trainees move through the online modules after establishing a DR research project idea. Each module consists of viewing videos, completing readings, and responding to assignment questions to build up their project idea. Trainees then workshop their proposal projects by incorporating knowledge gained from each of the online sections.

The course includes eight modules and a final assignment:

- Module 1: Introduction to Dissemination & Implementation Science
- Module 2: Dissemination Science: Theory, Models, and Frameworks
- Module 3: Dissemination Science: Methods
- Module 4: Study Design in Dissemination Science
- Module 5: Research Approaches in Dissemination Science
- Module 6: Dissemination Science: Evaluation
- Module 7: Implementation & Scale-Up of Interventions in Dissemination Science
- Module 8: Growing Through Dissemination Science

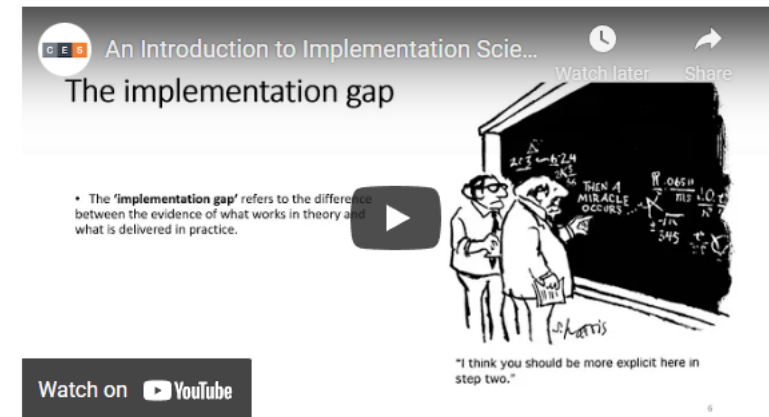
# Implementation Network of Ireland and Northern Ireland - Implementation Training Video Series

- core concepts and theories within implementation science
- enablers and barriers, stakeholder engagement and implementation teams
- implementation models, tools and frameworks
- monitoring, evaluation and sustainability strategies

<https://www.effectiveservices.org/>

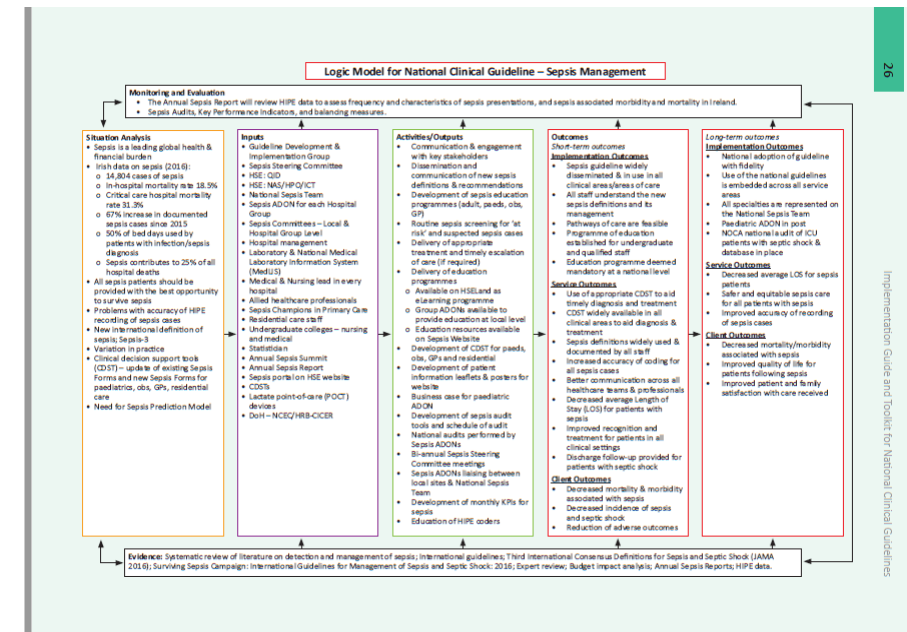
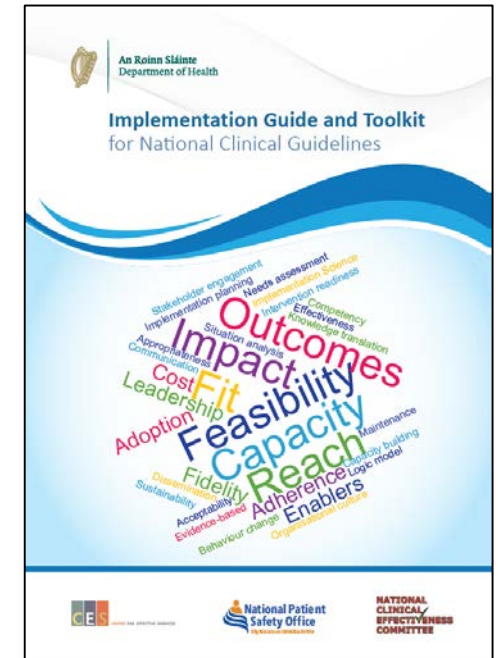


Implementation Network  
of  
Ireland and Northern Ireland



# Implementation Guide & Toolkit

- Models and frameworks for implementation.
- Guidance on monitoring and measurement of implementation outcomes and effectiveness.
- Tools and templates for developing an implementation plan, logic model and assessment of implementation readiness.
- Worked examples.
- Recommended resources.
- <https://health.gov.ie/national-patient-safety-office/ncec/resources-and-learning/>



# RESEARCH METHODS & REPORTING

## Implementation research: what it is and how to do it

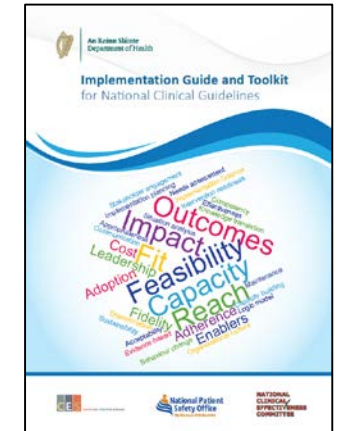
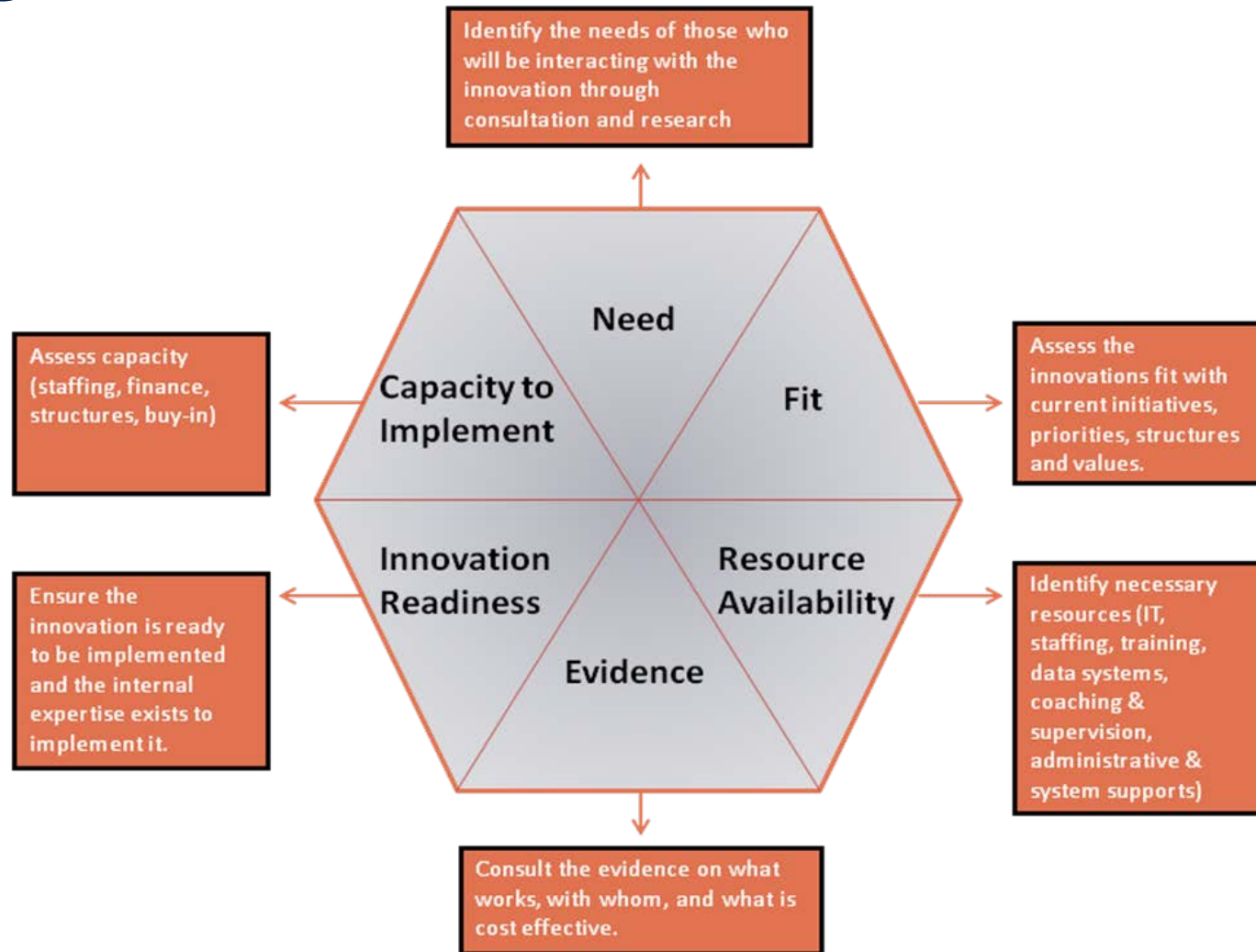
Implementation research is a growing but not well understood field of health research that can contribute to more effective public health and clinical policies and programmes. This article provides a broad definition of implementation research and outlines key principles for how to do it

David H Peters *professor*<sup>1</sup>, Taghreed Adam *scientist*<sup>2</sup>, Olakunle Alonge *assistant scientist*<sup>1</sup>, Irene Akua Agyepong *specialist public health*<sup>3</sup>, Nhan Tran *manager*<sup>4</sup>

Peters *et al.*  
BMJ 2013; 347



# Hexagon Tool – to assess readiness and implementation planning



# What is a logic model?

- A logic model is an adaptable and iterative tool.
- It allows the user to systematically work through the connections between the components of an intervention, usually in graphical format on a single page.



Many call it a  
**ROAD MAP**



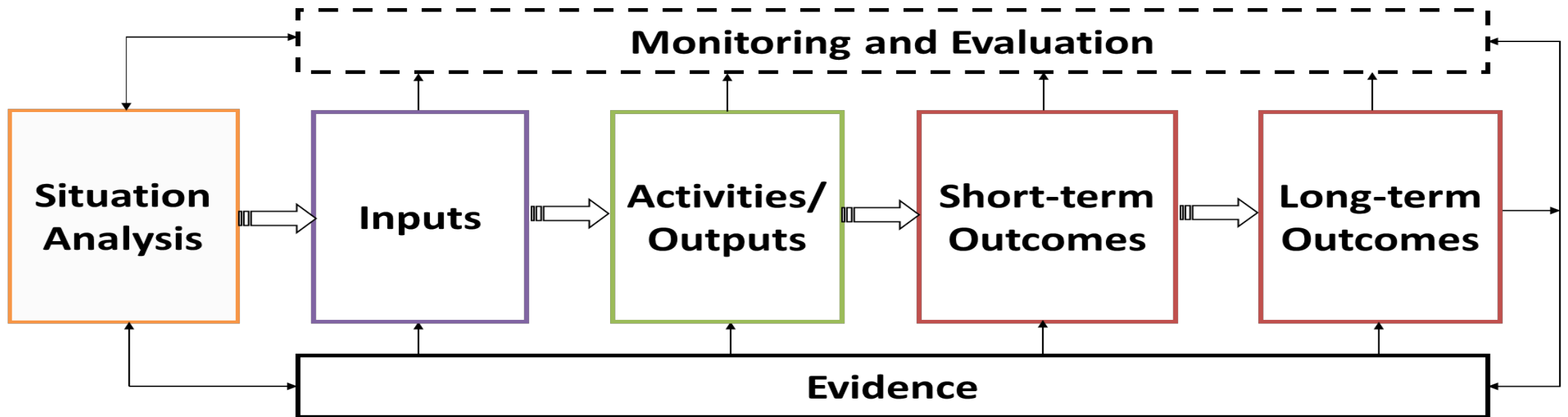
Where are you starting from?

Where are you going?

How will you get there?

What will tell you that you've arrived?

# Logic model

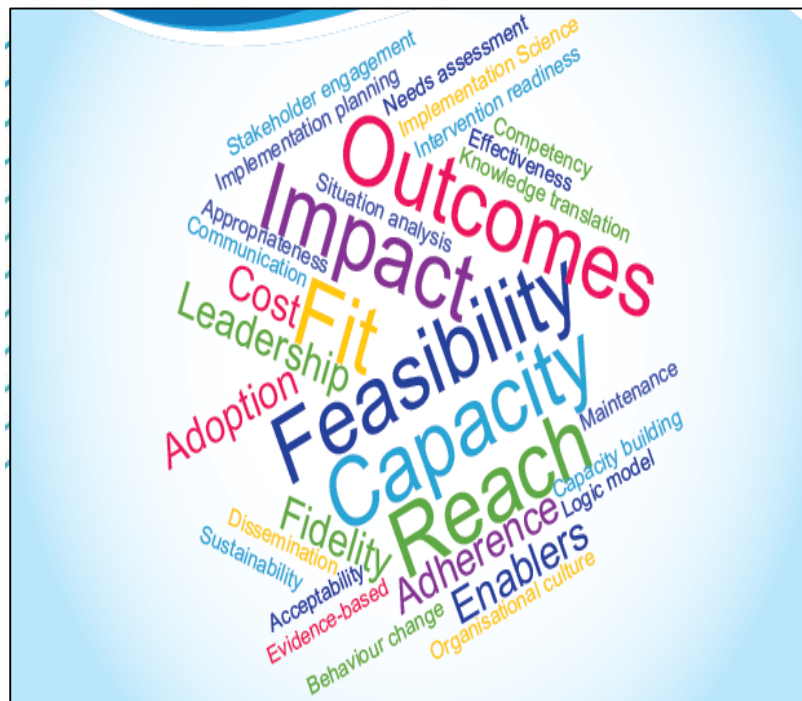




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# Implementation of PPPGs – translating evidence into practice



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*Safer Better Care*