

Designing research
(intervention & implementation)
to include multilevel factors
influencing
change



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- Why are you conducting your research? [objectives]

- Who are you conducting your research for?

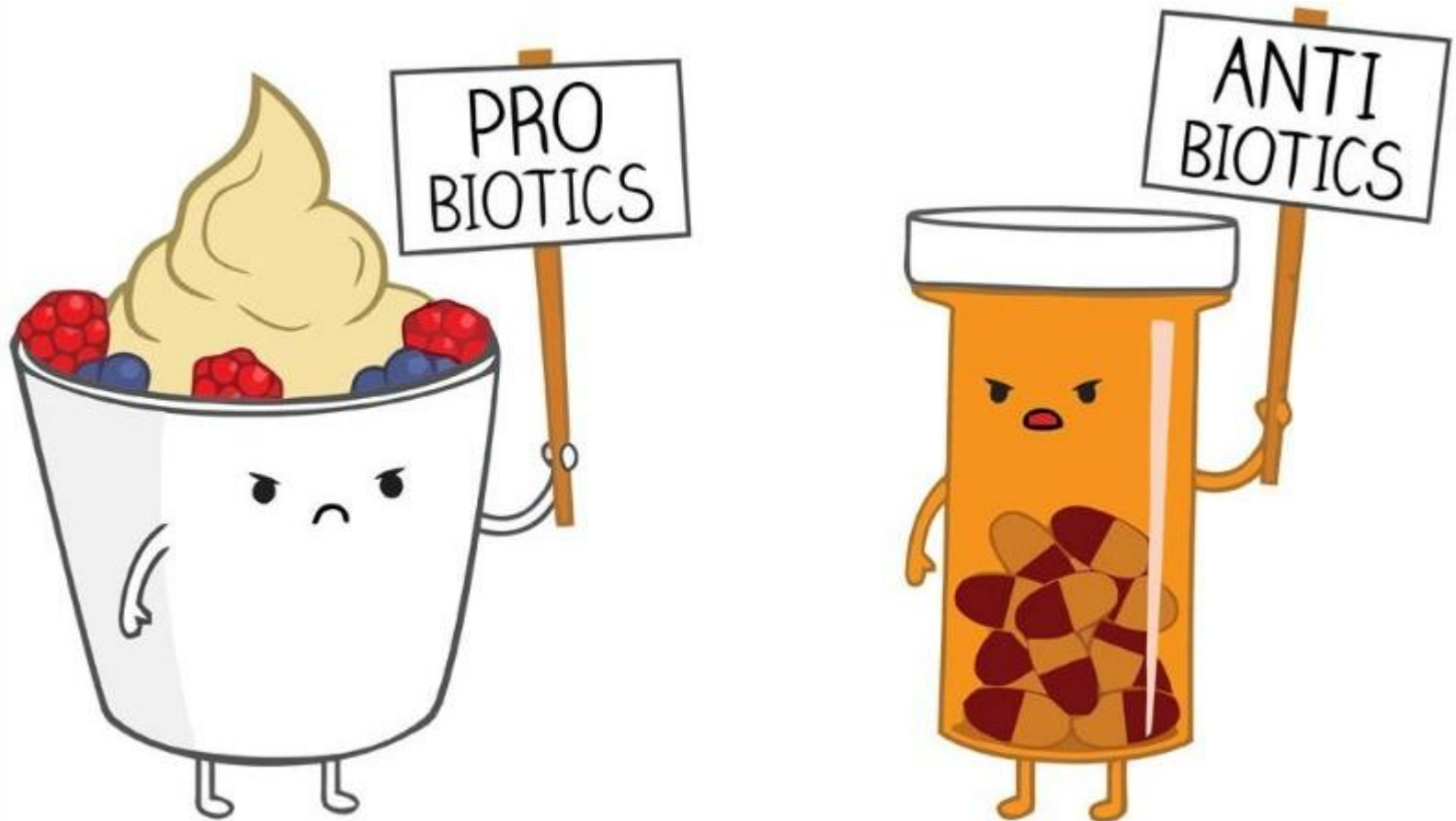
To conduct useful research: consider stakeholders' questions (policy, owners, managers)

- How do I choose an appropriate [clinical] program given my context?
- How do I implement the [clinical] program?
- How do I adapt and customize the [clinical] program to increase effectiveness (initially and over time)?
- How do I adapt and manage the setting to increase effectiveness (initially and over time)?
- **How, why, when and where does it work?**
- **How can I make it work?**



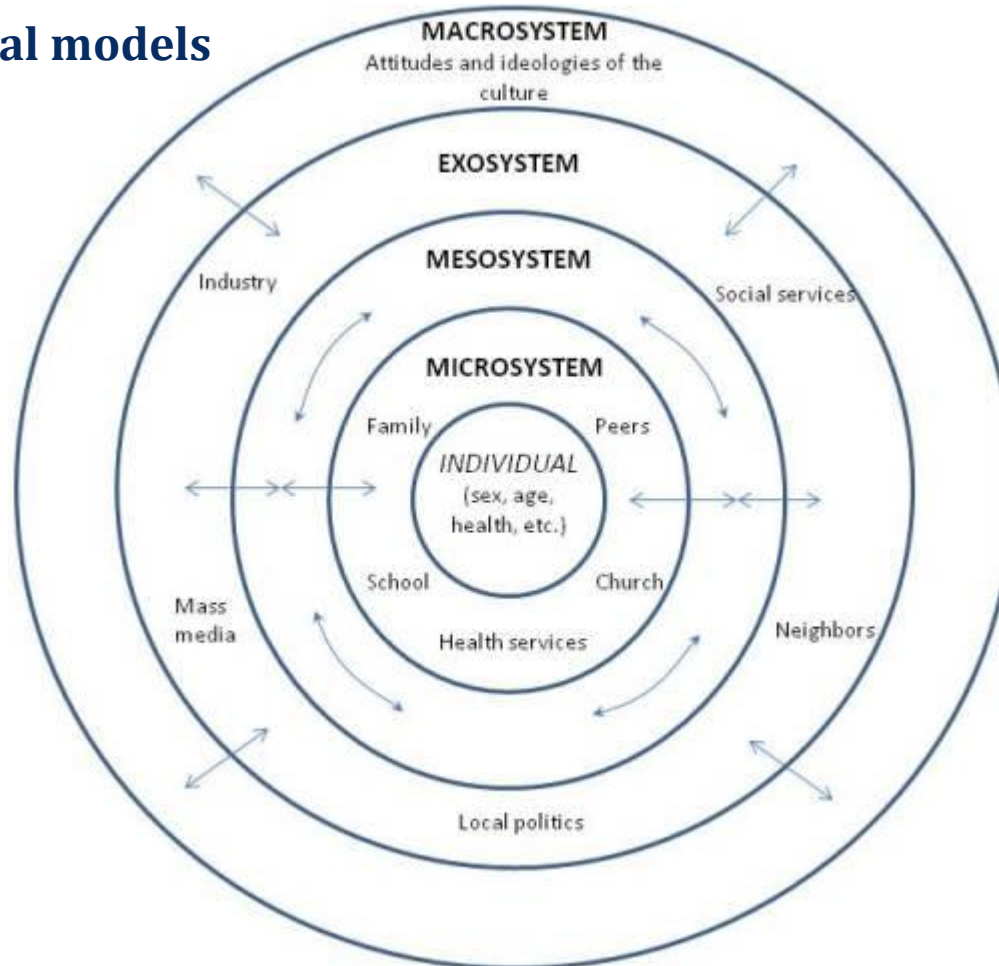
- Do not suppress, ignore or devalue adaptation - embrace, study & guide adaptation
- Study sustainment, scale-up/spread, cost analysis, etc.
- Supplement impact with evidence of process (mediators, moderators, mechanisms)
- Enhance partnerships & stakeholder engagement

Importance of stakeholder engagement

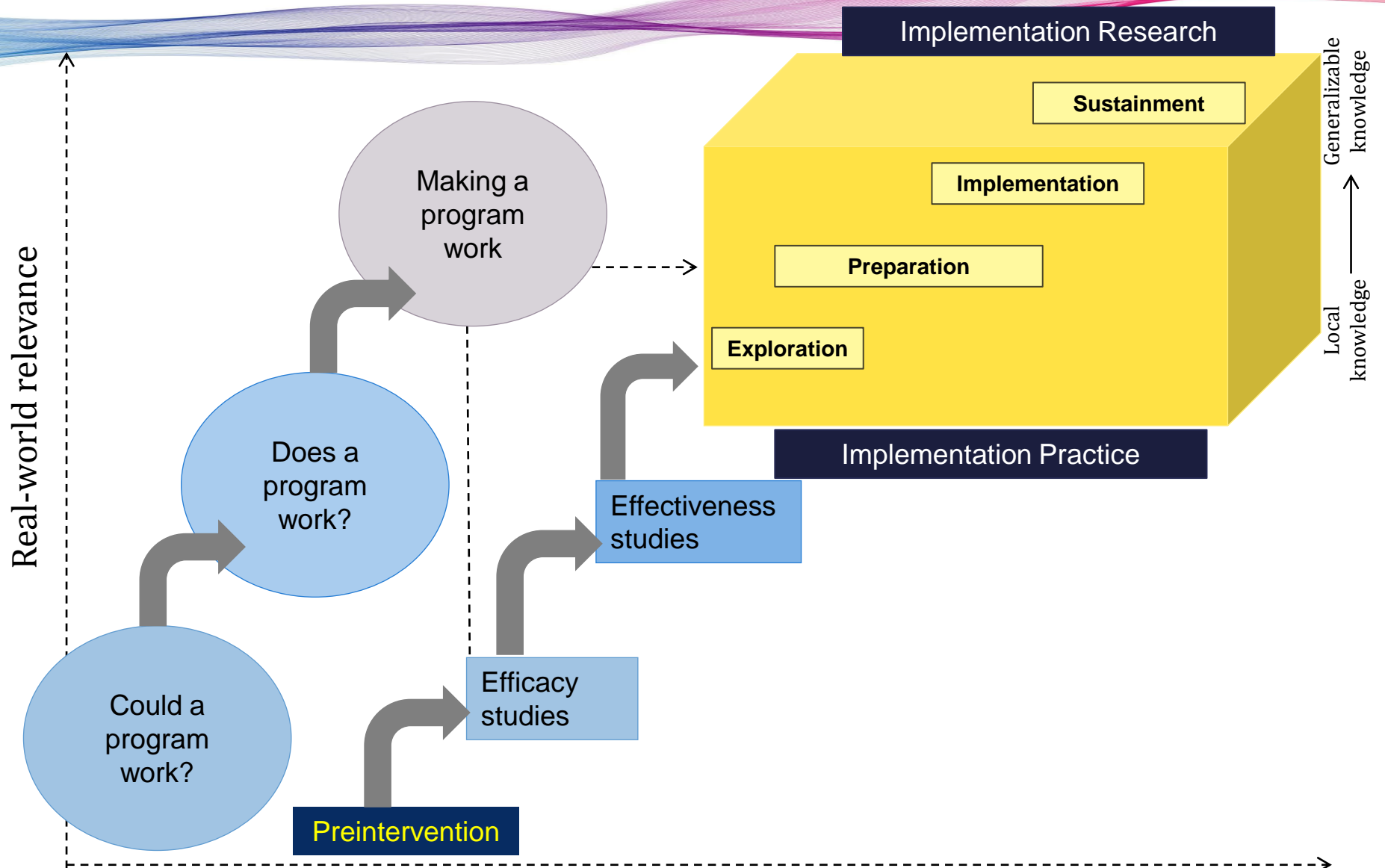


To conduct useful research answer: consider the multilevel nature of change

Social ecological models



Traditional Translational Pipeline



How to select/design 'implementable innovations' e.g. professional pharmacy services



- Needs assessment
- Assess determinants of change across contextual levels
- Consider stakeholders and factors that may influence its implementation, sustainability and scale-up
- Stakeholder identification and engagement/support is crucial
- Use collaborative research methodologies and change theories
 - Intervention mapping
 - Behavioural change wheel
 - Community-based (partnered) participatory research
 - MRC guidelines
 - IHI breakthrough method

How to design/select an implementation strategy



- Consider the multiphasic, multilevel nature of implementation
- Use an implementation framework, which includes contextual levels
 - **CFIR**: Consolidated Framework for Implementation Research
 - **ISF**: Interactive Systems Framework
 - **EPIS**: Exploration, Preparation, Implementation & Sustainment
 - **GIF**: Generic Implementation Framework
 - **FISpH**: Framework for the Implementation of Services in Pharmacy
- Models & analyses to study mediators, moderators, mechanisms
- Theory-based process evaluation, realistic/realist evaluation
- Approaches to adaptation

STUDY DESIGN

- Hybrid design
- Roll-out designs

Mixed methods

- Pragmatic
- Participatory action research

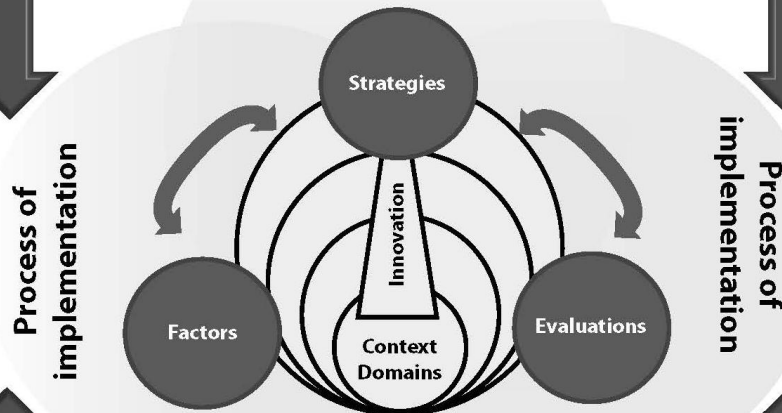
To conduct useful research: consider the multilevel nature of change

Generic implementation framework (GIF)

Pre-implementation



Process of implementation



Process of implementation

Factors

Innovation

Context Domains

Evaluations

Process of implementation

Process of implementation

Post-implementation

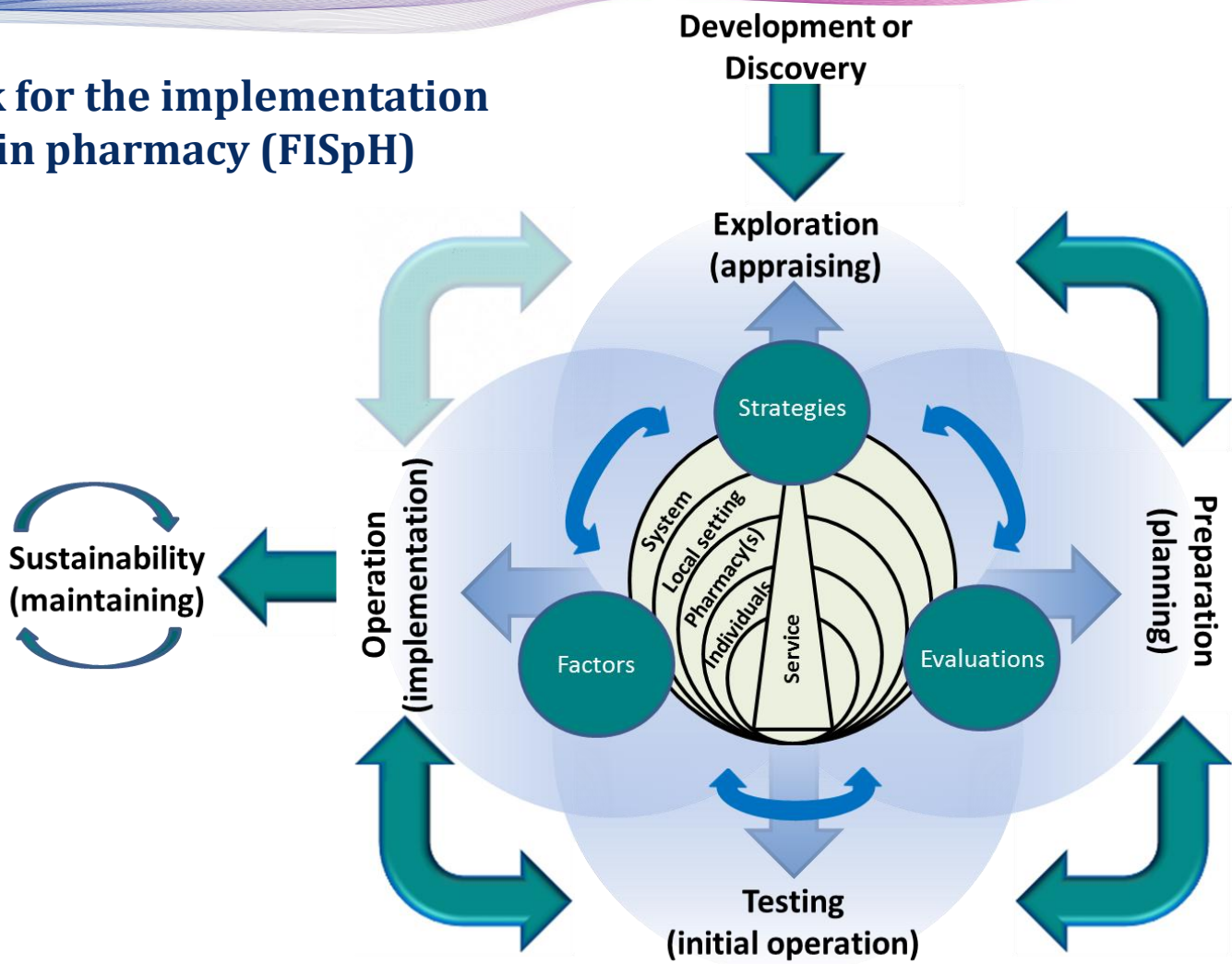


CORE CONCEPTS

Implementation involves
(1) an innovation,
(2) a multi-level context,
(3) a multi-stage process,

Influenced by a range of
(1) factors
(2) strategies
(3) and evaluations
(formative and summative)

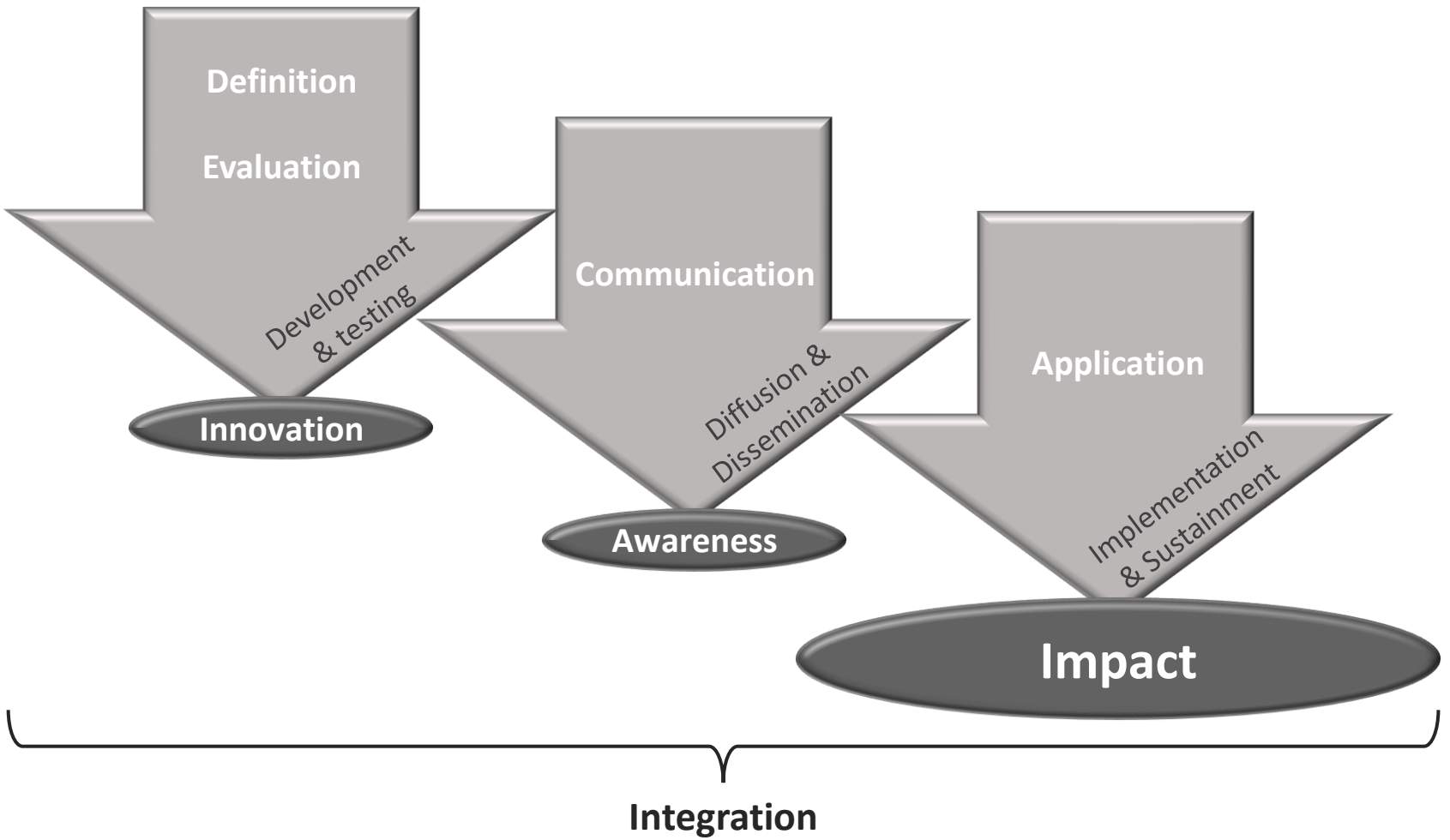
Framework for the implementation of services in pharmacy (FISpH)



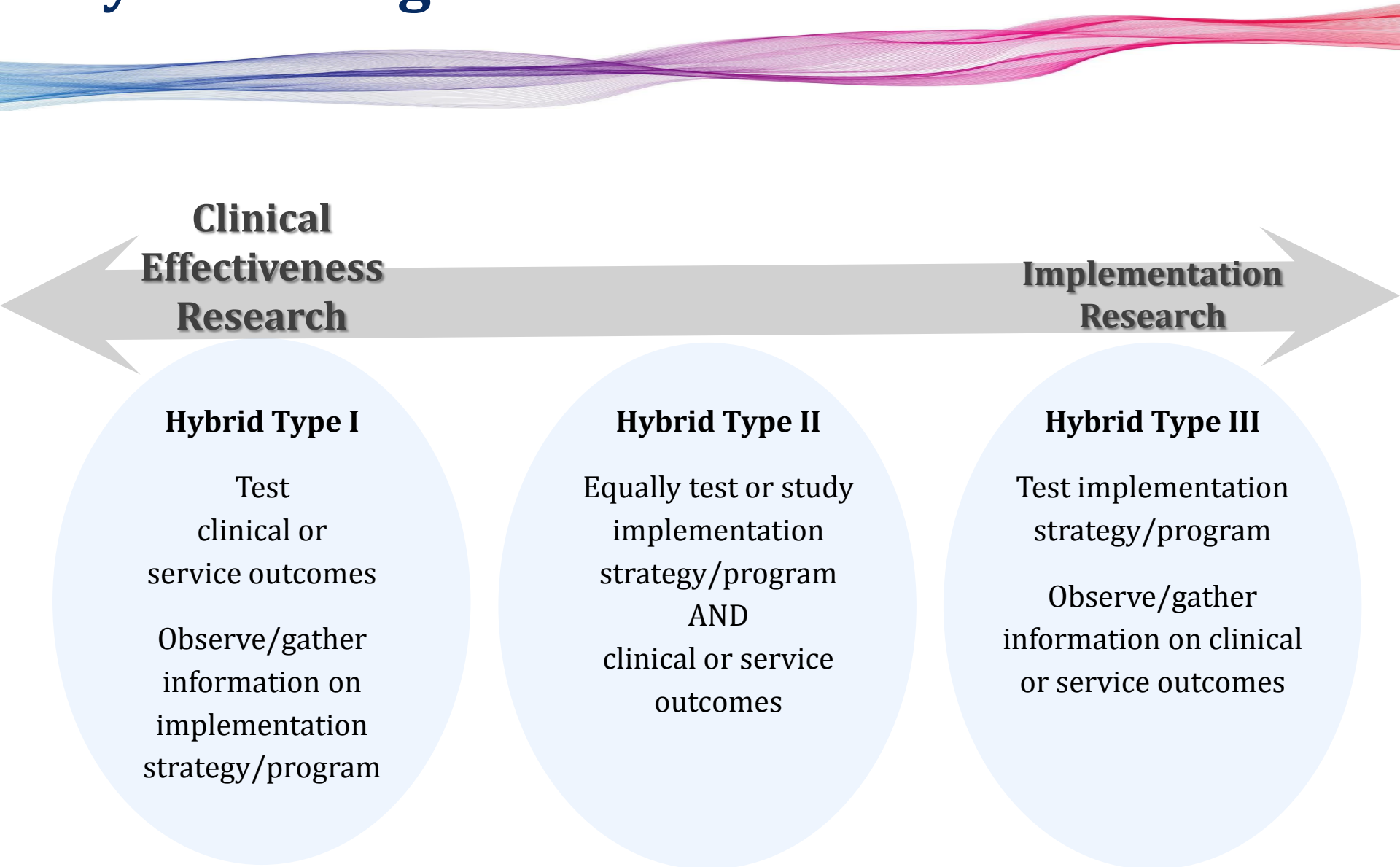


Successful implementation generally requires:

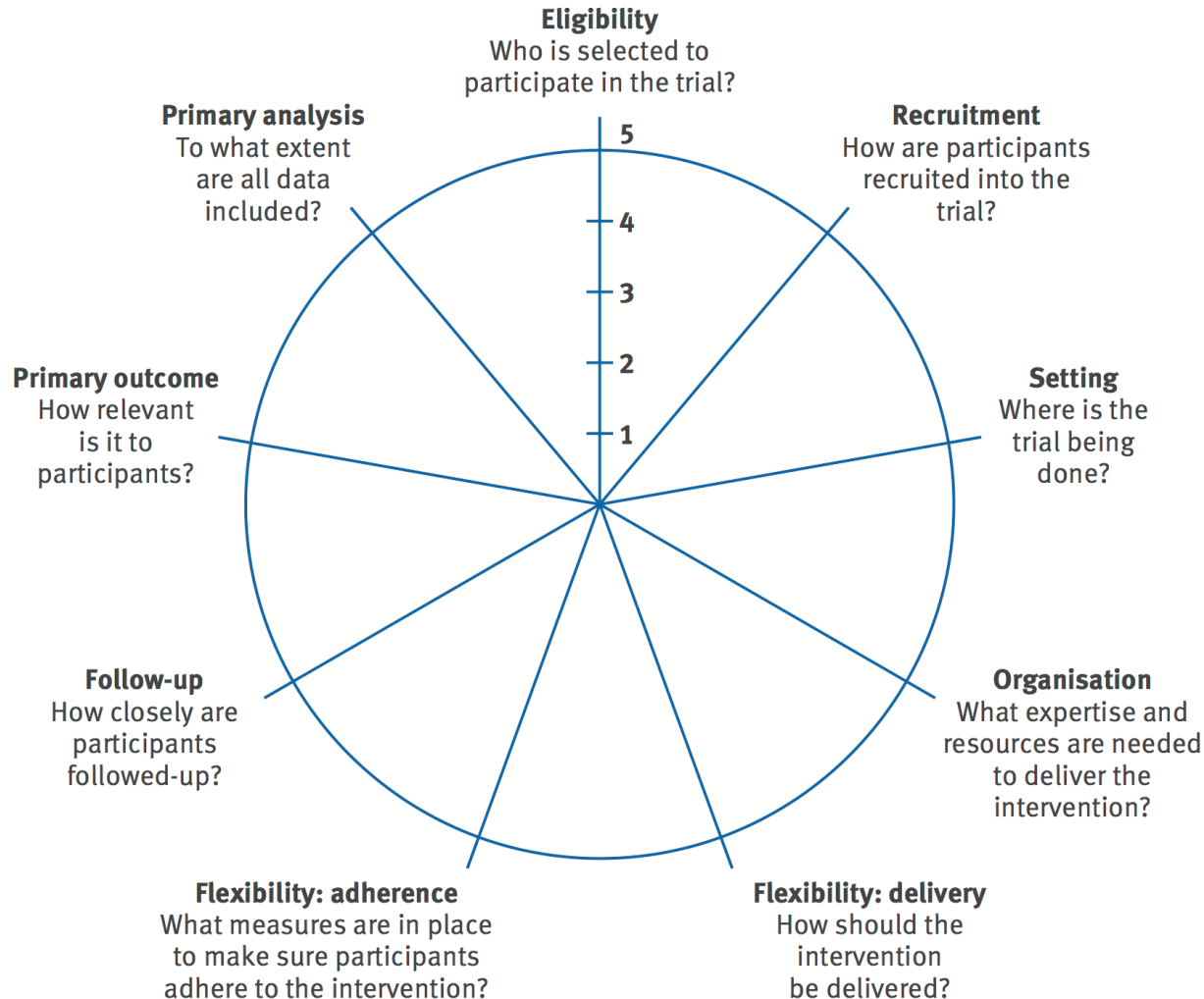
- Multi-level, multi-component, partnered strategies
- Guided by extensive planning
- With continuous monitoring, feedback, refinement and adaptation



Hybrid designs



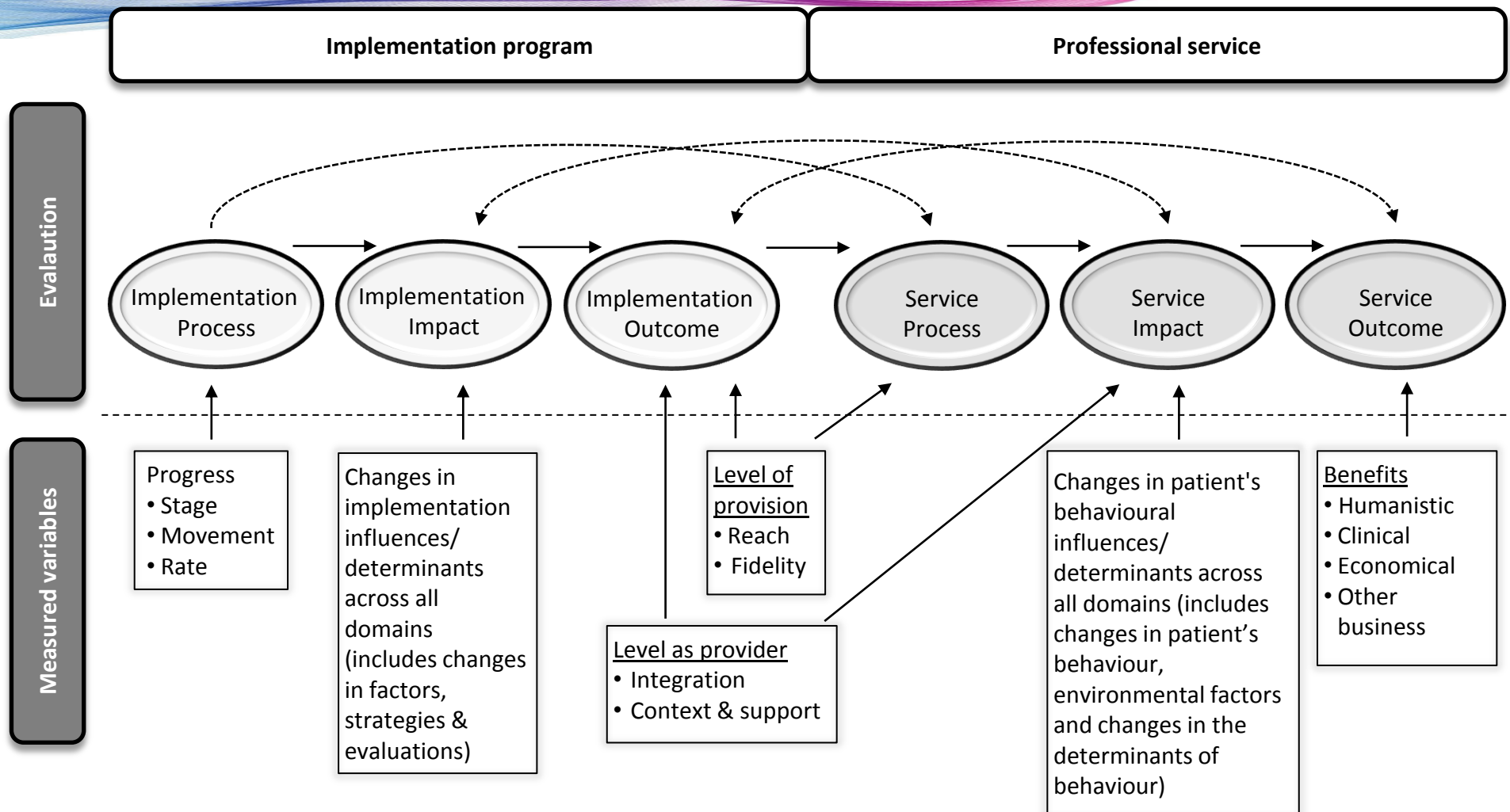
Pragmatic designs: PRECIS-2





	Health services research	Implementation research
Aim	Understand processes and factors associated with health	Understand processes and factors associated with implementation
Intervention	Clinical intervention/program INNOVATION / SERVICE	Implementation intervention/program STRATEGY
Determinants	Health behaviour determinants DETERMINANTS / BEHAVIOURS	Determinants of practice FACTORS / INFLUENCES
End-user	Patient/Client	Implementer

Model for the evaluation of implementation programs & services



Logic models

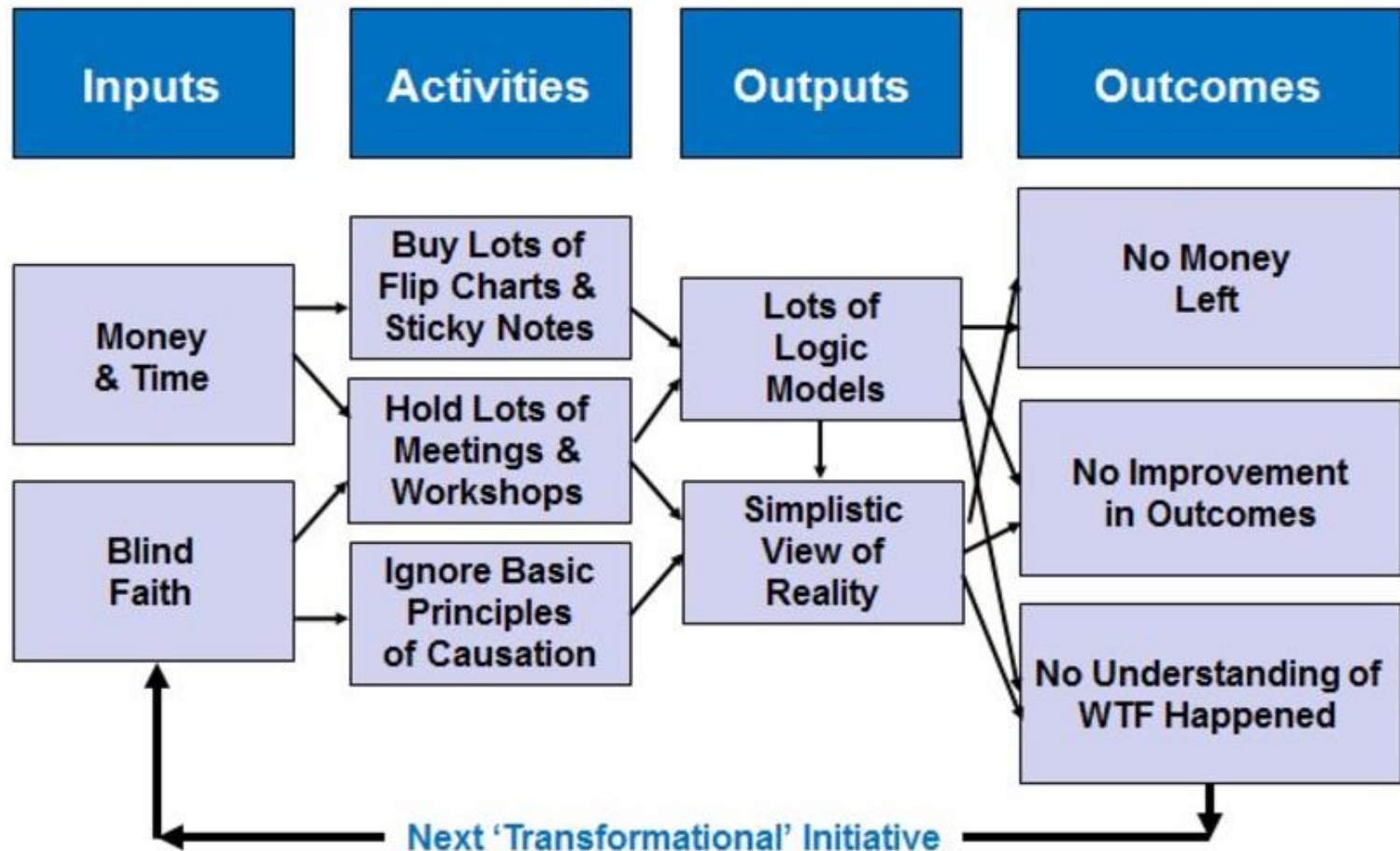


1. What is the clinical problem, determinants of the clinical problem
(how to change the problem)

-> Clinical innovation/service

2. What is the implementation problem, determinants of the
implementation problem
(how implementation happens)

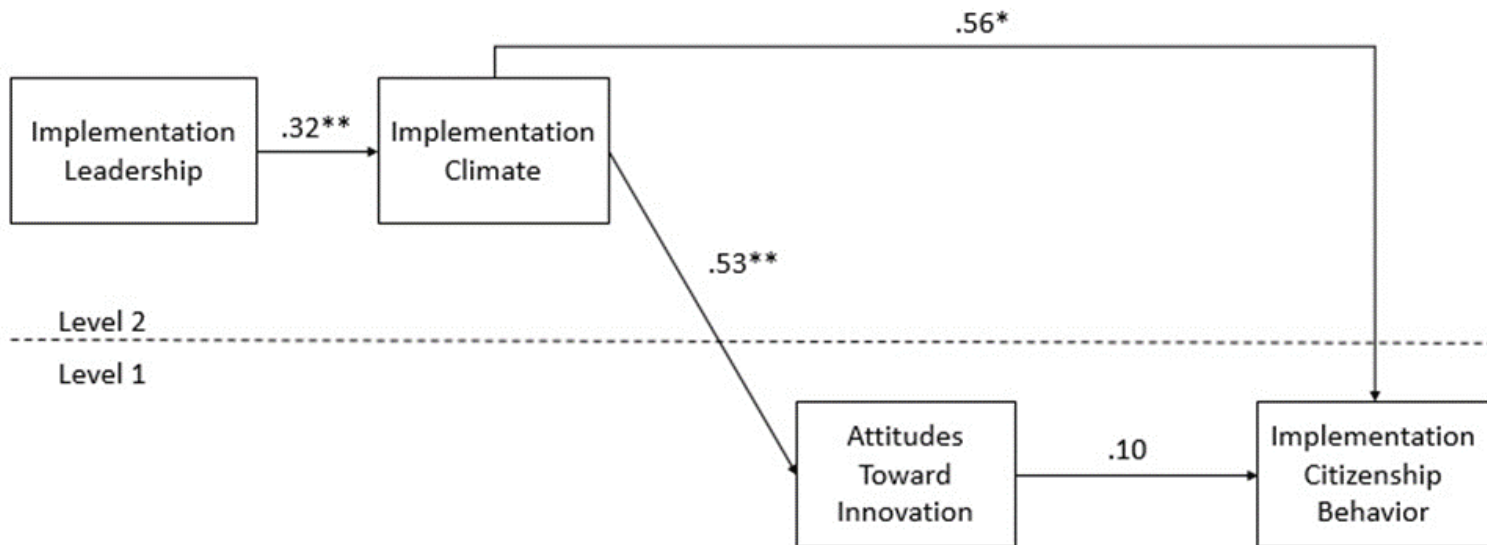
Logic models



Assumptions

Example model

- Ehrhart et al. (2016 – SIOP)
- Child welfare sample (275 providers and 54 supervisors from 15 agencies)



What is important



- Develop a model for research
- Select measures for each part of your model
- Consider mixed methods

- Ensure strategies target different contextual levels
 - In following presentation will show an example where,
 - Primarily targeted first level leaders
 - Organisational strategies to achieve buy-in and climate across organisation

Thoughts, questions, ideas?



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Thank you



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