Identifying Multilevel Contextual Factors

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What will we cover in this session?

- A brief overview of “context”
- Ways to organize our conceptualization and understanding of context using frameworks
- Practical application of a simple framework in identifying contextual factors at multiple levels relevant to implementation

A brief overview of “context”

If the goal of implementation science is to facilitate the uptake of evidence-based practices/policies/pills/programs into regular use, the overarching question is:

- **When, where, how, with whom, under what circumstances, and why does *this thing* work?**
  - Policies, programs, practices, principles, procedures, pills, products…
  - Implementation strategies

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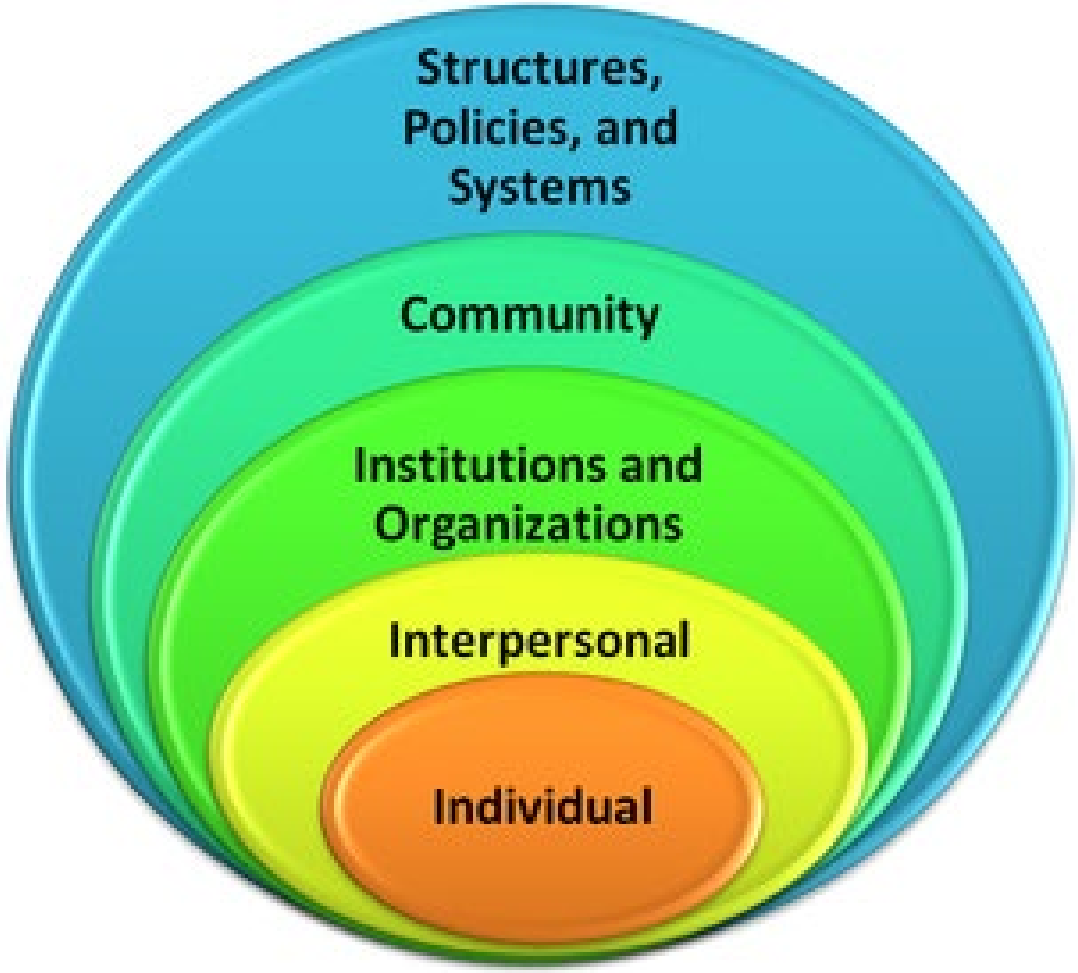
A brief overview of “context”

- Multilevel
- Multiple domains
- Interactive
- Dynamic



The Social Ecological Model

(see Bronfenbrenner 1977, 1986, 1989; CDC 2015; Sallis et al 2008)

A brief overview of “context”

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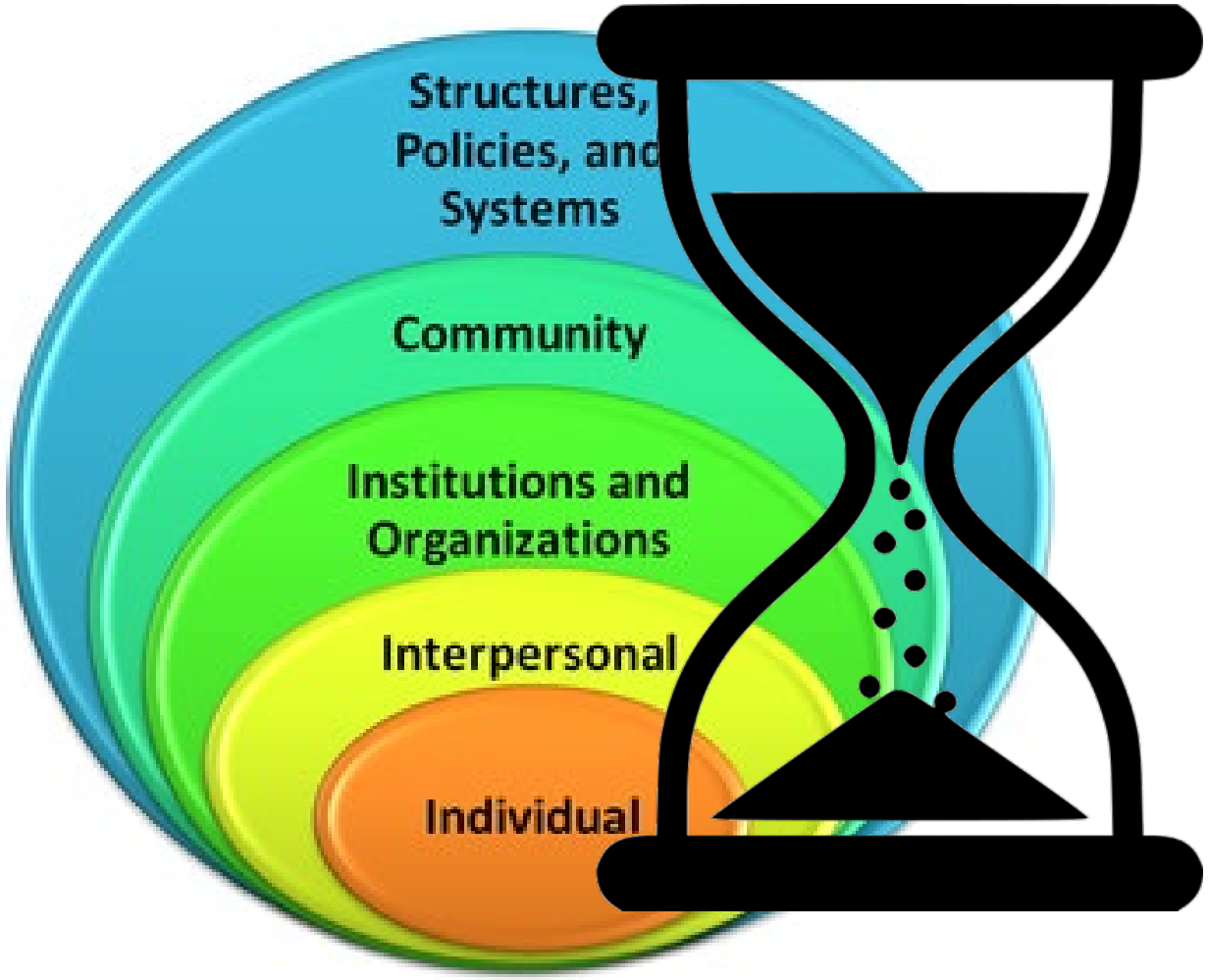

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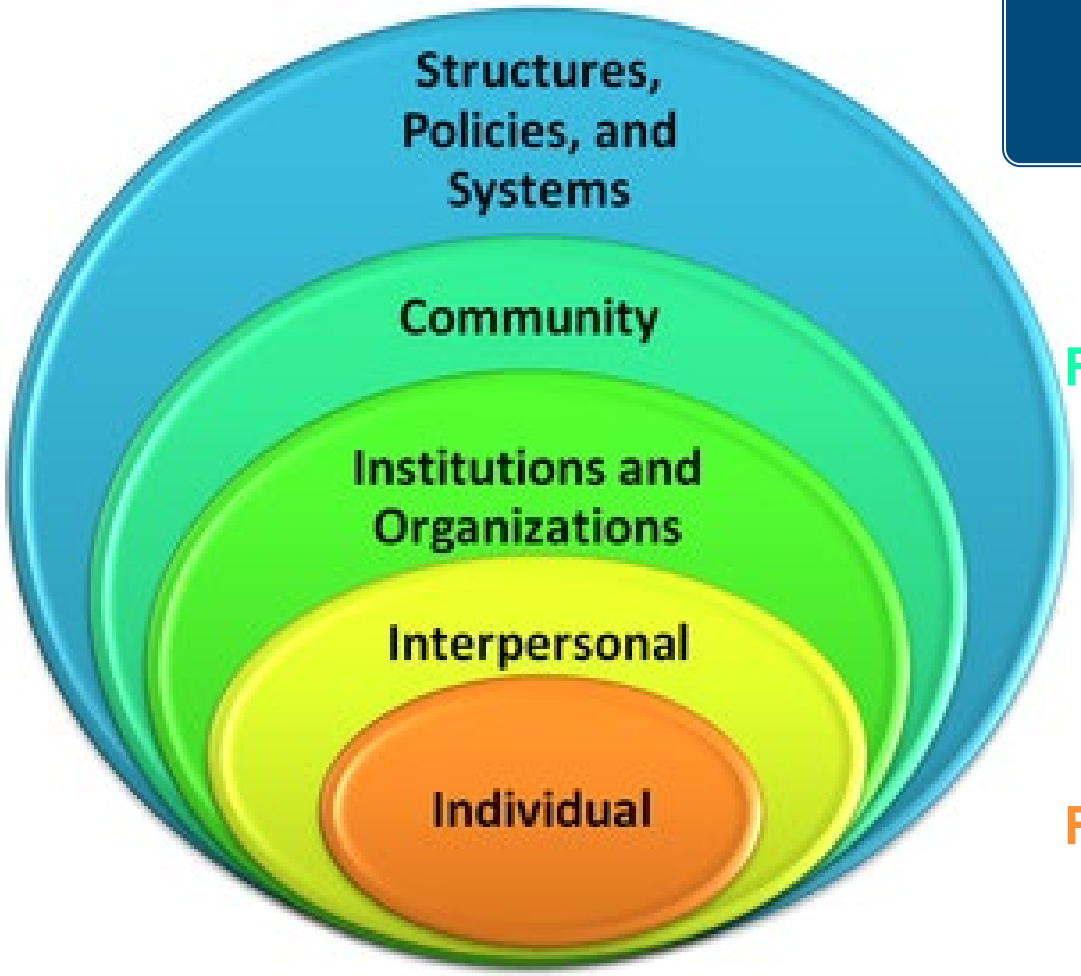


Planning	Implementing	Sustaining
Barrier	Facilitator	Facilitator
Facilitator	Barrier	Facilitator
Barrier	Barrier	Barrier
Barrier	Barrier	Barrier
Facilitator	Facilitator	Facilitator

A brief overview of “context”

“plasticity and elasticity”
(May et al., 2016)

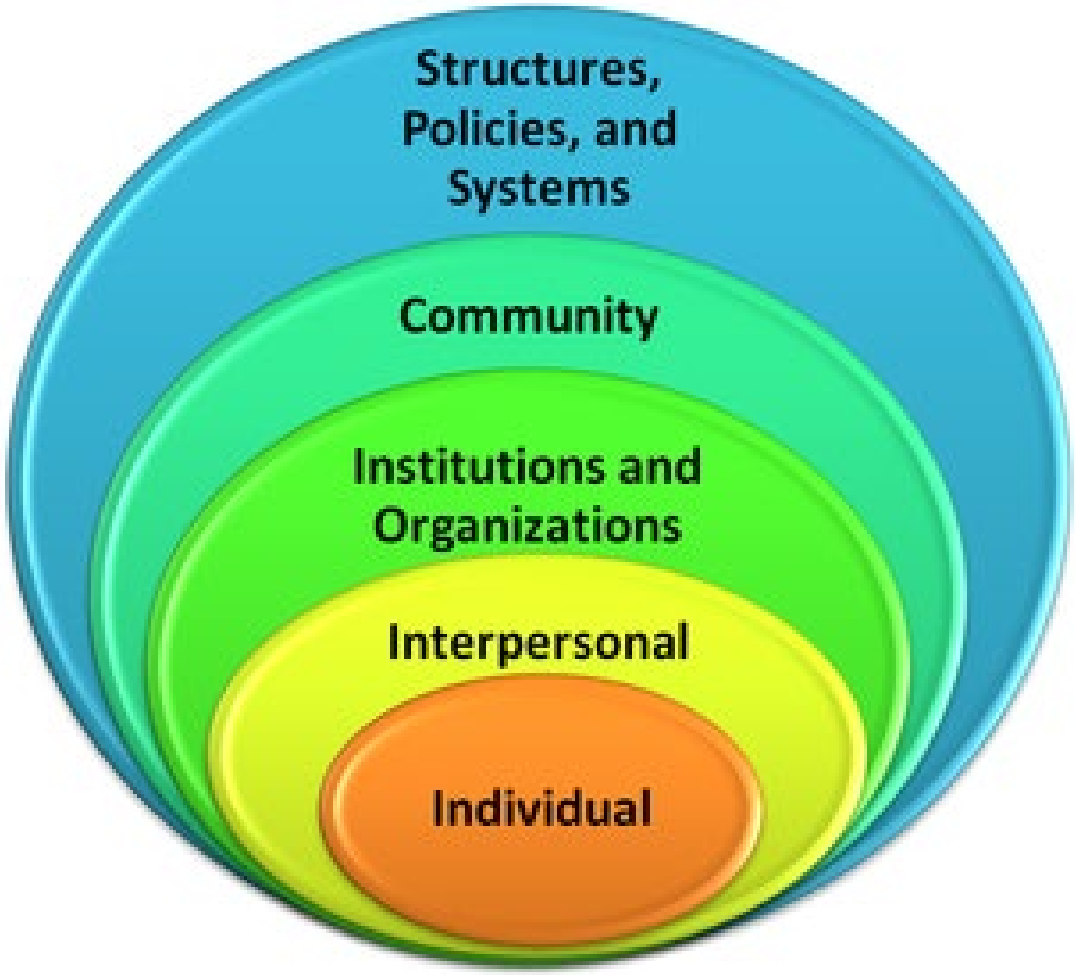
Planning	Implementing	Sustaining
Barrier	Facilitator	Facilitator
Facilitator	Barrier	Facilitator
Barrier	Barrier	Barrier
Barrier	Barrier	Barrier
Facilitator	Facilitator	Facilitator

Frameworks: Organizing context

- There are many frameworks that are used to conceptualize and organize “context”
- They range from simple to complex
- They are often referred to as “contextual frameworks” or “determinants frameworks”
- They allow for contextual factors to be:
  - Multilevel
  - In multiple domains
  - Interactive
  - Dynamic

Frameworks: Organizing context

A simple framework:

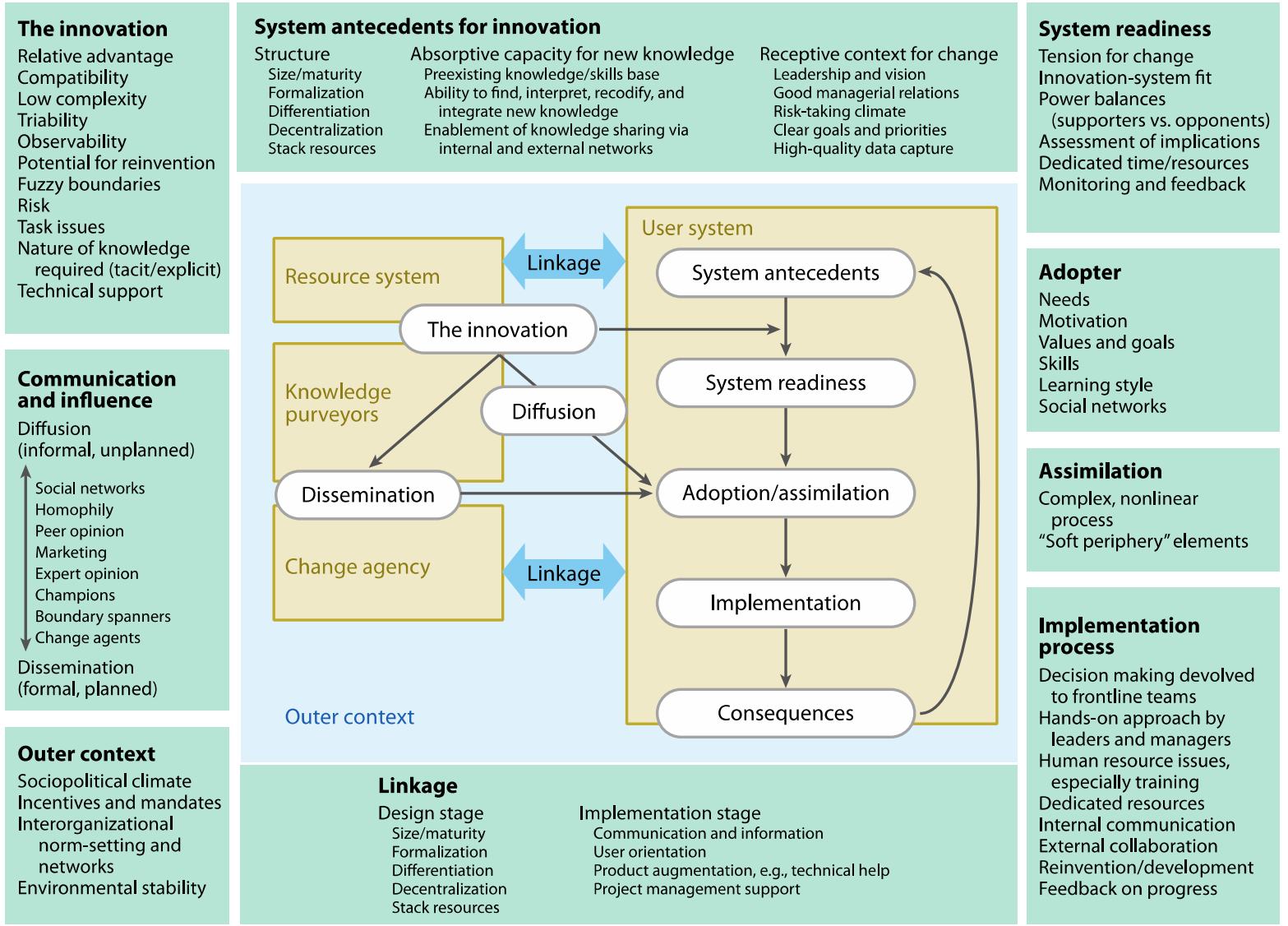


Frameworks: Organizing context

A more comprehensive framework:

Diffusion of innovations in service organizations

- Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Milbank Q. 2004. 2004. 82:581–629
- Lobb R & Colditz GA. Annual Review of Public Health 2013 34:1, 235-251



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Frameworks: Organizing context

Which one should you use?

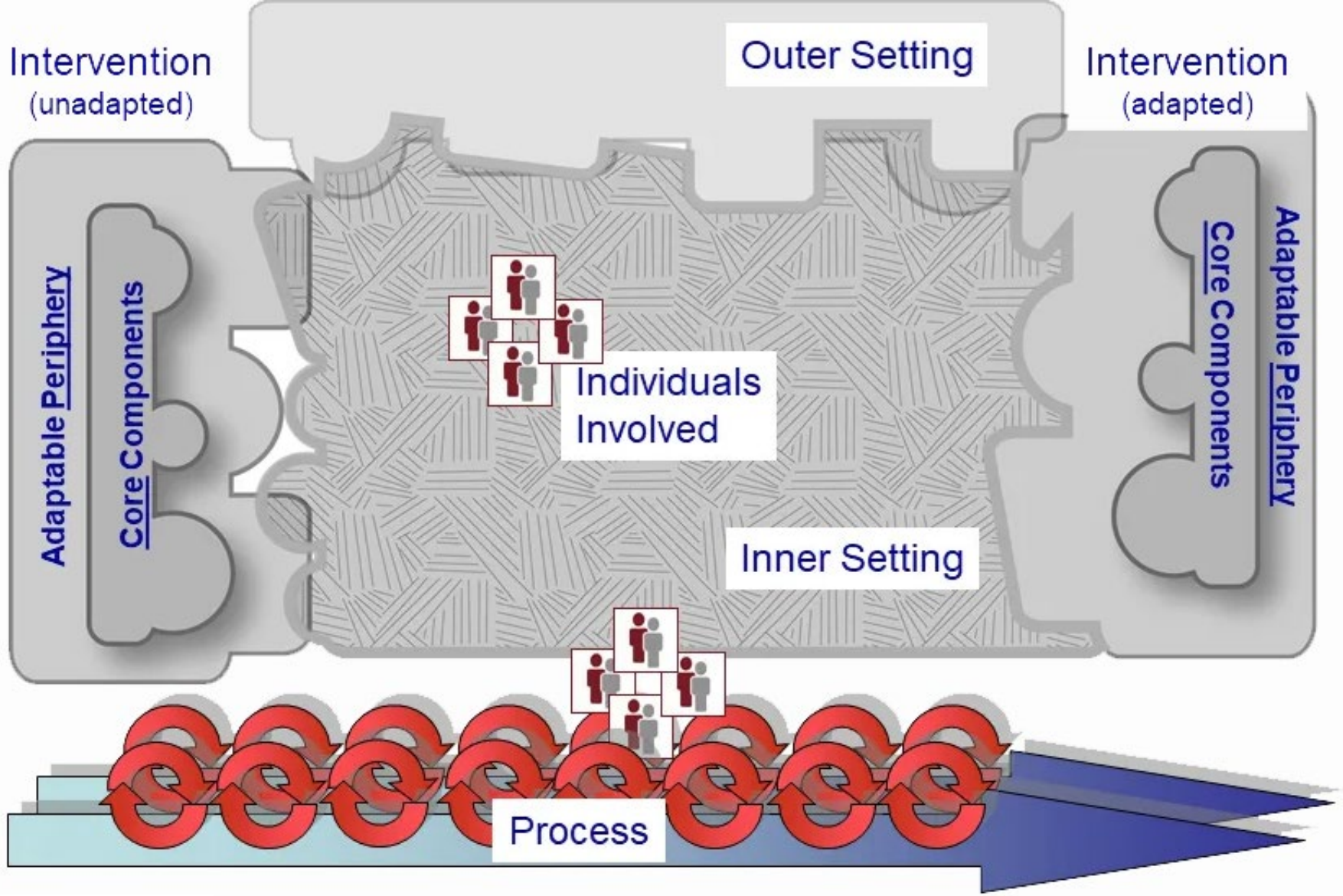
Frameworks: Organizing context

A resource to learn more about frameworks for context:

Dissemination-implementation.org

- Find models
- Find constructs within models
- Rationale and process for combining and/or adapting T/M/F
- Link to NCI D&I GEM for available measures (gem-measures.org – select Workspaces – GEM-D&I)

The Consolidated Framework for Implementation Research (CFIR)



Implementation Science

BioMed Central

Research article

Open Access

Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science

Laura J Damschroder*[1], David C Aron[2], Rosalind E Keith[1], Susan R Kirsh[2], Jeffery A Alexander[3] and Julie C Lowery[1]

https://cfirguide.org/

https://cfirguide.org/wp-content/uploads/2019/08/cfirconstructs.pdf

PRISM

The Joint Commission Journal on Quality and Patient Safety
Volume 34, Issue 4, April 2008, Pages 228-243

A Practical, Robust Implementation and Sustainability Model (PRISM) for Integrating Research Findings into Practice

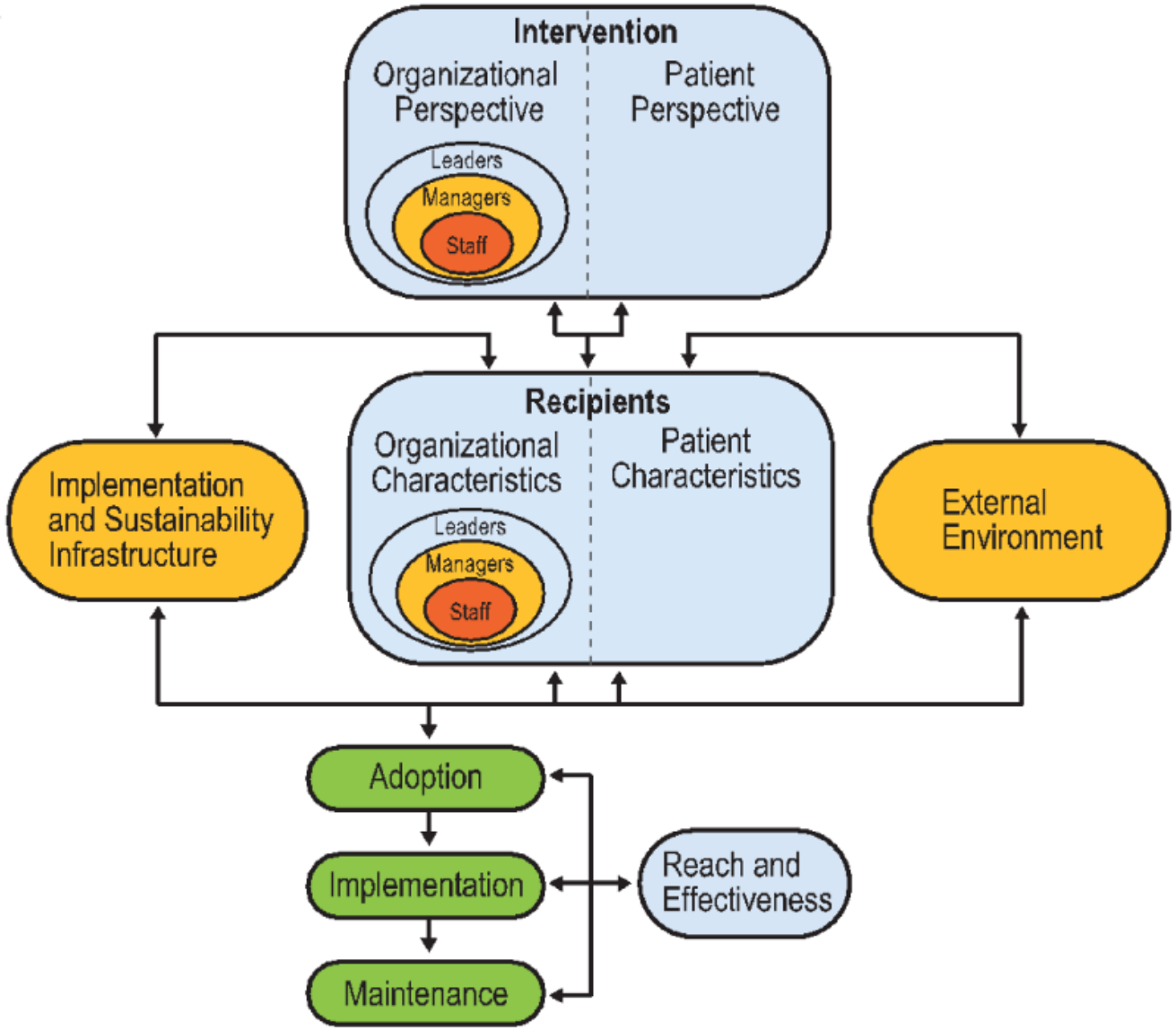
Adrianne C. Feldstein M.D., M.S. (Medical Liaison for Research, Northwest Permanente, Adjunct Investigator),
Russell E. Glasgow Ph.D. (Senior Scientist)

TBM

ORIGINAL RESEARCH

Using the Practical, Robust Implementation and Sustainability Model (PRISM) to qualitatively assess multilevel contextual factors to help plan, implement, evaluate, and disseminate health services programs

Marina S. McCreight,[1,2] Borsika A. Rabin,[1,3,4,5] Russell E. Glasgow,[1,4,5,6] Roman A. Ayele,[1,2,7] Chelsea A. Leonard,[1,2] Heather M. Gilmartin,[1,2,7] Joseph W. Frank,[1,2,8] Paul L. Hess,[1,2,9] Robert E. Burke,[10,11] Catherine T. Battaglia[1,2,7]



NOTE: PRISM is coming soon to re-aim.org

Adm Policy Ment Health (2011) 38:4–23
DOI 10.1007/s10488-010-0327-7

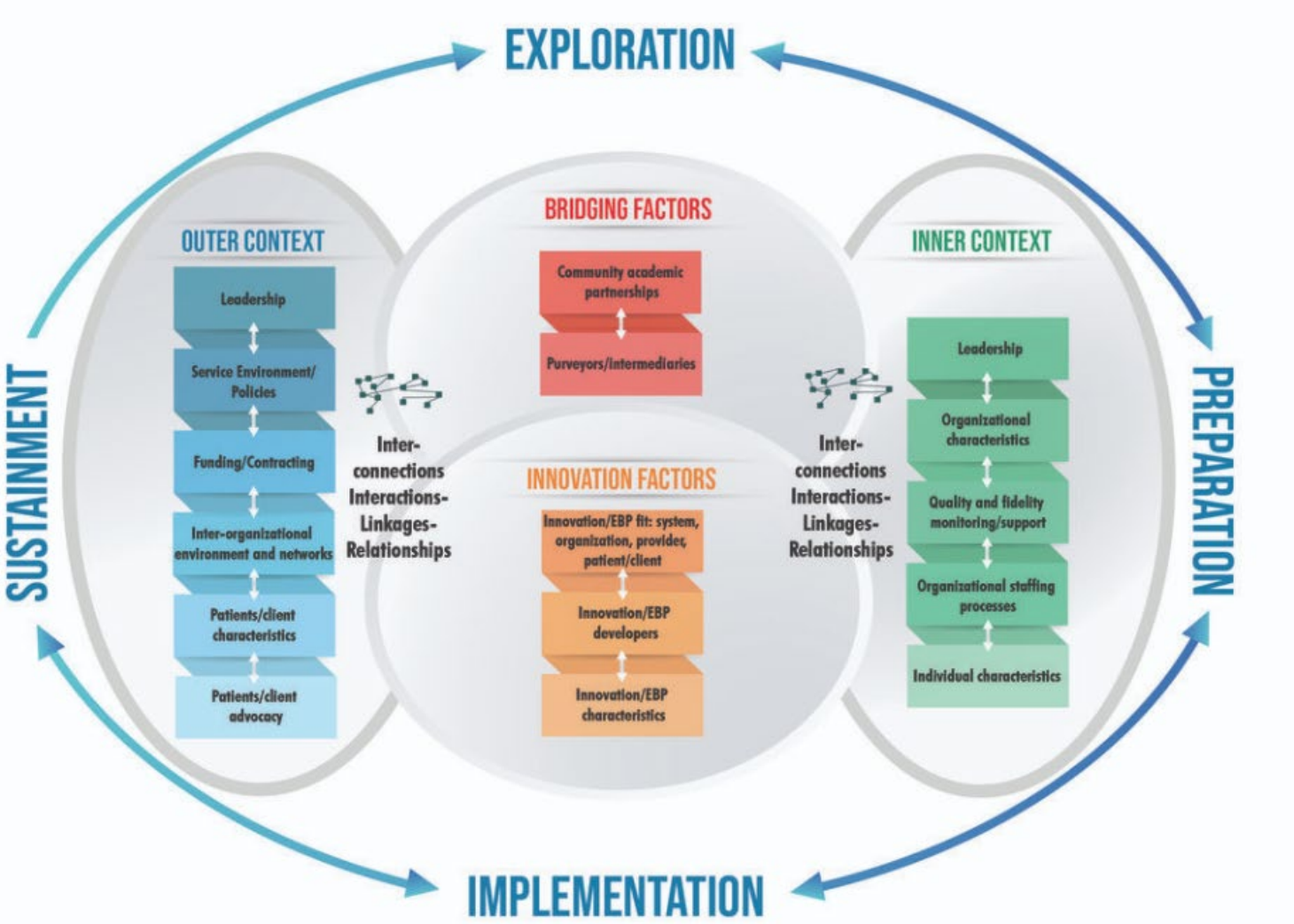
ORIGINAL PAPER

Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors

Gregory A. Aarons · Michael Hurlburt · Sarah McCue Horwitz

https://episframework.com/measures

Exploration, Preparation, Implementation, and Sustainment Framework (EPIS)



What do these frameworks help you with?

As you examine/consider/assess contextual factors influencing implementation, you may:

- Verify what you expected
- Consider contextual factors and levels you may not have thought of
- Identify modifiable contextual factors you could target with implementation strategies
- Identify non-modifiable contextual factors that may necessitate adaptation to your intervention or implementation strategies
- Assess the relevance and importance of contextual factors over time
- Inform plans for implementation, sustainment, scale-up, scale-out

Let’s do

AN EXERCISE!

Scenario:

- Low-dose CT lung cancer screening reduces mortality from lung cancer among individuals at high risk for developing lung cancer. Since identified as an evidence-based practice in 2015, LDCT has been inadequately adopted and implemented in community settings (i.e., mostly hospitals). Implementation research on LDCT seeks to understand contextual factors related to adoption, implementation, and eventual sustainment to increase its public health impact.
- Within each level of context organized in the Socioecological Framework, *brainstorm possible contextual factors that should be considered in the implementation of LDCT in community settings.*

Conclusions

- Context is queen
- Contextual factors at multiple levels may influence implementation and sustainment – and be modifiable or not
- Use of contextual frameworks can guide you in identifying relevant contextual factors…and which are relevant, which are barriers, which are facilitators may shift throughout the implementation process.
- These factors may be important targets for implementation strategies, conditions requiring adaptation of interventions or implementation strategies, or simply key in understanding:

When, where, how, with whom, under what circumstances, and why does *this thing* work?

Some key references and resources:

- Dissemination-implementation.org
- cfirguide.org
- re-aim.org (PRISM coming soon)
- episframework.com
- May et al. (2016). Implementation, context and complexity. Implementation Sci 11, 141.
- Moullin et al. (2019). Systematic review of the Exploration, Preparation, Implementation, Sustainment (EPIS) framework. Implementation Sci 14, 1.
- Damschroder et al. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation Sci 4, 50.
- McCreight et al. (2019). Using the Practical, Robust Implementation and Sustainability Model (PRISM) to qualitatively assess multilevel contextual factors to help plan, implement, evaluate, and disseminate health services programs. Transl Behav Med 9(6):1002-1011.
- Nilsen & Bernhardsson (2019). Context matters in implementation science: a scoping review of determinant frameworks that describe contextual determinants for implementation outcomes. BMC Health Serv Res, 19(1):189.
- Kirk et al. (2015). A systematic review of the use of the Consolidated Framework for Implementation Research. Implementation Sci 11, 72.