

# Identifying Multilevel Contextual Factors

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## Overview of context:

- When, where, how, with whom, under what circumstances, and why does **this thing** work?
  - **This thing** can be a program, policy, practice, principle, procedure, pill, product, or... implementation strategy.
- Key aspects of context:
  - Multilevel
  - Multiple domains
  - Interactive
  - Dynamic
- Contextual factors at multiple levels can (and do) serve as facilitators or barriers to implementation, and may come into play at different stages of the implementation process
- Contextual factors may be modifiable (or not)
  - “Plasticity and elasticity” (May et al., 2016)

## Organizing our conceptualization and understanding of context:

- Many contextual frameworks have been developed, adapted, combined
- Let's start with a relatively simple framework that reflects the key aspects of context (the Socioecological Framework) and compare it with a much more complex framework (Greenhalgh et al's Diffusion of Innovations in Service Organizations)
- In between these extremes are numerous contextual frameworks that add nuance and complexity to the basic idea of the Socioecological Framework and incorporate theory, constructs, and organizing principles from interdisciplinary fields. Three frequently used examples are:
  - The Consolidated Framework for Implementation Research (CFIR)
  - Exploration, Preparation, Implementation, and Sustainment (EPIS)
  - Practical, Robust Implementation and Sustainability Model (PRISM)

## The function of frameworks in identifying multilevel contextual factors:

- Verify what you expected (maybe)
- Consider contextual factors you may not have thought of
- Clarify contextual factors you could target with specific implementation strategies
- Identify contextual changes over time
- Inform adaptations, implementation, sustainment

## Key resources and references:

[Dissemination-implementation.org](https://dissemination-implementation.org)

<https://episframework.com>

[cfirguide.org](https://cfirguide.org)

[re-aim.org](https://re-aim.org) (PRISM coming soon!)

[May, C.R., Johnson, M. & Finch, T. Implementation, context and complexity. Implementation Sci 11, 141 \(2016\).](#)

[Moullin, J.C., Dickson, K.S., Stadnick, N.A. et al. Systematic review of the Exploration, Preparation, Implementation, Sustainment \(EPIS\) framework. Implementation Sci 14, 1 \(2019\).](#)

[Damschroder, L.J., Aron, D.C., Keith, R.E. et al. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation Sci 4, 50 \(2009\).](#)

[McCreight MS, Rabin BA, Glasgow RE, Ayele RA, Leonard CA, Gilmartin HM, Frank JW, Hess PL, Burke RE, Battaglia CT. 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. 2019 Nov 25;9\(6\):1002-1011.](#)

[Nilsen P, Bernhardsson S. Context matters in implementation science: a scoping review of determinant frameworks that describe contextual determinants for implementation outcomes. BMC Health Serv Res. 2019 Mar 25;19\(1\):189.](#)

[Kirk, M.A., Kelley, C., Yankey, N. et al. A systematic review of the use of the Consolidated Framework for Implementation Research. Implementation Sci 11, 72 \(2015\).](#)



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**An exercise in identifying potential multilevel contextual factors:**

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.*

Level of Socioecological Framework	Potential Contextual Factors
Individual	
Interpersonal	
Organizational	
Community	
Societal/Policy	
Other levels/factors that do not fit into the above	

For an example of ongoing studies on implementation of high quality lung cancer screening, check out:

[www.KentuckyLeads.org](http://www.KentuckyLeads.org)

