



University of California
San Francisco

Application of Implementation Science Frameworks to Guide Intervention Design

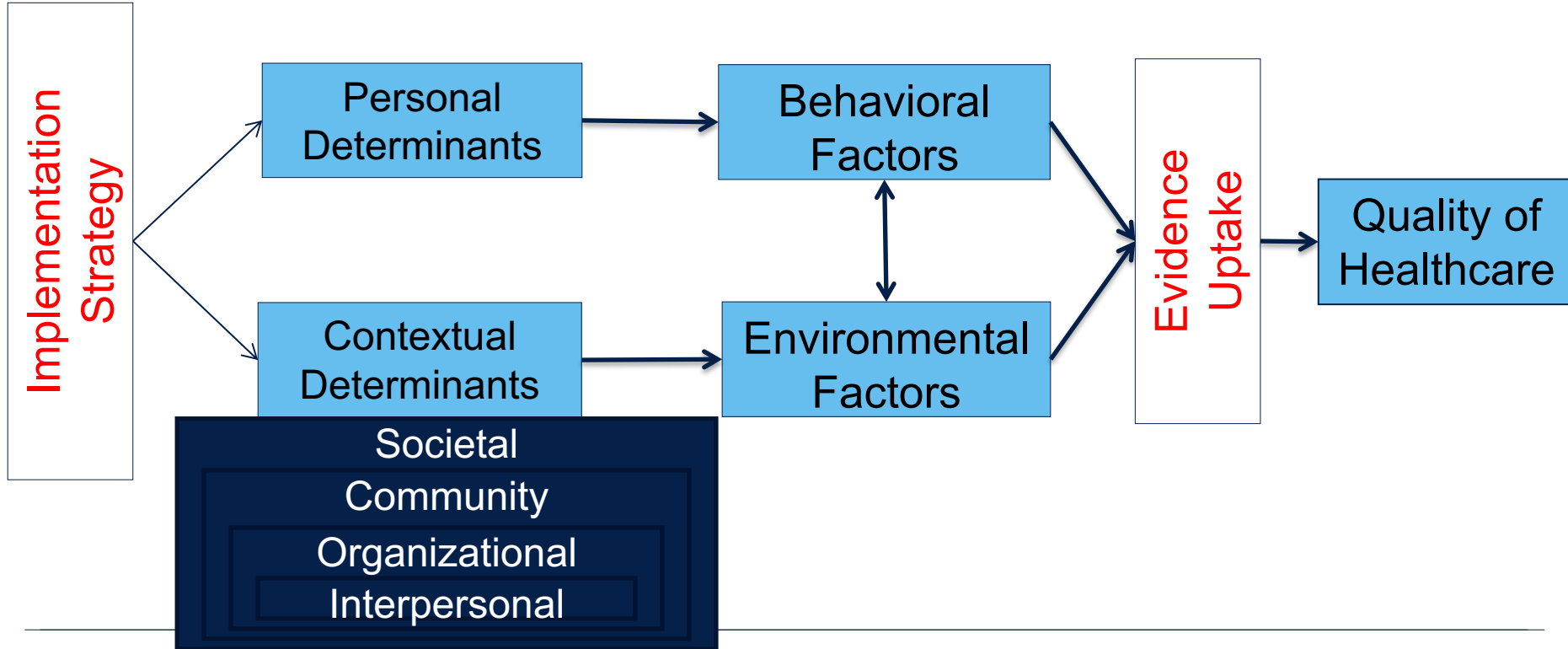
Part 1: Overview of Implementation Frameworks and Theories

Adithya Cattamanchi, MD, MAS
Associate Professor of Medicine
Co-director of UCSF Implementation Science Training Program

Behavioral approach to evidence translation

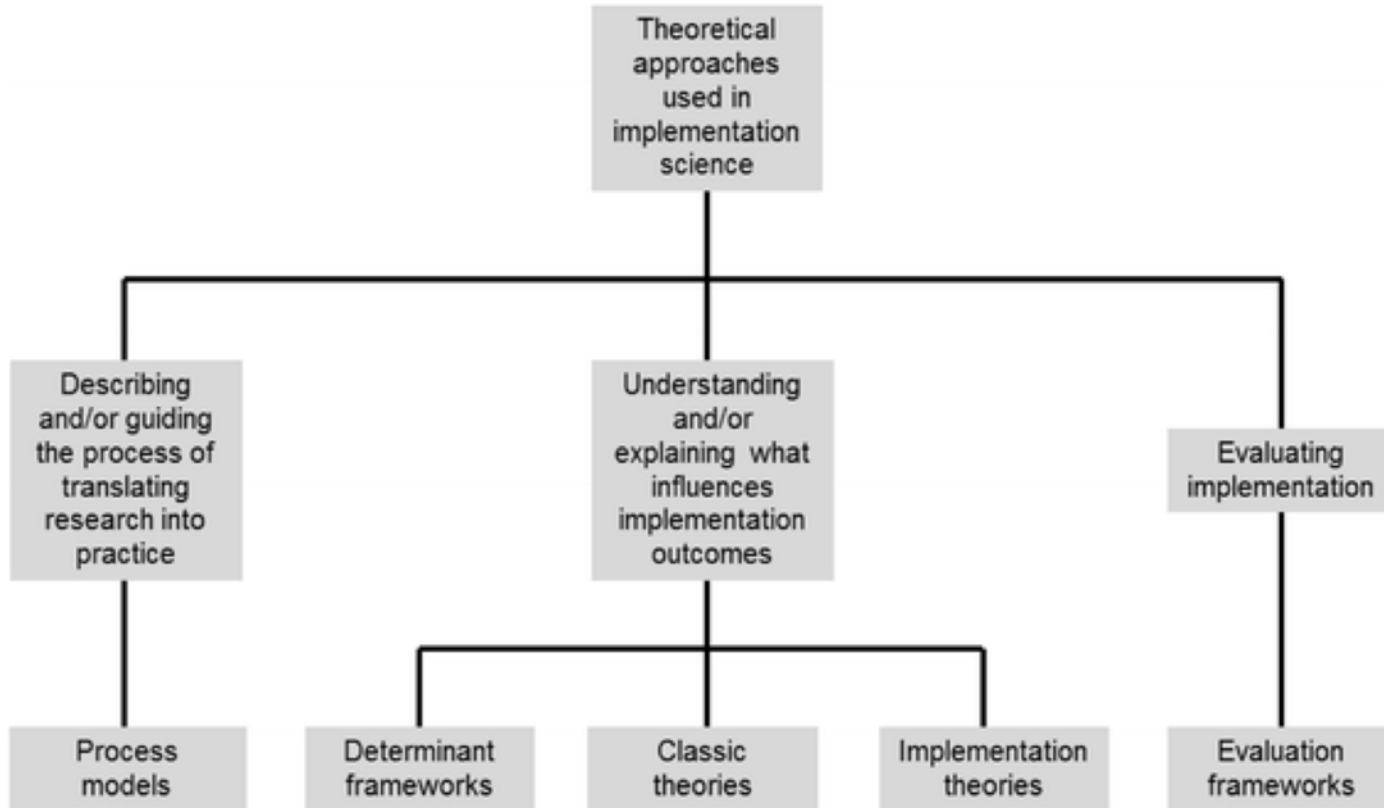
- Implementation depends on stakeholder behavior
- Improving the quality of healthcare requires changing behavior
- Changing behavior requires
 - Understanding determinants of current behavior
 - Understanding how behavior changes

Logic Model

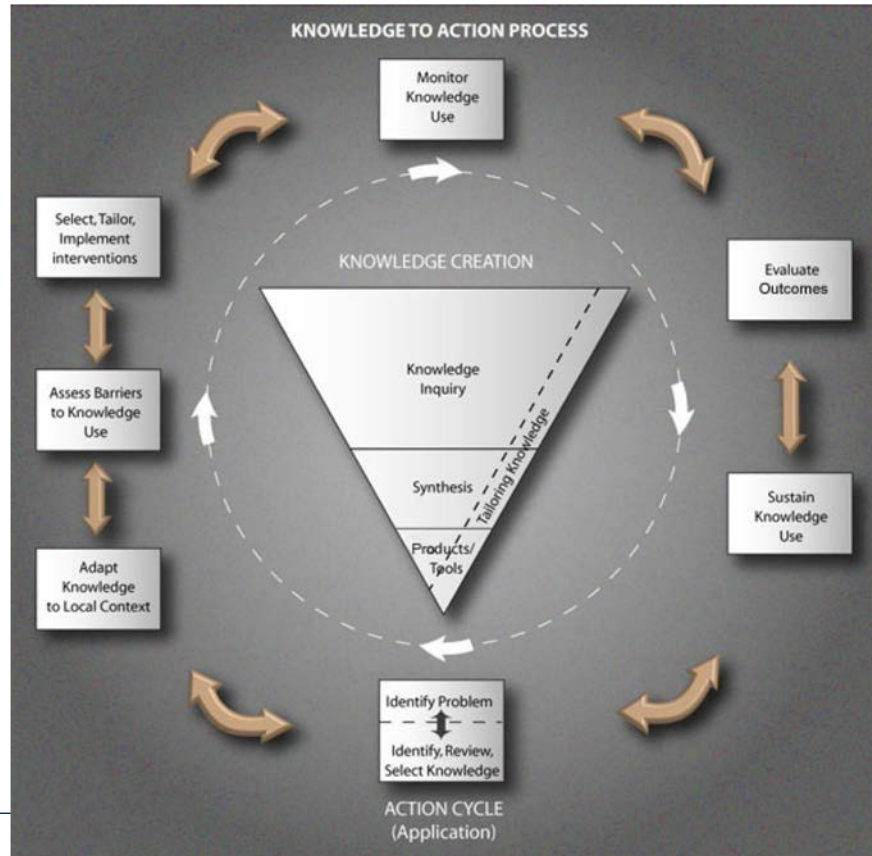




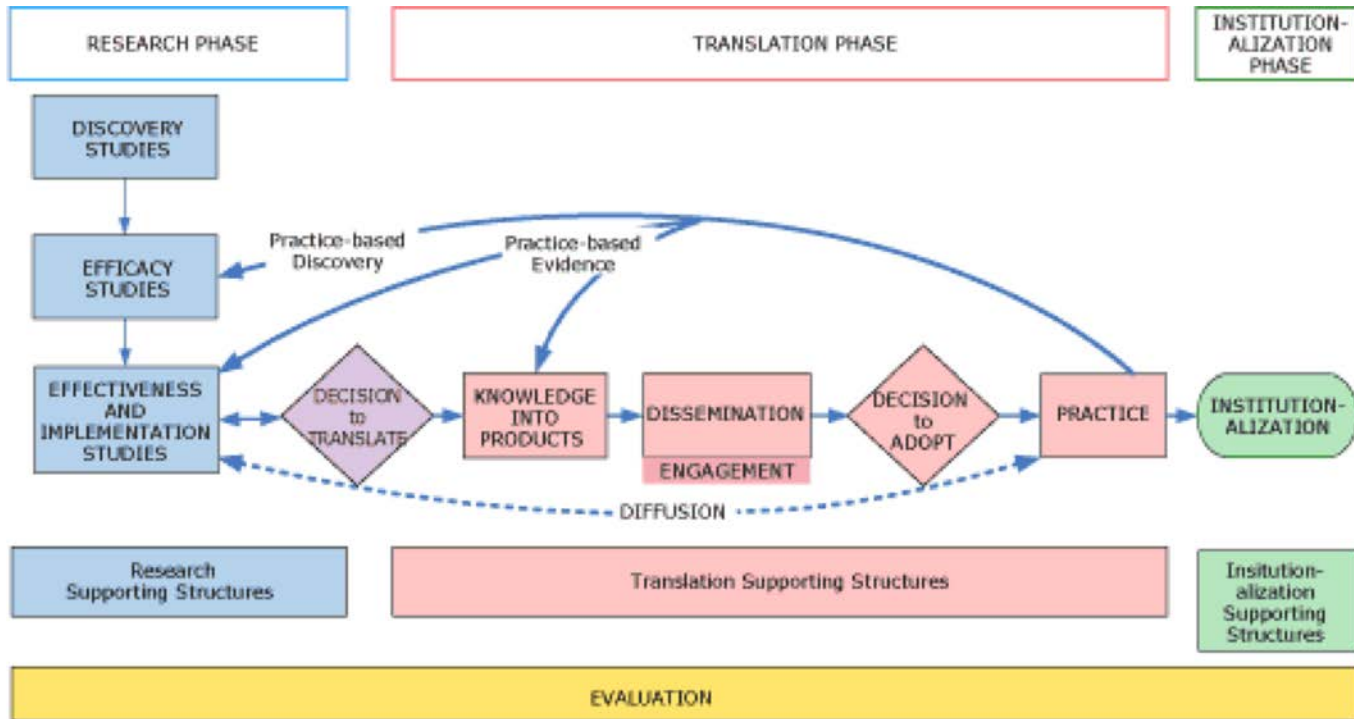
Theories, Models and Frameworks



Process Model Example: CIHR Knowledge Translation Model



Process Model Example: Knowledge to Action Framework for Public Health



Process Models = Planned Health Promotion



Implementation models/frameworks

- **Determinant Frameworks** (CFIR, PARIHS, etc.)
 - Specify determinants which act as barriers and enablers that influence implementation outcomes
 - AIM: Understand or predict implementation outcomes
- **Classic Theories** (Social Cognitive Theory, Theory of Planned Behavior, etc.)
 - Identify factors that help explain or understand implementation
 - ORIGIN: External to implementation science
- **Implementation Theories** (COM-B, Organizational Readiness, etc.)
 - Identify factors that help explain or understand implementation
 - ORIGIN: Developed by implementation researchers

Nilsen P. Imp Sci 2015.

Implementation Theories/Frameworks: Alternate Classification

Application	Selected Examples		
	Classic Theories, COM-B/TDF	BCW, PRECEDE/PER Worksheet	CFIR, PARIHS
Identifying barriers/enablers	X	X	X
Designing an implementation strategy		X	
Assessing implementation context			X

TDF: Theoretical Domains Framework; BCW: Behavior Change Wheel; CFIR: Consolidated Framework for Implementation Research; PARIHS: Promoting Action on Research Implementation in Health Services