

Dissemination and Implementation Models & Theories

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Session Outline

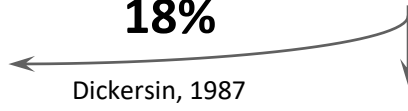
- The Context for Considering D&I Models
- Examples of Models Used in D&I research
- Resources
- Questions and Discussion



Negative results

Original research

18%



Dickersin, 1987

variable

Submission

It takes 17 years to turn 14 percent of original research to the benefit of patient care



Inconsistent indexing

Poynard, 1985

Reviews, guidelines, textbook



9.3 years

Implementation

“PUBLICATION PATHWAY”

Key Terms

- **Dissemination:** The targeted distribution of information and intervention materials to a specific public health or clinical practice audience. The intent is to spread (scale up) and sustain knowledge and the associated evidence-based interventions
- **Implementation:** The use of strategies to adopt and integrate evidence-based health interventions and change practice patterns within specific settings.” (PAR-16-238)
- ***Dissemination research*** is the scientific study of targeted distribution of information and intervention materials to a specific public health or clinical practice audience. The intent is to understand how best to spread and sustain knowledge and the associated evidence-based interventions.
- ***Implementation research*** is the scientific study of the use of strategies to adopt and integrate evidence-based health interventions into clinical and community settings in order to improve patient outcomes and benefit population health.

Key Terms

- Theory: A plausible or scientifically acceptable general principle or body of principles offered to explain phenomena (Merriam-Webster, 2013)
- Conceptual Framework: A type of intermediate theory that attempts to connect to all aspects of inquiry; can act like maps that give coherence to empirical inquiry (Wikipedia, 2013)
- Model: A description of analogy used to help visualize something that cannot be directly observed (Merriam-Webster, 2013)

Chambers, 2014 (Chapter Two) in Beidas & Kendall (eds), OUP.

Caveats to use of Models for D&I

- There is no comprehensive model sufficiently appropriate for every study or program
- Not all models are well operationalized
- Models should be considered dynamic

Chambers, 2014 (Chapter Two) in Beidas & Kendall (eds), OUP.

Tabak et al. review

- Identified 109 models
- Exclusions
 - 26 focus on practitioners
 - 12 not applicable to local level dissemination
 - 8 end of grant knowledge translation
 - 2 duplicates
- **Included 61 models**
- **Across Construct Flexibility, SEF, D/I**

Tips for thinking about how you use theory/frameworks

- In your research study...
 - Do you have a theory/model?
 - Is your theory/framework well developed throughout your proposal?
 - Linked to aims, research design, measures, analytic strategies
 - When finished, will use of your theory/framework advance the field of dissemination research?
 - Is the theory from outside of health? (may get you innovation points!!)

(Brownson, TIDIRH, 2013)

Choosing Implementation Frameworks

“[Models] inform the (frameworks) that provide the under girding or infrastructure, much like the frame of a house.”

- Explanatory: how implementation activities will affect a desired change
- Process: what implementation strategies should be planned

Sales A, Smith JL, Curran G, Kochevar L. Models, strategies and tools: The role of theory in implementing evidence-based findings into health care practice. JGIM 2006; 21:S43-49.

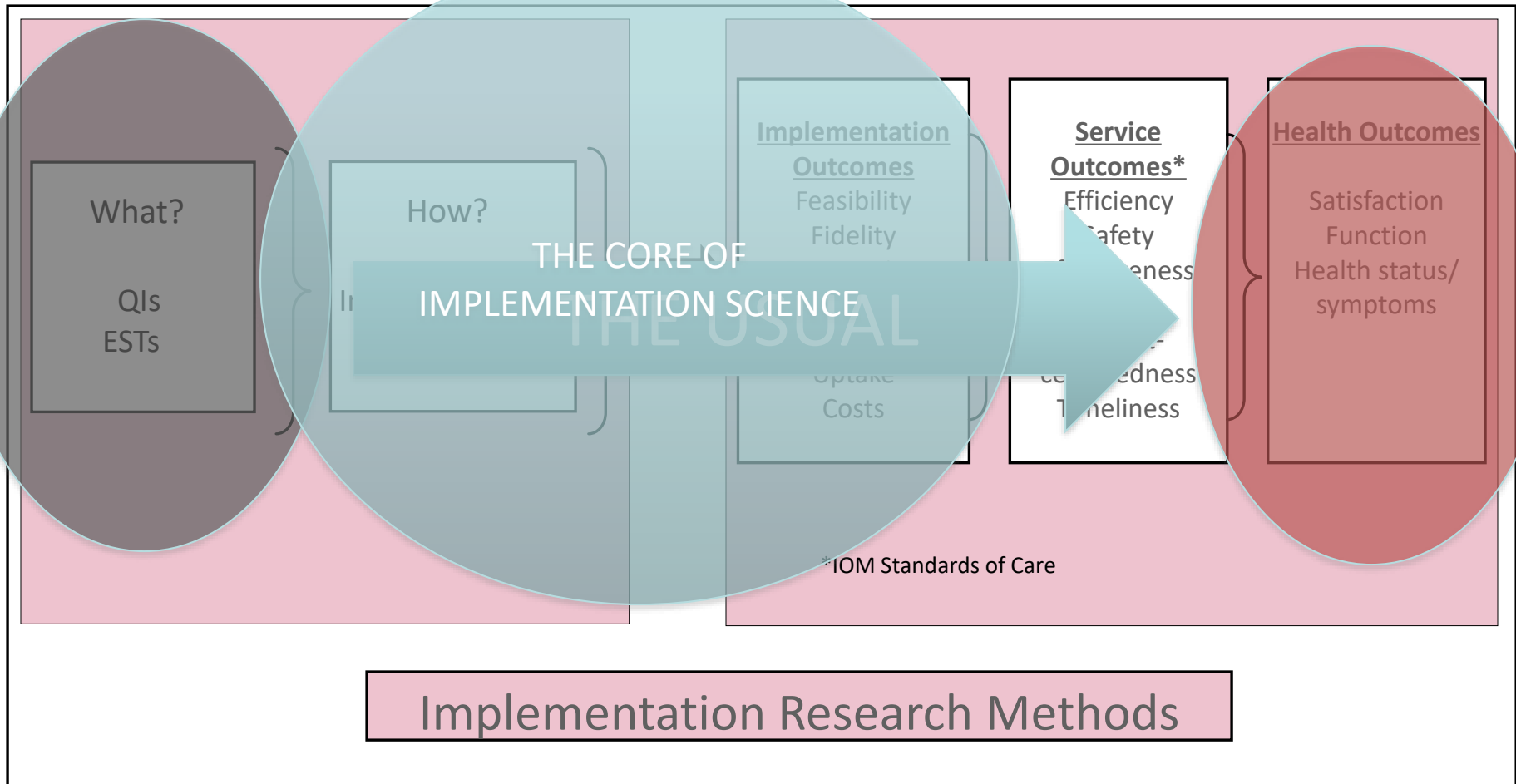
(adapted from Kilbourne, TIDIRH, 2013)

Implementation Frameworks

- Common factors
 - Nature of change (simple or complex)
 - Importance and priority of change
 - Local context (microsystem)
 - External context
 - Target of change
- Most changes require active facilitation
 - Local champions, tools, training
- Barriers differ across sites
 - Leadership, resources, IT, inertia

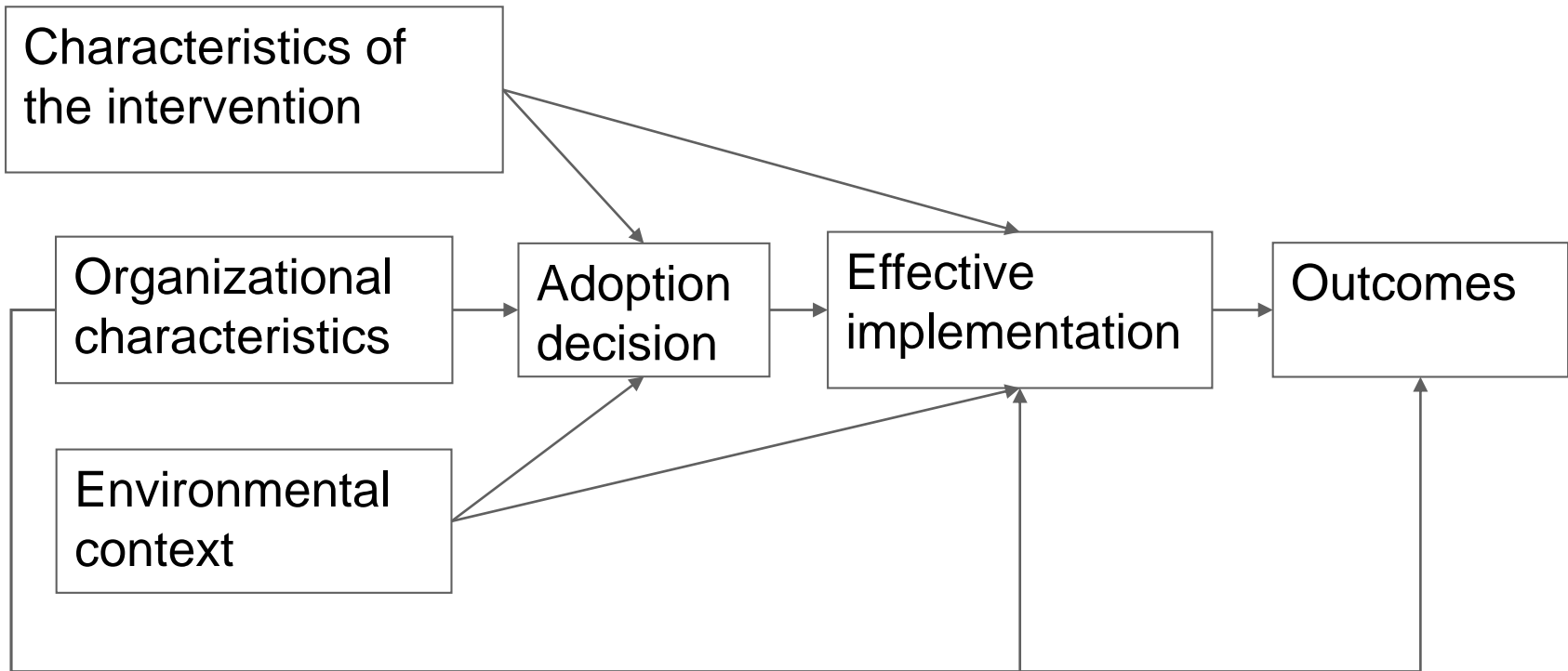
(Kilbourne, TIDIRH, 2013)

Studying Implementation



Proctor et al 2009 *Admin. & Pol. in Mental Health & Mental Health Services Research*

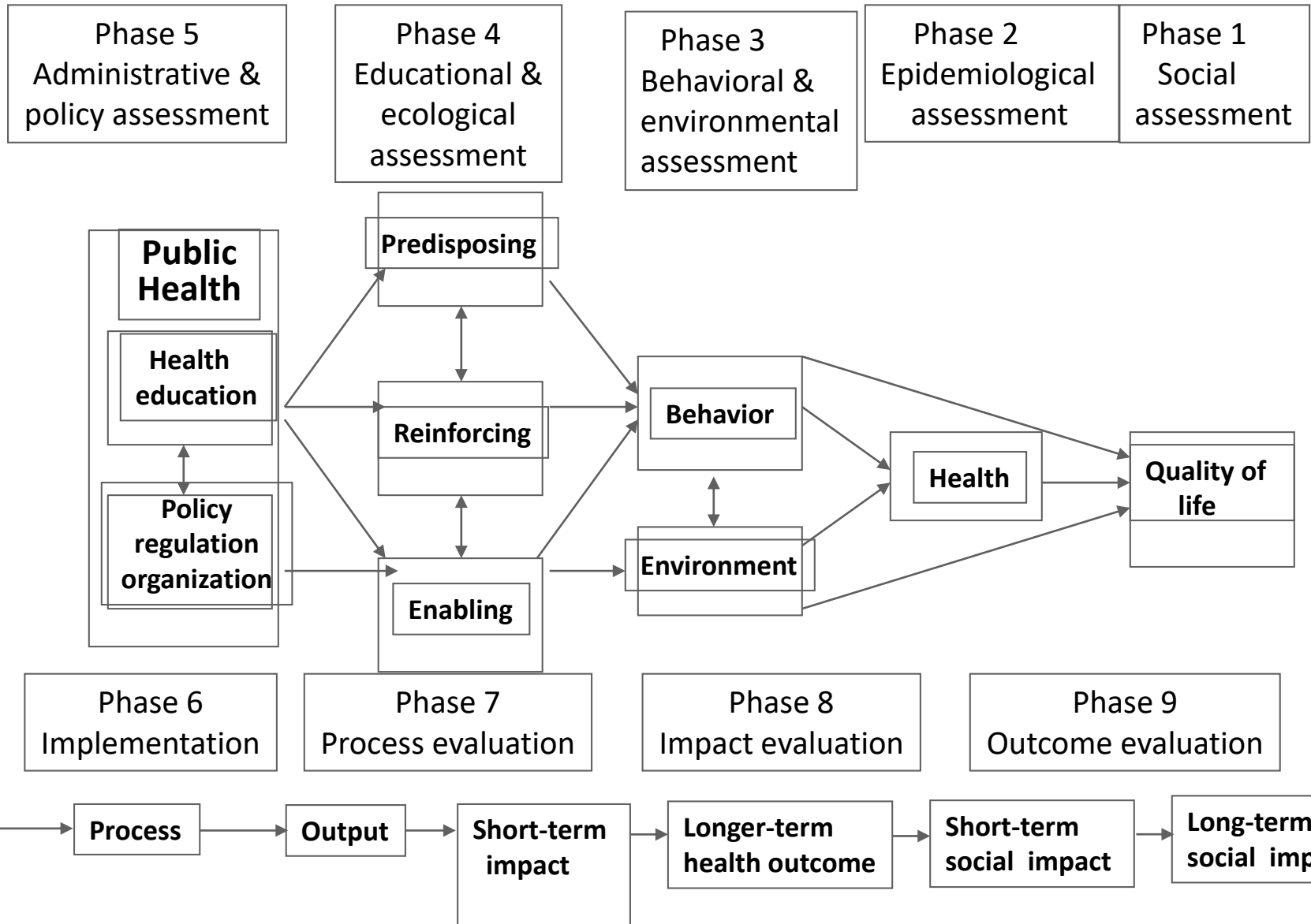
Roger's Theory of Diffusion



CIPRS: Stetler & Damschroder
Theoretical Frameworks

Krein SL, Olmsted RN, Hofer TP, Kowalski C, Forman J, Banaszak-Holl J, et al. Translating infection prevention evidence into practice using quantitative and qualitative research. *Am. J. Infect. Control* 2006;34(8):507-12.

Surveillance, Planning and Evaluating for Policy and Action: PRECEDE-PROCEED MODEL*

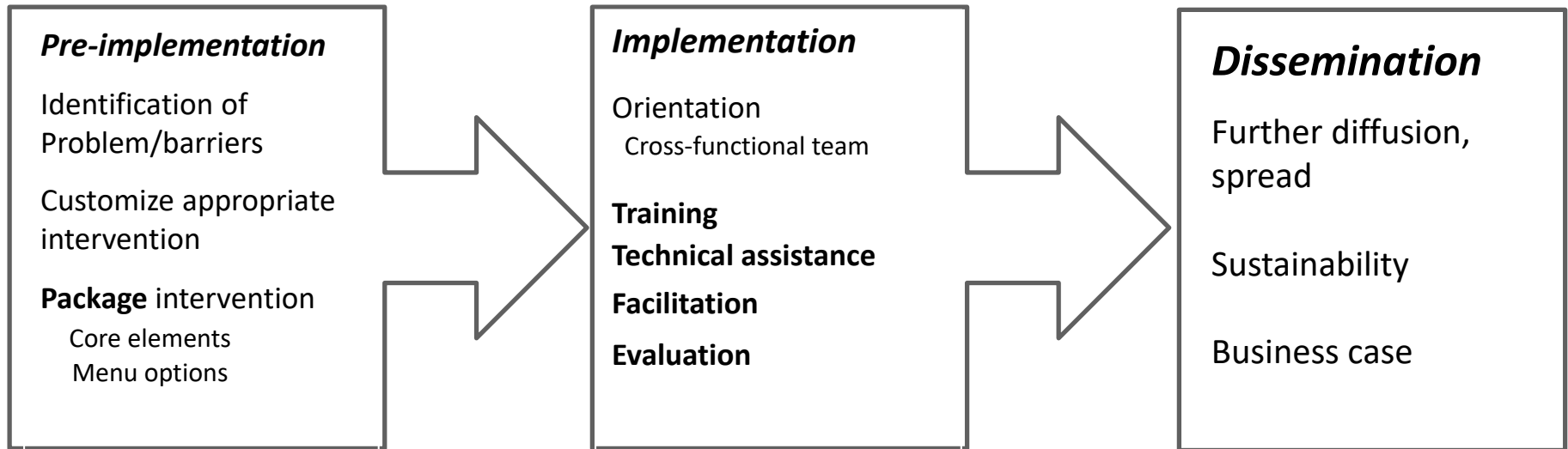


RE-AIM



Glasgow et al, re-aim.net, 2011

Example: Enhanced Replicating Effective Programs (REP) Framework

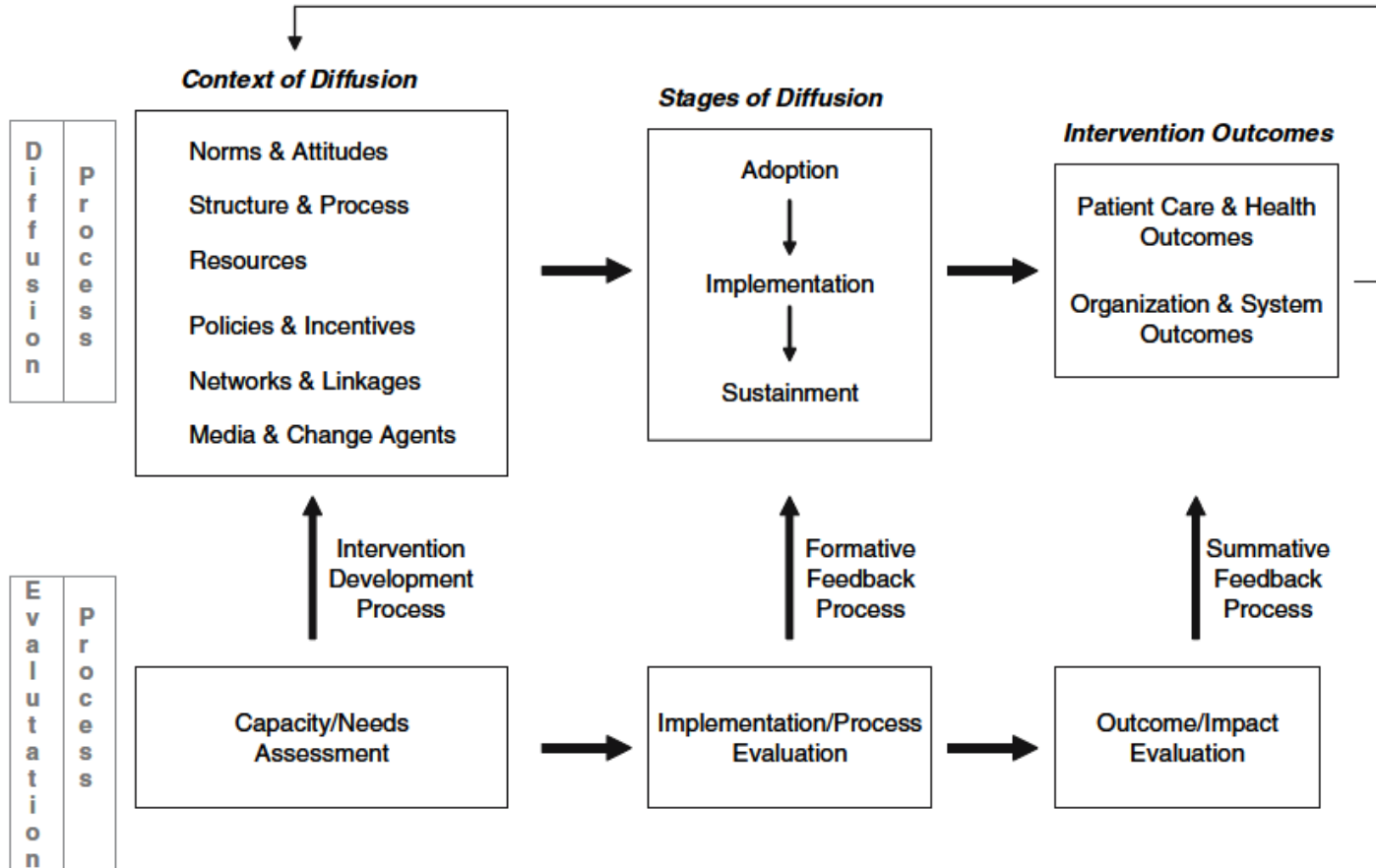


REP was developed by the Centers for Disease Control to rapidly translate HIV prevention programs to community-based settings

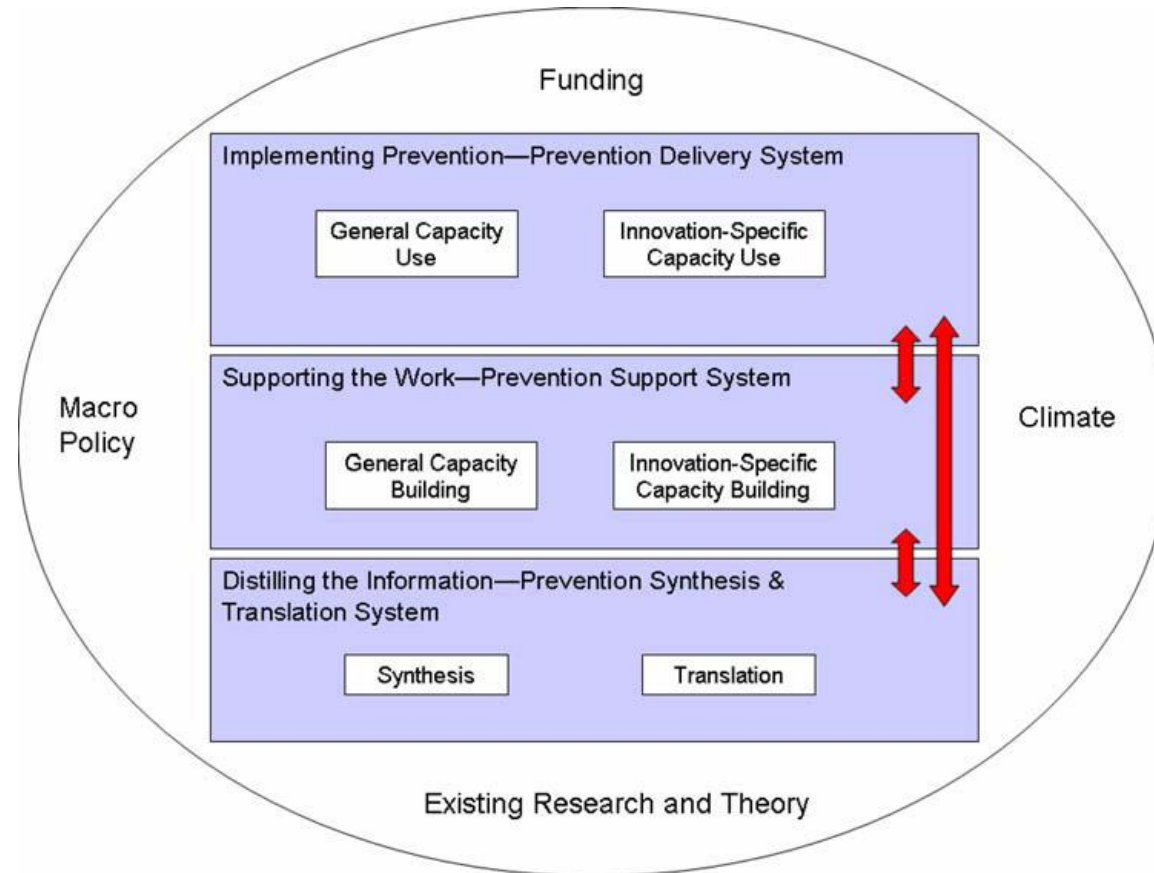
Enhanced REP includes additional facilitation based on the PARiHS framework: developing relationships and promoting provider self-efficacy

Kilbourne et al. Imp Science 2007; Kilbourne et al. Psychiatric Services 2012

Mendel et al, 2008



Interactive Systems Framework



Wandersman et al, AJCP, 2008

EXPLORATION

OUTER CONTEXT

Sociopolitical Context
 Legislation
 Policies
 Monitoring and review
 Funding
 Service grants
 Research grants
 Foundation grants
 Continuity of funding
 Client Advocacy
 Consumer organizations
 Interorganizational networks
 Direct networking
 Indirect networking
 Professional organizations
 Clearinghouses
 Technical assistance centers

INNER CONTEXT

Organizational characteristics
 Absorptive capacity
 Knowledge/skills
 Readiness for change
 Receptive context
 Culture
 Climate
 Leadership
 Individual adopter characteristics
 Values
 Goals
 Social Networks
 Perceived need for change

ADOPTION DECISION / PREPARATION

OUTER CONTEXT

Sociopolitical
 Federal legislation
 Local enactment
 Definitions of “evidence”
 Funding
 Support tied to federal and state policies
 Client advocacy
 National advocacy
 Class action lawsuits
 Interorganizational networks
 Organizational linkages
 Leadership ties
 Information transmission
 Formal
 Informal

INNER CONTEXT

Organizational characteristics
 Size
 Role specialization
 Knowledge/skills/expertise
 Values
 Leadership
 Culture embedding
 Championing adoption

ACTIVE IMPLEMENTATION

OUTER CONTEXT

Sociopolitical
 Legislative priorities
 Administrative costs
 Funding
 Training
 Sustained fiscal support
 Contracting arrangements
 Community based organizations.
 Interorganizational networks
 Professional associations
 Cross-sector
 Contractor associations
 Information sharing
 Cross discipline translation
 Intervention developers
 Engagement in implementation
 Leadership
 Cross level congruence
 Effective leadership practices

INNER CONTEXT

Organizational Characteristics
 Structure
 Priorities/goals
 Readiness for change
 Receptive context
 Culture/climate
 Innovation-values fit
 EBP structural fit
 EBP ideological fit
 Individual adopter characteristics
 Demographics
 Adaptability
 Attitudes toward EBP

SUSTAINMENT

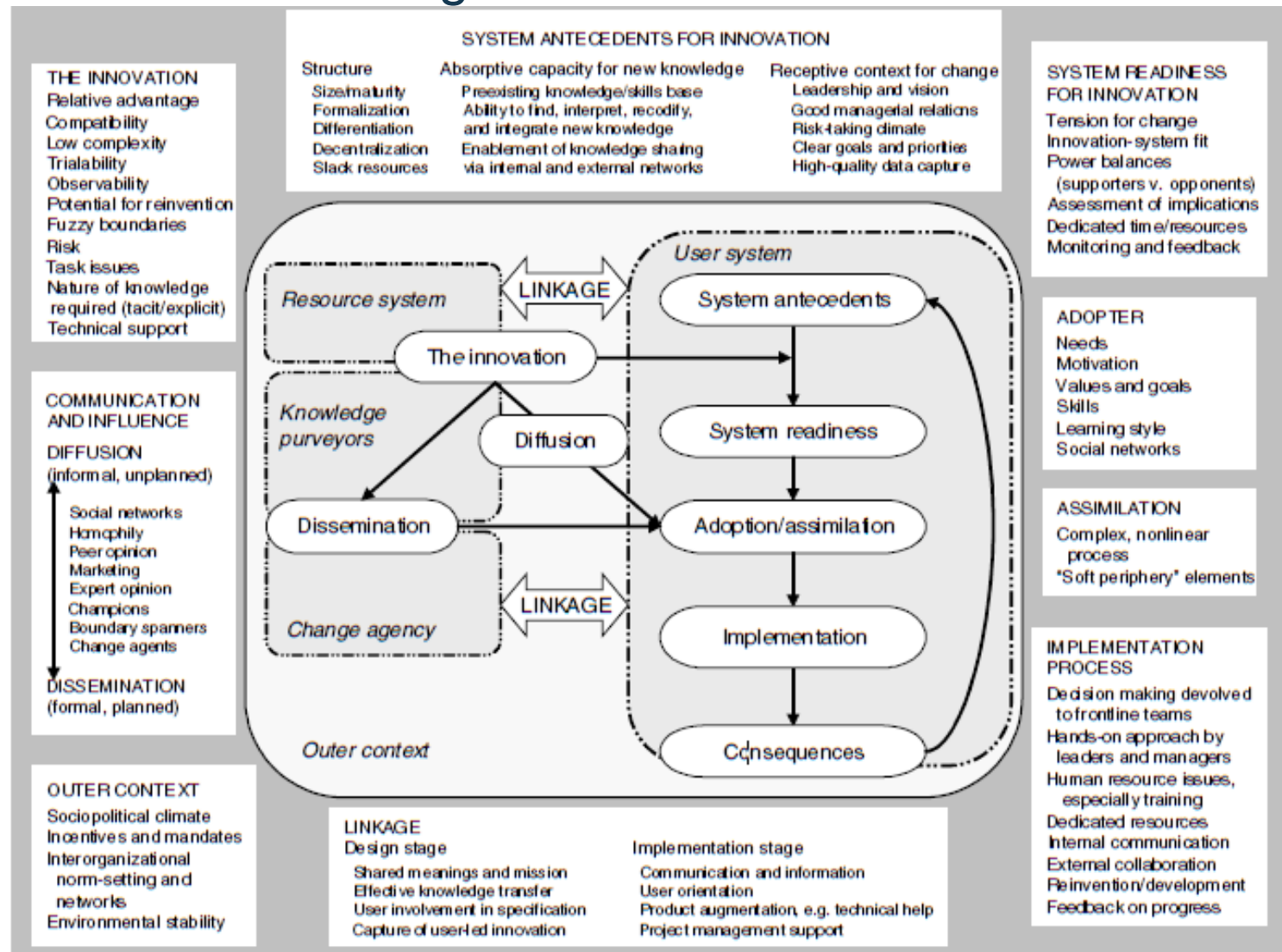
OUTER CONTEXT

Sociopolitical
 Leadership
 Policies
 Federal initiatives
 State initiatives
 Local service system
 Consent decrees
 Funding
 Fit with existing service funds
 Cost absorptive capacity
 Workforce stability impacts
 Public-academic collaboration
 Ongoing positive relationships
 Valuing multiple perspectives

INNER CONTEXT

Organizational characteristics
 Leadership
 Embedded EBP culture
 Critical mass of EBP provision
 Social network support
 Fidelity monitoring/support
 EBP Role clarity
 Fidelity support system
 Supportive coaching
 Staffing
 Staff selection criteria
 Validated selection procedures

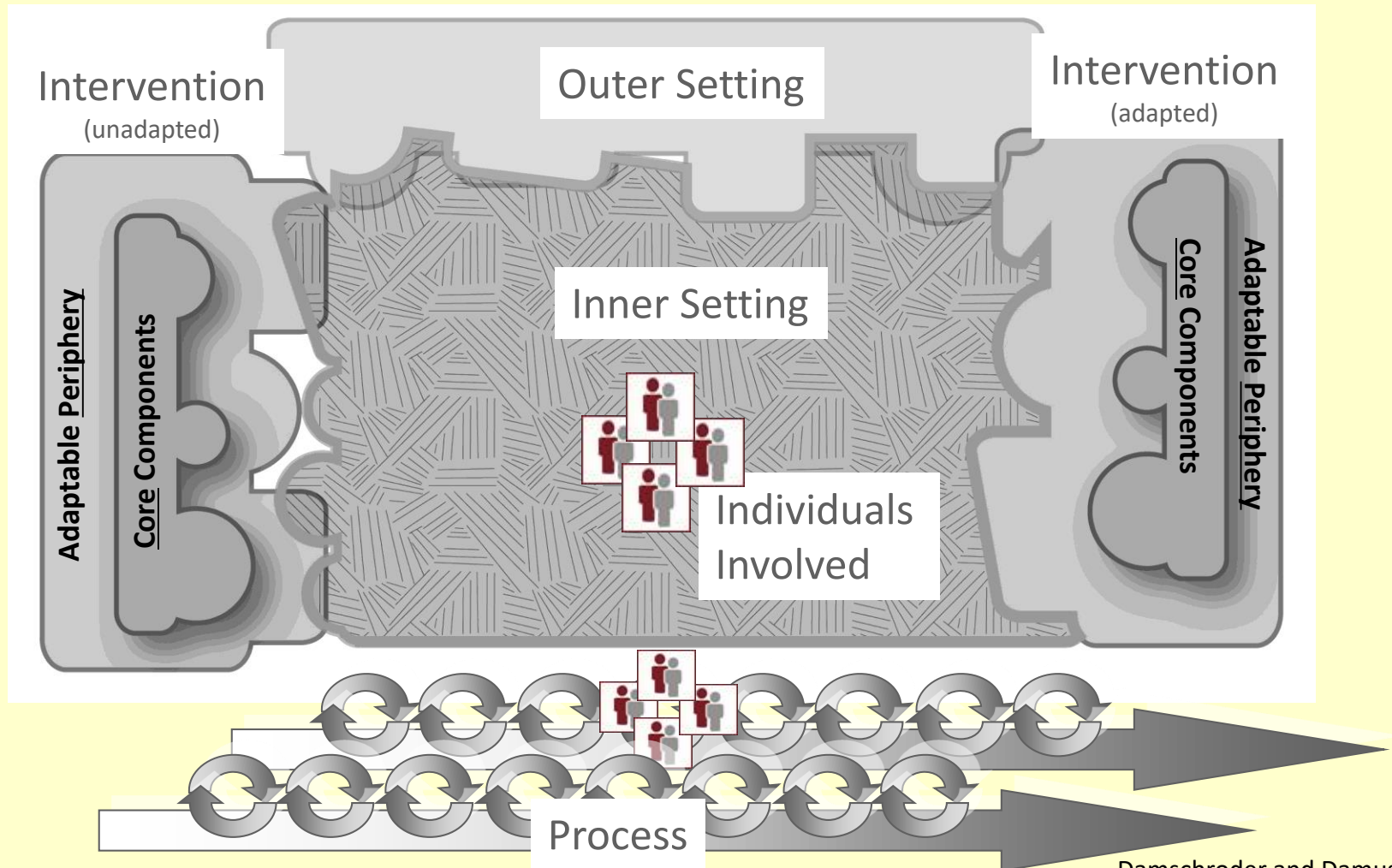
One Model for Diffusing Innovations in HCO



Greenhalgh et al. Diffusion of Innovations in Service Organizations:
 Systematic Review and Recommendations. Milbank Quarterly.

Review of 69 Models: Tabak et al, *AJPM*, 2013

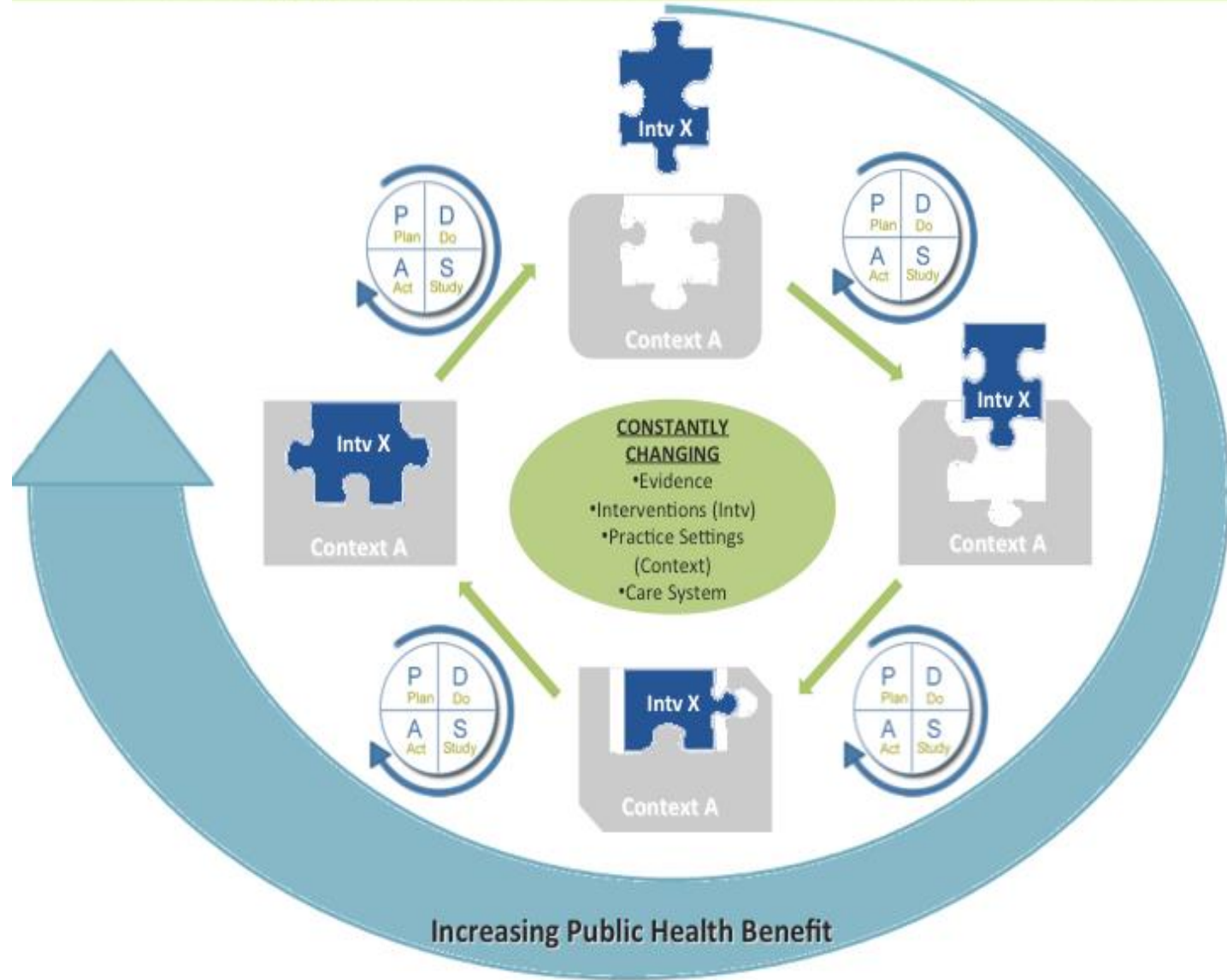
Damschroder's Consolidated Framework for Implementation Research (CFIR)



Damschroder and Damush, 2009

A Different Paradigm for IS

- IS as a Pathway for:
 - Improving Health Care
 - Improving Health
 - Improving Knowledge
 - Improving Interventions
 - Reducing/Eliminating Disparities
 - Designing Interventions
 - Conducting Most HS Research
- The Ultimate Goal: Practice & Research Co-exist



Chambers, Glasgow, Stange (2013), The Dynamic Sustainability Framework. *Implementation Science*

The Use of D&I Models in NIH-funded Research

- NIH Studies use D.O.I and RE-AIM most frequently
- Many studies use more than one model
- Many studies use no model

Chambers, 2014 (Chapter Two) in Beidas & Kendall (eds), OUP.

Selecting a Model for Study

- What is/are the research questions I'm seeking to answer?
- What level(s) of change am I seeking to explain?
- What characteristics of context are relevant to the research questions?
- What is the timeframe?
- Are measures available?
- Does the study need to be related to a single model?

Dissemination & Implementation Models in Health Research & Practice

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About Us

This interactive website was designed to help researchers and practitioners to select the D&I Model that best fits their research question or practice problem, adapt the model to the study or practice context, fully integrate the model into the research or practice process, and find existing measurement instruments for the model constructs. The term 'Models' is used to refer to both theories and frameworks that enhance dissemination and implementation of evidence-based interventions more likely.

Select

Search, view, and select
D&I Models

Adapt

Read strategies for
adapting D&I Models to
research or practice
context

Integrate

Read strategies for
incorporating D&I Models
into the full spectrum of
your project

Measure constructs

Find a list of constructs
and links to
measurement tools
associated with the D&I
Models

Footer info will go here. Links will look like this: [Privacy](#) [Terms](#)

Need Adobe Reader?



Last Updated:

•

<http://dissemination-implementation.org>

View All D&I Models

Search D&I Models

You can search for D&I Models by entering a keyword OR by selecting from the categories below.

Search D&I Models

Enter keyword for model search:

Select

Adapt

Integrate

Measure constructs

User Name

Password

----- OR -----

Dissemination & Implementation Models can be searched using individually set criteria.

D And/Or I

Dissemination Only
 Implementation Only
 Any

Socio-Ecological Levels

Individual Organization
 Community System
 Policy All

Constructs

Acceptability/feasibility
 Awareness Barriers and facilitators
 Communication Communication channels
 Context Context - Inner setting
 Development of an intervention
 Engagement Evaluation
 External validity/generalizability
 Fit Goals
 Identification Implementation
 Innovation characteristics
 Knowledge and knowledge synthesis
 Outcomes Outcomes - Health/QOL/Satisfaction/Clinical<
 Process Reach
 Readiness Relative advantage<
 Stakeholders Strategies
 Translation All

“Selecting a Model by criteria”

http://dissemination-implementation.org/search_di.aspx

SIRC's Instrument Repository

- Organized by
 - Consolidated Framework for Implementation Research (39 constructs)
 - Damschroder, Aron, Keith, Kirsh, Alexander, & Lowery, 2009
 - Outcomes for Implementation Research (17 constructs)
 - Proctor, Silmere, Raghavan, Hobmand, Aarons, Bunger, et al., 2011
 - Construct reviews resulted in over 400 measures

<http://www.societyforimplementationresearchcollaboration.org/sirc-projects/sirc-instrument-project/>

Consolidated Framework for Implementation Research



INNER SETTING

- Combined
- Culture
- ImplementationClimate
- IC: Tension for Change
- IC: Compatability
- IC: Relative Priority
- IC: Organizational Incentives & Rewards
- IC: Goals and Feedback
- IC: Learning Climate
- Networks & Communications
- Readiness for Implementation (RI)
- RI: Leadership Engagement
- RI: Available Resources
- RI: Access to Knowledge and Information
- Structural Characteristics

