FOGARTY

Adapting Without Drift: Core Components, Adaptable Periphery, & Documenting Adaptation

Luke Davis, MD, MAS
Associate Professor of Epidemiology & Medicine

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Yale CMIPS
Center for Methods in Implementation & Prevention Science

Yale SCHOOL OF PUBLIC HEALTH

cira
Center for Interdisciplinary Research on AIDS

Learning Objectives

- To describe when and why we might need to adapt evidence-based interventions to new contexts
- To define the concepts of implementation fidelity and adaptation and select an approach to measuring them
- To recognize adaptable components of evidence-based intervention using a commonly-used adaptation model

IS starts with evidence-based interventions or practices

"Actions to improve health-related biomedical or behavioral outcomes"

PROCEDURES

PROGRAMS

PRODUCTS

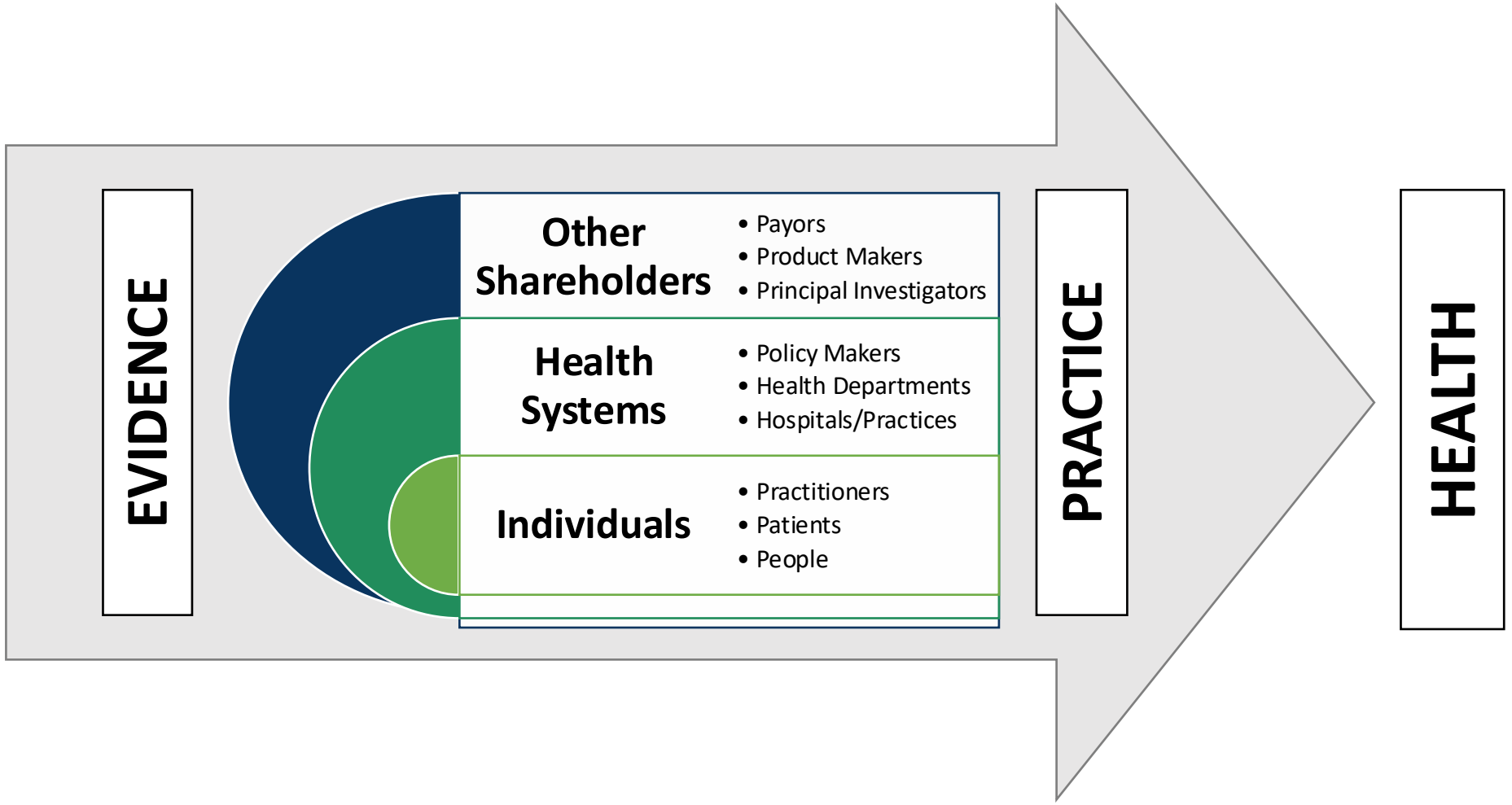
POLICIES

PILLS

PRACTICES

PRINCIPLES

Yet, context affects implementation at many levels



Gonzales R et al Academic Medicine 2012

How might context influence implementation?

Cochrane Library

Cochrane Database of Systematic Reviews

Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases (Review)

Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, Odgaard-Jensen J, Johansen M, Aja GN, Zwarenstein M, Scheel IB

As real-world relevance increases, so does contextual variation

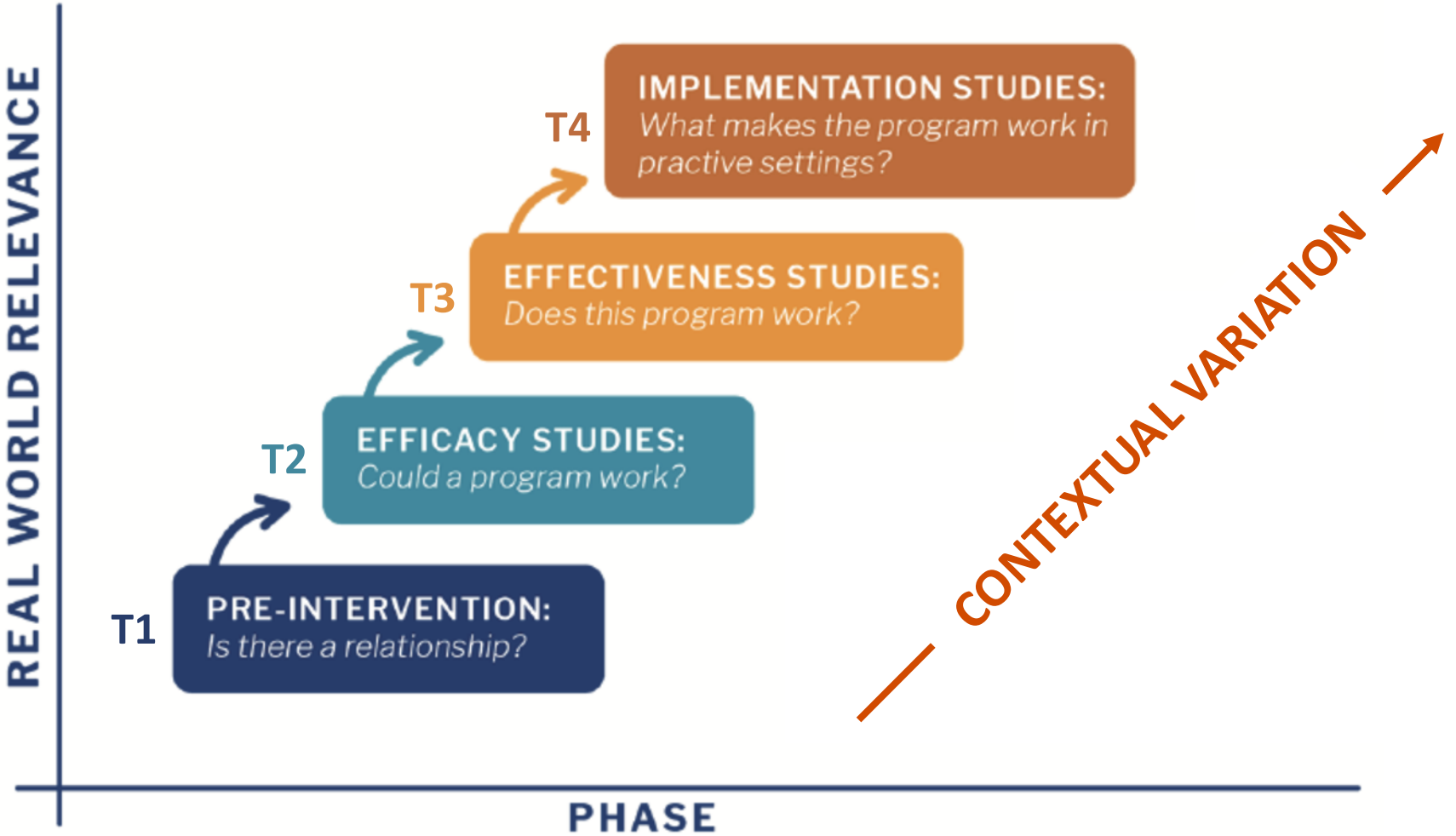
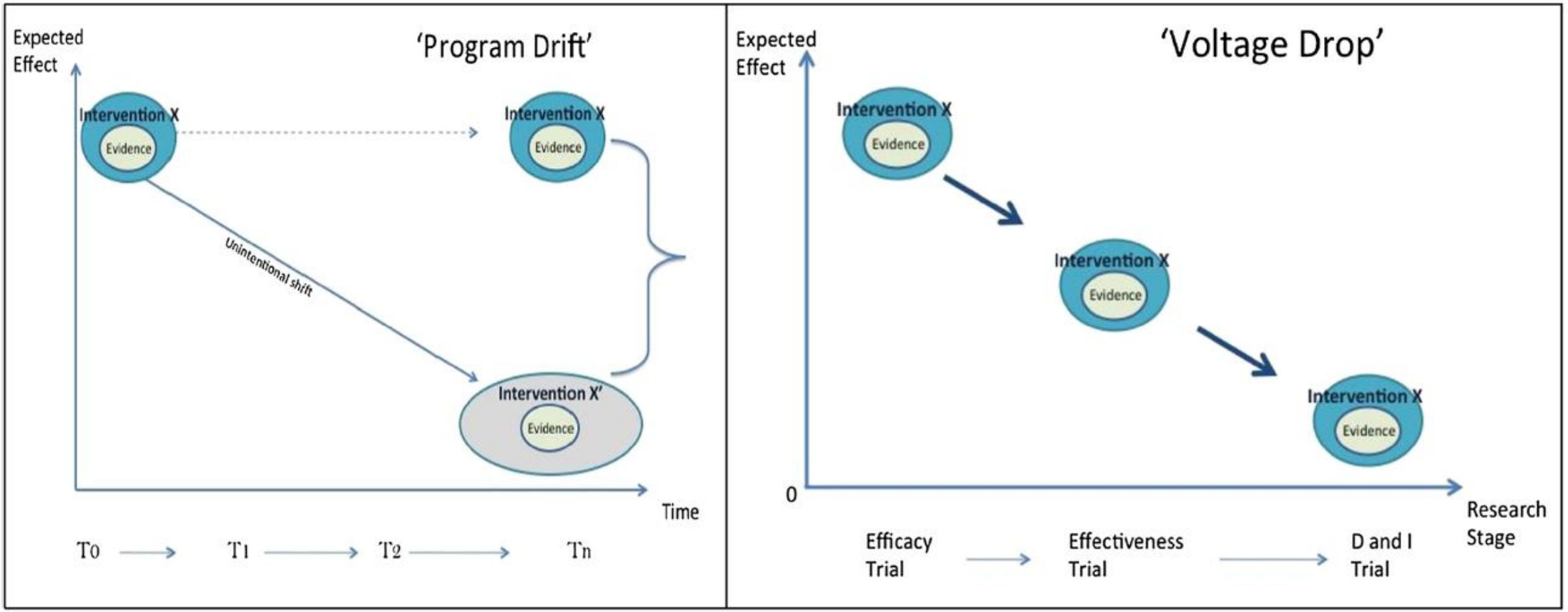


Image Courtesy of The Center for Implementation

But watch out for Drift and Drop!



Key concept for evaluating implementation

When [implementation] efforts fail, as they often do, it is important to know if the failure occurred because the intervention was

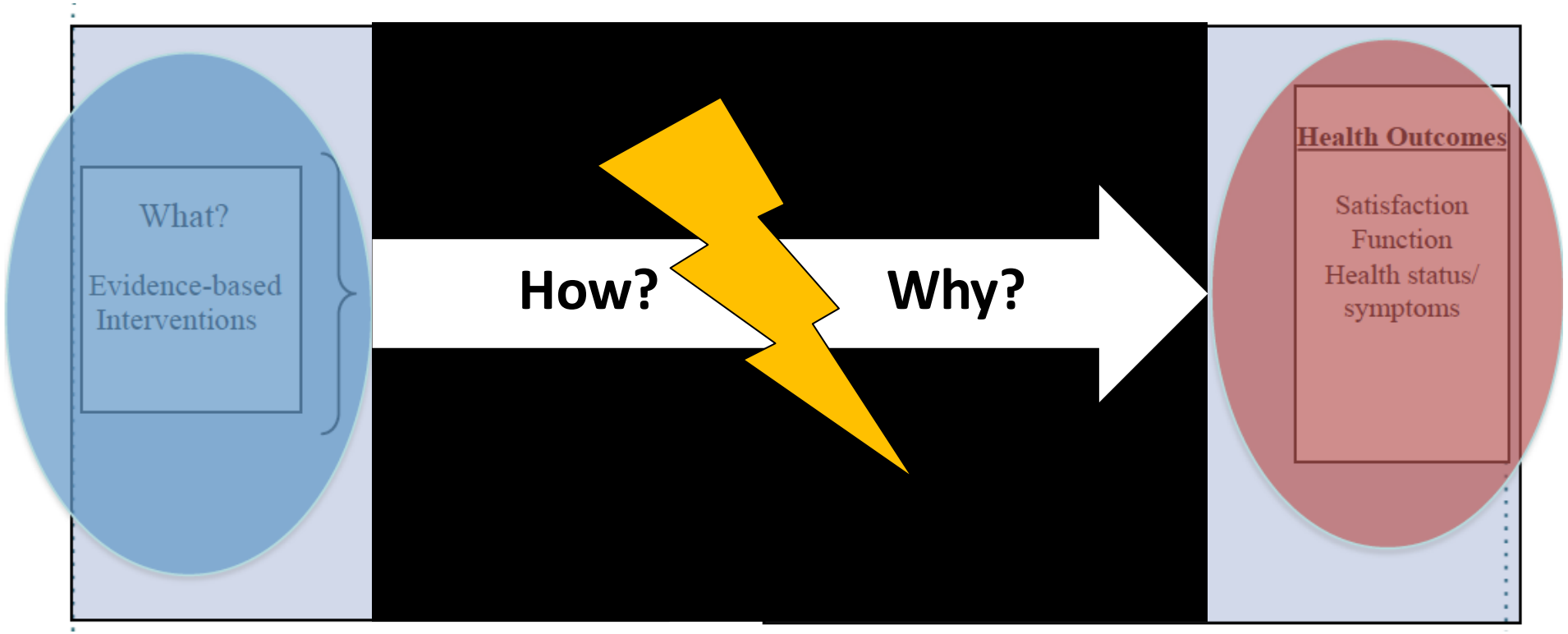
- *ineffective in the new setting* (intervention failure),

or

- *deployed incorrectly* (implementation failure).”

How can we tell the difference?

What we want to know when evaluating implementation...



Did they adhere to the intervention protocol?

Proctor et al, *Adm Policy Ment Health,*.2011

Fidelity vs Adaptation: A more detailed look

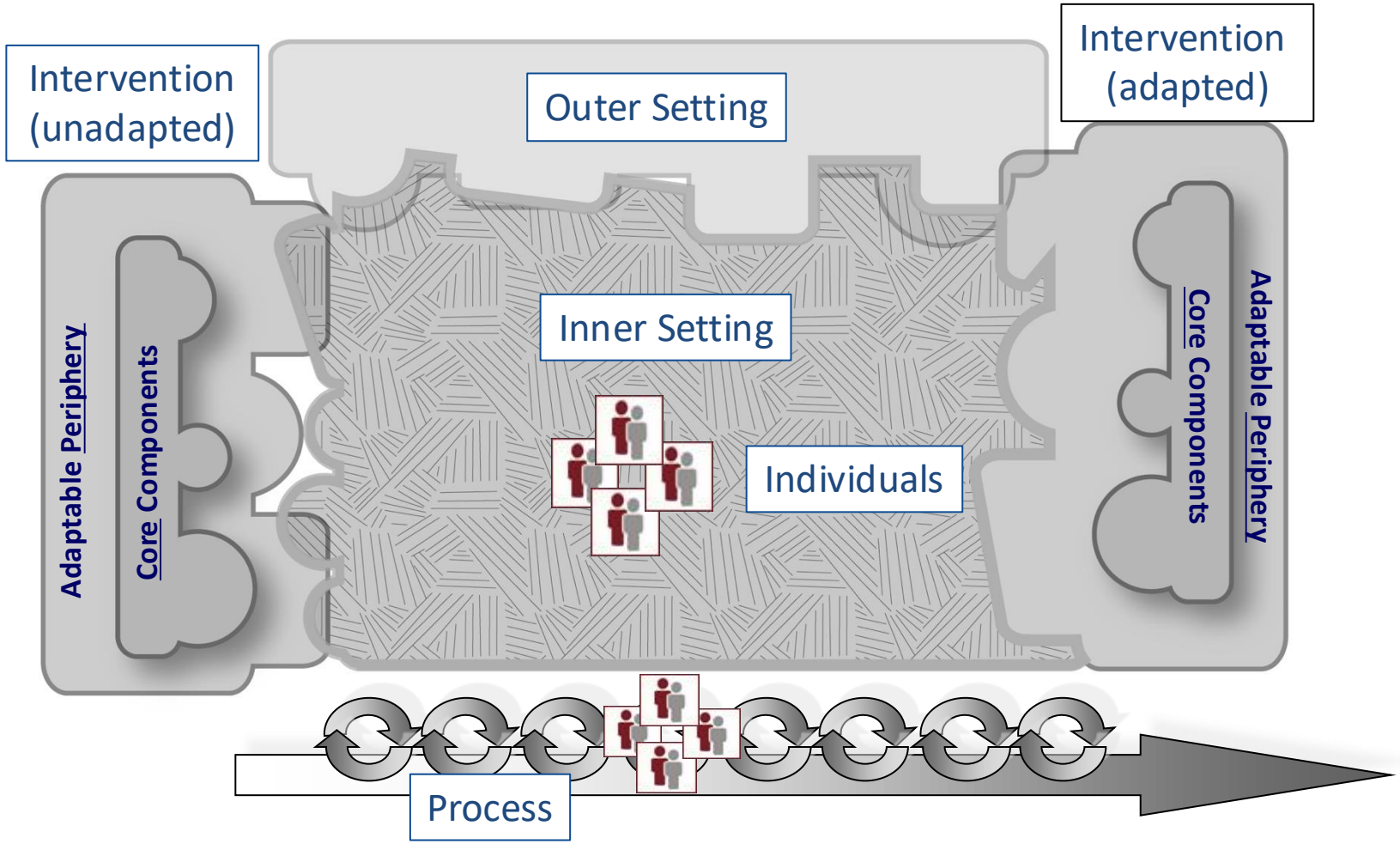
- Extent to which an intervention or strategy is delivered as intended

- 5 key dimensions of fidelity that can be assessed
  - Adherence to protocol
  - Dose of intervention delivered
  - Quality of delivery
  - Participant response
  - Mechanisms of impact

- But adaptability (fit) is also important, with a need to differentiate between *adaptation* (favorable) and *maladaptation*

Carroll C *et al* A conceptual framework for implementation fidelity. *Implement Sci*. 2007
Perez D *et al*. A modified theoretical framework to assess implementation fidelity of adaptive public health interventions. *Implement Sci.* 2016

Consolidated Framework for Implementation Research (CFIR)



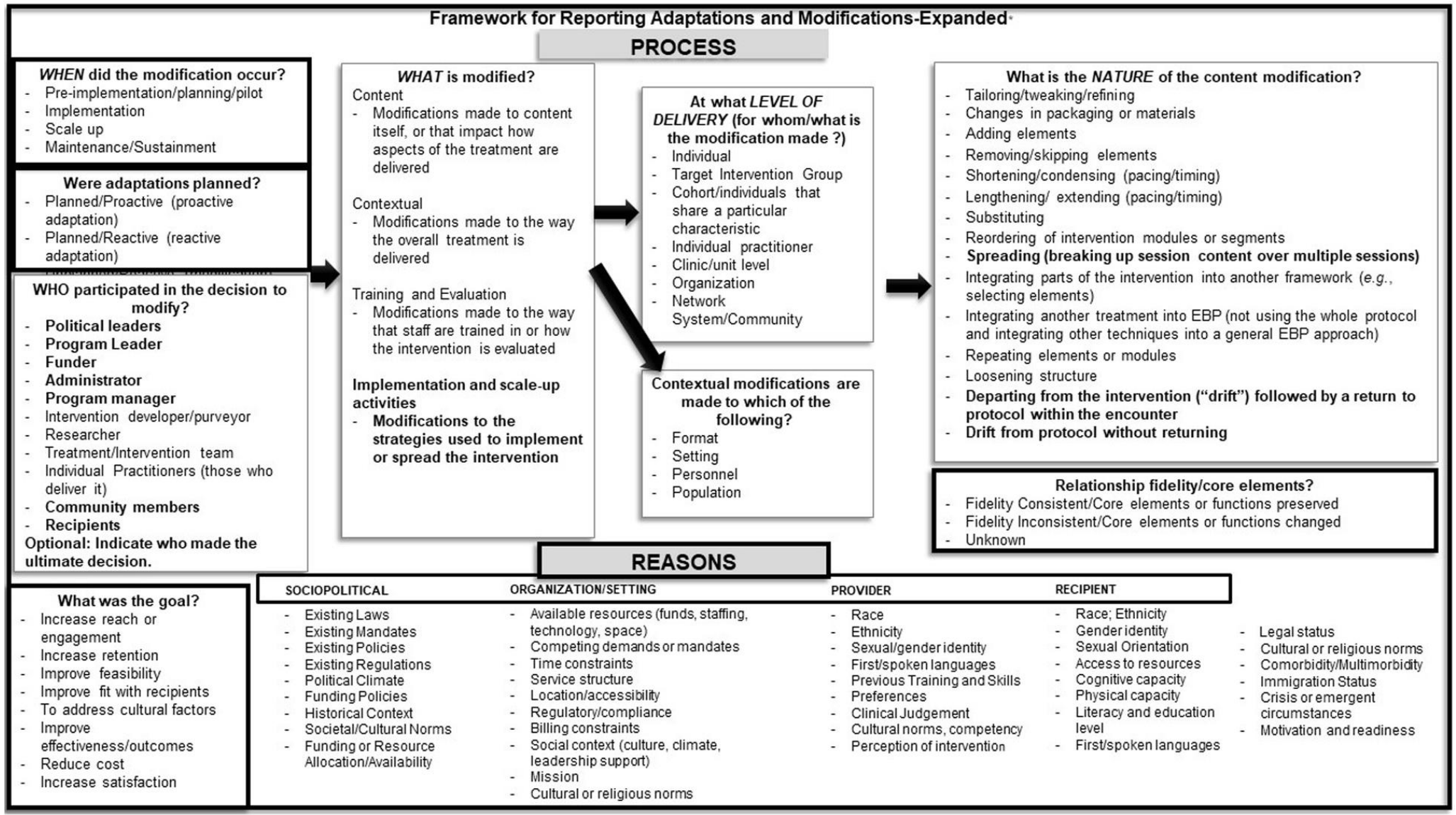
Damschroder Implement Sci 2009, 2022

Fidelity vs Adaptation: Baking vs. Frosting a Cake

Why are fidelity/adaptation important?

- To identify core ingredients of strategy
  - vs. "adaptable periphery"
- To characterize mechanisms
  - If strategy works, how & why?
  - If it doesn't work, how not & why not?
- To explain heterogeneity across units
  - Adaptive?
  - Maladaptive?

Framework for Reporting Adaptations & Modifications-Expanded (**FRAME**)



Stirman SW et al Implement Sci 2019

The Model for Adaptation Design and Impact (**MADI**)

Domain 1: Adaptation Characteristics (Stirman et al., 2019)

Specify the Adaptations

1. **When** was the adaptation?
2. **Planned/Unplanned?**
3. **Who** adapted it?
4. **What** was adapted?
5. **Nature** of the adaptation?
6. **Why** adapted?

Domain 2: Possible Mediating or Moderating Factors (Stirman et al., 2019; Moore et al., 2013)

Are the adaptations well-justified?

1. Were **core mechanisms** preserved?
2. Do the adaptations enhance **fit**?

Domain 3: Implementation and Intervention Outcomes (Intended and Unintended) (Proctor et al., 2011)

Which implementation factors to consider?

1. Fidelity/adaptability
2. Context

Kirk et al Implementation Science (2020)

It’s your turn to adapt an evidence-based intervention (EBI)!

- Form a group with 2-3 others sitting nearby

- **Pick an EBI to adapt to your local setting**
  - PrEP for HIV prevention
  - OAT for OUD
  - WHO mhGAP for major depression
  - Abstinence / Cessation interventions for unhealthy alcohol use or smoking
  - NCDs or Cancer screening
  - Anything else you wish!

- Identify 1 rapporteur to record your adaptations using the FRAME

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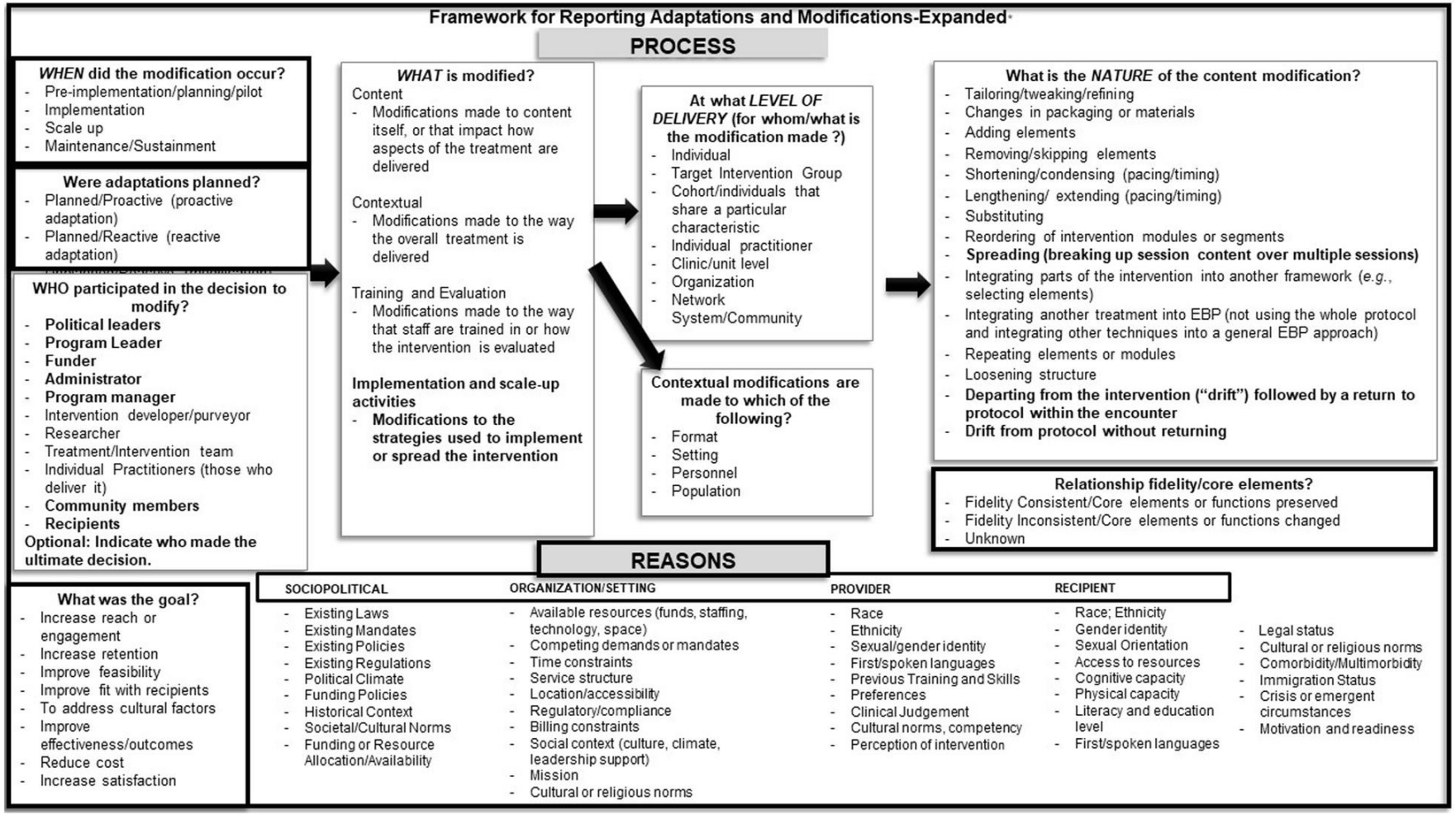

Stirman SW et al Implement Sci 2019

Framework for Reporting Adaptations and Modifications-Expanded

PROCESS

WHEN did the modification occur?
- Pre-implementation/planning/pilot
- Implementation
- Scale up
- Maintenance/Sustainment

Were adaptations planned?
- Planned/Proactive (proactive adaptation)
- Planned/Reactive (reactive adaptation)

WHO participated in the decision to modify?
- **Political leaders**
- **Program Leader**
- **Funder**
- **Administrator**
- **Program manager**
- Intervention developer/purveyor
- Researcher
- Treatment/Intervention team
- Individual Practitioners (those who deliver it)
- **Community members**
- **Recipients**

Optional: Indicate who made the ultimate decision.

WHAT is modified?

Content
- Modifications made to content itself, or that impact how aspects of the treatment are delivered

Contextual
- Modifications made to the way the overall treatment is delivered

Training and Evaluation
- Modifications made to the way that staff are trained in or how the intervention is evaluated

Implementation and scale-up activities
- **Modifications to the strategies used to implement or spread the intervention**

At what _LEVEL OF DELIVERY_ (for whom/what is the modification made ?)
- Individual
- Target Intervention Group
- Cohort/individuals that share a particular characteristic
- Individual practitioner
- Clinic/unit level
- Organization
- Network
- System/Community

Contextual modifications are made to which of the following?
- Format
- Setting
- Personnel
- Population

What is the _NATURE_ of the content modification?
- Tailoring/tweaking/refining
- Changes in packaging or materials
- Adding elements
- Removing/skipping elements
- Shortening/condensing (pacing/timing)
- Lengthening/ extending (pacing/timing)
- Substituting
- Reordering of intervention modules or segments
- **Spreading (breaking up session content over multiple sessions)**
- Integrating parts of the intervention into another framework (*e.g.*, selecting elements)
- Integrating another treatment into EBP (not using the whole protocol and integrating other techniques into a general EBP approach)
- Repeating elements or modules
- Loosening structure
- **Departing from the intervention ("drift") followed by a return to protocol within the encounter**
- **Drift from protocol without returning**

Relationship fidelity/core elements?
- Fidelity Consistent/Core elements or functions preserved
- Fidelity Inconsistent/Core elements or functions changed
- Unknown

REASONS

What was the goal?
- Increase reach or engagement
- Increase retention
- Improve feasibility
- Improve fit with recipients
- To address cultural factors
- Improve effectiveness/outcomes
- Reduce cost
- Increase satisfaction

SOCIOPOLITICAL
- Existing Laws
- Existing Mandates
- Existing Policies
- Existing Regulations
- Political Climate
- Funding Policies
- Historical Context
- Societal/Cultural Norms
- Funding or Resource Allocation/Availability

ORGANIZATION/SETTING
- Available resources (funds, staffing, technology, space)
- Competing demands or mandates
- Time constraints
- Service structure
- Location/accessibility
- Regulatory/compliance
- Billing constraints
- Social context (culture, climate, leadership support)
- Mission
- Cultural or religious norms

PROVIDER
- Race
- Ethnicity
- Sexual/gender identity
- First/spoken languages
- Previous Training and Skills
- Preferences
- Clinical Judgement
- Cultural norms, competency
- Perception of intervention

RECIPIENT
- Race; Ethnicity
- Gender identity
- Sexual Orientation
- Access to resources
- Cognitive capacity
- Physical capacity
- Literacy and education level
- First/spoken languages
- Legal status
- Cultural or religious norms
- Comorbidity/Multimorbidity
- Immigration Status
- Crisis or emergent circumstances
- Motivation and readiness

Report Back & Discussion

Lucian.Davis@yale.edu

@LDavisMD

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