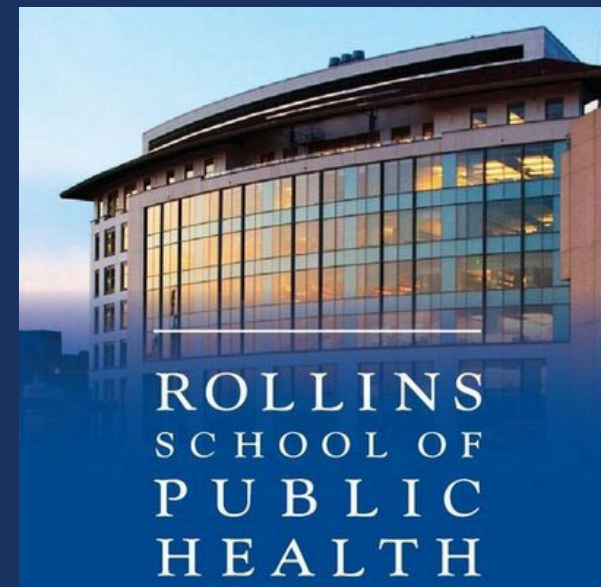# ADAPTING INTERVENTIONS TO ADVANCE GENDER AND HEALTH EQUITY:
A REVIEW OF FRAMEWORKS AND STRATEGIES

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EVIDENCE FOR ACTION

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ROLLINS
SCHOOL OF
PUBLIC
HEALTH

AGENDA

- Overview of Program Adaptation

- Adaptation Process and Steps

- Reporting on Program Adaptation

BACKGROUND

- Evidence-based public health translation of research to practice is essential to improving the public's health

- Dissemination and implementation (D&I) researchers have explored what happens once practitioners adopt evidence-based interventions (EBIs)

  - Levels of 60-80% compliance for implementation of intervention across hundreds of studies (Durlak & Dupre, 2008)

  - Organizations sometimes make changes, or adaptations, to the original EBI to fit their needs (Durlak & Dupre, 2008; Stirman et al., 2013)

  - Researchers have developed models and frameworks to provide systematic processes for adapting EBIs

ADAPTATION

Definitions

- "The degree to which an innovation is **changed or modified** by a user in the process of its adoption and implementation" (Rogers, 1995)

- Changes to an efficacious program or its components to **meet the needs of a new population and community** while retaining fidelity to its core elements (Solomon, 2006)

PROGRAM ADAPTATION

Definition Components:

- **Changes:** Modifications or alterations

- **Fit:** Reduce mismatches between original EBI to new population/needs/context

- **Fidelity:** Implementing with conforming to original program without diluting its effectiveness; compromising or deleting program's core elements

- A few mentioned planned vs. unplanned adaptations
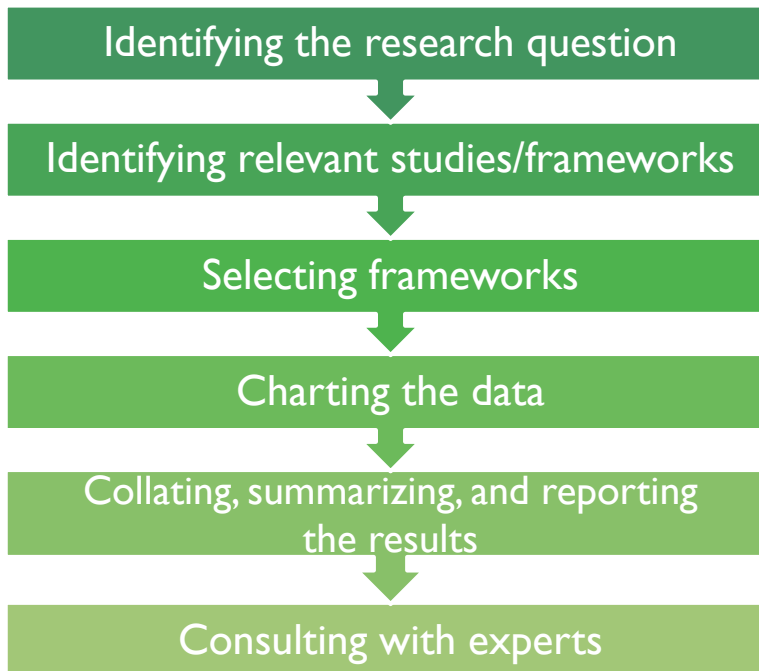
PURPOSE OF OUR SCOPING STUDY

- To identify and summarize adaptation frameworks

- Key research questions were:

1) What are adaptation frameworks used in research and practice?

2) What are the common adaptation steps across the adaptation frameworks?

3/9/2022

METHODS

- We followed the six recommended steps of a scoping study (Arksey & O'Malley, 2005):

Identifying the research question

↓

Identifying relevant studies/frameworks

↓

Selecting frameworks

↓

Charting the data

↓

Collating, summarizing, and reporting the results

↓

Consulting with experts

- We identified frameworks by:

  1) searching Google Scholar,

  2) searching PubMed, PsycINFO, PsycNET and CINAHL databases for an associated systematic review, and

  3) reviewing reference lists of framework articles.

- Researchers coded the frameworks and their steps into Excel and grouped common steps

- Research team reviewed and created the suggested names and descriptions for the final adaptation steps

FINDINGS: SUMMARY OF PROGRAM ADAPTATION STEPS BY THE 12 ADAPTATION FRAMEWORKS

- **Twelve adaptation** frameworks were found, including three from the grey literature and nine from the published literature

Grey Literature

- CSAP's Guidelines for Balancing Program Fidelity/ Adaptation
- Research Tested Intervention Programs (RTIPs) Adaptation Guidelines
- Intervention Mapping (IM) ADAPT

Published Literature

- Map of Adaptation Process (MAP)
- Research-based Program Adaptation
- Adapting Evidence-Based Programs to New Contexts
- ADAPT-ITT
- Cultural Adaptation Process
- Planned Adaptation
- Step Framework
- Method for Program Adaptation through Community Engagement (M-PACE)
- General Adaptation Guidance: A Guide to Adapting Evidence-Based Sexual Health Curricula

FINDINGS: KEY ADAPTATION STEPS

Adaptation Steps

1. **Assess community**
2. **Understand the intervention**
3. **Select intervention**
4. Consult with experts
5. Consult with stakeholders
6. **Decide what needs adaptation**
7. **Adapt the original program**
8. Train staff
9. **Test the adapted materials**
10. **Implement**
11. **Evaluate**

- **Eleven** program adaptation steps were identified and grouped into categories.

- **Eight** of these steps were recommended by more than five frameworks: #1-3, #6-7, and #9-11

SUMMARY OF STEPS AND DEFINITIONS

Step name	Step description
1) Assess community	• Identify behavioral determinants and risk behaviors of the new target population using focus groups, interviews, needs assessments, and logic models • Assess organizational capacity to implement the program
2) Understand the EBI(s)	• Identify and review relevant EBIs and their program materials • Understand the theory behind the programs and their core elements: core function (effective components or mechanism of change) vs. form (different ways of delivery)
3) Select intervention	• Select the program that best matches the new population and context
4) Consult with experts	• Consult content experts, including original program developers, as needed • Incorporate expert advice into program

Step name	Step description
5) Consult with stakeholders	• Seek input from advisory boards and community planning groups where program implementation takes place • Identify stakeholder partners who can champion program adoption in new setting and ensure program fidelity
6) Decide on needed adaptations	• Decide whether to adapt or implement original program • Determine how original and new target population differ in terms of developmental processes and risk and protective factors • Identify areas where EBI needs to be adapted and include possible changes in program structure, content, provider, or delivery methods • Retain fidelity to core elements
7) Adapt the original EBI	• Select and train staff to ensure quality implementation • Develop adaptation plan • Adapt the original program contents through collaborative efforts • Make cultural adaptations continuously through pilot testing • Core components responsible for change should not be modified

Step name	Step description
8) Train staff	• Select and train staff to ensure quality implementation
9) Test the adapted materials	• Pretest adapted materials with stakeholder groups • • Pilot test adapted EBI in new target population • Modify EBI further, if necessary
10) Implement the adapted EBI	• Develop implementation plan based on results generated in previous steps • Identify implementers, behaviors, and outcomes • Develop scope, sequence, and instructions • Deliver the adapted EBI
11) Evaluate	• Document the adaptation process and evaluate the process and outcomes of the adapted intervention as implemented • Write evaluation questions; choose indicators, measures, and the evaluation design; plan data collection, analysis, and reporting • Employ empowerment evaluation approach framework to improve program implementation

ADAPTATION THOUGHTS

- These are recommended steps; all steps may not be done or done in this sequence (e.g., EBIs may already be selected)

- You may be doing some of these steps simultaneously (i.e., consulting with experts, conducting assessment)

- Have an adaptation leader to drive the process

PURPOSE OF OUR SYSTEMATIC REVIEW STUDY

- To assess adaptations of evidence-based, public health interventions in the published literature

Research questions:

- What are the reasons for and common types of adaptations being made to EBIs as reported in the literature?

- What steps are reported for making adaptations to EBIs?

- What individual, intervention and organizational outcomes are assessed in evaluations of adapted EBIs?

Escoffery et al. **A systematic review of adaptations of evidence-based public health interventions globally**. Imp Sci. 2018;13(1):1-21.
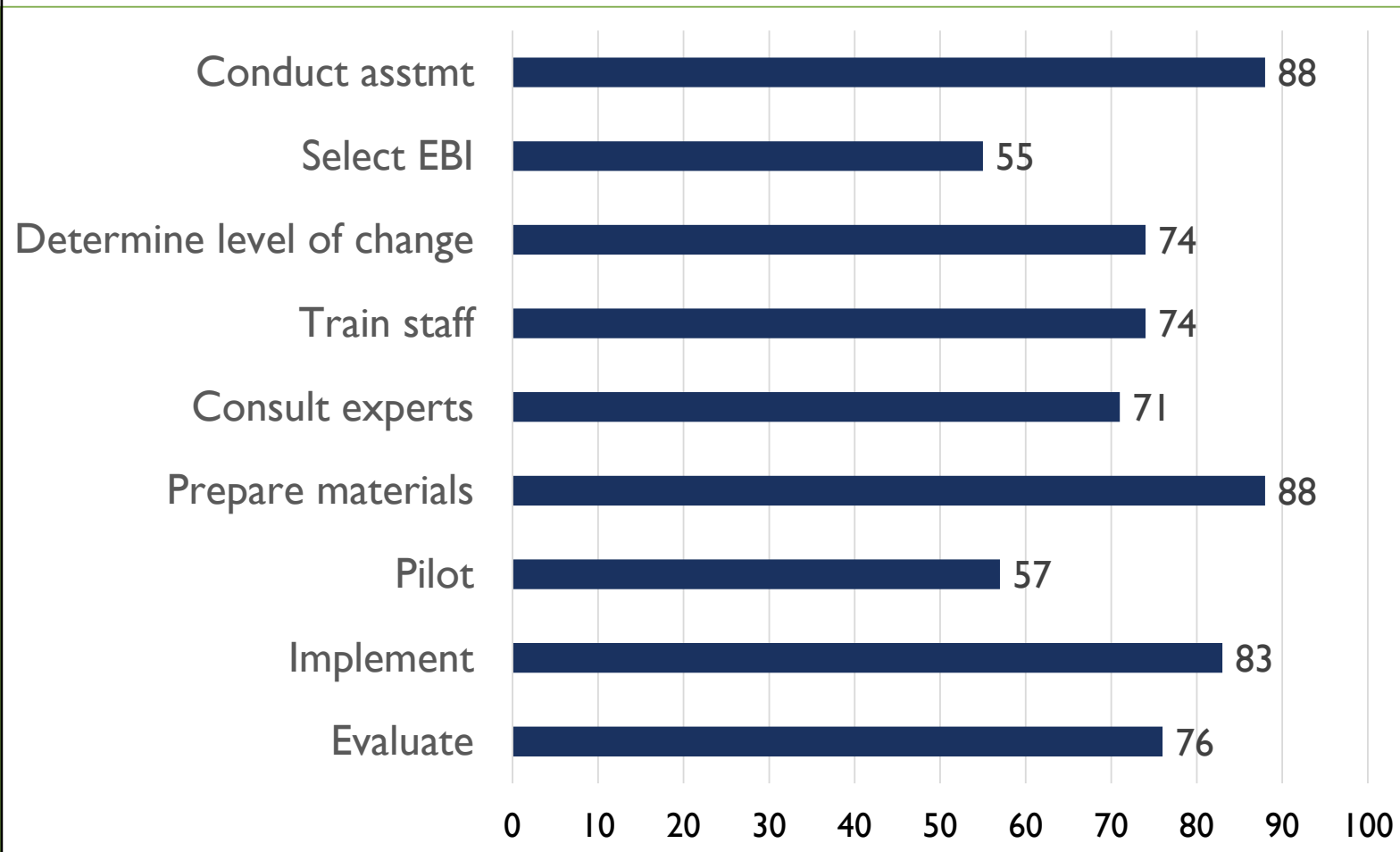
ADAPTATIONS MADE (% REPORTING)
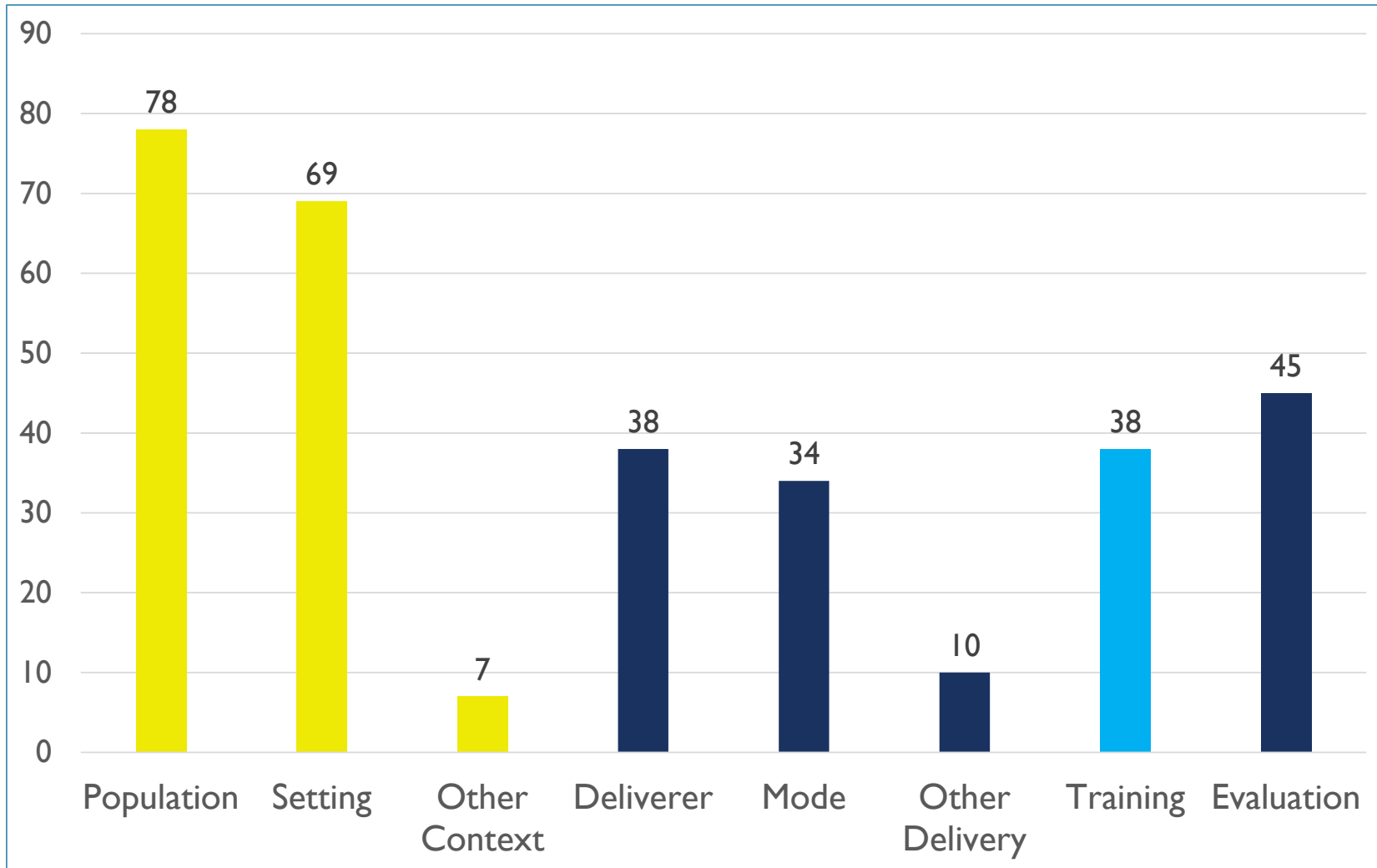
Stirman et al., 2013, Coding system for modifications and adaptations
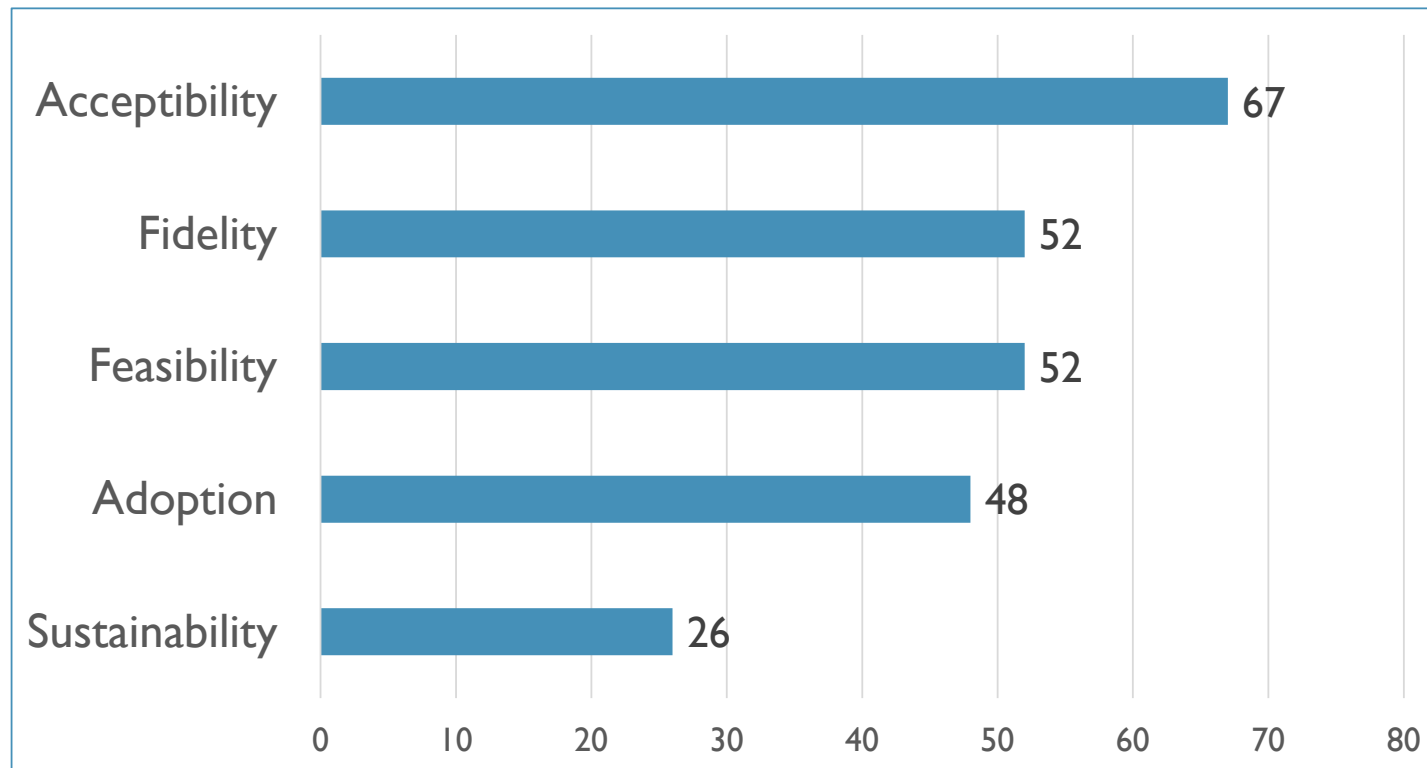
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STEPS IN ADAPTATION (% COMPLETING)

Escoffery et al. **A systematic review of adaptations of evidence-based public health interventions globally**. *Implementation Science*. 2018 Dec;13(1):1-21.

IMPLEMENTATION OUTCOMES:
WHAT WAS EVALUATED AFTER ADAPTATIONS?

Escoffery et al. **A systematic review of adaptations of evidence-based public health interventions globally**. *Implementation Science*. 2018 Dec;13(1):1-21.

REPORTING ON ADAPTATIONS

BENEFITS OF REPORTING ON ADAPTATIONS

- Know what changes are made when we are doing adaptations in addressing health inequalities in expanding availability of public health programs: are there common ones?

- Knowing if adaptation works when we tailor programs to context and communities (population and setting) for increase fit and acceptability

- Stirman et al developed FRAME to develop a method to document and track modifications to implementation strategies

TAXONOMY OF ADAPTATIONS

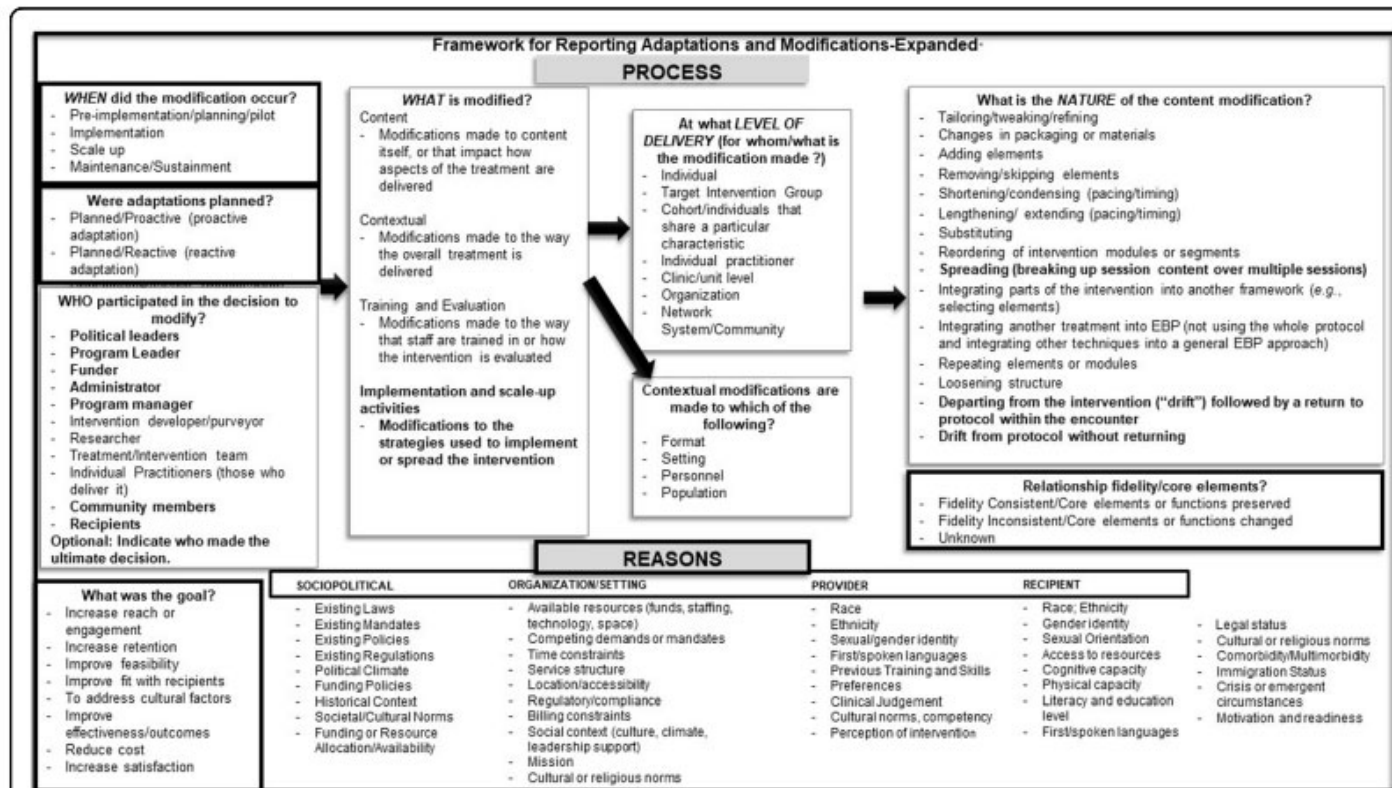Stirman et al. (2013) developed details on categories of adaptations

FRAME Model

Fig. 1 The Framework for Reporting Adaptations and Modifications-Expanded (FRAME). New elements are outlined in black lines, while the original aspects of the 2013 framework are outlined in gray. Additions and refinements within categories included in the 2013 framework are italicized. Recommended elements of reporting were as follows: (1) when and how in the implementation process the modification was made, (2) whether the modification was planned/proactive (i.e., an adaptation) or unplanned/reactive, (3) who determined that the modification should be made, (4) what is modified, (5) at what level of delivery the modification is made, (6) type or nature of context or content-level modifications, (7) the extent to which the modification is fidelity-consistent, and (8) the reasons for the modification, including (a) the intent or goal of the modification (e.g., cultural adaptations, to reduce costs, etc.) and (b) contextual factors that influenced the decision. Adapted from (Baumann A, Cabassa LJ & Stirman SW, 2017; Stirman SW, Miller CJ, Toder K & Calloway A, 2013)

FRAME – IS (Implementation Strategies)

Module 1: BRIEFLY DESCRIBE the EBP, implementation strategy, and modification(s)

The EBP being implemented is: _____

The implementation strategy being modified is: _____

The modification(s) being made is/are: _____

The reason(s) for the modification(s) is/are: _____

Module 2: WHAT is modified?

❏ *Content*
Modifications made to content of the implementation strategy itself, or that impact how aspects of the implementation strategy are delivered

❏ *Evaluation*
Modifications made to the way that the implementation strategy is evaluated

❏ *Training*
Modifications to the ways that implementers are trained

❏ *Context*
Modifications made to the way the overall implementation strategy is delivered. For Context modifications, specify which of the following was modified:
   ❏ *Format* (e.g. group vs. individual format for delivering the implementation strategy)
   ❏ *Setting* (e.g. delivering the implementation strategy in a new clinical or training setting than was originally planned)
   ❏ *Personnel* (e.g. having the implementation strategy be delivered by a systems engineer rather than a clinician facilitator)
   ❏ *Population* (e.g. delivering the implementation strategy to middle managers instead of frontline clinicians)
   ❏ *Other* context modification: write in here:
      _____

Module 3: What is the NATURE of the content, evaluation, or training 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 implementation modules or segments
❏ Spreading (breaking up implementation content over multiple sessions)
❏ Integrating parts of the implementation strategy into another strategy (e.g., selecting elements)
❏ Integrating another strategy into the implementation strategy in primary use (e.g. adding an audit/feedback component to an implementation facilitation strategy that did not originally include audit/feedback)
❏ Repeating elements or modules of the implementation strategy
❏ Loosening structure
❏ Departing from the implementation strategy ("drift") followed by a return to strategy within the implementation encounter
❏ Drift from the implementation strategy without returning (e.g., stopped providing consultation, stopped sending feedback reports)
❏ Other (write in here):
   _____

Module 3, OPTIONAL Component: Relationship to fidelity/core elements?

❏ Fidelity Consistent/Core elements or functions preserved
❏ Fidelity Inconsistent/Core elements or functions changed
❏ Unknown

Module 4, Part 1: What is the GOAL?

❏ Increase reach of the EBP (i.e. the number of patients receiving the EBP)
❏ Increase the clinical effectiveness of the EBP (i.e. the clinical outcomes of the patients or others receiving the EBP)
❏ Increase adoption of the EBP (i.e. the number of clinicians or teachers using the EBP)
❏ Increase the acceptability, appropriateness, or feasibility of the implementation effort (i.e. improve the fit between the implementation effort and the needs of those delivering the EBP)
❏ Decrease costs of the implementation effort
❏ Improve fidelity to the EBP (i.e. improve the extent to which the EBP is delivered as intended)
❏ Improve sustainability of the EBP (i.e. increase the chances that the EBP remains in practice after the implementation effort ends)
❏ Increase health equity or decrease disparities in EBP delivery
❏ Other (write in here):
   _____

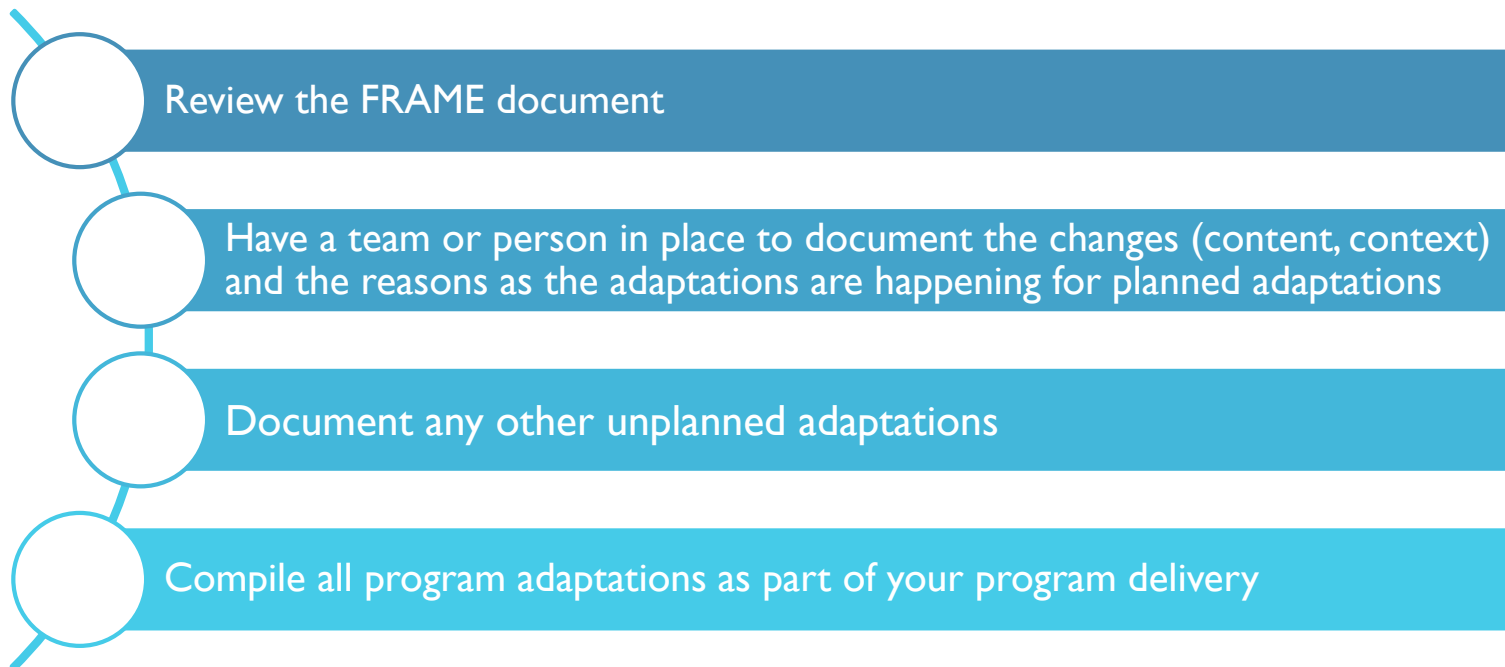**Module 4, Part 2: What is the LEVEL of the rationale for modification?**

❏ Sociopolitical level (i.e. existing national mandates)
❏ Organizational level (i.e. available staffing or materials)
❏ Implementer level (i.e. those charged with leading the implementation effort)
❏ Clinician or Teacher level (i.e. those implementing the EBP)
❏ Patient or Other Recipient level (i.e. those who will ideally benefit from the EBP)
❏ Other (write in here):
   _____

Fig. 1 The FRAME-IS (core modules)

Table 2 Example completion of the FRAME-IS

FRAME-IS module or sub-component	Example completion
Module 1	
The EBP being implemented is:	Parent-Child Interaction Therapy (PCIT)
The implementation strategy being modified is:	Training program for lay health workers to enhance parent engagement in PCIT
The modification(s) being made is/are:	- Tailoring of training content (e.g., language) to local context to fit population differences - Removal of the behavioral coding component of the training
The reason(s) for the modification(s) is/are:	- Improve appropriateness/feasibility
Module 2	
What is modified?	- Content (details provided in Module 3) - Context (setting, based on transition from Miami to California)
Module 3	
What is the nature of the content, evaluation, or training modification?	- Tailoring (modifying language) - Removing/skipping elements (specifically, removal of behavioral coding training component)
OPTIONAL: what is the relationship to core elements?	- Unknown
Module 4	
What is the goal?	- Increase the acceptability, appropriateness, and feasibility of the implementation effort
What is the level of the rationale for the modification?	- Practitioner and Patient level (address cultural and linguistic differences for a population of predominantly Mexican descent)
Module 5	
When is the modification initiated?	- Pre-implementation/planning/pilot phase
Is the modification planned?	- Planned/proactive
Module 6	
Who participates in the decision to modify?	- Researcher, program leader, and clinicians (lay health workers)
OPTIONAL: Who makes the ultimate decision?	- Researchers
Module 7	

ADAPTATION DOCUMENTATION

Review the FRAME document

Have a team or person in place to document the changes (content, context) and the reasons as the adaptations are happening for planned adaptations

Document any other unplanned adaptations

Compile all program adaptations as part of your program delivery

FRAMECodebook12.29.21.pdf

KEY SUMMARY POINTS

- Adaptations happen when health professionals are using effective public health programs

- It is important to use a systematic process for program adaptation and engage stakeholders (e.g., participants, program developer, implementation staff)

- Documenting adaptation helps ensure that that you know what changes were made and reasons why when you are implementation an evidence-based program

QUESTIONS

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