14TH ANNUAL CONFERENCE ON THE SCIENCE OF DISSEMINATION AND IMPLEMENTATION IN HEALTH

AcademyHealth NIH National Institutes of Health

Characterizing adaptations to mobile phone delivery of the Adolescent Transition Package (ATP) in Kenya Using FRAME - IS

Dorothy Mangale, PhD Candidate – Implementation Science,

University of Washington, Department of Global Health

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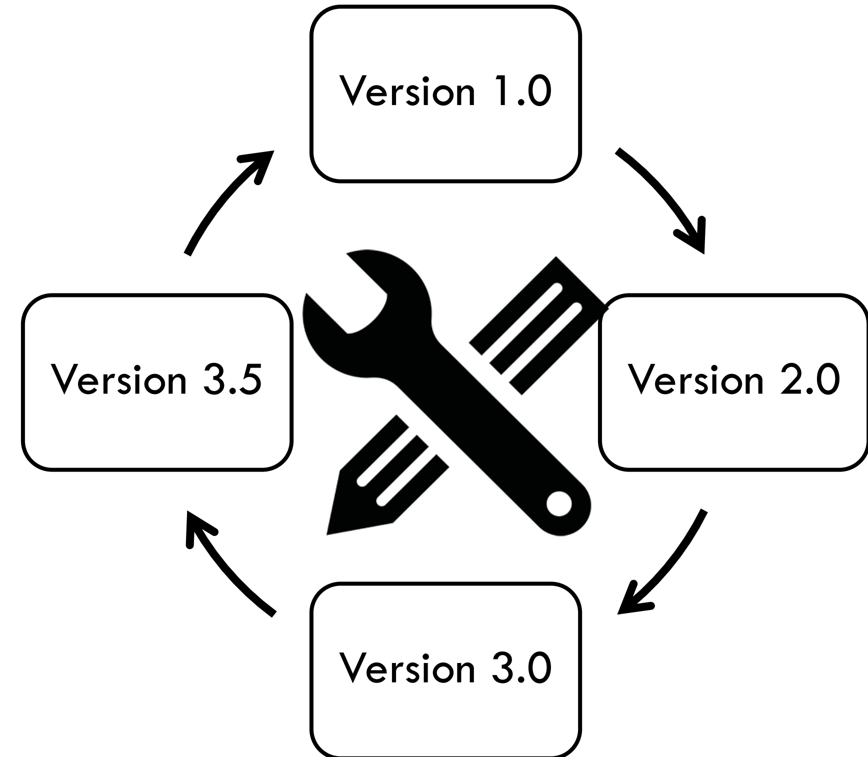
Co-authors: Alvin Onyango, Cyrus Mugo, Caren Mburu, Janet Itindi, Dalton Wamalwa, Arianna Means, Irene Njuguna, Bryan Weiner, Grace John-Stewart, Kristin Beima-Sofie

Contact: dmangale@uw.edu

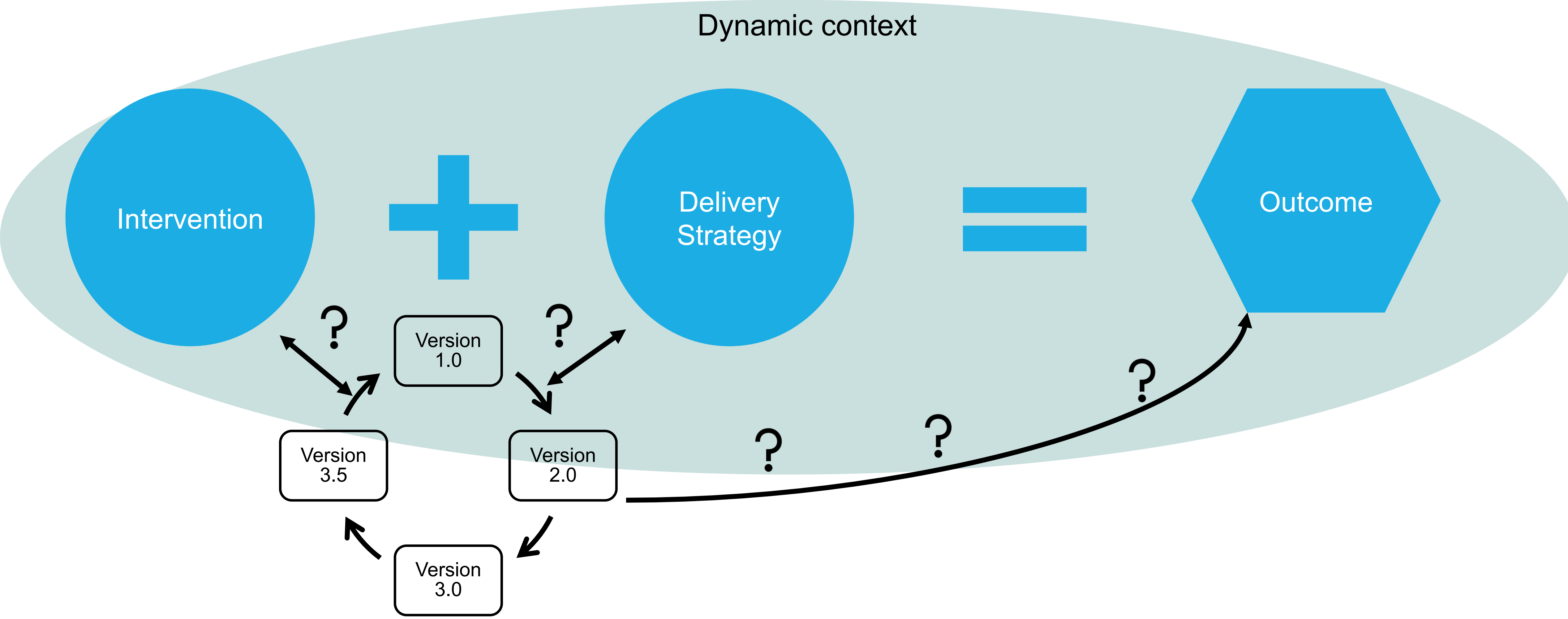
Background

Adaptations

- What is an adaptation?
  - Planned or unplanned change
- Why do we adapt?
  - Improve fit, effectiveness



Gap in capturing adaptations

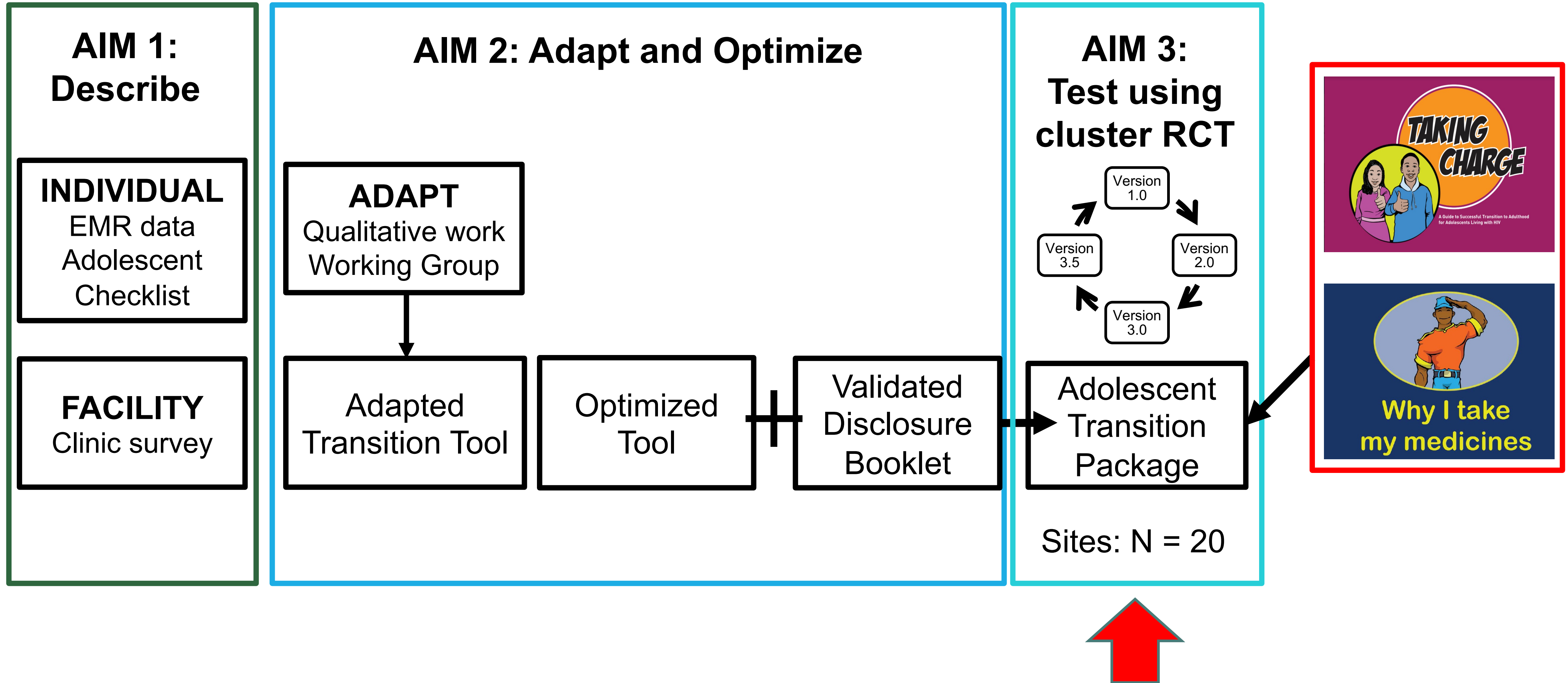


FRAME -IS

Framework for Reporting Adaptations and Modifications to Evidence-based Implementation Strategies (FRAME-IS)

CORE MODULES							OPTIONAL MODULES			
Proposed modification	Reason for modification	What is modified	Nature of modification	Goal of modification	Rationale for modification	Level of the rationale for modification	Timing of modification	Planned or unplanned modification	Participants in decision-making process	Spread of the modification

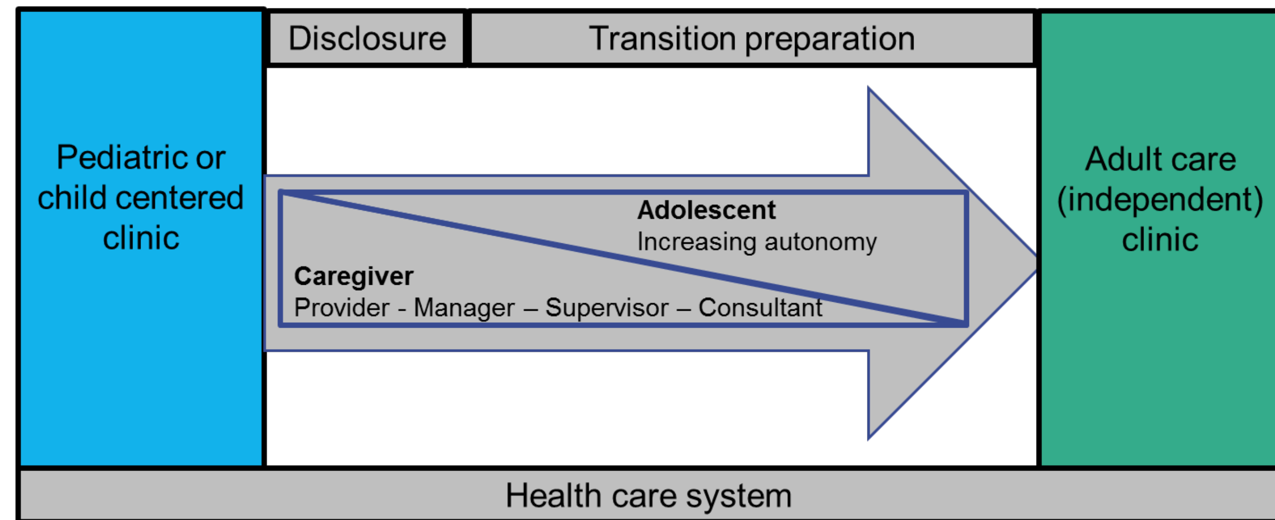
ATTACH Study



Why transition?

- Adolescence and early adulthood: complex period with many challenges
- Barriers increase the risk of being lost to follow up
- Systematic transition of HIV care for youth living with HIV involves providing knowledge and skills to support independence

Figure 4: Conceptual model (Adapted from Kieckhefer et al's Shared model of care)



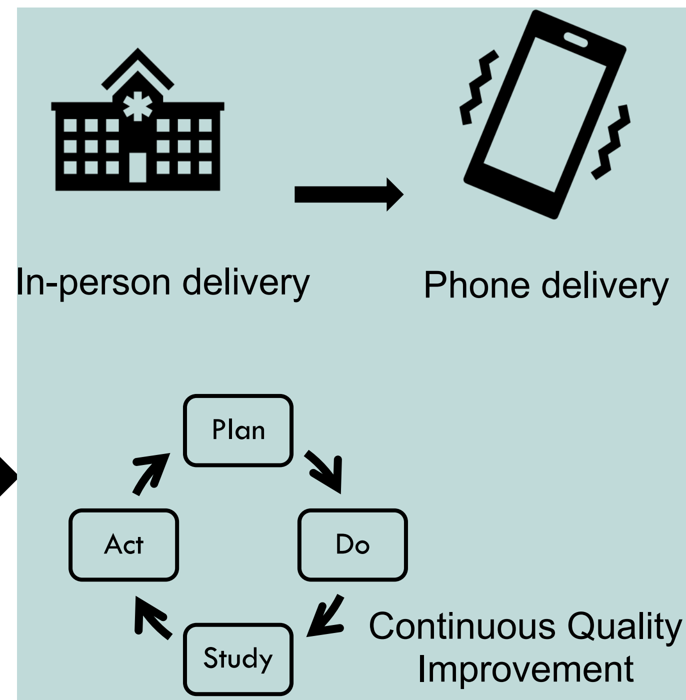
Digital health solutions for continuity of care

- Digital health interventions have demonstrated the potential to mitigate barriers to AYA being retained in care

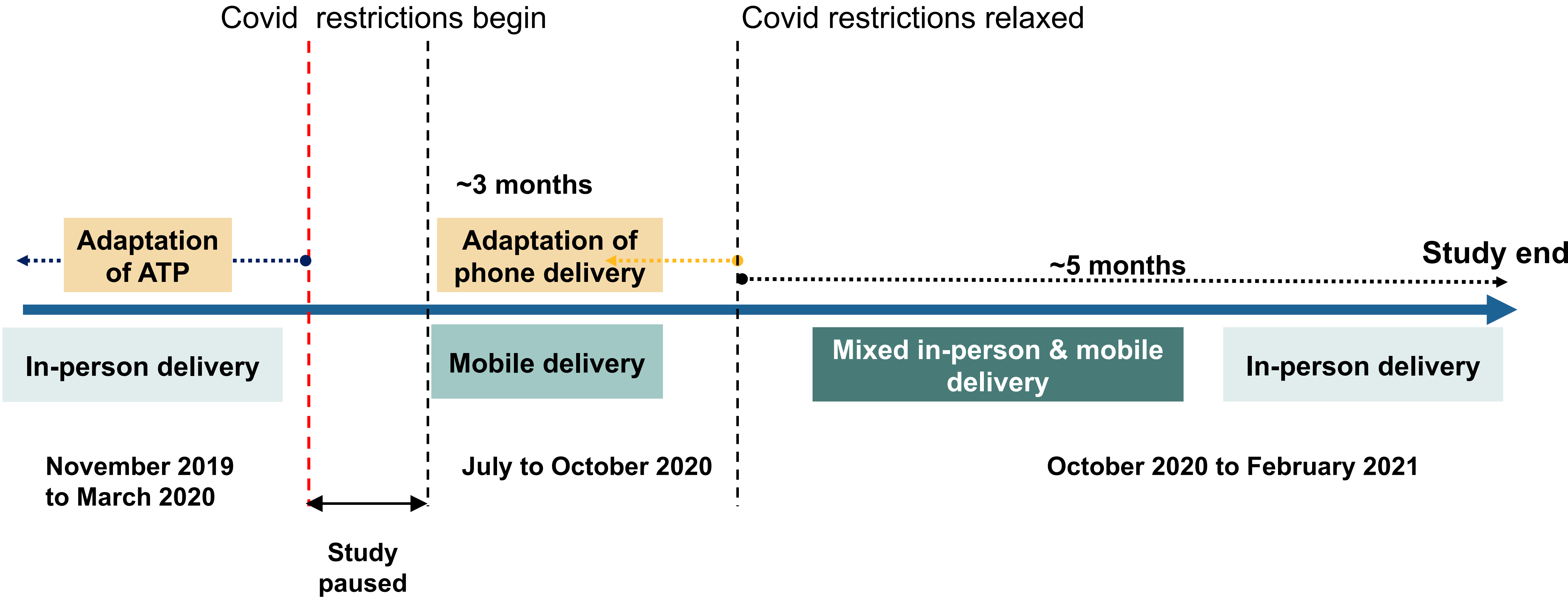
  - Improve access, affordability and engagement
  - Personalized services
  - Targeting marginalized groups to reduce disparities

ATTACH Trial

Hybrid I Effectiveness Cluster Randomized Trial



Pivoting to Phone Delivery

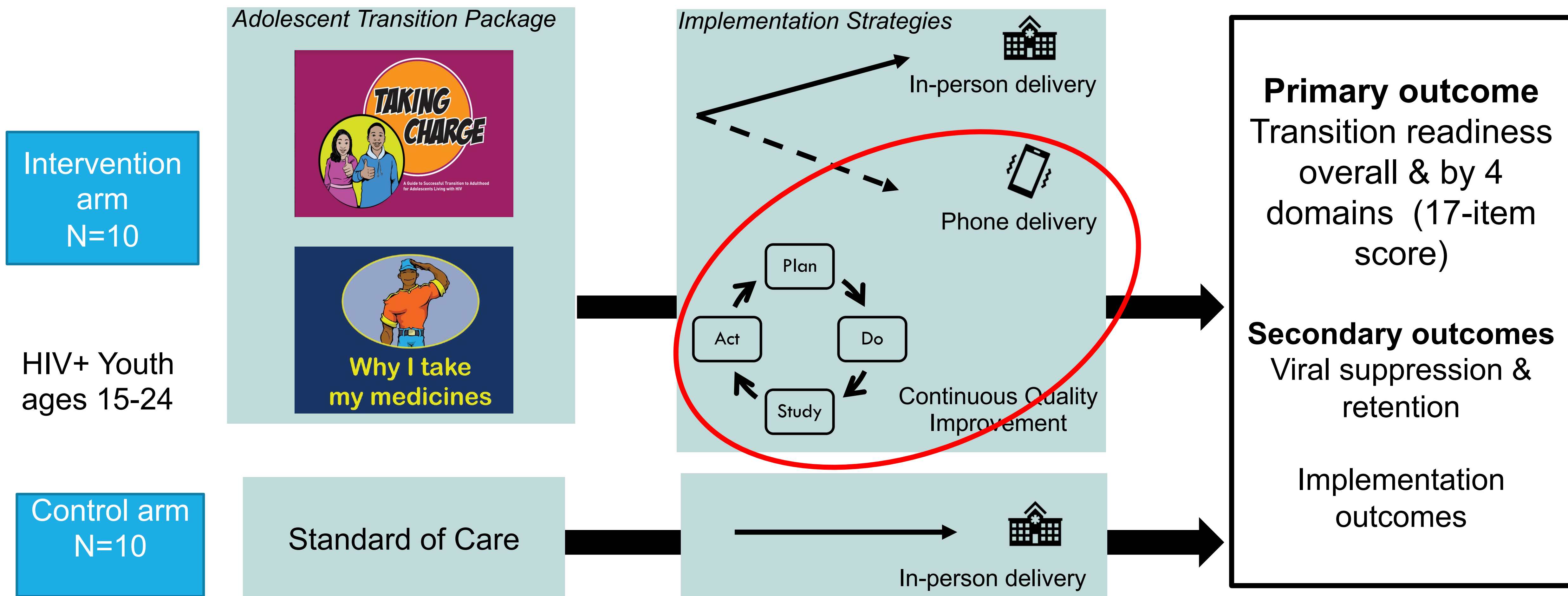


Objective

To identify and characterize adaptations to phone delivery of the Adolescent Transition Package (ATP)

ATTACH Trial

Hybrid I Effectiveness Cluster Randomized Trial



Methods

Data Collection & Analysis

- We prospectively identified and tracked adaptations

CQI-PDSA cycles	1 per two weeks
Data collection	• Audio-recordings • PDSA surveys

Data Collection & Analysis

Framework for Reporting Adaptations and Modifications to Evidence-based Implementation Strategies (FRAME-IS)

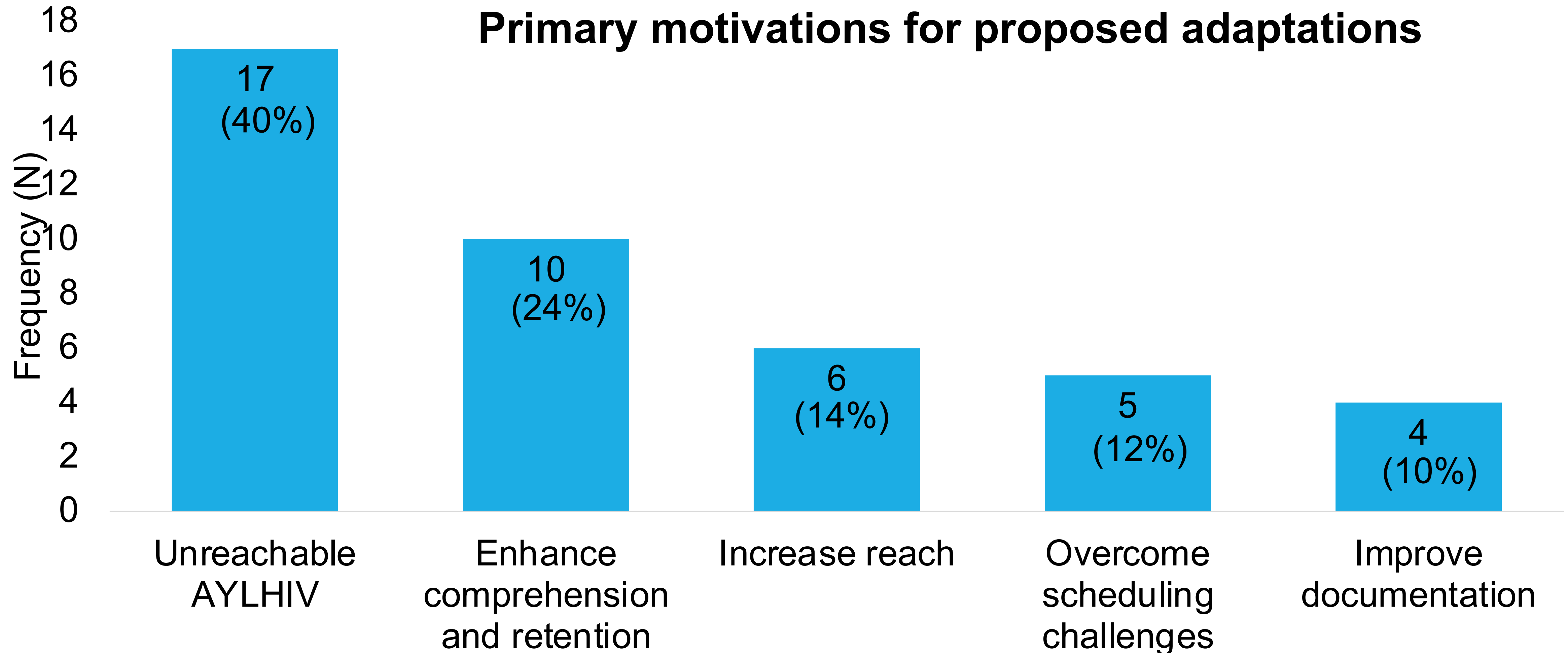
CORE MODULES							OPTIONAL MODULES			
1a-Proposed modification	1b-Reason for modification	2-What is modified	3-Nature of modification	3b-Link to fidelity/core elements?	4a-Goal of modification	4b-Level of rationale for modification	5a-Timing of modification	5b-Planned/ unplanned modification	6-Who decides to modify	7-Spread of the modification

Results

CQI characteristics

N = 60 CQI meetings	
HCW per CQI	Median (range) 5 [5 - 10]
Duration (minutes)	Median (range) 21 [13 – 75.0]

Results



Summary of adaptations proposed

Site	Modification	Reason	What is modified	Context
FITC	Use community health volunteers for home visits to reach unreachable	Unreachable contacts	Context	Personnel
FITC	Obtain alternate phone numbers and document in file (primary and secondary contact)	Unreachable contacts	Content	NA
FITC	Assign adolesent to HCW so HCW can follow-up on intervention history and ensure exposure once a	Low reach	Context	Personnel
FITC	Provide shorter TCAs for adoelscents with challenges understandin concepts and recaping topics during	Comprehension and retentio	Evaluation	NA
FITC	Use telephone script and ask adolescent if they are in a conducive envortonment, reschedule to when	Confidentiality concern/Conc	Content	NA
GOTKOJOWI	Reach out to secondary contacts	Unreachable contacts	Content	NA
GOTKOJOWI	Check TCS and link unreachable to CHVs	Unreachable contacts	Context	Personnel
GOTKOJOWI	Continue to send CHVs to reach them	Unreachable contacts	Context	Personnel
GOTKOJOWI	Redistribution of adolescents to staff to even out burden- ewual chance to take them through	Burdensome workload	Context	Personnel
GOTKOJOWI	Each HCW report on assigned adolescents	Poor documentation/Missing	Evaluation	NA
GOTKOJOWI	Document progress behind the pages and continue with allocating adolescents to HCW	Poor documentation/Missing	Evaluation	NA
KITENGELA	Wait for clients to come to facility - delay calling	Unreachable contacts	Content	NA
KITENGELA	assinging HCW to specific adolescents	Low reach	Context	Personnel
KITENGELA	Make phone call in shifts and organize for purchasing of a new phone	Limited resources	Context	Format
KITENGELA	Allow carrying of clinic phone home	Scheduling challenges	Context	Setting
KITENGELA	Going one chapter at a time and repeating if no comprehension; use simplest language possible;	Comprehension and retentio	Context	
KITENGELA	Give first priority to make calls in adance or hand over to youth champion who will delegate to others	Workflow/Personnel availabi	Context	
KITENGELA	Interactive sessions- chance to contribute and ask questions; make sure the time frame between calls is	Comprehension and retentio	Content	
LANGALANG/	conducting physical tracing of those without contact info to get contact and inform about the book	Unreachable contacts	Context	

60 adaptations, 24 unique

What was modified?

Module 2: WHAT is modified?

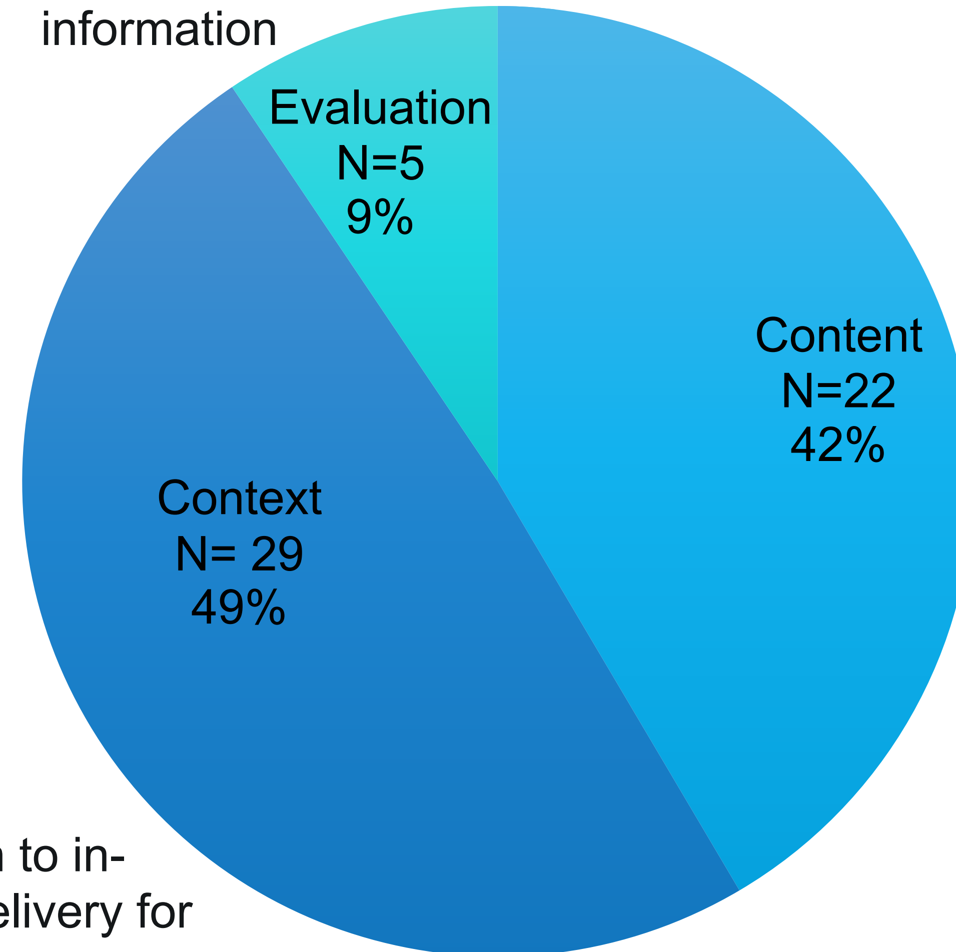
❑ ***Content***
Modifications made to content of the implementation strategy itself, or that impact how aspects of the implementation strategy are delivered

❑ ***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:



Specifying context modifications

Module 2: WHAT is modified?

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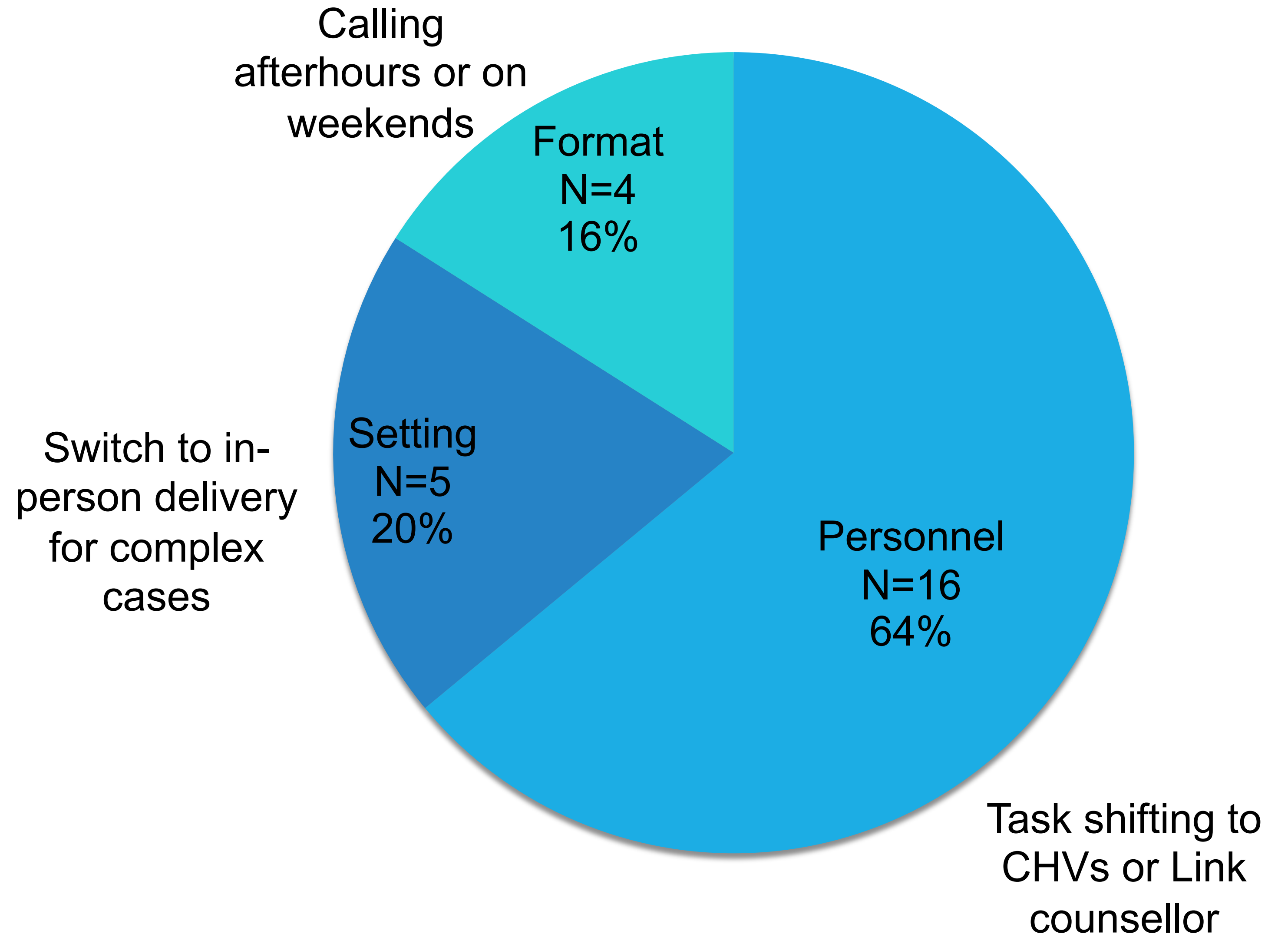
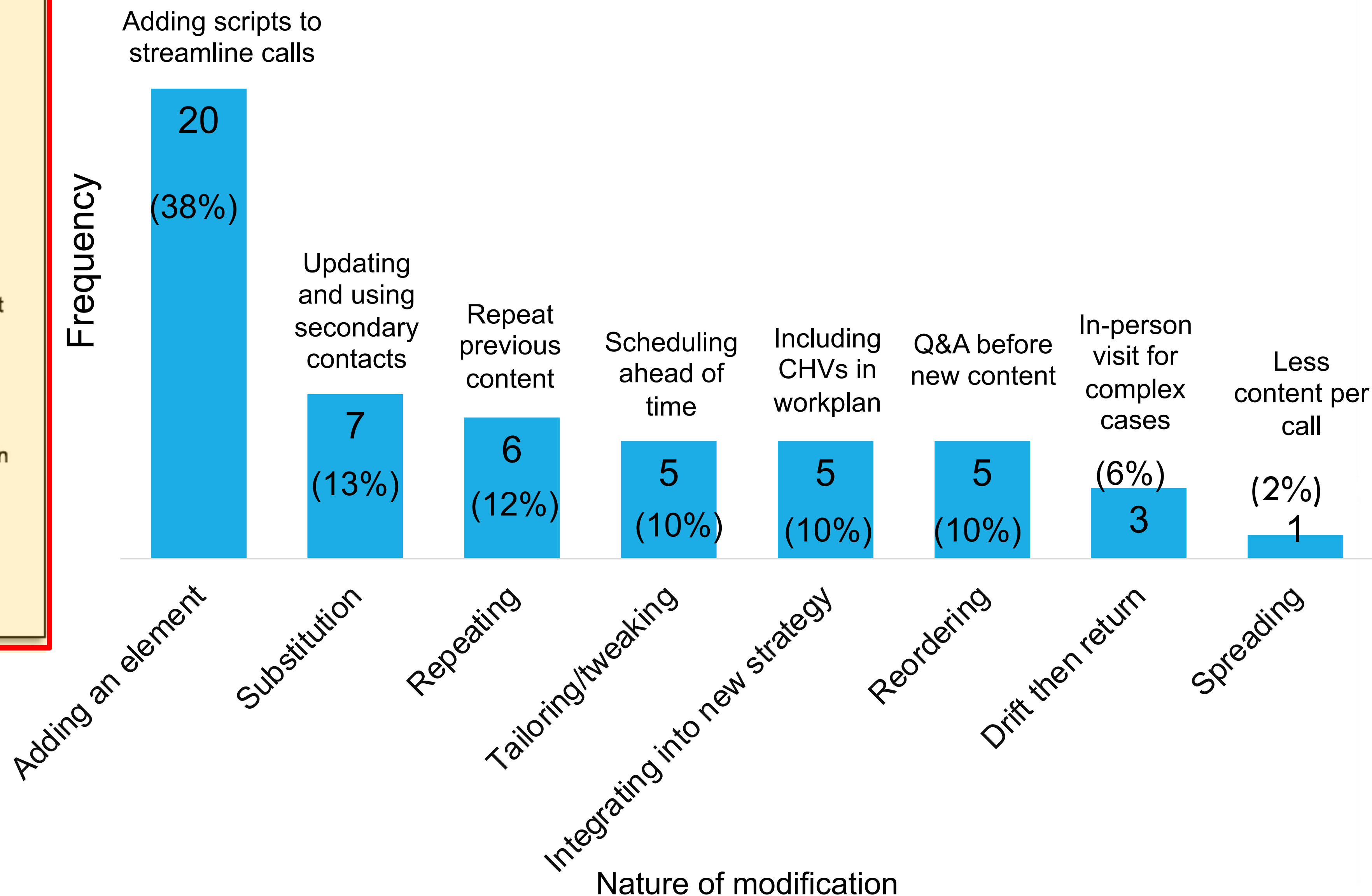


Module 3: What is the NATURE of the content, evaluation, or training modification?

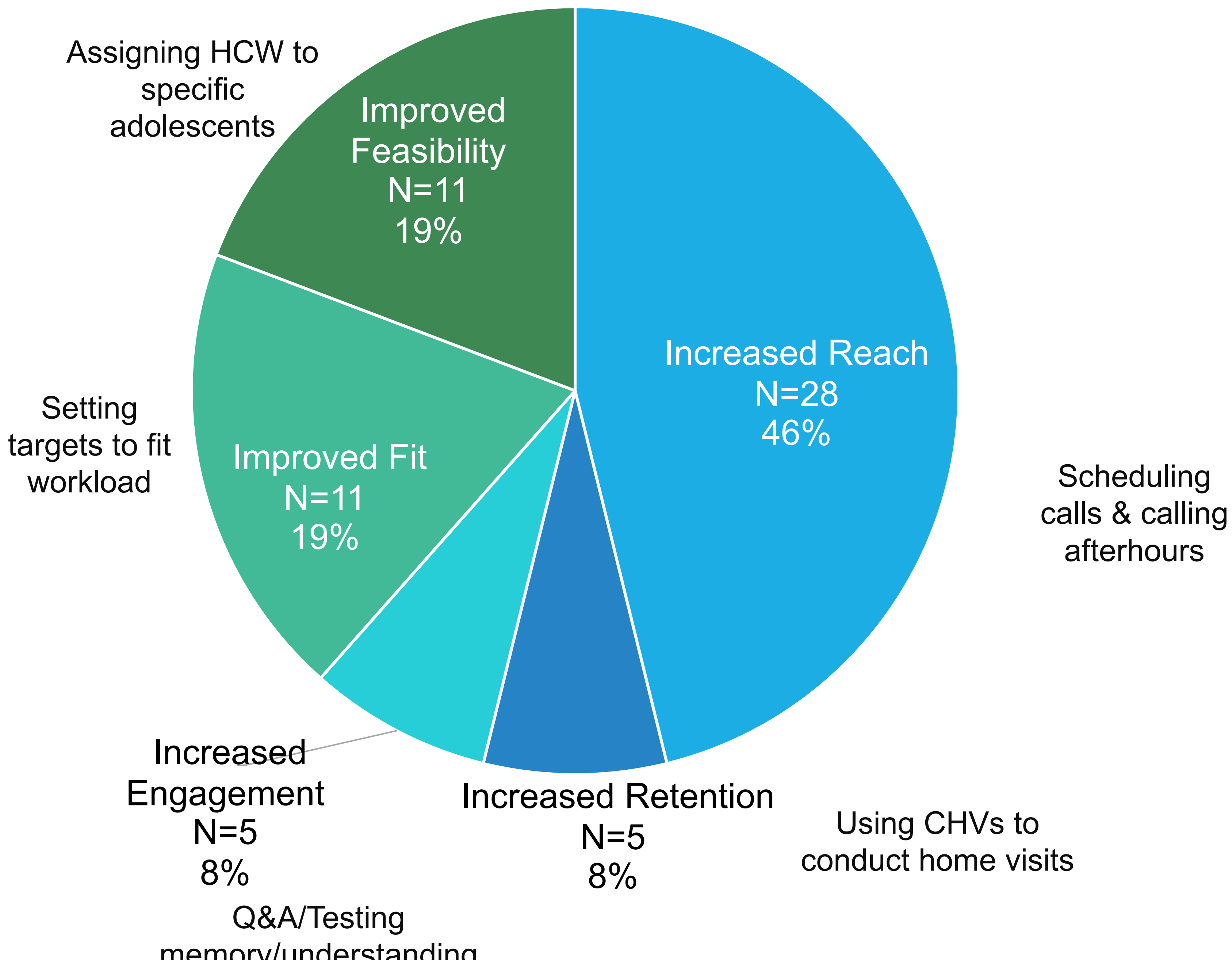
- ❑ Tailoring/tweaking/refining
- ❑ Changes in packaging or materials
- ❑ Adding elements
- ❑ Removing/skipping elements
- ❑ Shortening/condensing (pacing/timing)
- ❑ Lengthening/ extending (pacing/timing)
- ❑ Substituting
- ❑ Reordering of implementation modules or segments
- ❑ Spreading (breaking up 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):

____

Nature of proposed adaptations



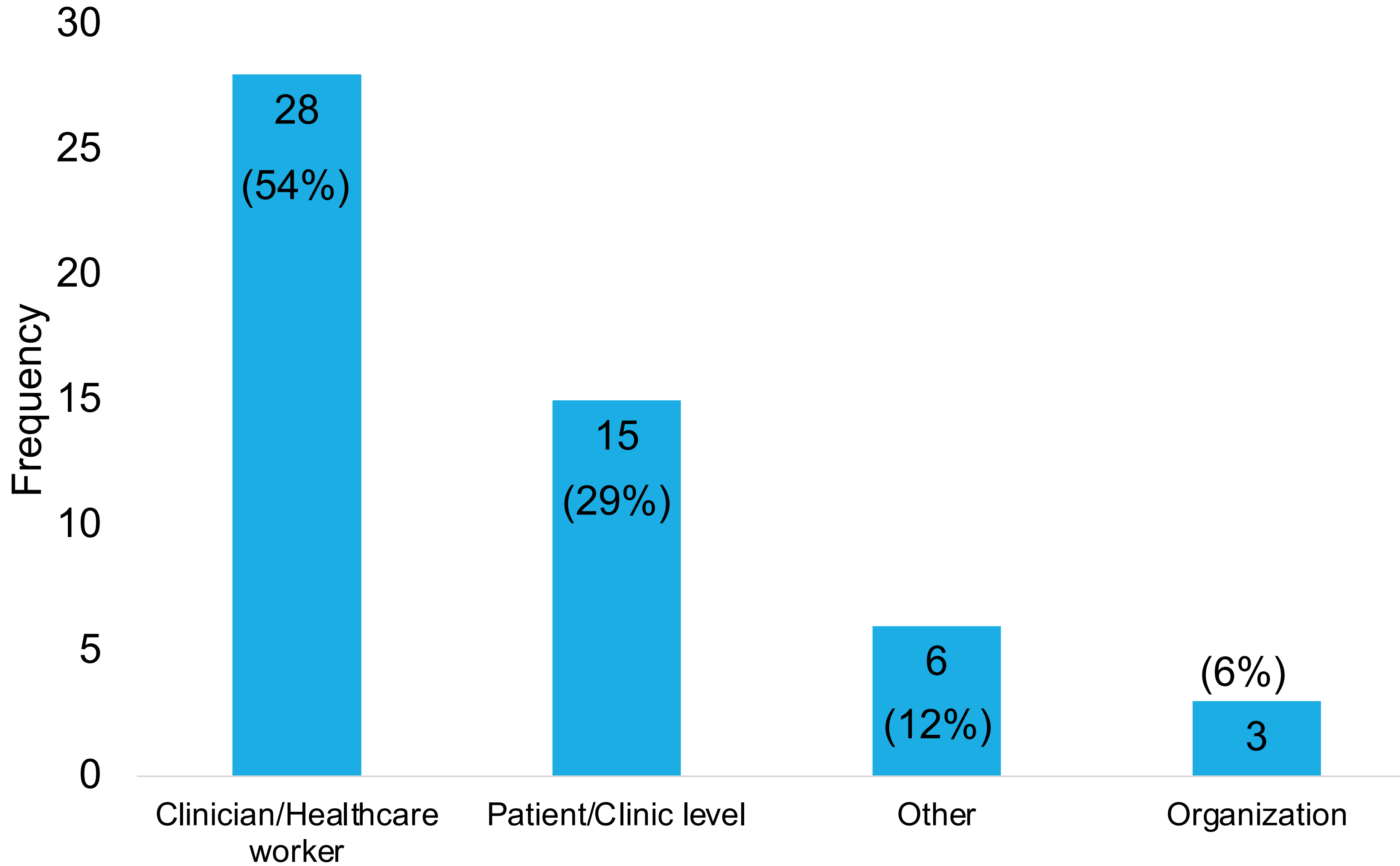
Goal of proposed adaptations



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): ____________________

Level of proposed adaptations



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): ____________________

Survey Results

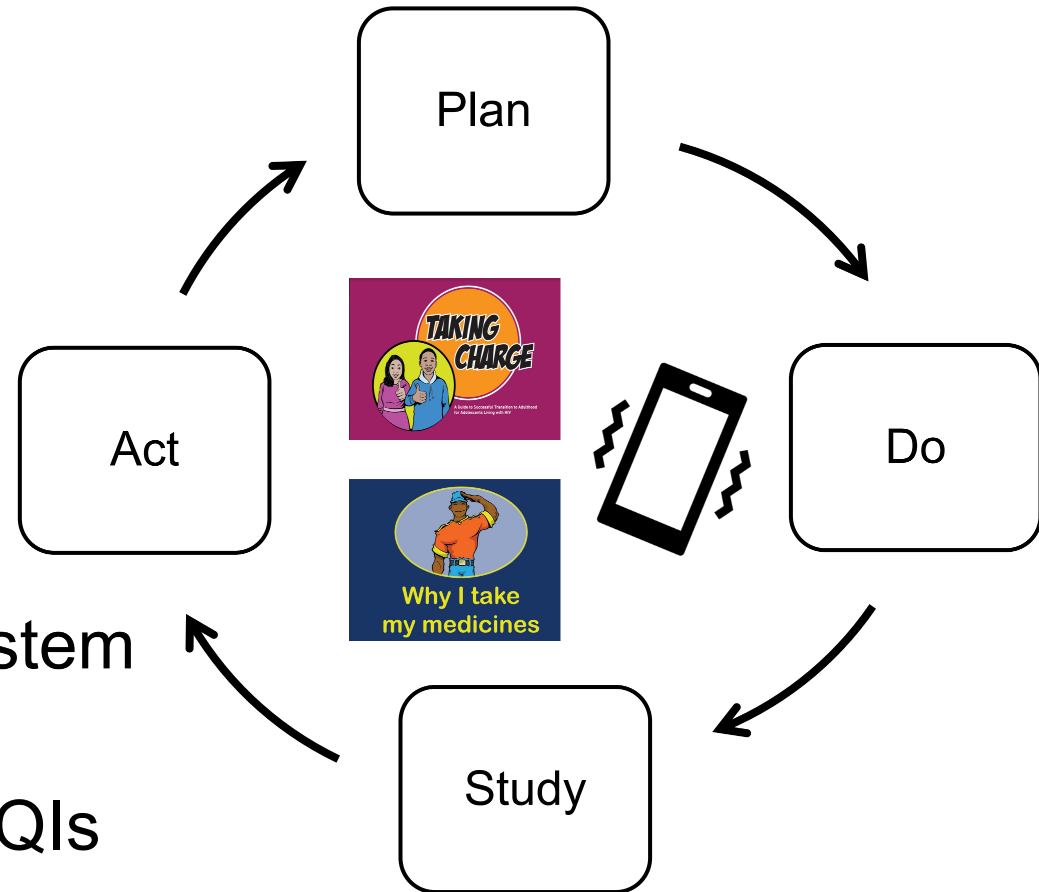
- Adaptation outcomes from PDSA surveys
  - 83% were and implemented as planned
  - 75% were implemented with relative ease
  - Final decision about proposed changes:
    - 48% adopted
    - 34% adapted
    - 18% abandoned

Lessons Learned

- Adaptation of mobile-phone delivery is feasible and acceptable
- CQI meetings and PDSA cycles were apt for facilitating the adaptation process and evaluating proposed changes
- Adaptations were primarily additive and most frequently addressed the inability to reach clients
- > 80% of adaptations were adapted or adopted suggesting that these changes addressed challenges brought up by HCW

Implications

- Identifying common, modifiable challenges at facility/HCW or client level
- Considerations for future scale-up
  - Range of possible challenges and adaptations
  - Integrating CQI into routine health system activities
  - Strategies for guiding and applying CQIs and PDSAs at scale
  - FRAME –IS for guiding adaptations



Limitations

- Leading and coaching teams to identify a specific change concept is challenging

- Coding using FRAME-IS directly from audio-recordings to structured CRFs not a 1:1 process

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NASCOP & County Directors of Health

ATTACH Study Participants

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National Institutes of Health (NIH) 1R01HD089850-01

No conflict of interest

Thank you

Email dmangale@uw.edu

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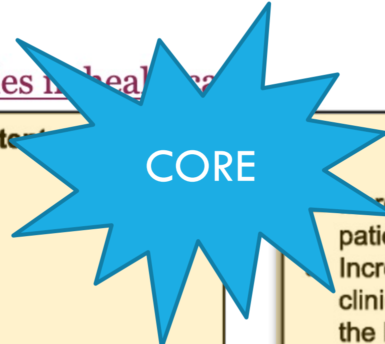

Module 1: BRIEFLY DESCRIBE the EBP, implementation strategy, and modification(s)

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?

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- ❑ 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

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- Increase the clinical effectiveness of the EBP (i.e. the clinical outcomes of the patients or others receiving the EBP)
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- ❑ Other (write in here):

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- ❑ Other (write in here):

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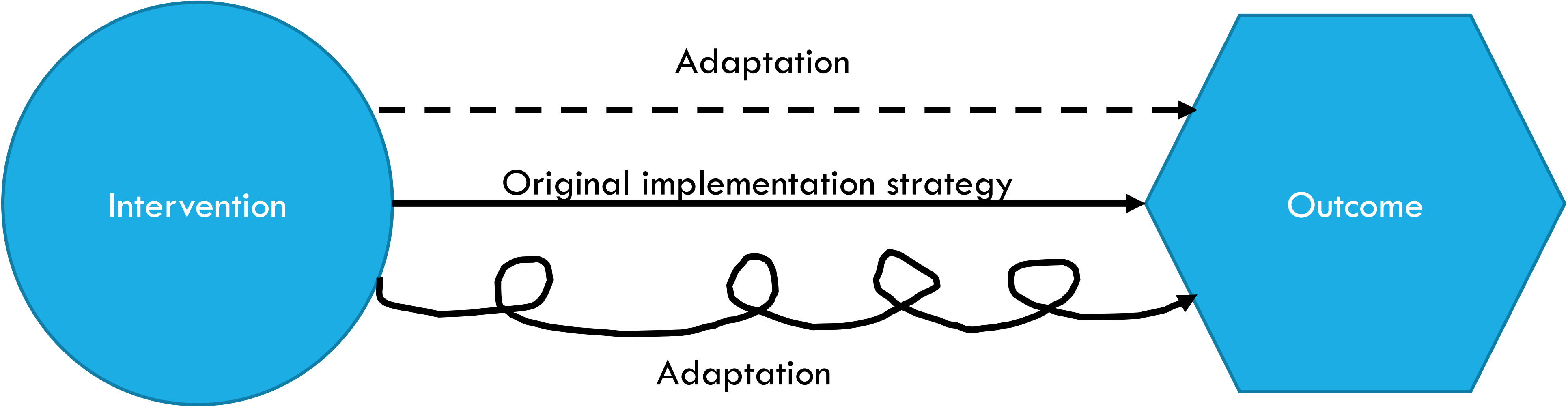
Gap in capturing adaptations



From: The FRAME-IS: a framework for documenting modifications to implementation strategies in healthcare

Module 5, Part 1: WHEN is the modification initiated?

- ❑ Pre-implementation/planning/pilot phase
- ❑ Implementation phase
- ❑ Scale up (i.e. when the EBP is being spread to additional clinics/settings within your system)
- ❑ Maintenance/Sustainment
- ❑ Other (write in here): ______________________

Module 5, Part 2: Is modification PLANNED?

- ❑ Planned/Proactive (proactive adaptation)
- ❑ Planned/Reactive (reactive adaptation)
- ❑ Unplanned/Reactive (modification)
- ❑ Other (write in here): ______________________

Module 6: WHO participates in the decision to modify?

- ❑ Political leader(s)
- ❑ Program Leader, Manager, or Administrator
- ❑ Funder
- ❑ Implementer or implementation strategy expert
- ❑ Researcher
- ❑ Clinician(s) or teacher(s) who are being asked to use the EBP being implemented
- ❑ Community members
- ❑ Patients or other recipients who will be the ultimate target of the EBP being implemented
- ❑ Other: write in here: ______________________

- ❑ **Optional: Indicate who makes the ultimate decision:** ______________________

Module 7: How WIDESPREAD is the modification? (i.e. for whom/what is the modification made?)

- ❑ Individual patient or other recipient for whom the EBP is being implemented
- ❑ Group of patients or other recipients for whom the EBP is being implemented
- ❑ Patients or other recipients that share a particular characteristic (e.g. all patients from a specific language background)
- ❑ Individual clinician or teacher charged with implementing the EBP
- ❑ Clinic/unit
- ❑ Organization
- ❑ Network system/community
- ❑ Specific implementer/facilitator
- ❑ Implementation/facilitation team

Adolescent Transition Package

Disclosure

- Caregiver readiness
- Disclosure tracking
- Post disclosure outcomes

Transition

- Transition tracking
- Transition readiness assessment

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)
- Unplanned/Reactive (modification)

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