

Building an Implementation Blueprint to Support Evidence Based Intervention Scale-Up

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Agenda

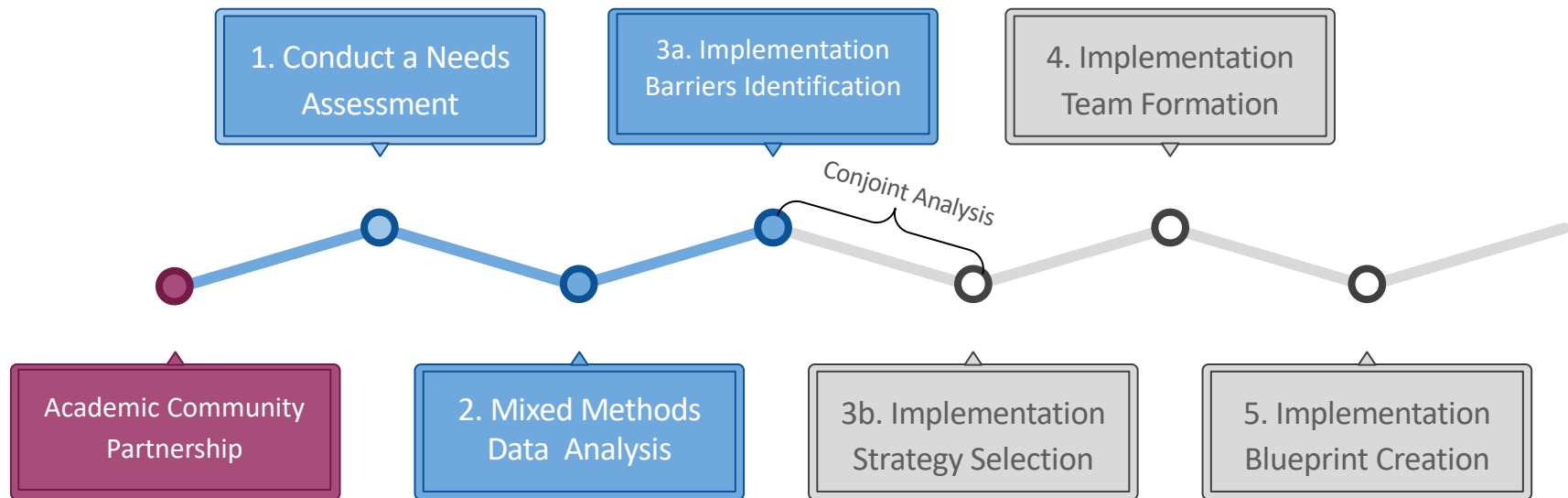
1. What is an implementation blueprint?
2. Steps to build an implementation blueprint - *and some practice!*
3. Exemplar study employing blueprints
4. Limitations and next steps in implementation strategy
specification

What is an implementation blueprint?

An implementation plan that includes:

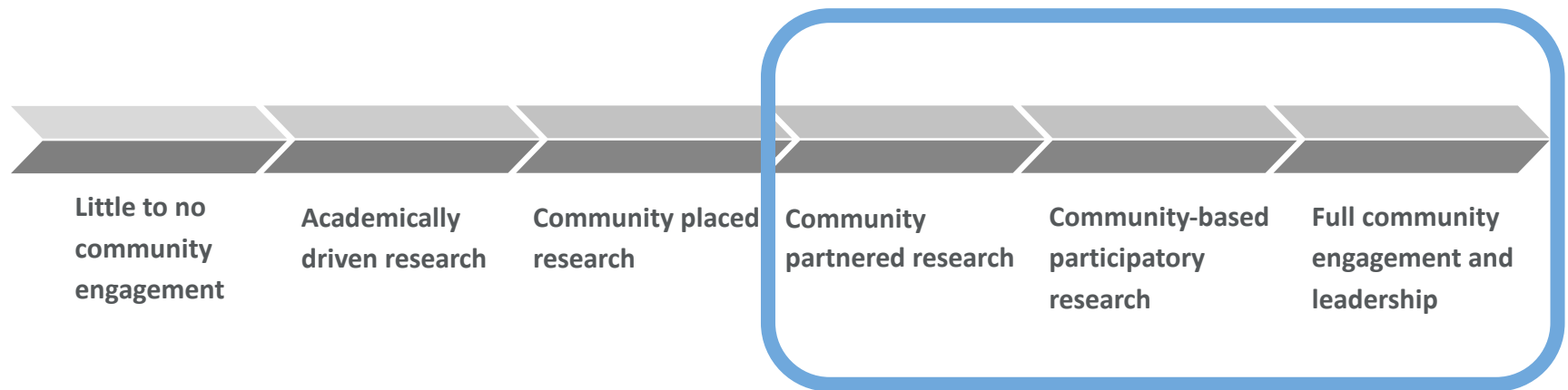
- Goals and strategies
- The scope of change
- Planned timeline and milestones
- Performance and progress measures

Steps to Build an Implementation Blueprint



(Lewis, Scott, & Marriott, 2018)

Form an Academic-Community Partnership



(Adapted from Key & Lewis, 2018)

Step 1: Conduct a Needs Assessment

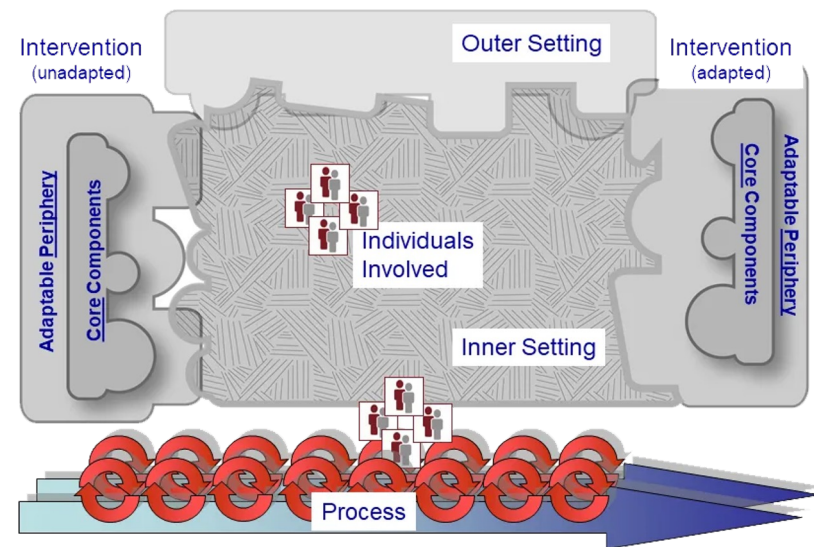
1. Identify the sites that will participate in implementation
2. Consider your budget
3. Identify your key stakeholders - should include **ALL** agency roles
4. Needs assessment goal: Identify determinants of practice

Step 1: Conduct a Needs Assessment

- Select a framework to guide your Needs Assessment

Consolidated Framework for Implementation Research

(Damschroder, 2009;
Damschroder et al., 2022)



Step 1: Conduct a Needs Assessment

- Mixed methods data collection
 - quantitative (surveys), qualitative (interviews, focus groups), observational
- Purposeful sampling to select participants with representative views (Palinkas et al., 2016)
- Use validated scales and interview guides
 - Interview guide development tool via cfirguide.org
 - Instrument repository via Society for Implementation Research Collaboration
(<https://societyforimplementationresearchcollaboration.org/>)

Step 2: Mixed Methods Data Analysis

- Develop a plan for integrating qualitative, quantitative, and observational data
 - *Structure* - sequential or simultaneous data collection, emphasis on qual or quant data (QUAN + QUAL; quan → QUAN)
 - *Function* - convergence, expansion, etc.
 - *Process* - merging, connecting, embedding
- Compare average scores on quantitative measures to the literature
- **Generate a list of barriers and facilitators**

Step 3a: Identify and Prioritize Barriers

- **Conjoint analysis**

- Rating and sorting method where stakeholders assign values to product attributes, services, or interventions
- Pictorial materials presented to stakeholders to rate on factors such as “desirability”
- Can identify trends in preferences and “must have” features
- Allows for estimation of the relative importance and trade-offs among different strategies

Teamwork



Climate



**Staff
Supervision**



**Training
Needs**



Feasibility

Importance

Burnout



Office Space


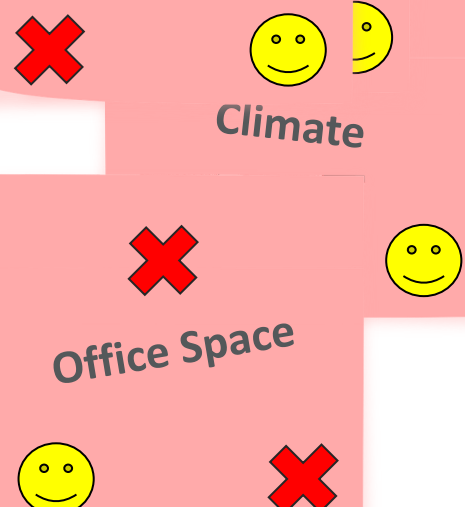



**Email
Communication**

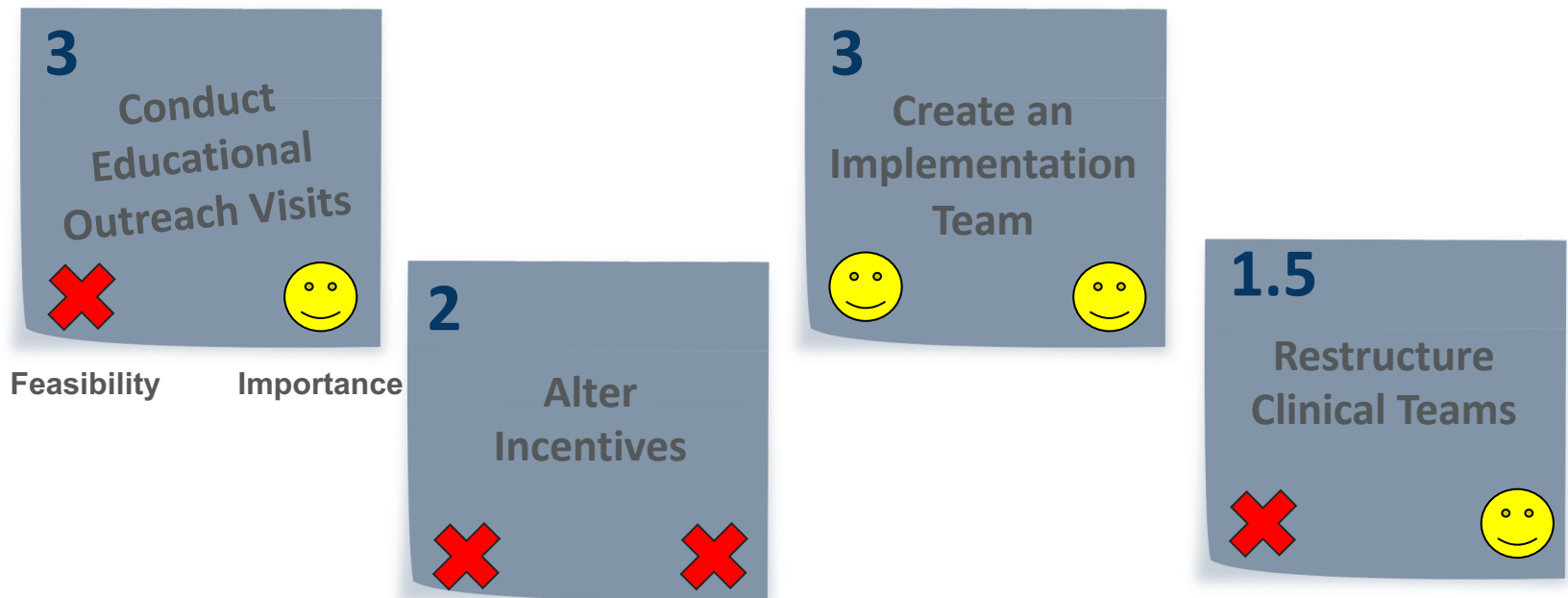


**Director
Leadership**







High Feasibility and High Importance	High Feasibility or High Importance	Low Feasibility and Low Importance
<p data-bbox="247 483 625 690">Training</p> <p data-bbox="331 690 709 896">Staff Supervision</p> <p data-bbox="199 896 577 1247">Director Leadership</p> 	<p data-bbox="819 487 1249 836">Burnout</p> <p data-bbox="829 836 1312 1063">Climate</p> <p data-bbox="829 917 1207 1266">Office Space</p> 	<p data-bbox="1470 722 1848 1071">Email Communication</p> 

Step 3b: Engage in Collaborative Selection of Strategies



(Powell et al., 2012; 2015)

High Impact and High Feasibility	High Impact or High Feasibility	Low Impact and Low Feasibility
<p data-bbox="254 537 625 889">3 Create an Implementation Team</p> 	<p data-bbox="867 483 1239 836">3 Conduct Educational Outreach Visits</p>  <p data-bbox="873 885 1245 1237">1.5 Restructure Clinical Teams</p> 	<p data-bbox="1478 537 1850 889">2 Alter Incentives</p> 

Step 4: Implementation Team Formation



Step 3b: Matching Barriers and Strategies

Go to [menti.com](https://www.menti.com) and enter code **2520 0571**

OR

Scan QR code below



Step 5: Implementation Blueprint Creation

- Build a blueprint for each phase of an implementation project:
 - Pre-Implementation (Exploration, Preparation)
 - Implementation
 - Sustainment

Importance	Goal	Responsible	Feasibility	Impact	Implementation Category	Action Step

METHODOLOGY

Open Access



A methodology for generating a tailored implementation blueprint: an exemplar from a youth residential setting

Cara C. Lewis^{1,2,3*}, Kelli Scott² and Brigid R. Marriott⁴

Abstract

Background: Tailored implementation approaches are touted as more likely to support the integration of evidence-based practices. However, to our knowledge, few methodologies for tailoring implementations exist. This manuscript will apply a model-driven, mixed methods approach to a needs assessment to identify the determinants of practice, and pilot a modified conjoint analysis method to generate an implementation blueprint using a case example of a cognitive behavioral therapy (CBT) implementation in a youth residential center.

Methods: Our proposed methodology contains five steps to address two goals: (1) identify the determinants of practice and (2) select and match implementation strategies to address the identified determinants (focusing on barriers). Participants in the case example included mental health therapists and operations staff in two programs of Wolverine Human Services. For step 1, the needs assessment, they completed surveys (clinician $N = 10$; operations staff $N = 58$; other $N = 7$) and participated in focus groups (clinician $N = 15$; operations staff $N = 38$) guided by the domains of the Framework for Diffusion [1]. For step 2, the research team conducted mixed methods analyses following the QUAN + QUAL structure for the purpose of convergence and expansion in a connecting process, revealing 76 unique barriers. Step 3 consisted of a modified conjoint analysis. For step 3a, agency administrators prioritized the identified barriers according to feasibility and importance. For step 3b, strategies were selected from a published compilation and rated for feasibility and likelihood of impacting CBT fidelity. For step 4, sociometric surveys informed implementation team member selection and a meeting was held to identify officers and clarify goals and responsibilities. For step 5, blueprints for each of pre-implementation, implementation, and sustainment phases were generated.

Results: Forty-five unique strategies were prioritized across the 5 years and three phases representing all nine categories.

Conclusions: Our novel methodology offers a relatively low burden collaborative approach to generating a plan for implementation that leverages advances in implementation science including measurement, models, strategy compilations, and methods from other fields.

Keywords: Tailored implementation, Conjoint analysis, Mixed methods, Community partnership, Youth residential setting

Mixed Methods Data Analysis (Lewis et al., 2018)

Teamwork

Climate

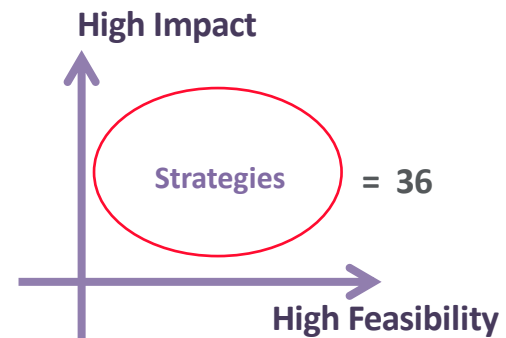
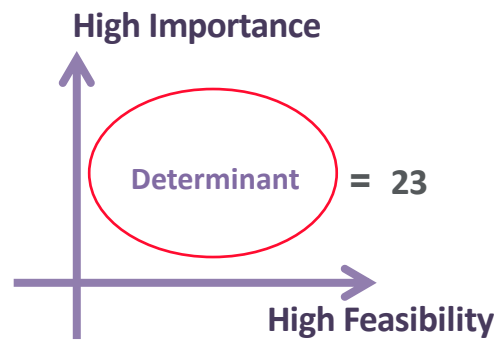
Communication

Conflict

Morale

Training

Modified Conjoint Analysis (Lewis et al., 2018)



Step 5: Implementation Blueprint Creation – Pre-Implementation

Goals: 1. Improve climate, satisfaction, communication, and teamwork; 2. Re-establish consistency/quality of restraints; 3. Prep materials to support CBT

Timeline: Revisit in 6-8 months (truncated surveys, focus groups)

Importance	Goal	Responsible	Feasibility	Impact	Implementation Category	Action Step
H	1, 2, 3	IT	H	3	Develop stakeholder interrelationships	Implementation Team- reserve biweekly meetings
H	1, 3	IT	L	1.5	Support clinicians	Restructure clinical teams
H	3	CBT Team	H	2	Train & educate stakeholders	Select training methods that fit preferences of staff
H	1, 3	CBT Team/IT			Use evaluative & iterative strategies	Develop and implement tools for quality monitoring (identify program level measures)

Step 5: Implementation Blueprint Creation –Implementation

Goals: 1. Continue to enhance climate, teamwork, communication, attitudes, and satisfaction; 2. Increase CBT knowledge, skill- integrate into care; 3. Demonstrate benefit to youth

Timeline: 3 years total; 3-5 day training every 6 months

Importance	Goal	Responsible	Feasibility	Impact	Implementation Category	Action Step
H	1, 2, 3	CBT Team	H	3	Train & educate stakeholders/ Provide interactive assistance	CBT/Imp Sci Training/ Supervision
H	1, 2, 3	IT	L	2	Develop stakeholder interrelationships	Hold cross-staff clinical meetings
H	1, 3	CBT Team/IT	H	2	Adapt & tailor to context	Facilitate, structure, and promote adaptability (CBT Team to work with IT to modify CBT to fit the sites)
H	2	CBT Team	L	3	Train & educate stakeholders	Conduct educational outreach visits

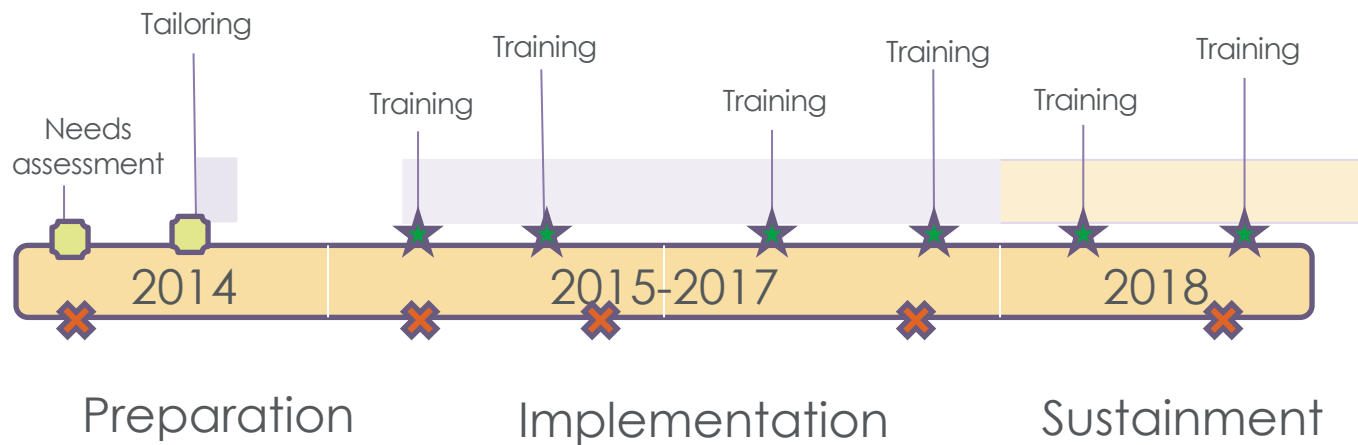
Step 5: Implementation Blueprint Creation – Sustainment

Goals: 1. Train new staff efficiently; 2. Maintain climate and communication; 3. Sustain integration and penetration of CBT

Timeline: Monitor 1 year post formal training

Importance	Goal	Responsible	Feasibility	Impact	Implementation Category	Action Step
H	1, 2, 3	IT	H	3	Develop stakeholder interrelationships	Engage implementation team
H	1, 3	IT	L	2	Develop stakeholder interrelationships	Hold cross-staff clinical meetings
H	3	IT	L	3	Use evaluative & iterative strategies	Develop and implement for quality monitoring- must monitor fidelity through observation regularly and randomly
H	1, 3	IT	H	1	Train & educate stakeholders	Conduct educational meetings- hold regularly for new staff and as refreshers

Step 5: Implementation Blueprint Creation (Lewis et al., 2018)



Example 1: Implementation of CBT in a youth residential setting (Lewis et al., 2018)



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Implementation of the Wolverine Mental Health Adoption Phase

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Natalie Rodriguez-Quintana, *Indiana University*
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Robert K. Hindman, *Beck Institute for Cognitive Behavior Therapy*

Residential treatment facilities (RTFs) are a first-line treatment option for juvenile justice-involved youth with internalizing or externalizing mental health needs. However, RTFs rarely offer evidence-based interventions for youth with internalizing or externalizing mental health needs. WHS is one of the first RTFs in the nation to implement cognitive-behavioral mental health care for their youth. This study outlines the preimplementation phase of a 5-year implementation effort among WHS, the Beck Institute, and an implementation science research team. The phase included a needs assessment across two sites of WHS to identify and prioritize barriers to the 76 unique barriers, 23 were prioritized as important and feasible to address. Implementation team and staff champions and opinion leaders, worked across 8 months to deploy 10 strategies designed blueprint. Upon reevaluation of the needs assessment domains, all prioritized barriers were removed and WHS's readiness for CBT implementation was enhanced. This study serves as a model for a process that can be employed to enhance the potential for successful evidence-based youth RTFs.

Implementation of the Wolverine Mental Health Program Implementation Phase

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To enhance mental health care for youth in a midwestern residential treatment facility, Wolverine Health Research Institute (WHRI) and the Beck Institute (an intermediary) and an implementation research team to implement cognitive-behavioral therapy (CBT). CBT has strong evidence supporting effectiveness for treating youth internalizing and externalizing symptoms, but it is a complex psychosocial intervention that demands a thoughtful implementation approach. This study outlines the implementation phase (2.5 years) of a 5-year collaborative effort. The implementation phase includes: (a) adapting CBT to fit the complex youth needs and the roles of the multidisciplinary team members result in a comprehensive and coordinated care model, and (b) the strategies utilized to support its competent integration into the facility. Six blended implementation strategies were deployed in this phase: forging implementation teams, installing progress monitoring, adapting CBT, training, providing supervision and consultation, and training the trainers. A component-based approach to CBT yielded six core skills: active listening, problem solving, mood monitoring and intervention mapping, activity scheduling, distress tolerance, and cognitive restructuring. By the end of this phase, all staff had robust exposure to and experience with the adapted form of CBT. The work of our academic-community partnership has both research and clinical implications, with respect to integrating an adapted version of CBT for residential environments (CBT-RE).

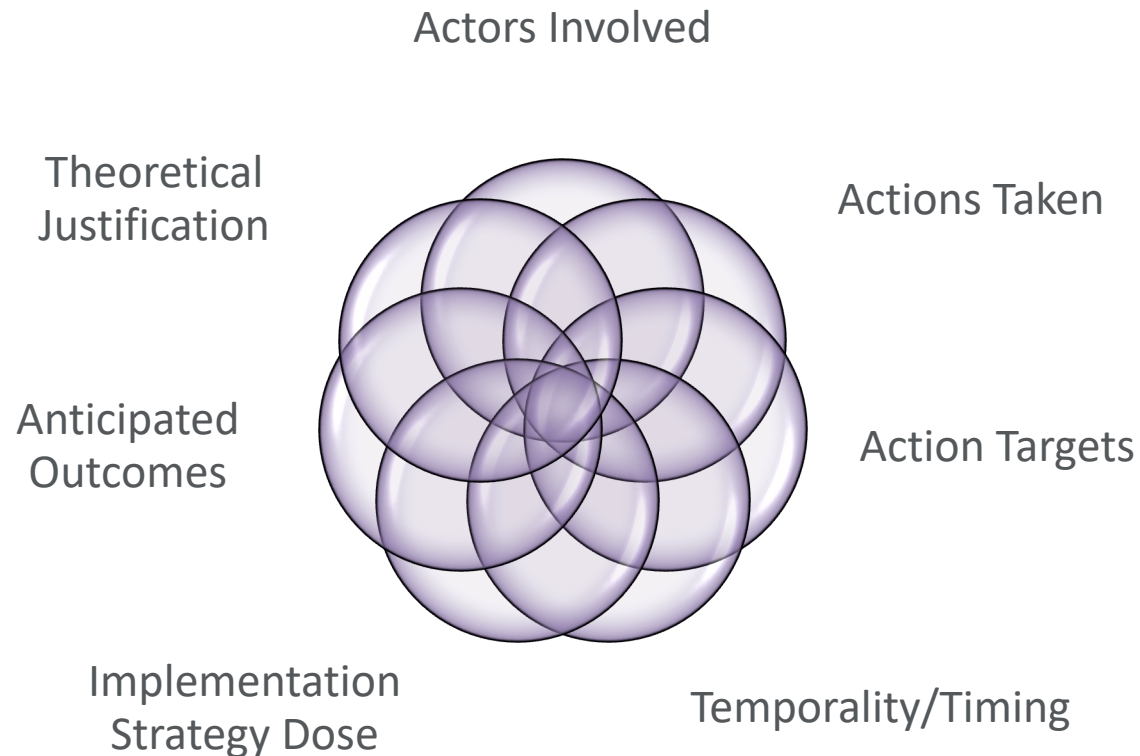
Implementation of the Wolverine Mental Health Program. Part 3: Sustainment Phase

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Kelli Scott, *Braun University School of Public Health*
Natalie Rodriguez-Quintana, *Carlin Hoffacker and Chandler Boys, Indiana University*
Robert Hindman, *Beck Institute for Cognitive Behavior Therapy*

Sustaining the implementation of an evidence-based practice (EBP) is the ultimate goal of often years of significant personal and financial investment. Some conceptualize sustainment as a distinct phase following an active implementation period where the contextual factors, processes, and supports are bolstered to ensure continued EBP delivery. This study provides an overview of the sustainment strategies deployed to embed cognitive-behavioral therapy (CBT) in a Midwestern residential treatment facility serving youth with complex mental health needs. Seven key strategies and their outcomes are described: use of CBT teams, new hire orientation plans, monthly campaigns, change in job descriptions and performance evaluations, development of a behavioral reinforcement system for youth, and a pathway to CBT certification. This study provides a window into how one might sustain an EBP by addressing barriers unique to this phase of work.

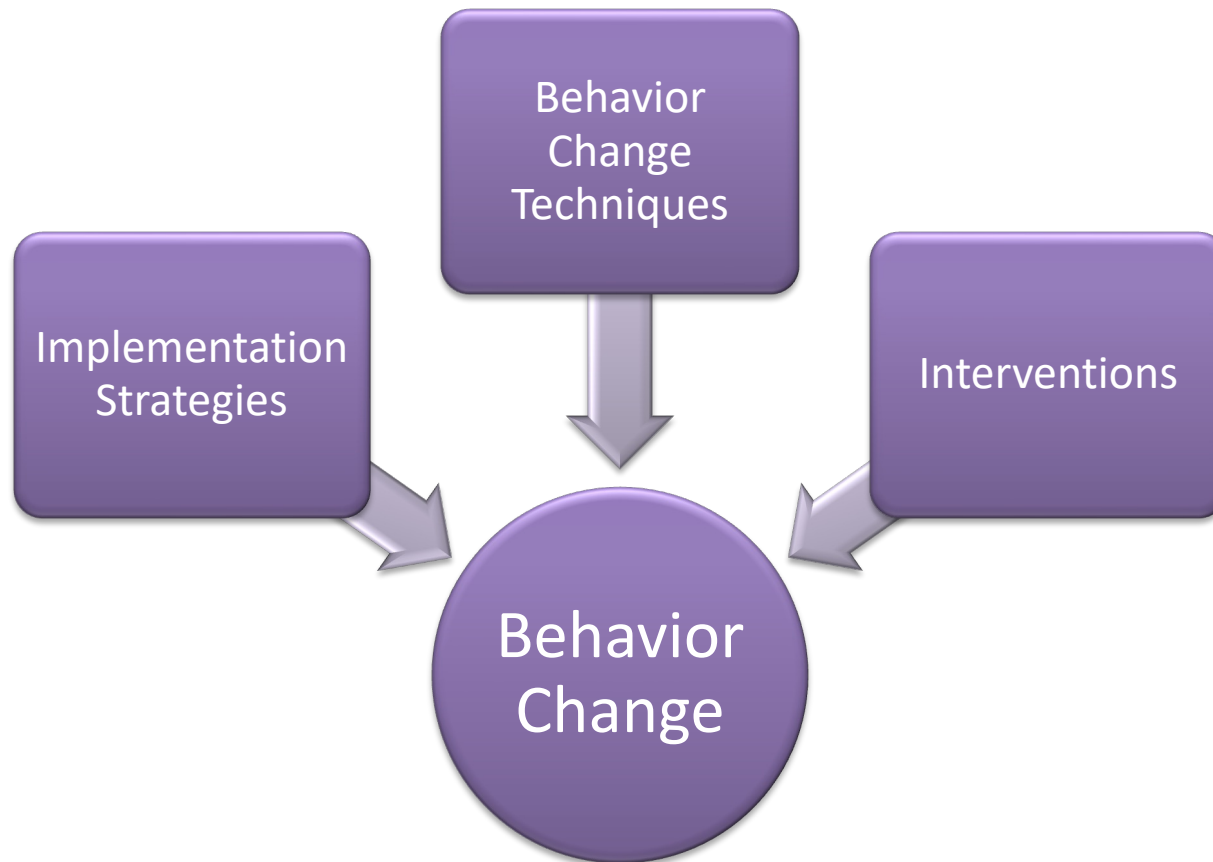
Limitations and Next Steps

- Important to balance blueprint complexity and replicability
 - Increased calls for systematic reporting and specification of implementation strategies (Huynh et al., 2018; Rudd, Davis, & Beidas, 2020)



Limitations and Next Steps

- Different terms/names used across behavior change fields
- Development of a glossary of common language to facilitate cross-disciplinary implementation efforts (Bohlen, Scott, & Frank, in prep)



Implementation Blueprint Resources

- Higgins, M. C., Weiner, J., & Young, L. (2012). Implementation teams: A new lever for organizational change. *Journal of Organizational Behavior*, 33(3), 366-388.
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- Francesca Beaudoin, M.D., Ph.D.
- Lawrence Palinkas, Ph.D.
- Melissa Clark, Ph.D.

Thank you!
QUESTIONS?



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