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

(Lewis, Scott, & Marriott, 2018)
Steps to Build an Implementation Blueprint

1. Conduct a Needs Assessment
2. Mixed Methods Data Analysis
3a. Implementation Barriers Identification
3b. Implementation Strategy Selection
4. Implementation Team Formation
5. Implementation Blueprint Creation

Academic Community Partnership

Conjoint Analysis

(Lewis, Scott, & Marriott, 2018)
Form an Academic-Community Partnership

Little to no community engagement  Academically driven research  Community placed research  Community partnered research  Community-based participatory research  Full community engagement and leadership

(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

(Palinkas et al., 2011)
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

(Green & Srinivasan, 1990; Larsen, Tele, & Kumar, 2021)
<table>
<thead>
<tr>
<th>High Feasibility and High Importance</th>
<th>High Feasibility or High Importance</th>
<th>Low Feasibility and Low Importance</th>
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<tr>
<td>Training Needs</td>
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<td>Staff Supervision</td>
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Step 3b: Engage in Collaborative Selection of Strategies

3. Conduct Educational Outreach Visits
   Feasibility: 
   Importance: 

2. Alter Incentives
   -
   -
   -

3. Create an Implementation Team
   -
   -

1.5. Restructure Clinical Teams
   -
   -

(Powell et al., 2012; 2015)
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<tr>
<th>High Impact and High Feasibility</th>
<th>High Impact or High Feasibility</th>
<th>Low Impact and Low Feasibility</th>
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<td>3 Conduct Educational Outreach Visits</td>
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<td>1.5 Restructure Clinical Teams</td>
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Step 4: Implementation Team Formation
Step 3b: Matching Barriers and Strategies

Go to 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

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METHODOLOGY

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

Cara C. Lewis¹,²,³, Kelli Scott² and Brigid R. Marriott¹

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 analysis 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

Slide adapted from Scott & Rodriguez-Quintana, 2022
Modified Conjoint Analysis (Lewis et al., 2018)

Determinant

High Feasibility

High Importance

= 23

Strategies

High Feasibility

High Impact

= 36

Slide adapted from Scott & Rodriguez-Quintana, 2022
**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)

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<tr>
<td>H</td>
<td>1, 2, 3</td>
<td>IT</td>
<td>H</td>
<td>3</td>
<td>Develop stakeholder interrelationships</td>
<td>Implementation Team- reserve biweekly meetings</td>
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<td>H</td>
<td>1, 3</td>
<td>IT</td>
<td>L</td>
<td>1.5</td>
<td>Support clinicians</td>
<td>Restructure clinical teams</td>
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<td>H</td>
<td>3</td>
<td>CBT Team</td>
<td>H</td>
<td>2</td>
<td>Train &amp; educate stakeholders</td>
<td>Select training methods that fit preferences of staff</td>
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<tr>
<td>H</td>
<td>1, 3</td>
<td>CBT Team/IT</td>
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<td></td>
<td>Use evaluative &amp; iterative strategies</td>
<td>Develop and implement tools for quality monitoring (identify program level measures)</td>
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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

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<td>H</td>
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<td>CBT Team</td>
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<td>Train &amp; educate stakeholders/Provide interactive assistance</td>
<td>CBT/Imp Sci Training/Supervision</td>
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<td>Develop stakeholder interrelationships</td>
<td>Hold cross-staff clinical meetings</td>
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<tr>
<td>H</td>
<td>1, 3</td>
<td>CBT Team/IT</td>
<td>H</td>
<td>2</td>
<td>Adapt &amp; tailor to context</td>
<td>Facilitate, structure, and promote adaptability (CBT Team to work with IT to modify CBT to fit the sites)</td>
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<td>H</td>
<td>2</td>
<td>CBT Team</td>
<td>L</td>
<td>3</td>
<td>Train &amp; educate stakeholders</td>
<td>Conduct educational outreach visits</td>
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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

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<td>Use evaluative &amp; iterative strategies</td>
<td>Develop and implement for quality monitoring- must monitor fidelity through observation regularly and randomly</td>
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<td>Train &amp; educate stakeholders</td>
<td>Conduct educational meetings- hold regularly for new staff and as refreshers</td>
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Step 5: Implementation Blueprint Creation (Lewis et al., 2018)
Example 1: Implementation of CBT in a youth residential setting (Lewis et al., 2018)

Implementation of the Wolverine Mental Health Adoption Phase
Kelli Scott, Brown University School of Public Health
Cara C. Lewis, Kaiser Permanente Washington Health Research Institute
Natalie Rodriguez-Quintana, Indiana University
Briidget R. Marriot, University of Missouri
Robert R. Hindman, Beck Institute for Cognitive Behavior Therapy

Implementation of the Wolverine Mental Health Program Implementation Phase
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Sarah Wohlers, Indiana University
Robert Hindman, Beck Institute for Cognitive Behavior Therapy

Sustaining the implementation of an evidence-based practice (EBP) is the ultimate goal of any team of significant personnel and financial investment. Some conceptualization exists as a distinct phase following an active implementation period about the contextual factors, processes, and support systems to maintain continued EBP delivery. This study provides an overview of the sustained strategies deployed to embed evidence-based treatment (EBT) in a Midwest residential treatment facility serving youth with complex mental health needs. Seven key strategies and their outcomes are described, including EBP teams, new-hire orientation plans, monthly coaching, change in job descriptions and performance evaluations, development of a behavioral management system for youth, and a jurisdictional EBP 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


- NIRN, Active Implementation Hub: [https://nirn.fpg.unc.edu/ai-hub](https://nirn.fpg.unc.edu/ai-hub)


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QUESTIONS?

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