MEASURING THE IMPLEMENTATION OF SOCIAL WORK INTERVENTIONS: OPTIONS AND EXAMPLES

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- Atlantic Coast Child Welfare Implementation Center at the University of Maryland School of Social Work.

- Permanency Innovations Initiative
  - University of Kansas School of Social Work
  - University of Maryland School of Social Work under contract to ACTION for Child Protection & the Washoe County Department of Social Services

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INTRODUCTIONS

Why this workshop?
Intervention research in social work uses scientific methods to evaluate whether an intentional change strategy is both efficacious and effective (Fraser, et al., 2009).
MEASURING FIDELITY AND IMPLEMENTATION

Must measure fidelity AND measure outcomes BECAUSE you need to know:

• Are we having an implementation problem?
  • Low fidelity & poor outcome = implementation problem
    -or-

• Are we having an effectiveness problem?
  • High fidelity & poor outcome = effectiveness problem

(Fixsen, et al., 2008; Metz, et al., 2010)
WORKSHOP OBJECTIVES

Using literature, sample data, and the co-presenters’ experience, participants in this workshop will achieve the following objectives:

(1) understand core implementation outcome domains that should be considered in intervention research designs;

(2) understand alternative methods for defining fidelity criteria and implementing fidelity assessments;

(3) consider how to use technology to support the collaborative collection and management of implementation data; and

(4) consider alternative formats for presenting implementation data to guide ongoing support and decision-making regarding implementation of interventions.
CONCEPTUAL IMPLEMENTATION MODELS

BRIEF CONTRAST
IMPLEMENTATION OUTCOMES  
(Proctor et al., 2011)

**Implementation Outcomes**

- Acceptability
- Adoption
- Appropriateness
- Costs
- Feasibility
- Fidelity
- Penetration
- Sustainability

**Service Outcomes**

- Efficiency
- Safety
- Effectiveness
- Equity
- Patient centeredness
- Timeliness

**Client Outcomes**

- Satisfaction
- Function
- Symptomatology

*IOM Standards of Care*
INTEGRATED THEORETICAL MODEL OF PROGRAM IMPLEMENTATION (BERKEL, ET AL., 2011)

Facilitative Behaviors

- Fidelity
- Quality

Participant Behaviors

- Adaptation
- Responsiveness
  - Attendance
  - Active Participation
  - Home Practice
  - Satisfaction

Program Outcomes

- Interactive Teaching Methods
- Clinical Process Skills
- Clinical Process Skills
- Clinical Process Skills
- Clinical Process Skills
Conceptual Model of EBP Implementation and Sustainment in Child Welfare

IMPROVED OUTCOMES FOR CHILDREN AND FAMILIES

Performance Assessment

Coaching (& supervision)

Training

Integrated & Compensatory

Competency Drivers

Organization Drivers

Facilitative Administration

Decision Support Data System

Leadership

Selection

National Implementation Research Network

© Fixsen & Blase, 2008
CRITICAL STEPS OF THE QUALITY IMPLEMENTATION FRAMEWORK

Self-Assessment Strategies
- Conducting a Needs and Resources Assessment
- Conducting a Fit Assessment
- Conducting a Capacity/Readiness Assessment

Decisions about Adaptation
- Possibility for Adaptation

Capacity-Building Strategies
- Obtaining Explicit Buy-in from Critical Stakeholders & Fostering a Supportive Climate
- Building General/Organizational Capacity
- Staff recruitment/maintenance
- Effective Pre-Innovation Staff Training
- Learning from Experience

Phase 1
Initial Considerations Regarding the Host Setting

Phase 2
Creating a Structure for Implementation

Phase 3
Ongoing Structure Once Implementation Begins

Phase 4
Improving Future Applications

Structural Features for Implementation
- Creating Implementation Teams
- Developing an Implementation Plan

Ongoing Implementation Support Strategies
- Technical Assistance/Coaching/Supervision
- Process Evaluation
- Supportive Feedback Mechanism

Meyers et al 2012
EVALUATING IMPLEMENTATION (INTEGRATING ACROSS MODELS)

We must consider alternative methods for evaluating:

- **Global Factors Affecting Implementation** – factors in the environment (outer context); the innovation and system fit and innovation and organizational fit; and the inner context - - intra organizational and practitioner level factors (Aarons, et al., 2011).

- **Organizational Culture and Readiness** to implement an innovation (new policy, practice, program).

- **Implementation Outcomes** - deliberate and purposive actions to implement new treatments, practices, and service (Proctor, et al., 2011), including fidelity, or the degree to which interventions are implemented as intended (Mowbray, et al., 2003).

- **Implementation Drivers** – mechanisms/activities installed to support implementation of a new initiative (Fixsen, et al., 2009).

- **Implementation Plans & Teams** – core implementation ingredients must be installed, implemented, and evaluated on an ongoing basis (Kaye, et al, 2012; Meyers, et al., 2002; Mildon & Shlonsky 2011)
RATE YOUR EXPERIENCE WITH ASSESSING ORGANIZATIONAL CLIMATE OR READINESS

1. No experience
2. Some experience
3. Extensive experience

33% 33% 33%
RATE YOUR EXPERIENCE WITH ASSESSING IMPLEMENTATION DRIVERS (ACTIVITIES):

1. No experience
2. Some experience
3. Extensive experience
RATE YOUR EXPERIENCE WITH ASSESSING COMPETENCY BUILDING PROGRAMS AND/OR TRANSFER OF LEARNING

1. No experience
2. Some experience
3. Extensive experience
RATE YOUR EXPERIENCE WITH ASSESSING FIDELITY:

1. No experience
2. Some experience
3. Extensive experience

33% 33% 33%
RATE YOUR EXPERIENCE DEVELOPING AND IMPLEMENTING SYSTEMS TO HELP TEAMS USE IMPLEMENTATION DATA

1. No experience
2. Some experience
3. Extensive experience
FOCUS OF WORKSHOP

BRIEF LITERATURE REVIEW & ILLUSTRATIONS

1. Organizational Climate/Readiness
2. Assessment of Drivers/Process
3. Building/assessing competency
4. Fidelity
5. Using data for implementation planning

EXAMPLES OF TECHNOLOGY ARE INTEGRATED

1. Qualtrics (for surveys and fidelity coding)
2. Blackboard
3. Secure Portal
ASSESSING ORGANIZATIONAL READINESS

“IMPLEMENTATION OCCURS IN THE CONTEXT OF COMMUNITY” (FIXSEN ET AL., 2005)
ASSESSING ORGANIZATIONAL READINESS

• “Implementation occurs in the context of community” (Fixsen et al., 2005)

• Selection
  • Who should carry out the innovation, new practice or program?
  • What are the characteristics of individual adopters?
  • What are the general workforce issues and larger system variables?

• Need to assess both **Individual** and **Organizational** characteristics.

Aarons et al., 2011; Fixsen et al., 2009; Glisson et al., 2012; Kaye et al., 2012
INDIVIDUAL CHARACTERISTICS

• Do they perceive a need for change?
• Do they value innovation?

• Work attitudes and morale employees with high morale are attached to their organization and respond positively to aspects of their job.

• Perceptions related to the need for, and potential benefits of the innovation, self-efficacy, and skill proficiency are related to implementing a program at higher levels of fidelity.

Aarons et al., 2011; Durlak & DuPre, 2008; Glisson et al., 2012
ORGANIZATIONAL CHARACTERISTICS

• Organizational characteristics can threaten the fidelity of intervention delivery.

• What does the general organizational workforce look like? And what are the organizational characteristics?

• Characteristics to consider:
  - Organization’s absorptive capacity – the existing knowledge, skills and abilities.
  - Readiness to change – is the organizational structure and processes ready?
  - Receptive context – is the culture and climate of the organization open to change?
  - Leadership – crucial in creating a conducive organizational culture & climate.

Aarons et al., 2011; Fixsen et al., 2009; Gearing et al., 2011
ORGANIZATIONAL CULTURE & CLIMATE

- **Culture (expectations and norms for the work environment)**
  - Organizational structure – fit of practice with roles, structure, values, and organizational authority may contribute to practice being adopted (Aarons et al., 2011).
  - Less rigid cultures associated with higher casework morale (Glisson et al., 2012).
  - Strong supervision is a common feature of high quality implementation (Daro et al., 2012).

- **Climate (psychological impact and individual perceptions of the work environment)**
  - Role clarity is associated with better job performance and role efficacy (Bray & Brawley, 2002).
  - Stress – emotional exhaustion, role overload, role conflict.
  - Engagement
WCDSS READINESS ASSESSMENT

• Implementation of new innovations is influenced by many factors.

• Survey incorporated the following constructs:

1. Organizational Readiness (Appropriateness, Management Support, Change Efficacy, Personal Valence)

2. Organizational Context (Culture, Climate, Work Attitudes)
FOR MORE QUALTRICS INFORMATION...

http://www.qualtrics.com/university/researchsuite/
EXAMPLE RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Total Group</th>
<th>Agency A</th>
<th>Agency B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Appropriateness</td>
<td>5.52</td>
<td>0.77</td>
<td>5.39</td>
</tr>
<tr>
<td>Management Support</td>
<td>4.64</td>
<td>0.23</td>
<td>3.75</td>
</tr>
<tr>
<td>Change Efficacy</td>
<td>5.65</td>
<td>0.73</td>
<td>4.59</td>
</tr>
<tr>
<td>Personal Valence</td>
<td>5.83</td>
<td>1.19</td>
<td>5.75</td>
</tr>
</tbody>
</table>

1. How would you interpret these results?

2. How could these findings inform your implementation drivers?
Figure 1. Average Job Satisfaction Scores*

<table>
<thead>
<tr>
<th>Total Group</th>
<th>Agency A</th>
<th>Agency B</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.96</td>
<td>3.21</td>
<td>4.71</td>
</tr>
</tbody>
</table>
Figure 1. Average Organizational & Career Commitment Scores

- **Total Group**
  - Organizational Commitment: 4.12
  - Career Commitment: 3.12

- **Agency A**
  - Organizational Commitment: 3.98
  - Career Commitment: 3.10

- **Agency B**
  - Organizational Commitment: 4.53
  - Career Commitment: 3.19
ASSESSING IMPLEMENTATION
DRIVERS/PROCESS
IMPLEMENTATION CAPACITY
ASSESSING IMPLEMENTATION CAPACITY

• Implementation Capacity measure was adapted\(^1\) for use with the Atlantic Coast Child Welfare Implementation Center (ACCWIC) projects

• Administered to the child welfare workforce to determine their understanding and application of the implementation drivers

• Multiple administrations can assess changes in ability/readiness to implement system-level efforts; can identify areas for additional training, coaching, and/or development

• Includes quantitative items on 7-point Likert scale (strongly disagree=1, strongly agree=7)

• A qualitative question encourages elaboration or additional comments

\(^1\)Adapted from Fixsen, Panzano, Naoom, & Blase, 2008; Holt, Amenakis, Feild, & Harris, 2007
One state’s child welfare workforce had the following results on the Implementation Capacity survey:

- Selection: 4.23
- Training: 4.77
- Coaching: 4.41
- Performance Assessment: 3.75
- Systems Intervention: 3.96
- LEADERSHIP: 4.62
- Facilitative Administration: 4.51
- Decision Support Data System: 4.43
- Shared Vision, Values & Mission: 4.64

Based on a Likert Scale of 1-7, N=432
TRAINING

• A core implementation component for practitioners.

• Practitioners need to learn when, where, how, and with whom to use new approaches and new skills.

• Useful to deliver background information, theory, philosophy, and values. Introduce the learner to the essential elements of a new set of skills.

• Environments in which the components and rationales of key practices are introduced and explored through lecture and discussion.

• Provide opportunities to practice new skills and receive feedback in a safe training environment through behavior rehearsal.

Aarons et al., 2011; Fixsen et al., 2005, 2009; Kaye et al., 2012
SAFETY ASSESSMENT FAMILY EVALUATION – FAMILY CONNECTIONS (SAFE-FC)

FOUNDATIONAL TRAININGS

I.  Pre-implementation trainings

- provided workers and supervisors with competency building opportunities in order to understand and effectively implement components of SAFE-FC
- reinforced foundational information provided in the SAFE-FC Intervention Manual.
- Training evaluations were conducted and analyzed.
COMPETENCY EXAMS

• Implemented after trainings on core content areas were provided to WCDSS and CC staff to provide foundational competency building training and practice exercises.

• Primary purpose - measure the degree to which workers and supervisors understood and could apply, in the context of case scenarios, core knowledge competencies of Safety Assessment Family Evaluation – Family Connections (SAFE-FC)

• Administered on Blackboard, a courseware management system used for web-enhanced and web-based courses.
  • Content included both learning modules and exams.
Question 27

(Q, from Module 7): Refer to the BSI Profile of Jennifer provided as a handout in Module 7 of the Online Learning Program. Jennifer’s results indicate a T score above the clinical cut point on two symptom dimensions. Which of the following symptom dimension matches behaviors, thoughts, feelings, or actions including feelings of annoyance and irritability, urges to break things, and frequent arguments, or uncontrollable outbursts of temper.

- a. Depression
- b. Hostility
- c. Phobic Anxiety
- d. Obsession-Compulsion
- e. Interpersonal Sensitivity
Question 44

This question is added for extra credit to explore how well you can integrate findings from multiple assessment instruments. You may earn up to 5 extra credit points for your answer. To answer this question, you will need the Leman NIA (first filed in the handout folder from Module 2 of the Online program) and the profiles from the RAS (module 2); AAPI (module 3); and SPS (module 4). In addition here are Mrs. Lemans scores on two other instruments – the ACEs and the BSI.

**ACEs** – Mrs. Leman scored a 7 on the ACEs and indicated a history of the following childhood history events: (1) psychological abuse; (2) physical abuse; (3) sexual abuse; (4) emotional neglect; (5) physical neglect; (7) household dysfunction – mother treated violently; and (8) household dysfunction – substance abuse.

**BSI** – T Scores above 63 on two symptom dimensions – Interpersonal Sensitivity (68) and Depression (70).

Analyze these findings and write an essay that proposes possible explanations for the specific impending danger threats and diminished protective capacities indicated on the NIA.
COACHING AND SUPERVISION

Purposes:
- Ensure implementation of training
- Develop good judgment (useful for adaptations)
- Ensure fidelity to core components of intervention
- Provide feedback to selection and training processes (Metz, et al., 2010)
TRAINING + COACHING = SUPERIOR OUTCOMES

<table>
<thead>
<tr>
<th>TRAINING COMPONENTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Participants who Demonstrate Knowledge, Demonstrate New Skills in a Training Setting, and Use New Skills in the Classroom</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
</tr>
<tr>
<td>Theory &amp; discussion...</td>
<td>10%</td>
</tr>
<tr>
<td>...+Demonstration in training</td>
<td>30%</td>
</tr>
<tr>
<td>...+Practice and feedback in training</td>
<td>60%</td>
</tr>
<tr>
<td>...+Coaching in classroom</td>
<td>95%</td>
</tr>
</tbody>
</table>

Joyce and Showers, 2002, adapted from Metz et al., 2010
KANSAS EXAMPLE OF COACHING - 1

What were your main goals for the session?
For yourself:
Please note this is the TS-DireCTIONS video. Family is father- Ryan and son- Mike.
The goal for this session was review the use of direction giving that occurred in the parent/child visit and troubleshoot any challenges experienced.
For the family:
The father wanted to review successes and challenges in direction giving.

What went well in the session (give time on the recording)?
I used demonstration by role-playing the directions that Ryan gave to Mike to reinforce the use of directions. At 00:04:35 I listed the variables that made the directions successful. I thought these pieces went well:

<table>
<thead>
<tr>
<th>start time</th>
<th>hh:mm:ss</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:02:33</td>
<td></td>
</tr>
</tbody>
</table>

What do you want feedback on (give time on recording)
Ryan talked about mistakes being okay. I don’t think I did a good job of validating that and missed the opportunity to point out shooting for compliance 70% of the time.

<table>
<thead>
<tr>
<th>start time</th>
<th>hh:mm:ss</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:10:20</td>
<td></td>
</tr>
</tbody>
</table>

What was a challenge? What would you do differently if you could do the session over?
I would reinforce Ryan for gaining insight into how his emotions set the tone.

HPA (after-session assignment) for next week

Goals for the next session
For yourself:
**KANSAS EXAMPLE OF COACHING - 2**

- **Nice gentle, positive start** to session – you are calming as you demonstrate warmth and interest in this father. “That’s awesome, so things are right on track!” **Quite solid, lovely process skills** obvious in the first minute.
- **Beautiful check-in question:** “I’m curious ... could you tell me about any opportunity you had to use some of those good directions skills we practiced last week.”
- “How did you set that up?” **Excellent leading question** that **elicited** the information you wanted – what worked with good directions.
- **Lovely quick joining** with humor re: spilled drink/carpet stain to remember visit. **Great example** of your attentiveness.
- **Smooth transition** into active teach “So when you were giving that direction …” as you stand up and move into a role play.
- “Great. I’m gonna write that up here ….. so I don’t forget it….. And was it successful … and he did it………” **Great punctuating**
- **Great summarizing and replaying** what dad did well (good direction) and then a high-five to further punctuate his success.
- “So tell me what helped you be successful” Such an **effective prompt** and then you **punctuate** on board. I like how you also **provide rationale** for why it is helpful to write this out on the flip chart (so we all can remember what worked)
- “To have Mike’s attention, what did that require?” **Very effective leading question**
- “Think about that interaction in slow motion” What a **lovely prompt** that leads dad to explore what he did successfully
- **Normalizing** dad’s frustration
- **Great reframing / expanding** what dad did into specific parenting skills & strengths
- **Excellent summarizing and supportive comments**:

  That is incredible progress

  I am really impressed with your self-awareness. I think it has helped give good directions and helped your son.

- **Lovely personalizing** and making **PTMO relevant** to this father when you tied Dad’s parenting success to his recovery goals.

**Consideration**

- How could you incorporate role play / practice into this session? Dad was successful with giving basic directions. What directions variation or aspect could he practice?
ASSESSING IMPLEMENTATION AND INTERVENTION FIDELITY

EXAMPLES FROM KANSAS AND WEST VIRGINIA
Degree to which an intervention is implemented as it was prescribed in original protocol or as it was intended by program developers (Daro, 2010; Proctor et al. 2011)

Achieving high fidelity requires (Gearing et al. 2011):
- Well-articulated practice or program design
- High-quality training and supervision on the practice or program
- Monitoring
- Receipt of treatment (the extent to which clients understand and can use it)
KEY POINTS FROM THE LITERATURE

• Fidelity data tells us how effective an intervention or practice change is (Daro et al., 2012)
• Fidelity data should inform decision-making about next steps in implementation (Mildon & Shlonsky, 2011)
• Must specify a theory of change and “active ingredients” or core components (Blase, 2005; Meyers et al., 2012)
• Multiple indicators and multiple data collection methods provide important flexibility (Baer et al., 2007; Proctor et al., 2011)
  • Self-report checklists
  • Coding of recorded sessions
  • Remote viewing
KEY POINTS FROM THE LITERATURE

• Fidelity data provide more than a summary judgment of implementation; can be used for continuous program improvement (Aarons et al., 2009)

• High fidelity is associated with improved outcomes! (Blase, 2005)

• High fidelity is achieved only over time (Bond et al., 2009)
## DIMENSIONS OF FIDELITY *(Adapted from Berkel et al., 2011)*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Definition</th>
<th>Other labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance</td>
<td>When prescribed program components were delivered as instructed in program protocol</td>
<td>Adherence Integrity Faithful replication</td>
</tr>
<tr>
<td>Context</td>
<td>Adherence to structural elements of the program</td>
<td>Structure</td>
</tr>
<tr>
<td>Competence</td>
<td>Clinical skill with which the program is implemented</td>
<td>Quality</td>
</tr>
<tr>
<td>Dosage</td>
<td>Amount of program delivered to client (e.g., number of hours of service; number of sessions completed)</td>
<td>Exposure Quantity Intervention strength</td>
</tr>
<tr>
<td>Participant responsiveness</td>
<td>Involvement and interest in the program</td>
<td>Engagement Attendance Retention Satisfaction</td>
</tr>
<tr>
<td>Differentiation</td>
<td>Distinctiveness of a program’s theory and practices from other available programs</td>
<td>Program uniqueness</td>
</tr>
<tr>
<td>Reach</td>
<td>Extent to which participants served are representative of target population</td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>Documenting services received by participants beyond program</td>
<td></td>
</tr>
</tbody>
</table>
# Kansas Example of Multidimensional Fidelity

<table>
<thead>
<tr>
<th>Type of Fidelity</th>
<th>Domain</th>
<th>Core Component</th>
<th>Indicator Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>Staffing</td>
<td>-</td>
<td>Use of selection protocols</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>-</td>
<td>Training attendance</td>
</tr>
<tr>
<td></td>
<td>Coaching</td>
<td>-</td>
<td>Coaching participation</td>
</tr>
<tr>
<td></td>
<td>Certifying</td>
<td>-</td>
<td>Key milestones – invitation, adequate ratings</td>
</tr>
<tr>
<td>Intervention</td>
<td>Context</td>
<td>Early intervention</td>
<td>Days from foster care entry to program referral</td>
</tr>
<tr>
<td></td>
<td>Context</td>
<td>In-home</td>
<td>Percent of sessions delivered in-home</td>
</tr>
<tr>
<td></td>
<td>Context</td>
<td>Intensive</td>
<td>Hours of tx per week</td>
</tr>
<tr>
<td></td>
<td>Context</td>
<td>Low caseload</td>
<td>Cases per practitioner</td>
</tr>
<tr>
<td></td>
<td>Dosage</td>
<td>Parent training</td>
<td>Number tx days (duration) Percent with tx/content completed</td>
</tr>
<tr>
<td></td>
<td>Compliance</td>
<td>PMTO content/order</td>
<td>Percent of cases with appropriate order</td>
</tr>
<tr>
<td></td>
<td>Competence</td>
<td>PMTO</td>
<td>Fidelity score</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
<td>Engagement</td>
<td>Retention &amp; completion rates</td>
</tr>
</tbody>
</table>
WEST VIRGINIA EXAMPLE OF INTERVENTION FIDELITY

A statewide team of practitioners uses detailed review instruments to measure fidelity to each area of the model

Key fidelity criteria for the intervention:
- Quality of interview (information from all key informants)
- Quality of decisions (imminent danger, present danger)
- Quality of plans (temporary protection plan, safety plan, protective caregiver capacity)

Instruments and processes created to support fidelity review:
- Customized fidelity review instruments, data analysis strategy, coding for software
- Collaborative processes: presentations and workshops with implementers and policy makers, evaluation sub-committee

Frequency of fidelity data collection – initial plan:
- Baseline data collected daily for 2 months after implementation
- Ongoing fidelity review is annual
WEST VIRGINIA EXAMPLE: COMMUNICATION ABOUT FIDELITY

Selected group of practitioners measures fidelity via case review

Field staff improve practice through coaching, supervision, & training

Leadership presents results to field staff

Results are analyzed and shared with leadership
USING DATA TO DRIVE IMPLEMENTATION FIDELITY

EXAMPLES FROM KANSAS AND WEST VIRGINIA
DECISION SUPPORT DATA SYSTEMS

• Include quality assurance data, fidelity data, & outcome data
• Assess key aspects of overall performance of organization
• Support decision-making to continue implementation of core intervention with fidelity over time
• Must be reliable, reported frequently, built into practice, accessible at actionable levels, and used to make decisions

(Fixsen, et al., 2008, 2009; Metz et al., 2012)
IMPLEMENTATION TEAMS AND DATA

- Implementation Teams use data during each Implementation Stage
- Teams monitor implementation by identifying practice areas that need attention to achieve practice standards
- Teams adjust implementation strategies to enhance other drivers (e.g., selection, training, coaching)

(Kaye, DePanfilis, Bright, & Fisher, 2012)

Exploration
- Assess needs
- Examine innovations
- Examine implementation
- Assess fit

Installation
- Acquire resources
- Prepare organization
- Prepare implementation
- Prepare staff

Initial Implementation
- Implementation drivers
- Manage change
- Data systems
- Improvement cycles

Full Implementation
- Implementation drivers
- Implementation outcomes
- Innovation outcomes
- Standard practice

(Metz & Bartley, 2012)
WEST VIRGINIA EXAMPLE

- In West Virginia, the timeline was for each of three major practice elements to roll out, in three phases, across the state
- Early fidelity results were not as high as hoped
- Mid-course correction
  - Fidelity review itself was unsustainable – daily reviews were too much work!
    - Fewer cases reviewed
    - Less frequent reviews
  - Practice change roll-out was too complex for original timeline
    - A four-phase, rather than three-phase, roll-out, was established
    - The regions with highest fidelity were selected for first roll-out of the next element
- Fidelity improved dramatically after these interventions
KANSAS EXAMPLE OF FIDELITY IMPROVEMENT CYCLES

- **Coach**
  - FIMP score*
  - Qualitative Feedback

- **Lead Coach**
  - FIMP score*

- **Practitioner**
  - Video-record
  - Quantitative Fidelity Indicators

- **Data Collection**

- **State Implementation Team**

- **Local Team**

- **Supervisor**
  - Quantitative & Qualitative Feedback

*FIMP score is a quantitative rating of competence
**KANSAS EXAMPLE – INTERVENTION FIDELITY OVERVIEW**

<table>
<thead>
<tr>
<th>CORE INTERVENTION COMPONENT</th>
<th>Avg</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Intervention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days from FC entry to KIPP referral</td>
<td>36.00</td>
<td>34.50</td>
<td>15 - 75</td>
</tr>
<tr>
<td>Days from KIPP referral to initial contact</td>
<td>0.6</td>
<td>0.00</td>
<td>0 - 4</td>
</tr>
<tr>
<td><strong>In-Home</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent KIPP Sessions in-home (N = 28)</td>
<td>70.50%</td>
<td>80.99%</td>
<td>0 - 100%</td>
</tr>
<tr>
<td><strong>Intensive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours of KIPP tx per week (N = 27)</td>
<td>2.50</td>
<td>3.20</td>
<td>1 - 7</td>
</tr>
<tr>
<td><strong>Parent/Child Visits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours of nonKIPP parent/child visits per week (N = 30)</td>
<td>14.10</td>
<td>5.63</td>
<td>.42 - 60.70</td>
</tr>
<tr>
<td>Hours of all parent/child contacts per week (N = 30)</td>
<td>14.90</td>
<td>7.00</td>
<td>0.75 - 61.30</td>
</tr>
<tr>
<td><strong>Parenting training (PMTO)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number tx days</td>
<td>155.96</td>
<td>176.00</td>
<td>13 - 244</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tx completed (6 months)</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not start treatment</td>
<td>2</td>
<td>7%</td>
</tr>
<tr>
<td>Did not complete treatment</td>
<td>7</td>
<td>23%</td>
</tr>
<tr>
<td>Completed PMTO content</td>
<td>16</td>
<td>53%</td>
</tr>
<tr>
<td>Completed 6 months but not PMTO content</td>
<td>5</td>
<td>17%</td>
</tr>
</tbody>
</table>

Note: All of the Kansas data are sample data. They are realistic, but not real data.
EXAMPLE OF CONTEXT & DOSAGE INDICATORS
SAMPLE DATA

Figure 1. Early Intervention

Figure 2. In-home

Figure 3. Low Caseload

Figure 4. Dosage
EXAMPLE OF COMPETENCE INDICATOR, PROJECT LEVEL
(SAMPLE DATA)

Average FIMP score

Observation

N = 1 27 2 27 3 27 4 27 5 26 6 26 7 25 8 19 9 18
EXAMPLE OF COMPETENCE INDICATOR, PRACTITIONER LEVEL (SAMPLE DATA)

Notes:
- **Red** = danger zone
- **Yellow** = possible concerns
- **Green** = certifiable
- Figure 1 – High scores, all certifiable, flat trajectory
- Figure 2 – Low scores, relatively steep trajectory
- Figure 3 – Typical positive trajectory with slight setbacks in later sessions
REDCap

Developed by Vanderbilt University
Distributed through consortium of university partners
HIPAA compliant
Accessed via internet
Tracks key outputs and outcomes data
Easy data extraction
Users access forms by clicking button. Red – incomplete  
Green = complete
<table>
<thead>
<tr>
<th>PART 1a - Social Skills: How Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Expresses feelings when wronged</td>
</tr>
<tr>
<td>2a. Follows household rules</td>
</tr>
<tr>
<td>3a. Tries to understand how you feel</td>
</tr>
<tr>
<td>4a. Says &quot;thank you&quot;</td>
</tr>
<tr>
<td>5a. Asks for help from adults</td>
</tr>
<tr>
<td>6a. Takes care when using other people's things</td>
</tr>
<tr>
<td>7a. Pays attention to your instructions</td>
</tr>
<tr>
<td>8a. Tries to make others feel better</td>
</tr>
<tr>
<td>9a. Joins activities that have already started</td>
</tr>
<tr>
<td>10a. Takes turns in conversations</td>
</tr>
<tr>
<td>11a. Says when there is a problem</td>
</tr>
<tr>
<td>12a. Works well with family members</td>
</tr>
<tr>
<td>13a. Forgive others</td>
</tr>
<tr>
<td>14a. Speaks in appropriate tone of voice</td>
</tr>
<tr>
<td>15a. Stands up for others who are treated unfairly</td>
</tr>
<tr>
<td>16a. Is well behaved when unsupervised</td>
</tr>
<tr>
<td>17a. Follows your directions</td>
</tr>
<tr>
<td>18a. Tries to understand how others feel</td>
</tr>
</tbody>
</table>
Take home points

• To move from evaluating efficacy to effectiveness, we must also evaluate key implementation variables/outcomes.

• Monitoring implementation and using data to change implementation strategies requires substantial effort. However, failing to monitor implementation means that we may not be able to interpret data about intervention outcomes.

• Other?
FOLLOW UP CONTACT INFORMATION

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www.family.umaryland.edu
REFERENCES


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