Fidelity 101: Assessing, Improving, Monitoring, and Driving CQI Initiatives

Learning Objectives

- Review the importance of assessing, improving, and monitoring fidelity to support implementation and evaluation

- Understand how fidelity assessments can support improving outcomes through CQI initiatives

- Explore utilizing the Gateway’s “Program Fidelity and CQI Assessment” to measure present-state fidelity and identify CQI initiatives to improve fidelity
Fidelity & Fidelity Assessment

- **Fidelity** is the agreement (concordance) of a replicated program or strategy with the specification of the original.

- Measuring fidelity can:
  - Support research on promising practices
  - Produce innovations to intervention models
  - Promote systematic implementation
  - Target proximal outcomes
**Fidelity Assessment** is a process designed to help program implementers, evaluators, funders, and developers assess changes or adaptations made to a program upon implementation.

- **Implementers**- anticipate potential adaptations
- **Funders**- evaluating appropriateness of changes

**Adaptation** describes any changes or departures from the methodology used in the original implementation of the program or strategy.

- **Essential for:**
  - Understanding program impact
  - Account of how a program was adapted
  - Guiding future attempts at successful implementation
**Fidelity Assessment**

A long-term process

**Initial Funding/Implementation**

- **Detail Anticipated Modifications**

- **Regular Fidelity Assessments** (every 1-6 months)

**Benefits of Fidelity Assessment**

- Select a program that is appropriate to the organization’s or community’s needs and resources

- Anticipate, plan, implement, and track appropriate and beneficial adaptations

- Contribute to the knowledge-base about effective and ineffective adaptations

- More accurately attribute outcomes to the actual program
Assessing Fidelity
### Table: Fidelity Methods and Descriptions

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
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<tbody>
<tr>
<td>Site visit</td>
<td>Intervention experts conduct structured interviews</td>
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<tr>
<td>Structured observation</td>
<td>Intervention experts code practitioners during live observation and provide feedback, or trained coders rate audio/video recordings</td>
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<tr>
<td>Multi-informant methods</td>
<td>Feedback collected from multiple stakeholders, including youth, families, providers, case files, supervisory review</td>
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<tr>
<td>Self report checklists</td>
<td>Practitioners complete checklists to describe whether key intervention activities were completed</td>
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<tr>
<td>Secondary data analysis</td>
<td>Researchers analyze existing administrative data</td>
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<tr>
<td>Supervisory review</td>
<td>Supervisors rate practitioners on adherence or competence</td>
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<tr>
<td>Case file review</td>
<td>Intervention experts or trained researchers code case files/progress notes</td>
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<tr>
<td>Key informant survey</td>
<td>Agency representative reports for a unit or organization</td>
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### Fidelity Score

<table>
<thead>
<tr>
<th>Good Outcomes</th>
<th>High Fidelity</th>
<th>Low Fidelity</th>
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<tbody>
<tr>
<td>Celebrate and duplicate!</td>
<td>Re-examine the intervention and modify the fidelity assessment.</td>
<td></td>
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<table>
<thead>
<tr>
<th>Poor Outcomes</th>
<th>Modify the intervention</th>
<th>Start over</th>
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MIECHV Gateway “Program Fidelity & CQI Assessment”

- **What:** A fidelity assessment tool
- **Where:** MIECHV Gateway Site – Stage 1: Plan; Step 2
- **Purpose:** Identify adherence to a procedure/policy and acts as a powerful brainstorming tool to identify potential CQI projects.
- **Score:** Obtain a fidelity score based on a point scale of Always (3), Sometimes (2), Seldom (1), Never (0). Responses marked as "Not Observed" will not be counted in the fidelity score. The fidelity percentage is out of a total of 100.
- **Action:** Based on the results of this assessment, the reporter and their agency are able to self-identify areas where quality improvement initiatives are needed and to self-direct the CQI process through to the completion of a CQI Storyboard.

Example
MIECHV Gateway Fidelity Assessment Scoring Tool

1-29% Immediate Action Needed
Immediate program assessment and quality improvement work is necessary

30-74% Recommend Action
Strongly recommend quality improvement projects begin to improve fidelity

75-100% Ongoing Review
Continued program assessment and quality improvement work, as needed, to maintain fidelity

Improving Fidelity
Fidelity Leads to Outcomes

Primary Reasons for Fidelity Change

- **Recipient** issues (cultural norms, demographics)
- **Program provider** issues (staff recruitment/retention issues, costs)
- **Community** issues (political climate, traumatic incident, community norms)
- **Setting** issues (policies, scheduling, facilities)
- **Evaluation** issues (sample size requirements, resources, reporting schedule)
- **Sustainability** issues (potential funding leverage, community buy-in)
Key Elements for 100% Participation

- Organization-wide *training*
- A *data system* that tracks project progress, successes
  - very easy to access
  - promotes "stealing" of successful ideas, drives reward and recognition
  - helps standardize solutions
- A formal *reward and recognition* system, complemented by intermittent, unexpected reinforcement

Monitoring Fidelity
Measurement Imperative

“Not everything that counts can be counted, and not everything that can be counted counts”
- Albert Einstein

But...

“You can’t improve what you don’t measure”
- Edwards Deming

Fidelity data collection is...

- Frequent
- Relevant
- Actionable

Kaye, S. & Holder, T. (August 2011)
CQI Measure Types

- **Structure**: Physical equipment and facilities
- **Process**: How the system works
- **Outcome**: The final product, results

Data to Wisdom

- **Data**: Obtain raw facts (numbers, letters, symbols)
- **Information**: Give meaning to obtained data (who, what, where, when)
- **Knowledge**: Analyze and synthesize derived information (how)
- **Wisdom**: Use knowledge to establish and achieve goals (why)
Driving CQI Initiatives
3 Key Questions

Before performing a PDSA cycle, you should answer 3 key questions:

1. What are we trying to accomplish? **Aim**
2. How will we know a change is an improvement? **Measurement**
3. What change will result in improvement? **Method**

### PDSA Cycle

**Plan** - What question are you trying to answer?
- Objective, predictions & plan

**Do** - What happened?
- Execute, document & record

**Study** - How did what happened compare with the plan?
- Analyze, compare, and summarize results

**Act** - What is the next step?
- Finalize changes & future steps
Summary

- Vital to measure fidelity by completing regular fidelity assessments
- Assess fidelity prior to beginning a CQI project
- Identify and document issues within and changes made
- Collect data that is frequent, relevant, and actionable
- Begin utilizing the “Program Fidelity and CQI Assessment”