Monitoring the Impact of State Flex Programs

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Flex Reverse Site Visit
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A Performance Monitoring Resource for Critical Access Hospitals, States, and Communities
Learning Objectives

• Review program planning and monitoring issues
  – Theory of change
  – Process vs. outcomes
  – Connecting evidence-based interventions to desired outcomes
  – Identifying and rolling up chained outcomes (short, intermediate, and long-term) that lead to desired overall goals
• Review potential process and outcomes measures by Flex activity areas
  – Data issues
Understanding outcome measures
Program Management Challenges: Activity Traps

- Doing a particular activity for a long time
- Not sure why we keep doing them
- Things may be done right – they are just not the right things
- Targeting symptoms – not the root causes
- Falling for the “intervention” of the month
- Not adapting interventions to the local critical access hospital (CAH) or community context
- Not having a consistent strategy over time
ATM: Avoiding Activity Traps

- Antecedent conditions – the “why” of a problem
- Identify root (causal) factors related to the problem
- Target antecedent conditions: who, what, how
- Interventions must directly target root causes
- Who has the power to make necessary changes
- Resource needs, planned activities & outcomes
- Extract outcomes from root causes
- Measurement
- Identify time frame for expected outcomes
- For which outcomes are measures necessary?
- What are the sources of data for measures?
- Extract measurable objectives from identified outcomes
- Adapted from Renger and Titcomb, 2002
Theory of Change

• Describes how and why a set of activities are expected to lead to short, intermediate, and long-term outcomes over time
  – Develops a causal pathway to identify necessary and sufficient outcomes needed to achieve a goal
  – Creates a roadmap that shows how a set of actions would help achieve a goal
  – Identifies and highlights interventions and assumptions that are critical to produce an outcome
  – Highlights critical areas addressed by external actors and how the project will link to them
Flaws in Theories of Change

- No actual theory: “We do stuff and stuff happens”
- Implausible theory: “That trick never works”
- Too simple: Assuming “it works” for everyone and ignores contribution of other organizations
- Not clear: “Everything is linked to everything”
- Forget that it is only a model: Treat it as perfectly representing reality and fixed
- Unintended results ignored: Negative impacts not anticipated and risk managed
- Theory of change not reflected in evaluation
Key Questions for a Theory of Change

• What problematic conditions exist that demand a programmatic response?
  – Why do these conditions exist?
  – For whom do they exist?
  – Who has a stake in addressing the conditions contributing to problems in performance?
  – What can be changed?
Evaluating a Theory of Change

• What is the causal chain of events leading from interventions to desired outcomes and impact?
• Are outcomes sequenced properly?
  – Does each lower level outcome lead to the higher level outcome?
  – Do the proposed interventions connect the outcomes?
• Are there leaps in logic or missing elements?
  – Is each outcome necessary and sufficient to cause the higher level outcome?
  – Are all necessary outcomes that others are responsible included?
• Are there sufficient time and resources?
Outputs vs. Outcomes

Outputs
- Result from successful completion of program activities
- Example: # of CAH personnel attending QI training

Outcomes
- Changes/benefits to participants from program activities
- Time specific – short, intermediate, and long term
- Difficult to measure/determine causality as the time horizon becomes longer
- Chain of outcome evidence becomes important
- Example: improvement in CAH financial performance

Impacts
- Organizational, community, and/or system level changes expected to result from program activities
Timeframes

- Short term – 1-2 years
  - Changes in participants’ knowledge, attitudes, or skills
- Intermediate term – 3-4 years
  - Changes in participants behavior
- Long term – 5 or more years
  - Changes in participants’ condition or status
Understanding the chain of outcomes
Program Chain of Outcomes

- Broad goals are difficult to measure
- Causality/attribution is difficult to prove
- Many entities, programs, stakeholders impact CAHs
- Data collection is expensive
- Broad goals may have long time horizons
- Program’s theory of change provides a “chain of outcomes”
- Describes why and how interim outcomes will monitor progress towards proposed long term program impact
- Interim outcomes are less expensive/easier to measure
- Provides evidence that program is on track to achieve goals
Evaluating Chain of Outcomes

• Do the proposed long term outcomes represent meaningful change in participants’ performance?
• Do outputs and short, intermediate, and long-term outcomes relate logically to each other?
• Check “If-Then” relationships between outputs and outcomes
• If accurate, then each output/outcome should be expected to result in the next outcome of the chain.
• Are outcomes achievable given resources and program’s influence over participants?
• Have potential negative outcomes/unintended consequences been identified?
Challenge: Dealing with Complexity

- Failure to understand underlying rationale
- Problem statements and activities are more easily identified than underlying rationale
- Clearly identify theory of change
- Understand the “noise” in the system and players that influence the outcomes of programs and interventions
- Understand the relative contribution/influence that a program or intervention may have on a CAH
Challenge: Outcomes and Measurement

- Identify desired outcomes from targeted causes of underlying problem
- Extract measurable objectives from the identified outcomes
- For which outcomes are measures necessary?
- Can changes in outcomes be expected during the course of the program?
- Identify interim evidence-based steps that lead you to believe that the program is moving in the right direction
Measure Selection Criteria

- Relevance
- Meaningfulness and interpretability
- Scientific or clinical evidence
- Reliability or reproducibility
- Feasibility
- Validity
- Importance
Defining and Writing Outcome Measures

• Clarity and specificity are key
  – **Specific**
  – **Measureable**
  – **Attainable**
  – **Results oriented** (they must be actionable!)
  – **Timed**
Sources of Data

• Measures must reflect the proposed interventions and available data

• Identifying available secondary data
  – What data are already reported by hospitals?
  – Can any of these data be used to monitor the chain of outcomes towards high-level program goals?

• Some measures may require original data collection (examples)
  – CAH satisfaction with technical assistance received
  – Benefits from participation in Flex-funded trainings
  – Interim measures based on specific interventions
FMT Tools to Support Outcome Measurement
CAHMPAS

- Critical Access Hospital Measurement and Performance Assessment System

- Domains
  - Finance and operations
  - Quality
  - Community benefit and health improvement

- Searchable database of CAH-relevant performance measures in the three domains

- Website: https://cahmpas.flexmonitoring.org/
- Resources and tutorials are available on the website
Financial Measures

- Hospital-level financial measures
  - Profitability
  - Liquidity
  - Capital structure
  - Revenue
  - Cost
  - Utilization

- Relative to national, state, peer groups

- Benchmark, market, outpatient, financial distress reports
Quality Measures

- CAH Participation in Hospital Compare, 2017
- Percent of CAHs Reporting HCAHPS Survey Data, 2011-17
- State Rankings of CAH Reporting Rates for Inpatient Quality Measures, 2017
- State Rankings of CAH Reporting Rates for Outpatient Quality Measures, 2017
- Inpatient and Outpatient Process of Care Results for Patients Discharged from Reporting CAHs, 2017
- Median Time to Patients Receiving Recommended Care at CAHs, 2017
- Structural Quality Measures Reported by CAHs, 2017
Quality Measures (cont’d)

- State Rankings of HCAHPS Participation Rates for CAHs, 2017
- Completed HCAHPS Surveys among CAHs Reporting Data, 2011-17
- Detail of HCAHPS Survey Completion Rates among CAHs Reporting Data, 2017
- Critical Access Hospitals by Number of Completed HCAHPS Surveys and Hospital Admissions, 2017
- Number of Completed HCAHPS Surveys and Response Rates for CAHs, 2017
- HCAHPS Results for CAHs by State, 2017
Community Benefit and Health Improvement

• Charity Care, Bad Debt, and Uncompensated
  – Measured as a % of adjusted revenue

• Health Improvement, Essential Health Services, and Community Benefit Activities
  – Provision of wellness and prevention services
  – Provision of core services (e.g., dental care, substance abuse, primary care)
  – Strategies to improve care for culturally/linguistically-diverse populations
Community Benefit and Health Improvement (cont’d)

- Community Health Needs and Issues (to assess the community context in which CAHs operate)
  - Socioeconomic factors (e.g., unemployment)
  - Environmental factors (e.g., limited access to healthy food, limited access to recreational facilities)
  - Health outcomes (premature death, low birthweights)
  - Health behaviors (e.g., obesity, excessive drinking)
  - Clinical care and access to care (e.g., ratio of primary care physicians to population, uninsured population, diabetic screenings)
Conclusions

• The key points to remember are:
  – Successful programs build on a clear theory of change
  – Use your theory of change and evidence-base for your interventions to identify potential measures
  – Be clear about data sources
  – Balance the need for original data against the costs of collecting the data
  – Roll up short, intermediate, and long-term measures to document progress towards achievement of high level goals
  – Don’t reinvent the wheel, use measures that have been tested in other programs and adapt them to your specific needs
Thank You!

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