

Performance and Outcome Measurement for State Grantees

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Learning Objectives

- Provide an overview of the program planning and monitoring process
 - 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 indicators by category of activity across opioid, substance use, and telehealth grants
 - Data issues

Understanding Outcome Measurement

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 may not be the right things
- Targeting symptoms – not the root causes
- Falling for the “intervention of the month”
- Not adapting interventions to the 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
 - 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, either part of a highly focused program or a comprehensive initiative, are expected to lead to early, 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

Challenges: Developing a Theory 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”
- Unintended results ignored - Negative impacts not anticipated and risk managed
- Not used for evaluation - Theory of change not reflected in evaluation
- Forget its only a model - Treat it as perfectly representing reality and fixed

Key Questions Underlying a Theory of Change

- What problematic condition exists that demands a programmatic response?
 - Why does it exist?
 - For whom does it exist?
 - Who has a stake in the problem?
 - What can be changed?

Evaluating a Theory of Change

- What is the causal chain of events that leads from the implementation to the 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 any large 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 vs. Impacts

- **Outputs**
 - Result from successful completion of program activities
- **Outcomes**
 - Changes/benefits to individuals, groups, organizations, communities that result from program activities
 - Time specific – short, intermediate, and long term
 - More difficult to measure and determine causality as the time horizon becomes longer
 - Chain of outcome evidence becomes important
- **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 O/SUDs
 - Data collection is expensive
 - Broad goals may have long time horizons
- Theory of change provides a “chain of outcomes”
 - Describes why and how interim outcomes will contribute to desired 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 desired long term outcomes represent meaningful change in participants' performance?
- Do outputs and short, intermediate, and long-term outcomes relate to each other logically?
 - 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 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 providers, community, individuals with O/SUDs

Challenge: Outcomes and Measurement

- Extract outcomes from targeted causes of underlying problem
- Extract measurable objectives from the identified outcomes
 - For which outcomes are indicators 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

Example:
Performance Measurement for FORHP's
Opioid and Substance Use Grant Programs

Rural Health Opioid Program

- Reduce morbidity/mortality related to opioid ODs through development of community consortiums by:
 - Identifying at-risk individuals and providing outreach and education on treatment options and support services
 - Educating community members
 - Implementing care coordination practices (encouraged)
 - Supporting individuals in recovery by providing behavioral counselling and peer support activities (encouraged)
- Key focus points for measurement
 - Operation of consortiums, engagement of partners
 - Implementation and use of programs
 - Level of participation in programs
 - Outcomes for participants in programs

RCORP - Planning

- Reduce Opioid OD morbidity/mortality by engaging consortiums in planning to strengthen capacity to address prevention, treatment, and/or recovery
- Key focus points for measurement
 - Development and operation of consortium
 - Engagement of and collaboration between consortium partners
 - Inventory of available services
 - Development of detailed plans to:
 - Identify gaps and needs to reduce opioid OD deaths
 - Develop programs/services (or enhance existing services) in one of more of the core areas to fill those gaps
 - Secure resources to expand programs/services and ensure sustainability
 - Improve integration of services across providers
 - Address workforce needs

RCORP - Implementation

- Implement robust interventions/models to expand access to, and strengthen quality of, SUD/ODU prevention, treatment, and recovery services
- Key focus points for measurement
 - Development and/or enhancement of programs/services to address gaps in one or more of three core areas
 - Improved access (e.g., increased utilization, reduced wait times)
 - Utilization of programs/services
 - Outcomes for participants in programs
 - Reductions in supplies of prescription or illicit opioids
 - Improved system capacity and sustainability
 - Greater integration across programs
 - Reduced morbidity and mortality related to OD deaths

Telebehavioral Health Network Program

- Use telehealth networks to increase access to behavioral health care services in rural and frontier communities
- Establish an evidence-base for the effectiveness of TBH
- Key points for measurement
 - Improved access to care through telehealth
 - Development and expansion of TBH services
 - Utilization of those services
 - Outcomes for participants in programs
 - Evaluation and production of evidence for TBH services
 - Quality
 - Clinical effectiveness
 - Cost effectiveness

SU TX Telehealth Network Grant Program

- Demonstrate use of telehealth programs/networks to improve access to healthcare services, particularly SU services, in rural, frontier, and underserved communities
- Key points for measurement
 - Expansion of telehealth services, improved access to care
 - Improved coordination of care
 - The quality of telehealth services
 - Enhanced training for health care providers
 - Improved availability of health information (for decision-making) to providers, patients and their families
 - Outcomes for participants in programs
 - Sustainability of programs

Context for Selecting Indicators

Indicator Selection Criteria

- Relevance
- Meaningfulness and interpretability
- Scientific or clinical evidence
- Reliability or reproducibility
- Feasibility
- Validity
- Health importance

Defining and Writing Indicators

- Clarity and specificity are key
- Specific
- Measureable
- Attainable
- Results oriented (they must be actionable!)
- Timed

Core Areas of Program Implementation

- Consortium development, operation, and collaboration
- Planning and implementation – identifying/addressing needs
- Improving service and system integration
- Workforce development
- Improving access
- Quality of services
- Program utilization and reach
- Outcomes resulting from participation
- High level goals – reduction of morbidity/mortality related to OUDs and overdoses
- Improve O/SUD delivery systems in rural communities

Reflecting the Diversity of Grantee Activities

- Across the five programs, there are a range of proposed initiatives
 - Because of the diversity, it is not possible to identify specific indicators for all activities
 - Instead, we will discuss examples from core program areas
- Indicators must be selected to reflect the context of the proposed activities and interventions
- Indicators to monitor program implementation should “roll up” to move toward the desired end goals
- Complicating factors
 - Open or closed system?
 - Geographic reach?
 - Access to data

Sources of Data

- Selecting indicators can only be done within the context of the proposed interventions and available data sets
- Identifying availability of data at the state, system, or provider, consumer, or community level
 - What data are collected by the state?
 - What data can be collected/reported by providers and participating agencies
 - Data confidentiality issues
 - Are there systems to track participation across programs and/or systems of care
 - Some indicators (related to consortium functioning or success of educational initiatives) may require surveys

Potential Data Sources

- Identify available data that may already be collected at the state or county levels
 - State Medicaid data
 - State surveys or other data
 - State O/SUD or mental health data systems
 - CDC or other data
- Locally collected or new data
 - Consortium member surveys
 - Provider surveys
 - Patient/family surveys
 - Community surveys
 - County administrator surveys (if applicable)
 - Data from providers/agencies records including EHRs

Examples of Indicator Selection by Core Program Activity

How to Monitor Consortium Activities

- Three pillars of network evaluation
 - Connectivity
 - Membership – people/organizations that participate in consortium
 - Structure – how connections are structured and what flows through connections
 - Health
 - Resources – material resources need to sustain consortium
 - Infrastructure – internal systems/structures that support the consortium
 - Advantage – capacity for joint value creation
 - Results
 - Interim outcomes- results achieved as the consortium works towards its ultimate goal (short/intermediate-term)
 - Goal/intended impact – progress towards achieving ultimate goals

Monitoring Consortium Operation

- Connectivity
 - Membership participation
 - Are members participating with the capacities needed to meet consortium goals?
 - What is flowing through consortium? (information, resources)
- Health
 - Diversity and dependability of consortium resources
 - How are members sharing resources? Is the process equitable?
 - Is the consortium adapting its plans over time?
 - Satisfaction with communication, governance, decision-making?
 - Satisfaction with participation?
 - Are participants achieving more than they could alone?

Monitoring Consortium Operation (cont'd)

- Results
 - Are there measurable signs of progress on interim outcomes?
 - Is there measurable progress being made on the way to longer-term goals?
 - At which levels are those signs of progress being made?
 - Organizational?
 - Delivery system?
 - Can a case be made that the consortium has contributed to the goals?

Monitoring System Performance

- Identification and Referral
 - Screening rate - % of people screened for O/SUDs and/or mental health issues
 - Clinical assessment rate - % of people clinical assessed using a validated instrument
 - Referral rate - % of people screened/assessed who are referred to a treatment program or linked to services
 - Initiation - % of people referred to services who start within 14 days of the assessment

Monitoring System Performance (cont'd)

- Engagement and completion (individual)
 - Engagement – individual participates in at least two treatment sessions within 30 days of initiation
 - Retention – length of stay in TX for different levels of care
 - Successful completion rate - % of people successfully completing TX
 - MAT rate – percent of individuals screened for conditions require MAT and receiving those services
 - Compliance with treatment plan - % of people in compliance with TX plans developed by clinicians and individual

Monitoring System Performance (cont'd)

- Recovery management (individual)
 - Continuum of care – % of people who transitioned from one program to another within 30 days
 - Continuity of care - % of people who transitioned from one phase of programming to another
 - Transitions of care - % of people who moved from type of programming (e.g., TX) to another (e.g., recovery, vocational or educational services)

Monitoring Hub and Spoke Implementation

- Indicators to monitor hub and spoke implementation requires a range of measures
 - System integration and performance
 - Expansion of services (increase in the # of hubs)
 - Workforce issues
 - Access
 - Patient clinical outcomes
 - Opioid, alcohol, and other drug use
 - Changes in wellbeing
 - Public health and safety
 - Overdose deaths
 - Reductions in emergency department visits

Monitoring Hub and Spoke Implementation (cont'd)

- System integration and performance
 - Key elements of hub and spoke models are in place
 - MAT services are available
 - Hubs serve as subject matter experts (consultation) and referral sources for patients with complex OUDs
 - Spokes serve as referral sources for patients with stable OUDs
 - MAT teams offer counseling, case mgt., peer support, and referral to recovery resources
 - MAT teams support wavered prescribers in spokes
 - Learning opportunities are provided by MAT teams
 - OUD screening /assessments conducted using standardized instruments
 - Participants report satisfaction with care coordination, “connection”, communication, and effectiveness of components

Monitoring Hub and Spoke Implementation (cont'd)

- System integration and performance
 - Expansion of services
 - Increase in the number of hubs by setting (e.g., primary care, EDs) and geographic location
 - Increase in hours of operation
 - # and representativeness of people impacted by hub and spoke
 - Workforce issues
 - Increase in the number of waived providers
 - Use of nurse practitioners and physician assistants waived
 - Expanded use of case managers, community health workers, etc. as part of teams
 - Percent of spoke providers receiving ongoing training from the hubs

Monitoring Hub and Spoke Implementation (cont'd)

- Access
 - Portion of population with OUDs reached
 - # of new patients served
 - Increase in hours of operation
 - Reductions in wait times
- Patient clinical outcomes
 - Reductions in days of use
 - Changes in average days of activity
 - % of patients that report fewer days of fair or poor health
- Public health and safety
 - Overdose deaths
 - Reductions in emergency department visits
 - Reductions in illegal activity and police stops/arrests
 - Reductions in new cases of HIV/HCV

Washington State Opioid Response Plan

- Overall Health Outcomes
 - Opioid overdose death rate DOH/Death certificates
 - Prescription opioid overdose death rate DOH/Death certificates
 - Heroin overdose death rate DOH/Death certificates
 - % of 10th graders misusing pain killers Healthy Youth Survey
 - Infants born with NAS DOH/Hospital discharge data
- Prevent opioid misuse and abuse
 - Patients on high-dose chronic opioid therapy > 90 mg MED DOH/PDMP
 - New opioid users who become chronic users DOH/PDMP
 - Chronic opioid users with concurrent sedative use DOH/PDMP
 - Days of opioids supplied to new users DOH/PDMP

Washington State Opioid Response Plan (cont'd)

- Identify and treat OUDs
 - Buprenorphine Metric TBD DOH/PDMP
 - % Medicaid clients with OUDs receiving MAT Health Care Authority
- Reduce morbidity/mortality from OUDs
 - # naloxone kits distributed by syringe service programs
UW Alcohol & Drug Abuse Institute
 - # of opioid overdose reversals reported by syringe service programs
UW Alcohol & Drug Abuse Institute

Resources to Support Indicator Selection and Use

- Don't try to reinvent the wheel!
- SAMHSA
 - Performance Accountability Reporting System National Outcome Measures for Discretionary Programs
- Published evaluation studies
- National Quality Forum
- Council of State and Territorial Epidemiologists
- National Drug and Alcohol Research Centre (Australia)
- Partners for Recovery
- National Academies Press: Assessment of Performance Measures for Public Health, Substance Abuse, and Mental Health

Other Resources

- FMT Team: Toolkit for State Flex Programs
 - <http://www.flexmonitoring.org/documents/PLMToolkit.pdf>
- WK Kellogg: Logic Model Development Guide
 - <http://www.wkkf.org/knowledge-center/resources/2006/02/WK-Kellogg-Foundation-Logic-Model-Development-Guide.aspx>
- Targeting Outcomes of Programs (TOP) Framework
 - <http://citnews.unl.edu/TOP/english/index.html>
- United Way Measuring Program Outcomes: A Practical Approach
 - http://www.unitedwaystore.com/product/measuring_program_outcomes_a_practical_approach/program_film

Conclusions

- Selecting indicators to monitor program implementation can be a challenge
- The key points to remember are:
 - Successful programs are build on a clear theory of change
 - Use your theory of change and evidence-base for your interventions to identify potential indicators
 - Be clear about data sources
 - Balance the need for original data against the costs of collecting
 - Based on the evidence, roll up short, intermediate, and long-term indicators to point towards achievement of high level impacts
 - Don't reinvent the wheel, use indicators that have been tested in other programs and adapt them to your specific needs

Questions?



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