Anything Worth Doing is Worth Measuring: Evaluation of SBIRT Programs

Dawn Lindsay, PhD
Evaluator
National SBIRT ATTC
Learning Objectives

1. Participants will be able to identify appropriate questions for an SBIRT evaluation.
2. Participants will be able to connect potential sources of data to an SBIRT evaluation plan.
3. Participants will be able to discuss ways to apply concepts of SBIRT evaluation to their own settings.
What is Program Evaluation?

• “The systematic collection and analysis of information about program activities, characteristics, and outcomes, to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development.”

– Merged definition (CDC, SAMHSA, AEA)
Research vs. Evaluation

“Research seeks to prove. Evaluation seeks to improve” ~ M.Q. Patton
## Research vs. Evaluation

<table>
<thead>
<tr>
<th>Concept</th>
<th>Research Principles</th>
<th>Program Evaluation Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Planning</strong></td>
<td>Scientific Method</td>
<td>Framework for Program Evaluation</td>
</tr>
<tr>
<td><strong>Decision Making</strong></td>
<td>Investigator Controlled</td>
<td>Stakeholder Controlled</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>Isolate Changes and Control Circumstances</td>
<td>Incorporate Changes and Include Circumstances</td>
</tr>
<tr>
<td></td>
<td>Contextual Factors are Confounds</td>
<td>Contextual Factors are Essential Information</td>
</tr>
<tr>
<td><strong>Data Collection</strong></td>
<td>Limited Number of Sources</td>
<td>Multiple Sources Preferred</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>Focus on Specific Variables</td>
<td>Integrate all Data</td>
</tr>
<tr>
<td><strong>Judgments</strong></td>
<td>Implicit</td>
<td>Explicit</td>
</tr>
<tr>
<td><strong>Use</strong></td>
<td>Disseminate to Interested Audiences</td>
<td>Feedback to Stakeholders Critical</td>
</tr>
</tbody>
</table>

Framework for Public Health Evaluation

Step 1: Engage Stakeholders

Step 2: Describe Program

Step 3: Focus the Evaluation Design

Step 4: Gather Credible Evidence

Step 5: Justify Conclusions

Step 6: Ensure Use and Share Lessons Learned

Standards:
- Utility
- Feasibility
- Propriety
- Accuracy

http://www.cdc.gov/eval/framework/
Framework for Public Health Evaluation

Step 1: Engage Stakeholders
Step 2: Describe Program
Step 3: Focus the Evaluation Design
Step 4: Gather Credible Evidence
Step 5: Justify Conclusions
Step 6: Ensure Use and Share Lessons Learned

Standards:
- Utility
- Feasibility
- Propriety
- Accuracy

http://www.cdc.gov/eval/framework/
Engage Stakeholders

“There are five key variables that are absolutely critical in evaluation use. They are, in order of importance: people, people, people, people, and people.” ~ Halcolm
Engage Stakeholders

• **What:** Fostering participation among people who have an investment (stake) in the evaluation findings and use

• **Why:** Increase chances that evaluation will be successful and useful; Improve credibility of the evaluation
Engage Stakeholders

- Activities:
  - Consulting stakeholders throughout the evaluation process
  - Making special efforts to include less powerful groups or individuals (e.g., patients)
Engage Stakeholders

• Three major groups
  – Those involved in program operations (Management, staff, etc)
  – Those served by the program (patients, advocacy groups, etc)
  – Persons in position to make decisions about the program (partners, funding agencies, etc)
Application to SBIRT

• Stakeholders include:
  – Representatives from all agencies involved
  – Staff members conducting screening, brief interventions and referrals
  – Insurance providers/purchasers
  – County/State representatives
  – Funding agency representatives
  – Legislators
  – Patients
Framework for Public Health Evaluation

Step 1: Engage Stakeholders

Step 2: Describe Program

Step 3: Focus the Evaluation Design

Step 4: Gather Credible Evidence

Step 5: Justify Conclusions

Step 6: Ensure Use and Share Lessons Learned

Standards:
- Utility
- Feasibility
- Propriety
- Accuracy

http://www.cdc.gov/eval/framework/
Describe the Program

- What: Delineating components and features of the program in detail, including its role in the public health context
- Why: Allows a balanced evaluation of strengths and challenges in the program, and helps stakeholders understand how program features contribute to outcomes and relate to public health context
Describe the Program

- Activities
  - Identifying needs addressed by the program
  - Constructing an explicit **logic model** to illustrate relationships between inputs, outputs and outcomes
  - Analyzing the public health context of the program
SBIRT Logic Model

Inputs → Outputs → Outcomes - Impact
SBIRT Logic Model

- Inputs
- Outputs
- Outcomes - Impact

Activities | Participation
Short Term | Medium Term | Long Term
SBIRT Logic Model

Inputs
- Program Staff
- Partners
- SBIRT Champion
- Evaluator
- Funding
- SBIRT Tools

Outputs
- SBIRT Training
- SBIRT Technical Assistance
- Implementation Activities
- Onsite Consultation

Outcomes - Impact
- Activities
- Participation
- Short Term
- Medium Term
- Long Term
SBIRT Logic Model

Inputs
- Program staff
- Partners
- SBIRT Champion
- Evaluator
- Funding
- SBIRT Tools

Outputs
- SBIRT Training
- SBIRT Technical Assistance
- Implementation Activities
- Onsite Consultation

Activities
- Participation

Outcomes - Impact
- Short Term
- Medium Term
- Long Term
- Providers at Sites
- Clients/Patients
- Administration
- SBIRT Champion
SBIRT Logic Model

**Inputs**
- Program staff
- Partners
- SBIRT Champion
- Evaluator
- Funding
- SBIRT Tools

**Outputs**
- SBIRT Training
  - SBIRT Technical Assistance
  - Implementation Activities
  - Onsite Consultation
- Providers at Sites
  - Clients/Patients
  - Administration
  - SBIRT Champion

**Outcomes - Impact**
- Short Term
- Medium Term
- Long Term

**Activities**
- # Trained
- # Receiving TA
- # Patients Receiving SBIRT
SBIRT Logic Model

**Inputs**
- Program staff
- Partners
- SBIRT Champion
- Evaluator
- Funding
- SBIRT Tools

**Outputs**
- SBIRT Training
  - SBIRT Technical Assistance
  - Implementation Activities
  - Onsite Consultation
- Providers at Sites
  - Clients/Patients
  - Administration
  - SBIRT Champion

**Outcomes - Impact**
- Activities
- Participation
- Short Term
- Medium Term
- Long Term

- # Trained
- # Receiving TA
- # Patients Receiving SBIRT

SBIRT is implemented across sites
SBIRT Logic Model

**Inputs**
- Program staff
- Partners
- SBIRT Champion
- Evaluator
- Funding
- SBIRT Tools

**Outputs**
- SBIRT Training
- SBIRT Technical Assistance
- Implementation Activities
- Onsite Consultation
- Providers at Sites
- Clients/Patients
- Administration
- SBIRT Champion

**Outcomes - Impact**
- Short Term
- Medium Term
- Long Term

- Reduced risky alcohol use
- Improved overall health

- # Trained
- # Receiving TA
- # Patients Receiving SBIRT
- SBIRT is implemented across sites
SBIRT Logic Model

Inputs
- Program staff
- Partners
- SBIRT Champion
- Evaluator
- Funding
- SBIRT Tools

Outputs
- SBIRT Training
- SBIRT Technical Assistance
- Implementation Activities
- Onsite Consultation

Outcomes - Impact
- Providers at Sites
- Clients/Patients
- Administration
- SBIRT Champion

Activities
- Short Term
- Medium Term
- Long Term

Participation
- # Trained
- # Receiving TA
- # Patients Receiving SBIRT

Context
- Needs
- Project Objectives
- Stakeholder Engagement

Impact
- Reduced risky alcohol use
- Improved overall health
SBIRT Logic Model

**Inputs**
- Program staff
- Partners
- SBIRT Champion
- Evaluator
- Funding
- SBIRT Tools
- SBIRT Training
- SBIRT Technical Assistance
- Implementation Activities
- Onsite Consultation

**Outputs**
- Providers at Sites
- Clients/Patients Administration
- SBIRT Champion

**Outcomes - Impact**
- Short Term
  - # Trained
  - # Receiving TA
  - # Patients Receiving SBIRT
- Medium Term
  - SBIRT is implemented across sites
- Long Term
  - Reduced risky alcohol use
  - Improved overall health

**Assumptions**

**External Factors**

**Context**
- Needs
- Project Objectives
- Stakeholder Engagement
<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Participation</th>
<th>Short</th>
<th>Medium</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://www.uwex.edu/ces/pdande/evaluation/evallogicmodelworksheets.html
Outputs to Outcomes

- Connection of Activities to Outcomes
- Establishing Causal Relationships
- Long Term Outcomes Not Always Measured

“I think you should be more explicit here in Step Two.”
Framework for Public Health Evaluation

Step 1: Engage Stakeholders

Step 2: Describe Program

Step 3: Focus the Evaluation Design

Step 4: Gather Credible Evidence

Step 5: Justify Conclusions

Step 6: Ensure Use and Share Lessons Learned

Standards:
- Utility
- Feasibility
- Propriety
- Accuracy

http://www.cdc.gov/eval/framework/
Focus the Evaluation Design

• Types of Evaluation
• Defining the Evaluation Questions
• Deciding on the Evaluation Design
Types of Evaluation

- **Implementation**: Has a program been implemented as intended?
- **Effectiveness**: Has a program led to intended outcomes?
Types of Evaluation

• Efficiency: Are programs being run with minimal use of resources?
• Cost-Effectiveness: Does the benefit or value of the program equal or exceed the cost?
• Attribution: Can outcomes be related to the program (correlation vs. causation)
Process vs. Outcome

• Implementation is Process-Focused: Did it happen?
  – Are we administering a validated screen?
  – Do we have a process to conduct brief intervention when indicated?

• Effectiveness is Outcome-Focused: Did it make a difference?
  – Do patients reduce drinking as a result of SBIRT
State SBIRT Projects: Process Questions

- How closely did implementation match the plan?
- What types of changes were made to the originally proposed plan?
- What led to the changes in the original plan?
- What effect did the changes have on the planned intervention and performance assessment?
- What effect did the changes have on the ability to electronically share health information through the state HIE?
- What effect did the changes have on the sustainability of the SBIRT program?
- Who provided (program staff) what services (modality, type, intensity, duration), to whom (individual characteristics), in what context (system, community), and at what cost (facilities, personnel, dollars)?
- What strategies were used to maintain fidelity to the evidence-based practice or intervention across providers over time?
- How many individuals were reached through the program?
State SBIRT Projects: Outcome Questions

- What was the effect of the intervention on key outcome goals?
- What program/contextual factors were associated with outcomes?
- What individual factors were associated with outcomes, including race/ethnicity?
- How durable were the effects?
- Was the intervention effective in maintaining the project outcomes at 6-month follow-up?
- How was technology used to improve the delivery and sustainability of SBIRT services?
- Have policies been developed by the HIE and participating providers for managing patient consent and privacy of health information stored or transmitted electronically in compliance with 42 CFR Part 2 and state health information privacy laws?
Framework for Public Health Evaluation

Step 1: Engage Stakeholders

Step 2: Describe Program

Step 3: Focus the Evaluation Design

Step 4: Gather Credible Evidence

Step 5: Justify Conclusions

Step 6: Ensure Use and Share Lessons Learned

Standards:
- Utility
- Feasibility
- Propriety
- Accuracy

http://www.cdc.gov/eval/framework/
Gather Credible Evidence

- Indicators
- Sources
- Quality
- Quantity
- Logistics

This is our evaluator. Every time she collects data it will help us remember what we said we were going to do in the first place.

freshspectrum.com
Indicators

• Define program components in specific, observable and measurable terms.

<table>
<thead>
<tr>
<th>Program Component</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBIRT Training (Process)</td>
<td>4-hour SBIRT training will be offered to all intake workers at all sites. 80% of workers will attend</td>
</tr>
<tr>
<td>SBIRT Screening (Process)</td>
<td>80% of patients will be administered a validated screen annually</td>
</tr>
<tr>
<td>Reduced Drinking (Outcome)</td>
<td>Patients report 3 fewer drinks per week at 1-month follow up</td>
</tr>
</tbody>
</table>
Sources

- Where the data are going to come from
  - Primary: Surveys, Focus Groups, Observation, Document Review
  - Secondary: Existing Data Sets
Sources

• SBIRT Examples:
  – Initial screening scores
  – Interventions undertaken
  – Progress notes
  – Referrals made
  – Follow up screening scores/outcomes and treatment utilization
  – Physical and mental health symptoms or diagnoses
  – Next scheduled screening
Quality

• How to ensure that data are reliable, valid and useful
  – Design of data collection instruments
  – Data collection procedures (Logistics)
  – Training of data collectors
  – Selection of data sources
  – How the data are coded
  – Data management
Quantity

• How to determine amount of data to collect
  – Evaluation vs. Research distinction
Logistics

• Procedures by which data will be collected
  – Who will collect data?
  – When, and how often, will data be collected?
  – How will security and confidentiality be maintained?
Framework for Public Health Evaluation

1. Engage Stakeholders
2. Describe Program
3. Focus the Evaluation Design
4. Gather Credible Evidence
5. Justify Conclusions
6. Ensure Use and Share Lessons Learned

Standards:
- Utility
- Feasibility
- Propriety
- Accuracy

http://www.cdc.gov/eval/framework/
Justify Conclusions

- Analyze and Synthesize Findings
- Identify Program Standards
- Interpret Findings
- Make Judgements
Justifying Conclusions

• Check data for errors and tabulate
  – Number of participants receiving program components (e.g., #/% screened)
  – Number of participants achieving desired outcome (e.g., #/% decreased drinking)

• Compare results with similar programs

• Compare results with stakeholder needs

• Interpret findings and make judgements
Context is Important

Friend to Groucho Marx: “Life is hard…”

Groucho Marx to Friend: “ Compared to what?”
Framework for Public Health Evaluation

Step 1: Engage Stakeholders

Step 2: Describe Program

Step 3: Focus the Evaluation Design

Step 4: Gather Credible Evidence

Step 5: Justify Conclusions

Step 6: Ensure Use and Share Lessons Learned

Standards:
- Utility
- Feasibility
- Propriety
- Accuracy

http://www.cdc.gov/eval/framework/
Ensure use and share lessons learned

- If the purpose of evaluation is to improve, no evaluation is complete unless the findings are applied to the program.
- You don’t want your evaluation to sit on a shelf!
- Evaluation is part of a continuous feedback loop of program planning
Ensure use and share lessons learned

- To demonstrate effectiveness
- Identify ways to improve program
- Modify program planning
- Demonstrate accountability
- Justify funding
Ensure use and share lessons learned

- SBIRT Examples
  - If #/\% screened was low, why was that? What can we do to change it?
  - Modifications to logistics (screening modality, timing)
Resources

**TAP 33**


**CDC Evaluation Framework**

Thank you!!

Questions?

Dawn Lindsay, PhD
dawn@ireta.org
412-258-8571

Everything that can be counted does not necessarily count, and everything that counts cannot necessarily be counted ~ Albert Einstein