Developing, Implementing, and Using Practical Evaluation of Oral Health Programs

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Don Compton, PhD
Senior Evaluator, CDC Division of Oral Health
bfn5@cdc.gov

Bilquis Khan, MSc.(Epi), MBA, Msc. (Stat)
Evaluator, Minnesota Department of Public Health
Objectives

• To identify approaches to involving stakeholders in evaluation studies
• To increase understanding of how to make oral health evaluation studies more useful to potential users
• To articulate methods for increasing evaluation use by primary intended users.
• To describe key issues to be addressed in an evaluation
What is Program Evaluation?

- *Program evaluation* is “the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development.”
Steps in Developing an Evaluation Plan

1. Identify evaluation team/Involve stakeholders *(PRACTICAL USE)*
2. Develop a logic model
3. Develop evaluation questions
4. Identify potential sources of data collection and a system to collect that data
5. Identify methods of data analysis
6. Develop a preliminary dissemination plan
1. Evaluation Team/Users/ Stakeholders

• Which users/stakeholders should be included?
  – Primary intended users of the evaluation
  – Decision makers
  – Program staff
  – Partners
  – Served or affected by the program
2. Logic Model

• Describes the sequence of events for bringing about change

• Components of a Logic Model
  – Resources (Inputs)
  – Activities (Strategies)
  – Outputs (Results of Strategies)
  – Expected Effects (Outcomes)

• Other Considerations
  – Stage of Development
  – Context
## Comprehensive School-based/linked Dental Sealant Program Logic Model Example

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short-term outcomes</th>
<th>Intermediate outcomes</th>
<th>Long-term outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral health team prevention coordinator</td>
<td>- Conduct needs assessment</td>
<td>Assessment report</td>
<td>Increased number of schools participating in SBSP</td>
<td>Increased sealant retention rate</td>
<td>Decreased dental caries in 3rd graders</td>
</tr>
<tr>
<td>Sealant advisory group</td>
<td>- Conduct BSS</td>
<td>BSS report</td>
<td>Increased number of 2nd graders participating</td>
<td>Increased public knowledge of the benefits of sealants</td>
<td>Sustainable program</td>
</tr>
<tr>
<td>Partners</td>
<td>- Determine protocols and outline in sealant plan</td>
<td>Sealant plan</td>
<td>Increased number of students receiving a dental screening</td>
<td></td>
<td>Increase in cost-effective programs</td>
</tr>
<tr>
<td>Referral networks</td>
<td>- Establish pilot project</td>
<td>Pilot project</td>
<td>Increased number of students receiving at least one sealant on permanent molars</td>
<td></td>
<td>Distal Outcomes</td>
</tr>
<tr>
<td>Guidelines, manuals and material on dental sealants</td>
<td>- Recruit and train staff</td>
<td>Trained staff</td>
<td></td>
<td></td>
<td>Reduced disparity in school age children</td>
</tr>
<tr>
<td>Relevant data</td>
<td>- Develop educational material</td>
<td>Equipment and supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment and material</td>
<td>- Select participating schools</td>
<td>Educational material</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEAL software and technical assistance</td>
<td>- Conduct pre, post and sealant day activities</td>
<td>Consents forms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral networks</td>
<td>- Collect, analyze and report data using SEAL software</td>
<td>Report on Sealant program indicators using SEALs software</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial resources</td>
<td>- Sealant advisory group meetings</td>
<td>Evaluation plan and evaluation report</td>
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<tr>
<td></td>
<td>- Plan and evaluate the program</td>
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</table>

**Planning**

**Implementation**

**Maintenance**
3. Evaluation Questions

• What questions should evaluation answer?
  – Consider purpose of evaluation
  – Users and uses of evaluation

• Evaluation questions:
  – Dependent on the stage of development of the program
  – Identified by evaluation team
  – Prioritized based on importance and feasibility
  – Include both types - qualitative and quantitative
<table>
<thead>
<tr>
<th>Planning Inputs and Activities</th>
<th>Implementation Activities and Short-term Outcomes</th>
<th>Maintenance Intermediate and Long-term Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who are our stakeholders? Are these the right stakeholders for our program?</td>
<td>How does our overall implementation process work?</td>
<td>How is the sustainability of the oral health program being ensured?</td>
</tr>
<tr>
<td>What type of burden of oral disease data are available?</td>
<td>How could the process be improved?</td>
<td>Are the right policies in place? Are they having the intended impact?</td>
</tr>
<tr>
<td>What are the criteria for target schools and target population?</td>
<td>What type of data are being used for evaluating program activities and what is accuracy and timeliness of this data?</td>
<td>What is the prevalence of caries?</td>
</tr>
<tr>
<td>Does our identified risk group reflect our state burden?</td>
<td>How far have we reached or fall short on meeting our goals?</td>
<td>What are the levels of disparity for dental caries and untreated decay?</td>
</tr>
<tr>
<td>What is the total number of eligible schools? What is the total number of children in the target grade of the target schools?</td>
<td>What are the challenges to the program?</td>
<td>What is the prevalence of untreated decay?</td>
</tr>
<tr>
<td>What are the results of our environment assessment for readiness for the program implementation?</td>
<td>What is the level of understanding and support for the oral health program from stakeholders and the community?</td>
<td>What are the policies in place to support OH activities? Are these the right policies? What are the intended impact of these policies?</td>
</tr>
<tr>
<td>What are the resources and support available for program implementation?</td>
<td>What is the quality of sealant placement?</td>
<td>What were the unintended effects (positive and negative) of the program?</td>
</tr>
<tr>
<td>What policies do we have to support oral health activities?</td>
<td>What is the retention rate?</td>
<td>How was the cost effectiveness of the program assessed?</td>
</tr>
</tbody>
</table>
4. Methods

• Evaluation results must provide a credible evidence and they must be seen as credible by evaluation’s primary users

Data Collection System and Sources

• What data collection procedures best match the primary users, uses and questions?
• Is it possible to mix methods to overcome limitations of any single approach?
4. Methods (Continued)

– Sources
  • What sources will be accessed to gather data?
  • What will be done to integrate multiple sources?
– Quality
  • Is the information trustworthy and reliable?
– Quantity
  • What amount of information is sufficient?
  • Is the respondent burden reasonable?
– Logistics
  • What techniques, timing and resources will be used to gather data?
5. Methods of Data Analysis

• Qualitative and Quantitative data analysis methods
6. Preliminary Dissemination Plan

• A Preliminary Dissemination Plan should be in place before the evaluation activities begin and should be discussed among the Evaluation Advisory Group members.
Summary

Essential element for program evaluation and its success:

• Stakeholder involvement
• Utilization Focused Evaluation
Workshop Activity

A “mock” evaluation consultation group meeting

To design an evaluation of an oral health initiative – School Based Sealant Program
Workshop Activity

• Form an Evaluation Consultation Group (ECG)
• Each member assumes a role of one of the members in a face-to-face meeting
• Then the group works on the following:
  ❖ Purpose of the evaluation
  ❖ Primary intended users of the evaluation
  ❖ Uses of the evaluation
  ❖ Evaluation questions
  ❖ Methodologies to answer the questions
  ❖ Political considerations