Program Evaluation in Community Youth Smoking Cessation Programs

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Background
- With a limited evidence-base for what works in youth tobacco cessation, we examined the extent to which administrators of community-based youth cessation programs engage in program evaluation.
- Program evaluation is an informative part of all stages of an intervention effort: planning, implementing, improving programs for the future, and demonstrating results for stakeholders.
- In particular, rigorous evaluations of community-based youth tobacco cessation programs can provide important insights into effective real-world approaches to reducing youth smoking.
- Even with the increasing importance placed on program evaluation in public health, an overall understanding of the utilization of program evaluation in community youth cessation programs is lacking.
- This paper analyses data collected during the Phase I program characteristics survey of the Helping Young Smokers Quit (HYSQ) initiative. A complete description of Phase I can be accessed on the HYSQ website (www.HYSQ.org).

Research questions:
- What proportion of youth tobacco cessation programs include an evaluation component with a standard written protocol?
- What characteristics distinguish programs that have a program evaluation component from those that do not?
- What types of evaluation measures and methods do programs utilize?
- Does the endorsed purpose of evaluation match the evaluation methods?

Method
- Community-based youth tobacco cessation programs were found using a snowball sampling method within a nationally representative sample of 488 U.S. counties.
- We sought programs that met the following criteria:
  1. provided direct tobacco cessation services,
  2. were primarily for individuals age 12 to 24 years,
  3. had been established at least 6 months prior, and
  4. were not part of a research initiative.
- A total of 591 program administrators completed a 45-minute survey by telephone. The survey included questions regarding: community context, organizational setting, participants, program implementation, program content, and program evaluation.

Evaluation Measure: For the analyses conducted in this study, program evaluation is defined as those programs that include an evaluation component with a standard written protocol or survey for data collection.

Analyses
- We used descriptive statistics with Chi-square tests to identify characteristics of programs that included a standard written program evaluation component from those that did not; a logistic regression procedure (SAS 9.1, Proc Logistic) was used to model the inclusion of a standard written program evaluation component.

Description of Programs
- Among the 591 surveyed programs:
  - 90% were offered in a school setting
  - $2000 was the median annual funding
  - 20 participants per year was the median number served
  - 56% used only voluntary enrollment, 9% used mandatory only, and 35% used both types of enrollment
  - 47% conducted any post-program follow-up* for reasons other than offering treatment
  - 11% conducted only one follow-up
  - 16% conducted two follow-ups
  - 13% conducted three follow-ups
  - *Follow-ups conducted most often at 2, 4 and 7 months

What proportion of programs included an evaluation component with a standard written protocol?
- 67% of all programs reported having a standard written protocol or survey to collect evaluation information.

Overall Characteristics of Programs by Evaluation

What characteristics distinguish programs that have a program evaluation component from those that do not?

Logistic Regression Modeling Inclusion of Standard Written Program Evaluation Component

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds Ratio</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting (school)</td>
<td>0.57</td>
<td>0.28, 1.16</td>
</tr>
<tr>
<td>Annual funding level above $2000</td>
<td>2.45*</td>
<td>1.92*, 1.16, 2.34</td>
</tr>
<tr>
<td>Type of enrollment</td>
<td>0.59</td>
<td>0.30, 1.17</td>
</tr>
<tr>
<td>Funding source</td>
<td>0.84</td>
<td>0.56, 1.28</td>
</tr>
<tr>
<td>Participants per year</td>
<td>1.25</td>
<td>0.85, 1.86</td>
</tr>
<tr>
<td>More than 20 versus less than or equal to 20 per year</td>
<td>1.60*</td>
<td>1.09, 2.34</td>
</tr>
</tbody>
</table>

A Logistic regression model was used to model inclusion of a standard written program evaluation component in a program.

What types of measures were used by those programs that included written evaluations? (n=397)

Process evaluation measures
- Attendance tracking: 89% of programs
- User satisfaction: 86% of programs
- Cost of program administration: 21% of programs

Outcome evaluation measures
- Quitting data: 84% of programs
- Biochemical validation: 11% of programs
- Post-program follow-up: 73% of programs

Chi square = 24.4, p < .01

Chi square = 5.68, p = .01

Chi square = 4.66, p = .09

Chi square = 11.40, p < .01

Does the identified purpose of their program evaluation match the methods used by each program?
- We cross-tabulated purpose of evaluation with type of measures used, in order to assess purpose and method.
- *Process evaluation purpose: process measures used by 99% of programs that endorsed that purpose.
- *Outcome evaluation purpose: post-program follow-up used by 92% of programs that endorsed that purpose.

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