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A Case Study of Use of Data for Participatory Evaluation Within a Statewide System to Prevent Substance Abuse

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Although evaluation is considered an essential component of community health initiatives, its function requires actual use of the data to inform practice. The purpose of this case study was to examine how often and in what ways practitioners in a state system for substance abuse prevention used participatory evaluation data. To assess uses of data, interviews and surveys (N = 13) were conducted with practitioners. Questions focused on the frequency of use for several functions of evaluation data. Results showed that 77% of participants reported using their data within the past 30 days to review progress of the initiative, and 64% had used the data to communicate successes or needed improvement to staff. Fewer participants indicated they had used the data to communicate accomplishments to stakeholders (54%) or to make adjustments to plans (38%). This study suggests that participatory evaluation data can have multiple functions and uses for community health practitioners.

Keywords: evaluation; participatory evaluation

Evaluation can enhance community health promotion and prevention initiatives by helping to review progress and improvement, identify areas for adjustment and celebration, and increase accountability to stakeholders (Fawcett et al., 1995; Wandersman, 2003). The use of evaluation data has become increasingly important as health promotion and prevention efforts respond to demands by funders and local partners to use evidence-based approaches (Mitchell, Florin, & Stevenson, 2002) and to show outcomes (Chinman et al., 2001).

BACKGROUND

The utility criterion for evaluation refers to the “premise that evaluations should be judged by their utility and actual use” (Patton, 1997, p. 20). Although many practitioners are not trained and skilled in the use of evaluation data (Chinmann et al., 2001), technical support for participatory evaluation can enhance its use in making adjustments to the effort (Fawcett et al., 2003). This study describes the use of evaluation data after implementation of a coordinated set of evaluation supports for practitioners in a state system for substance abuse prevention. Use of evaluation data is critical for assessing the effectiveness of prevention and promotion efforts as it provides “the link between the day-to-day work of evaluation, on the one hand and those activities that could actually improve the lives of program participants and society, on the other” (Mark & Henry, 2004, p. 35).

Forss, Rebein, and Carlsson (2002) suggested that use of evaluation data could be strengthened by implementing key activities before and during the evaluation process, not merely after the evaluation process is completed. Dawson and D’Amico (1985) similarly recommended engagement of program or

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initiative staff in the evaluation process to promote use of evaluation data. Forss et al. also indicated that there is limited knowledge about how prevalent is the use of evaluation data and that “there is a need to know more about process use, and to verify whether it occurs as often as some like to believe it does” (p. 43).

Patton (1997) suggested that evaluation data has three primary functions: to arrive at judgments about an effort’s success, to identify areas for needed improvement, and to generate new knowledge. Patton also suggested another type of use, process use, which involves the participation of stakeholders in the evaluation logic and processes to develop shared understanding and an increased sense of ownership of the evaluation and results. Preskill, Zuckerman, and Matthews (2003) offered examples of process use, including participating in the development of the evaluation, interpreting data, and sharing the results of evaluation efforts with others.

Multiple factors appear to influence the use of evaluation data by practitioners. Leviton and Hughes (1981) identified five categories based on a systematic review: relevance of the data to the needs of evaluation audience or stakeholders, communication between producers of evaluation and potential users, information processing of evaluation and evaluation findings, the credibility of evaluation efforts, and the involvement or commitment of the user in the evaluation effort. A review conducted by Cousins and Leithwood (1986) expanded on these dimensions to note additional factors that may influence use: the quality of the evaluation, the credibility of the evaluator and the activities undertaken, the quality of communications that result from the evaluation, the actual findings, the timeliness of findings provided by evaluators, the needs of the stakeholders, how decisions were made, whether or not the political climate supported use, the presence of other sources of information that influence key stakeholders, the personal characteristics of stakeholders, and the commitment of stakeholders to the evaluation effort.

In addition to identification of factors contributing to use, researchers have also attempted to identify actions that might make use more likely. Preskill and Caracelli (1997) conducted a survey of members of the American Evaluation Association’s Evaluation Use Topic Interest Group. The findings reported by the authors indicate that evaluators regard several activities as being of great importance for making use of evaluation findings more likely, including planning for use of evaluation findings at the beginning of evaluation efforts, identifying possible stakeholders/users of the evaluation information, and involving stakeholders in the evaluation process.

A follow-up to the review conducted by Cousins and Leithwood (1986) identified collaborative approaches, including participatory evaluation, as an emerging approach in evaluation practices (Shula & Cousins, 1997). Participatory evaluation was defined by Cousins and Earl (1992) as “applied social research that involves a partnership between trained evaluation personnel and practice-based decision makers, organization members with program responsibility, or people with a vital interest in the program” (pp. 399-400). This includes engaging key stakeholders/users in all phases of the evaluation process, including naming key questions, gathering data, and making sense of findings. It has been suggested that participatory evaluation encourages use of evaluation findings by the intended users (Cousins & Earl, 1992) and more specifically that it “will enhance relevance, ownership and utilization” (Butterfoss, Francisco, & Capwell, 2001, p. 116).

The purpose of this case study is to examine the frequency and type of use of evaluation data by a state prevention support system. The context is the use of data collected by prevention centers on changes in communities and systems (an intermediate outcome) facilitated by substance abuse prevention efforts. The authors were part of a university-based center that coordinated a set of supports for participatory evaluation. This project received approval from the University of Kansas Human Subjects Committee (14907).

► METHOD

Context of the Prevention Support System in Kansas

The Kansas Department of Social Rehabilitation Services’ Addiction and Prevention Services (AAPS) has a prevention support system that consists of a statewide...
network of 13 Regional Prevention Centers (RPCs) and related intermediary organizations. The RPCs, primarily funded through the Substance Abuse Prevention and Treatment Block Grant, provide training and technical assistance to local communities and coalitions to support the prevention and reduction of adolescent substance use. The RPCs fulfill several functions, including provision of technical assistance to more than 200 community coalitions and partnerships in Kansas to support implementation of prevention programs, policies, and practices. The prevention support system also includes intermediary organizations, including the authors’ university-based center, that collaborate with the RPCs by providing statewide advocacy, capacity building, and evaluation services. Since 1995, the University of Kansas Work Group for Community Health and Development (KU Work Group) has provided support for the participatory evaluation of local and statewide prevention efforts that includes data on how efforts are changing communities and systems to reduce adolescent substance abuse. Additional prevention support partners include the Greenbush Southeast Kansas Education Service Center, which conducts and analyzes the annual Communities That Care Survey, providing the primary source of outcome data (e.g., reported 30-day use of alcohol, tobacco, and other drugs) and the Kansas Family Partnership, which coordinates statewide advocacy, workforce development, and leadership training for the prevention support system.

To examine how the prevention system is working, RPC staff and initiative members used the online documentation and support system (ODSS) to record events or activities facilitated by local initiative, especially changes in communities and systems (i.e., new or modified programs, policies, or practices), related to substance abuse prevention. The ODSS also permitted online displays of possible associations of community/system changes with population-level outcomes (e.g., 30-day use of alcohol, tobacco, or other drugs). In addition to specific events or activities, RPC staff and members also tracked media coverage and monetary or in-kind resources obtained by the local initiatives. The ODSS provided online data entry forms tailored to the goals and priorities of each RPC. It included features for creating real-time listings of accomplishments, automatic graphing, and reports of the data entered by each RPC. All of these features of the ODSS are intended to make it easier and more likely that stakeholders will use the evaluation data.

This ongoing participatory evaluation process engaged prevention practitioners, coalition members, and support partners in reviewing patterns in the data and implications for adjustment. This framework and associated participatory process enabled prevention practitioners and coalition members to use evaluation information about community/system change and other outcomes to answer related evaluation questions.

**Description of Coordinated Set of Supports for Participatory Evaluation**

As part of its role in the Kansas prevention infrastructure from 2004 to 2006, KU Work Group staff implemented a support system with multiple elements, including (a) access to the ODSS and a related workstation, (b) training on use of the evaluation system, (c) monthly feedback about the reliability of the coding of the data, (d) training on using the data and facilitating sensemaking among varying stakeholders, and (e) prompts and feedback through one-on-one contacts for using the data to fulfill several functions of evaluation data. Access to the ODSS included online data entry screens tailored to the goals and priorities of each RPC. It also included options for creating automatic graphs, real-time listing of accomplishments, and reports of the data entered for each RPC. Access to a workstation helped connect users to each other and to capacity-building tools specific to the initiative and from the community tool box (http://ctb.ku.edu).

Training included technical information about how to score key measures and to use features of the ODSS and workstation (e.g., creating a listing, creating graphs, exporting data). It also included practice using the ODSS to document accomplishments (e.g., a new program or policy or practice), analyze the contribution of those accomplishments to longer-term outcomes, and plan for effective use of the ODSS and workstation. Training was provided to all RPC directors and some local prevention specialists on how to use the data to communicate and facilitate shared sensemaking (i.e., using the data to make sense and give meaning to the efforts as well as identify areas for improvement, adjustment, and celebration). During this training in December 2004, modeling and demonstrations of how to present the data and questions to ask to facilitate shared sensemaking of the evaluation data were provided. Monthly, RPC staff were given reports that identified coding discrepancies of events and activities between primary and secondary coders and the reliability levels of the data. The RPC staff and KU Work Group staff worked to clarify entries with discrepancies in scoring. Between 2004 and 2005, RPC staff were twice engaged in conversations about how and with whom they could share the data for the purpose of reporting to stakeholders and working with stakeholders to determine implications of the data for...

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their work. A report was prepared by KU Work Group staff of RPC or initiative specific data and used to model how the RPC staff might work with stakeholders to carry out sensemaking efforts.

**Measurement of the Use of Data for Participatory Evaluation**

This study used two different methods to assess the use of intermediate outcome data collected by the RPCs. Qualitative information was collected during implementation of these supports to discern how staff used the evaluation data for particular functions, the barriers they encountered in using the data, and the supports needed to enhance use of data. Interviews were conducted between October and November 2004, with 15 prevention practitioners (either RPC directors or prevention specialists). The participants (typically RPC directors) represented all 13 of the RPCs in the statewide system and all worked directly with coalitions and in communities to provide technical assistance and substance abuse education and prevention supports. Audio recordings of the interviews were transcribed. Information from these interviews was used to help interpret the data collected from a companion survey.

A survey was used to assess the frequency and type of use of intermediate outcome (community change) data collected in the ODSS by prevention practitioners. The survey included questions about uses or functions of the evaluation data and satisfaction with the evaluation. Participants were asked if they had used their evaluation data within the last 30 days for any of the following evaluation functions: (a) to review RPC and related initiative progress, (b) to consider adjustments to plans, (c) to communicate accomplishments to community members or funders, and/or (d) to communicate successes or needed improvements to staff. If participants indicated yes, they were asked to indicate how many times this occurred. If participants indicated no, they were asked to indicate the length of time since they last used the data. Participants were also asked to indicate their satisfaction with the ODSS and the overall evaluation effort.

Participants were asked to indicate their responses based on a 5-point Likert-type scale. Response options to all three questions ranged from a negative/not response (1) to very positive response (5). Questionnaires were administered to staff of the 13 RPCs during one time (between December 2005 and January 2006). Of the 16 staff people (from 13 RPCs) surveyed, 13 responses were received from 10 of the 13 RPCs, yielding a response rate of 81.25%.

### RESULTS

Table 1 displays the reported prevalence of use of evaluation data, the mean number of times (and range) the data were used by respondents in the last 30 days, and the mean time period since prior use for those reporting it had not been used in the last 30 days.

The results show that the most frequent use of the data by respondents (76.9%) was to review progress of how the initiative or RPC was progressing toward its goals. Based on the key informant interviews, quotes from participants expanded on how they used the data for this function:

I would say, primarily [to see] if we are meeting grant goals and objectives. Because everything that is written into our grant has some measurable outcome.
The tracking is all in one place and so you can see if we’re meeting our goals and objectives. And I think it helps me look back at the past, when did we do this and we have done this before.

Participants who reported using the data for this purpose reported using it an average of 1.7 times during the prior 30-day period.

The next most frequent use of evaluation data was to communicate successes or needed improvement to staff (63.6%). Participants used the data for this function an average of 1.2 times per month. The quotes from qualitative interviews illustrate how the data were used for this function:

I take our logic models and we have five or six grants going and use it [ODSS data] to manage the grants to see what the staff completed this month.

It helps me out a lot as a supervisor to know, because I look at my staff entries every month so I know what they’re doing or not doing.

Over half (53%) of the respondents indicated that they had used the data to communicate accomplishments to other community members or funders. The key informant interviews suggest the use of the data filled several related functions: engaging new partners, keeping stakeholders abreast of activities that are occurring, and helping to leverage resources.

We’ve been able to bring additional community partners on board to secure income resources as well as financial resources because they can see how that one piece fits into the big picture.

Well, actually in our city liquor tax grant, we use the ODSS and they love it. Whenever we have a site visit from our city officials and stuff, they are really impressed that we are able to track and report community actions and changes, which is specifically how we write our grant to them.

I’d say it’s for grant writing and communities. I mean we send out those one page summaries not just to coalitions but to community leaders to show that’s what we are doing. To the city and county commissioners or judges, things like that.

A total of 91.3% of respondents indicated that the ODSS was either very important or somewhat important to their community effort. A total of 84.6% indicated that they were either very or somewhat confident that the evaluation contributed to understanding and informing their efforts.

Finally, 77% indicated that they were either very or somewhat satisfied that their participation in evaluation efforts will contribute to success. Table 2 displays the responses of participants to these survey questions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage of Responses in Each Category (N = 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How important is the use of the ODSS to your community effort? Scale ranging from 1 (not important) to 5 (very important)</td>
<td>0 0 7.7% 30.8% 61.5%</td>
</tr>
<tr>
<td>How confident are you that this evaluation contributed to understanding and improving your efforts? Scale ranging from 1 (not confident) to 5 (very confident)</td>
<td>0 0 15.4% 61.5% 23.1%</td>
</tr>
<tr>
<td>How satisfied are you that your participation in evaluation efforts will contribute to success?</td>
<td>0 0 23.1% 38.5% 38.5%</td>
</tr>
</tbody>
</table>

NOTE: ODSS = online documentation and support system.

The purpose of this study was to examine the prevalence, type, and satisfaction with use of participatory evaluation data within a statewide prevention support system. The results from this case study suggest that the evaluation data were used frequently for several purposes: (a) to review the coalitions’ progress (76.9% using evaluation data for this purpose during the prior month), (b) to communicate successes and needed improvements to staff (63.6%), and (c) to communicate accomplishments to stakeholders (53.8%). Qualitative
information from interviews suggests that there may be positive naturally occurring consequences (e.g., access to resources) for using these data in these particular ways (e.g., communicating accomplishments to stakeholders). Using the data to consider adjustments to plans was less frequent, however, with only 38.5% of respondents indicated using the data for this purpose in the previous 30 days. Perhaps this behavior of adjusting plans is tied to less frequently occurring events (e.g., yearly grant applications). Future research may help to determine whether using the data for different functions requires different skills or time and effort, or whether there are more naturally occurring prompts and consequences for some types of uses (e.g., for reviewing progress or communicating successes).

The two least frequent users, including one who had not used the data for any of the purposes, were prevention specialists, not RPC directors. The RPC directors may have more occasions for use in their administrative roles.

Although the overall percentage of staff who had used the data is high for most of the functions listed, the actual frequency of use in the past 30 days was somewhat low (with a range of one to four times a month for most functions). This may have implications for future efforts to enhance usage of evaluation data; that is, to consider expanding frequency of use as well as expanding the functions of use.

Survey questions about user satisfaction with the ODSS and perceived importance of evaluation were generally quite high. Most participants indicated that they believed that the use of this particular documentation system was either very or somewhat important (92.3%). Almost a quarter of the respondents (23.1%) indicated they were neutral on the issue of whether evaluation efforts would contribute to success. This suggests that more work is needed to assure that the participatory evaluation process is visibly and consistently associated with understanding and improvement.

This case study has several limitations. First, as with any case study, it yields only descriptive information not evidence of cause and effect relationships about the effects of the support system on subsequent use of data. Yin (1994) differentiated between causal (explanatory) case studies and those that build toward an explanation. The purpose of this study was to discover potentially important uses of data in this statewide prevention system. Second, this study did not provide any evidence of a link between use and improvement in the outcomes of interest for the RPCs (e.g., substance abuse.) Although the ultimate aim of research and improved use of evaluation data would be to assist an initiative in making progress toward attainment of goals and objectives, this was not studied. Third, the measurement relies on self-report of use, with no verification of use. With possible bias in reporting, respondents may have overreported actual use. Fourth, assessments of use of the data were conducted only after the full set of evaluation supports were implemented. The relative contributions of distinct components of the coordinated set of evaluation supports (e.g., training, online supports) would need to be examined in further research.

The generalizability of the findings may be limited to participants with administrative responsibilities, such as RPC directors, and a specific context (e.g., intermediary organizations working with substance abuse prevention initiatives). For example, although high levels of use were reported by administrators in prevention centers, more exploration is needed to understand use of evaluation data by the community coalitions these practitioners support. Although the model used was intended to be participatory, the model implemented represents a variation from a robust form of participatory evaluation in which “evaluators collaborate in some way with individuals, groups, or communities who have a stake in the program or project that is being evaluated” (Butterfoss et al., 2001, p. 115). Collaboration occurred more frequently with individuals who were representatives of the community coalitions than with all members of the coalition. A more robust form would include more stakeholders involved in all stages of the evaluation. The findings may not generalize to systems that do not have contingencies supporting participation in the evaluation and documentation process. As participatory evaluation requires time and effort, and as the positive consequences for data use are delayed, external consequences for participatory evaluation (e.g., grant requirements) may be necessary to prompt its initial and continued use.

There are also many strengths of this case study. First, this is one of the few studies that provide descriptive data on the prevalence of actual use of evaluation data. Second, this study contributes qualitative information about the particular types of uses of evaluation data that can be expected in a prevention support system. This may aid in developing tools and resources to support and optimize use of evaluation data. Third, the use of both interview and survey data aids in understanding the positive natural consequences, such as support from stakeholders and funders, which may sustain data usage. Finally, this case study illustrates how well participatory evaluation can be integrated as an essential component of a statewide prevention support system.

This study has led to the development of some critical next steps. Although this study examined use...
among prevention practitioners, an important future direction is to explore use by community members. In addition, this study relied on self-report of use, which has been strongly critiqued by those hoping to develop a stronger body of evidence for evaluation use (Leviton, 2003). A future direction for this research should be to attempt to validate self-report measures of use of evaluation findings. For example, researchers may consider conducting content analysis to meeting agendas or meeting minutes.

This study yields some important implications for practice. First, it provides evidence that members of a prevention support system can and do use evaluation data. Second, investment in the system infrastructure may be needed to make participatory evaluation easier and more likely to be used by practitioners with many other competing demands. Third, technical support for evaluation and having staff with a history of using data in different contexts may help make this possible. Fourth, when planning for evaluation efforts, it is important to keep in mind potential stakeholders or audiences for the information. The interviews indicated that staff, potential partners, and community leaders were potential audiences, and each had somewhat different interests. Finally, it may be beneficial to identify supports and consequences that make use for particular underutilized functions more likely. In addition to the factors affecting use of data identified by Leviton and Hughes (1981) and Cousins and Leithwood (1986), this study suggests that setting the occasion for data use by providing support through training, modeling, and arranging for consequences of use may influence data use. For instance, if more frequent use of evaluation data to adjust plans is desired, the requiring documentation of adjustments could make this particular function occur more frequently.

Taken together, individual practitioner and system supports can make participatory evaluation and use of resulting data easier. For such uses to be sustained, they must also result in benefits, such as approval from stakeholders or additional resources from funders. The utility of evaluation can be seen in its effective and continued use by practitioners to fulfill particular functions. Perhaps this and related efforts to support use can help fulfill the promise of participatory evaluation.

REFERENCES


