7.4 EVALUATING PEER PROGRAMS: ANALYZING AND DISSEMINATING EVALUATION RESULTS

> "Due to our peer navigators' assistance with contacting our no-show clients, our no-show rate is stable at 29%, which is a 10% improvement. Making sure that the majority of our clients are in here and receiving health care on an ongoing basis-- that's success to us.

Lucy Wells
Business Manager/Ryan White Project Director
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Once an evaluation design has been chosen, a logic model developed, and data collection strategies and continuous quality control methods are in place, the program can begin to explore the meaning of the information. The plan for the use of the data influences the type of analysis. Data analysis also depends on available resources such as staff with expertise and software for analysis. Data analysis can be as simple or rigorous as necessary to meet the needs of the program. Many programs conduct data analysis for internal purposes (quality management and program improvement) and reporting to funders. Others are interested in disseminating the results through publications and presentations to share results with the broader community. It's important to have a clear understanding of the use of the data prior to data analysis.

Data Preparation: Coding and Cleaning

Before beginning analysis, it is important to prepare the data. For quantitative data, an important first step in this process is data coding. If statistical software is available, it is necessary to assign numeric values to each response. For example, a "Yes" response can be assigned the number "1" and a "No" response can be assigned the number "0." Assigning numbers to character responses will aid the data entry process and will allow the software to run frequency counts more easily and efficiently. The end product is a codebook that will be used for labeling and tracking variables.

For all software programs, it is important to thoroughly check the data to ensure that it's free of errors after it has been entered. This process is called **data cleaning**. Cleaning data is usually conducted by someone other than the person who entered the data and involves running frequencies to identify responses that seem out of the ordinary or missing data. In continuous quality improvement, cleaning data involves conducting a random audit by comparing information on the reporting form with the entered data.

If a program is analyzing qualitative data, data preparation involves organizing the documents for review or transcribing text from interviews and observations into a word-processing file.

Preliminary Data Analysis

Once the data has been properly entered and cleaned, the next step is to run preliminary analyses to gain understanding of the data and recognize any simple trends. For quantitative analysis, the program should begin with a descriptive analysis. Descriptive analyses involve calculating the mean, median, and variation in responses to determine the general trends in the data. In qualitative analysis, exploring the data involves reading through all the data to develop a general understanding of the database while recording initial thoughts in the margins of the transcript or field notes.

Unless the organization has invested in statistical software such as SPSS (http://www.spss.com) or SAS (http://www.sas.com), the program will be limited to conducting analyses by hand. For example, the Smith County program, described in Read More C: Sample Evaluation Plan, tabulated frequencies of the number of community partner testing opportunities before the program started and compared them with the number of community partner testing opportunities at the end of the program period in order to measure the number of increased testing opportunities. Frequencies, or counting the number of recurring events, are the most common analytical tests of measurement. Frequencies will not reveal the cause for the number of recurring events, but instead will clearly provide information on how many times an event happens in a specific time period. Frequencies can be used to recognize trends in peer work, changes in clients' access to services, and other peer program outcomes.

Microsoft Excel can also be used to conduct preliminary data analyses. The program can be used to run frequencies, calculate means and medians, and create charts to visualize your data. Data entered into Excel can be imported into both SPSS and SAS for further, more advanced analyses. For more information on how to import Excel spreadsheets, visit the Help sections in SPSS or SAS or their websites at http://www.spss.com/ and http://www.sas.com/technologies/analytics/statistics/stat/, respectively.

Advanced Data Analysis

Quantitative Data

With quantitative data, advanced analysis uses appropriate statistical tests to address the questions, objectives or hypotheses that were established early in the planning or design process of the peer program. Statistical tests might include generating cross-tabulations to compare two different variables or running t-tests to determine the statistical significance of responses between two time periods, such as pre- and post-test.

Qualitative Data

Qualitative analysis involves more steps than most quantitative analysis techniques. It begins with coding the data, dividing the text into small units, and assigning a label to each unit or piece of text. Code words are assigned to text segments and then recorded into broader themes.

For example, an excerpt from a client interview may contain the client's thoughts on keeping appointments and adhering to medication. These different paragraphs would be separated into smaller units by placing the text in separate files or index cards. Then, the paragraphs would be labeled separately under the code words "appointments" and "medication," and may ultimately be recorded under a broader theme entitled "Adherence to Care and Treatment."

Themes can then be grouped into larger dimensions or perspectives related or compared. The themes or larger perspectives are the findings or results that provide answers to the program's initial objectives or hypotheses. It is a good idea to use a trained evaluator to run the qualitative data analysis process.

Dissemination of Findings

Sharing and disseminating results is an important final step in program evaluation. Dissemination of the results with stakeholders can lead to new programs and policies or improve and change existing ones. Evaluation results can be disseminated outside the program at national, state, or local events through presentations, workshops or posters and through written methods such as publications, review articles, or via the World Wide Web. Program staff can use evaluation results internally to improve systems and practices. Deciding a dissemination strategy during the design of the evaluation plan can help to facilitate data analysis and dissemination.

One of the most effective ways to increase the utilization of data analysis findings is to present the findings in a way that are of direct practical use to the program stakeholders. Depending on the audience, a program may want to present only a summary of the findings or provide a full report of the findings. In either situation, it is important to keep the presentation focused on the key findings. Ideally, the program should bring together evaluators with key program staff to determine what key findings they want to present. A joint meeting is an effective way to discuss the meaning of the data from the program staff perspective. This tandem team strategy also can be helpful for deciding appropriate recommendations to assure practicality while staying true to the data. Plan the written report to make it simple, attractive, and user-friendly. Often, the best way to communicate the results is through narratives that reference tables and charts. Whether the findings are based on quantitative or qualitative methodologies, the use of visual or verbal presentations to complement written reports is universally accepted.

Some of the valuable uses of evaluation findings include:

- To improve/enhance programs or create new ones.
- To report/validate program effectiveness to current or potential funders, grantors, etc.
- To effect policy changes.
- To share positive findings with others through oral presentations, professional journal articles, etc.

The Communicating and Reporting Plan in Program Resources for Section 7 Evaluating Peer Programs provides steps to developing a plan for disseminating the results of a peer program evaluation.

[1]Norušis, M. J. and SPSS Inc. 2000. The SPSS Guide to Data Analysis for Release 4. Chicago: SPSS

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▶ **FOR MORE INFORMATION**

Additional Evaluation Sections
- 7 Evaluating peer programs: Introduction
- 7.1 Choosing the outcomes to measure
- 7.2 Logic models for peer programs
- 7.3 Data collection methods
- 7.4 Analyzing and disseminating evaluation results
- 7.5 Evaluation and Resource planning
- 7.6 Human subjects protection and evaluation

Resources
- Sample forms for documenting peer work
- Logic Model Brainstorm (The Lotus Project)
- HIV primary care quality assurance program summary (Kansas City Free Health Clinic)
- Process evaluation plan (People to People)
- HIV patient satisfaction survey-English and Spanish (Kansas City Free Health Clinic)
- Treatment adherence survey (Kansas City Free Health Clinic)
- Communicating and reporting plan (Kansas City Free Health Clinic)
- Focus group guidelines (Kansas City Free Health Clinic)
- Peer focus group guide (Massachussetts Department of Public Health)
- Example of a qualitative study design and interview guide
- Additional evaluation resources and websites
- Validated evaluation instruments

This section is part of the online toolkit *Building Blocks to Peer Program Success*. For more information, visit http://www.hdwg.org/peer_center/program_dev .