

## EVALUATION BRIEF

### What's the Difference?

### Understanding Process and Outcome Evaluation

October 2007

#### Conducting an Evaluation

Program evaluation is an essential component of the Children's Bureau Discretionary Grant Programs. Evaluation uses a systematic method for collecting, analyzing, and using information to answer basic questions about a program. The term "systematic" in the definition of evaluation indicates that it requires a structured and consistent method of collecting and analyzing information about your program. You can ensure that your evaluation is conducted in a systematic manner by following a few basic steps.

*Step 1:* Assemble an evaluation team. Planning and executing an evaluation should be a team effort. Even if you hire an outside evaluator or consultant to help, you and members of your staff must be full partners in the evaluation effort.

*Step 2:* Prepare for the evaluation. Before you begin, you will need to build a strong foundation. This planning phase includes deciding what to evaluate, building a program model, stating your objectives in measurable terms, and identifying the context for the evaluation. The more attention you give to planning the evaluation, the more effective it will be.

*Step 3:* Develop an evaluation plan. An evaluation plan is a blueprint or a map for an evaluation. It details the design and the methods that will be used to conduct the evaluation and analyze the findings. You should not implement an evaluation until you have completed an evaluation plan.

*Step 4:* Collect evaluation information. Once you complete an evaluation plan, you are ready to begin collecting information. This task will require selecting or developing information collection procedures and instruments.

*Step 5:* Analyze your evaluation information. After evaluation information is collected, it must be organized in a way that allows you to analyze it. Information analysis should be conducted at various times during the course of the evaluation to allow you and your staff to obtain ongoing feedback about the program. This feedback will either validate what you are doing or identify areas where changes may be needed.



*Step 6:* Prepare the evaluation report. The evaluation report should be a comprehensive document that describes the program and provides the results of the information analysis. The report should also include an interpretation of the results for understanding program effectiveness.<sup>1</sup>

These six steps will help you conduct both your process and outcome evaluations. Both are important as they accomplish two different things. An outcome evaluation will tell you whether the project achieved its goals. A process evaluation will tell you how and why the results were achieved.

### Process Evaluation

A process evaluation describes the services and activities that were implemented in a program and the policies and procedures that have been put in place. Grantees were funded with an expectation that a specified number of participants will be served and that specific services will be implemented under the project. Process measures, or “output” data, describe who received the services, what they received, and “how much” of the service was provided. Therefore, grantees should be tracking the number, type, and duration of services. Progress toward project milestones is successive, and therefore, data should be collected on an ongoing basis over the course of the demonstration to monitor and describe how well the established goals are being met. This information will enable grantees to demonstrate to the funding agency whether they were able to provide the services that they were funded to provide.

The process evaluation may provide early feedback as to whether or not the program has proceeded as intended, what barriers have been encountered, and what changes are needed. Most importantly, the process evaluation helps to answer questions about why the intended outcomes were achieved or not achieved.

Indicators of program process include:

- Type of programmatic activity
- Characteristics of the staff offering the service
- Frequency of service (strength of treatment)
- Duration of service
- Intensity (dosage)
- Integrity of service to planned design
- Size of group receiving service
- Stability of activity (vs. frequent shift in focus)
- Quality of service
- Responsiveness to individual needs<sup>2</sup>



Examples of service outputs include:

- Number of referrals for services
- Number of mothers who participated in educational sessions on effective parenting practices
- Number of service plans completed
- Number of case worker contacts
- Number of career-building and advancement workshops offered
- Number of mental health consultations
- Number and type of employment and training materials disseminated
- Number of protocols and policies developed
- Number and type of outreach materials disseminated
- Number of staff trained
- Types of staff training provided

A process evaluation also involves the collection of “descriptive statistics” on the characteristics of program participants, such as age, race, marital status, education, employment, income, and number of children. This information can be used to help interpret whether the program is reaching its intended target population and whether adjustments to the service approach may be necessary. These descriptive statistics also help to identify who benefits most from the program and can be used to interpret the findings after the evaluation has been conducted.

A process evaluation may also include “process outcomes.” These are not based on longitudinal changes in an outcome variable (i.e., they do not rely on the measurement of outcomes at different points in time) but describe the status or condition of participants after they participate in a program.

Examples of process outcomes include:

- Number of children who remained safely in their homes
- Number of parents who are knowledgeable about their children’s needs
- Number of program participants who believe their participation in the program was beneficial
- Number of children meeting developmental milestones
- Number of children who obtained permanency

- Number of agencies collaborating on comprehensive assessments
- Number of staff who are knowledgeable about cultural competency
- Number of children who had service needs met

If outcome data indicate that change took place, process data can be used to demonstrate whether this change took place as a result of the intervention or other contextual factors. By delineating pathways of change, the program logic model, or theory of change, enables process data to be linked to program outcomes.

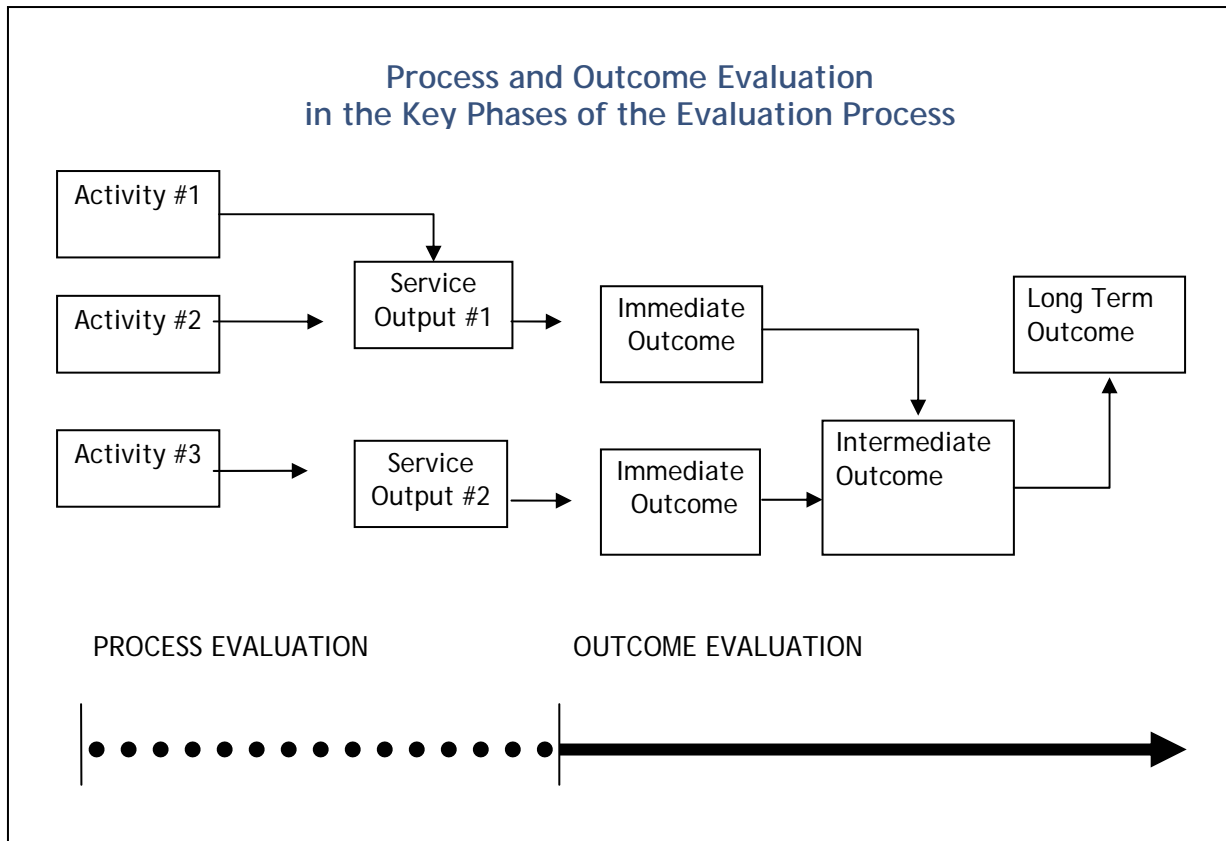
Finally, process data can help explain why change did not happen. For example:

- 1) Was the program not implemented as planned at the staff level (e.g., staff did not receive appropriate trainings)?
- 2) Was the program not able to reach the estimated number of participants from the target population (e.g. the goal was to place 50 children in adoptive homes, but the project was only able to recruit 10 adoptive families and only 5 of these families became certified adoptive placements)?
- 3) Did the demographics of the target population shift (e.g., the program worked to place more children over the age of 5 than originally planned)?

### Outcome Evaluation

An outcome evaluation is used to measure a program's results, or outcomes, in a way that determines whether the program produced the changes in child, family, and system-level outcomes that the program intended to achieve. Outcome evaluation tests a series of hypotheses concerning the intended changes by (1) making a comparison between conditions after participation in a program and conditions prior to participation, (2) comparing individuals who participated in a program with similar individuals that did not participate, or (3) a combination of both.

Whereas a process evaluation can report on milestones such as the number of parents who are knowledgeable about their children's needs, this measure does not indicate whether there has been a change or improvement in parents' levels of knowledge. To know this, one would need to know the level of knowledge that parents previously had about their children's needs in order to determine whether the current level reflects an increase or improvement. An outcome evaluation speaks to this issue by assessing whether there have been changes or improvements in participants' knowledge, attitudes, skills, or behaviors. In an outcome evaluation, outcomes are operationalized (usually in a numeric or quantitative format) so that they reflect that a change is being measured and that some comparison is being made to determine whether a condition has "increased," "improved," or is "greater" after the intervention. Outcomes can also measure whether a condition has "decreased" or is "fewer" (i.e., "decreased length of time in out-of-home placement" or "reduced incidence of maltreatment and neglect"). Outcomes include short-term results, intermediate results, and results that are achieved over the long-term.



Source: Kaye, E. (2005). Using a Theory of Change to Guide an Evaluation and Strengthen the Presentation of Findings. Presentation at the Children's Bureau Grantees' Meeting. May 2005. Washington, D.C.

Examples of outcome measures include:

- Less recurrence of child maltreatment
- Increased number of children who meet reunification goals
- Increased number of children who maintain permanency
- Decrease in length of time that families receive public assistance
- Improved housing situation among families in project
- Improved employment stability among families in project
- Reduction in positive drug tests
- Decreased length of time in out-of-home placement
- Decreased number of children entering/re-entering out-of-home placements



- Fewer substantiated cases of child abuse or neglect
- Increased knowledge and use of positive parenting practices
- Improved parent-child relations
- Reduced court involvement in families
- Improved school performance

*Outcome Evaluation Designs.* There are several different types of outcome evaluations. Some of the common types of outcome evaluation that grantees may be implementing to measure program outcomes are described below.

- *Pre-Post Design.* This design involves identifying an “event” that marks the beginning of an individual’s participation in the program intervention. Data are then collected before that “event” or intervention begins, which is referred to as the pre-test or baseline assessment. After completion of the intervention, data are collected a second time from the same participants, which is referred to as the post-test or follow-up assessment. The follow-up data are then compared to the baseline data to identify whether participants changed or improved on the outcome measure.
- *Comparison Group.* This design involves the identification of a group of individuals assessed as being “comparable” to individuals in a participant group, but who have not been exposed to the services or interventions offered to program participants. A comparison group can be identified within the program’s agency (e.g., similar individuals who could have benefited from the program) or from another agency or community that does not have the service intervention available. Typically, demographic characteristics and other key variables are examined, such as presenting conditions, to establish the comparability of the intervention and comparison groups. A comparison group may be identified before, during, or after the start of an intervention, and can be created at either the client level (i.e., individuals in the participant group are directly matched and compared with comparison individuals) or the aggregate level (i.e., outcomes for the participant group as a whole are compared with outcomes for the comparison group as a whole).
- *Historical or existing data as a comparison.* When it is not possible to locate a group of individuals that is comparable to the group of program participants, historical data can sometimes serve as a benchmark for comparison. For example, a program implementing agency-wide practice change could potentially see that all clients served by the agency are exposed to the intervention in one form or another. In this case, a program might rely on data regarding services and outcomes maintained by the agency prior to the changes in practice and compare these to the outcomes observed over time following the implementation of the practice changes.
- *Experimental Design.* This design is the most rigorous type of evaluation and is an experiment which is used to determine the extent to which a program causes change in the outcomes of interest beyond what would have been expected in the absence of the program. The gold standard for a rigorous comparative evaluation that enables an



evaluator to attribute observed changes to the intervention is an experimental design with random assignment of individuals to a “treatment” group (receives the service or intervention) or a “control” group (does not receive the service or intervention). A less rigorous comparative evaluation can assess whether change has occurred in a participant group relative to the past or to a comparison group, but it generally cannot determine whether, or to what extent, the observed changes are attributable to the program or intervention of interest. An experimental design, by contrast, applies more rigorous standards of research design, data collection, and analysis to allow an evaluator to conclude with a greater degree of confidence that observed impacts are a function of the intervention itself and are not a result of other factors. Analyses typically involve the comparison of outcomes for program participants to those of a systematically and carefully defined comparison group. In other words, an evaluator would examine whether the changes or improvements in the participant group were greater, or more favorable, than the changes in a comparable group of individuals that did not receive the intervention.

Source: Adapted from DeSantis, J. & Kaye, E. (2004). Presentation on Technical Assistance on Evaluation. Children’s Bureau Annual Grantees Meeting. March 2004. Washington, D.C.

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<sup>1</sup> U.S. Department of Health and Human Services. *The Program Manager’s Guide to Evaluation: An Evaluation Handbook Series from the Administration on Children, Youth and Families*. p. 9-10.

<sup>2</sup> Weiss, C. H. 1998 *Evaluation: Methods for Studying Programs and Policies*. 2<sup>nd</sup> edition. Upper Saddle River, NJ: Prentice-Hall. p. 130.