

Developing an Evidence Base for Your Program: A Resource Guide

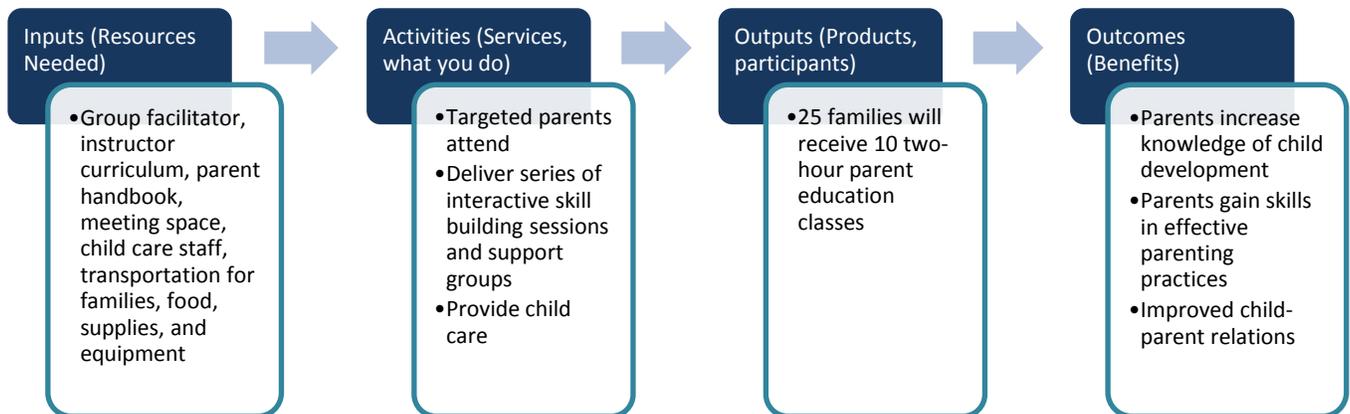
An organization does not always need to adopt an evidence-based program (EBP) to meet their needs. Establishing an evidence base for an existing program that seems promising is an alternative to adopting an EBP. There are critical steps that need to happen prior to testing the effectiveness of a program. This guide is intended to highlight important concepts related to program evaluation and provide resources to assist organizations with creating a plan for building an evidence base for an established program.



Creating a Logic Model to Know How the Program Works

Creating a logic model (or a theory of change) is an important first step to building an evidence base. A logic model is a map or flow chart that details how activities help the program achieve its short-term and long-term goals. A logic model answers the question, “How does the program work?” Logic models can vary in their level of detail and complexity but they all share the benefit of serving as a powerful image that conveys the importance of the program for the target population and the community. Below is an example of a basic logic model.

Logic Model Example: Parent Training Program



A logic model can also provide opportunities for identifying issues and engaging in quality improvement. By explicitly stating the relationship between the activities and outcomes, a logic model allows agencies to test assumptions (such as the number, type, and duration of activities) and determine the overall effectiveness of the program. To learn more about evaluating program effectiveness, read *Conducting Program Evaluations* below. A logic model is needed prior to evaluating the program in order to determine if the program is actually true to the original plan and if the outcomes can be measured.

Resources on Logic Models:

- 1) *Logic Model Builders* (Child Welfare Information Gateway) - Assists programs with defining their service goals and outcomes, identifying indicators, and selecting evaluation instruments to measure success.
<https://www.childwelfare.gov/topics/management/effectiveness/logic-model/>
- 2) *A video series for building evidence on effective programs* (Child Trends; June, 2018) - A series of videos and resources that review the process and principles of becoming an evidence-based program.
<https://www.childtrends.org/project/video-series-building-evidence-effective-programs>

Utilizing Measurement Tools to Examine Outcomes

A program cannot be identified as effective until it has supporting data. Research-supported measurement tools (including screening and assessment tools) help to efficiently identify family strengths and issues, ensure that families receive the most appropriate services for their needs, allow providers to design a plan to resolve the presenting issues, and ultimately measure their progress toward meeting those issues.

Evidence-based measurement tools are rigorously tested to determine if they effectively measure what they are intended to measure. See the *Important Measurement Terms* box for a list of areas that measurement tools are tested. The CEBC reviews and rates select measurement tools based on the tool's supporting published, peer-reviewed research evidence.

There are diverse measurement tools that examine a wide variety of areas, including exposure to and risk for child maltreatment, family strengths, mental health/trauma, protective factors, and many other areas. Agencies need to make several considerations when selecting a measurement tool in order to determine the tool's fit with the agency and target population. Tools can vary in length of time to complete, costs, available languages and cultural appropriateness, informants, age-range, supporting research evidence, and if the tool requires a clinical license to administer.

In addition to being trained to use the tool, organizations should have policies that promote sound data collection. Visit the BetterEvaluation link below for more information.

Important Measurement Terms

- **Screening** – A brief questionnaire or procedure that examines risk factors, mental health/trauma symptoms, or both. A positive result on a screening tool should result in a referral for a more thorough assessment.
- **Assessment** – An in-depth collection of information to identify strengths and issues the family is facing, design a plan, and provide services that will resolve the identified issues.
- **Reliability** – The extent to which the same result will be achieved when repeating the same tool again.
- **Validity** – The degree to which the tool's results are likely to be true and free of bias.
- **Sensitivity** – A measure of how well a tool *identifies* people *with* a specific problem
- **Specificity** - A measure of how well a tool *excludes* people *without* a specific problem.

Resources on Measurement Tools:

- 1) *Measurement Tools for Child Welfare* (California Evidence-Based Clearinghouse [CEBC]) - Detailed information on various measurement tools and a recorded webinar (<http://www.cebc4cw.org/assessment-tools/>)
- 2) *Assessment* (Child Welfare Information Gateway) - Assessment information & resources (<https://www.childwelfare.gov/topics/systemwide/assessment/>)
- 3) *Manage Data*(BetterEvaluation) - Details various aspects of data quality assurance (http://betterevaluation.org/plan/describe/manage_data)

Conducting Program Evaluations to Determine Effectiveness

Outcome evaluations ask the question “Is the program working?” The aim of an evaluation is to determine if there are positive (or negative) changes in the children, youth, or parents served. Organizations are encouraged to partner with a university or another type of research institution to help them select an evaluation design that works best for their program. It is typically recommended that an organization first start with a *process evaluation*, which examines the program’s structures and practices, including the logic model, data systems, and implementation. An **Evaluability Assessment (EA)** is a type of process evaluation that helps identify whether an outcome evaluation is justified, feasible, and likely to provide useful information. Click on the link in the box below for more information.

Important Evaluation Terms

- **Random assignment** - A process that reduces the likelihood of bias by assigning people (or sites or counties) to specific groups (e.g. your program or a control group) by chance alone (i.e., randomly). When groups are created by random assignment, individual characteristics are less likely to make the results inaccurate.
- **Control group** - A group that receives no intervention or a different type of intervention (e.g. treatment as usual). Allows researchers to compare the impact of the intervention to other

A **Randomized Controlled Trial (RCT)** is the scientific gold standard for determining the effectiveness of a program. An RCT measures a program’s effect by *randomly assigning* a sample of program participants to a group that completes the program, or to a *control group* that does not. Many policymakers and administrators use findings from RCTs to make evidence-based policy and programming decisions. An **Opportunistic Experiment (OE)** is an RCT for real-world settings with limited time or resources. OE examines the effects of an initiative, program change, or policy action that an agency or program plans or intends to implement. See links in box below for more information on both types of RCTs.

Lastly, **Quasi-Experiments** can be a second best alternative when an RCT is not possible. Quasi-experiments feature an intervention group and control group but lack the randomization of participants into each group, which limits the generalizability of the study’s findings.

Resources on Program Evaluations:

- 1) *Evaluability Assessment* (BetterEvaluation, 2015) - Information & resources on conducting an EA
http://betterevaluation.org/themes/evaluability_assessment
- 2) *Key Items to Get Right When Conducting Randomized Controlled Trials of Social Programs* (Arnold Foundation, 2016) - A checklist and description of critical tasks for conducting a successful RCT
<http://www.arnoldfoundation.org/wp-content/uploads/Key-Items-to-Get-Right-in-an-RCT.pdf>
- 3) *Opportunistic Experiments Toolkit* (Mathematica Policy Institute, 2015) - Detailed information on OE
http://www.acf.hhs.gov/sites/default/files/opre/oe_learning_what_works_toolkit_final_2_b508.pdf
- 4) *Which Quasi-Experimental Study Designs are Most Likely to Produce Valid Estimates of a Program’s Impact?* (Coalition for Evidence-Based Policy, 2014) - Considerations for quasi-experimental designs
<http://coalition4evidence.org/wp-content/uploads/2014/01/Validity-of-comparison-group-designs-updated-January-2014.pdf>

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