

# **Evaluation Technical Assistance Brief**

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## Tips for Enrolling and Retaining Evaluation Participants

Obtaining an adequate sample size for an evaluation can be challenging. It begins with enrolling clients in both the program (ideally to full capacity) and study, and ends only after data collection is complete.

Small sample size has substantial implications for an evaluation. Sample size affects the ability to statistically measure differences, known as the evaluation's statistical power. This is true for a comparison group study in which outcomes for a group receiving program services (program group) are compared with those who receive alternative or no services (comparison group). Statistical power also matters for descriptive studies that measure change over time, such as before and after clients receive services.

Recruiting, enrolling, and retaining participants in programs and evaluations are critical steps. This brief provides tips for enrolling and retaining an adequate program and evaluation sample, and successfully collecting data from as many respondents as possible, based on best practices and the experiences of Regional Partnership Grant (RPG) projects.

### Why are evaluation samples often small?

Evaluations of programs in child welfare and other fields often struggle with small sample size because of multiple factors.

#### Who should read this brief?

The Children's Bureau funded this brief for groups that receive a Regional Partnership Grant (RPG) or other grants and want to evaluate their programs, especially if using comparison group designs. The brief discusses common pitfalls in program and evaluation recruitment and retention based on RPG grantees' experiences, and provides tips for addressing them. The brief is written in the context of programs serving child welfare-related target populations, but it applies to other program areas as well.

**Target population.** The size of the target population depends on who the intended participants are. For example, there might be a large number of families in which children are at-risk of possible maltreatment, but if programs instead target children with substantiated maltreatment, or children already removed from the home, the pool of program and evaluation participants might be very small. Any pool is typically smaller in sparsely populated regions. When programs also target those with specific demographic or risk characteristics—such as families with children younger than 5 or with possible adult substance use disorders as in RPGtarget populations can be smaller still.







<sup>&</sup>lt;sup>1</sup> Comparison group evaluations collect data on families in a program group—which is offered program services—and a comparison group—which is not—to test whether and how much outcomes changed because of the program alone. A companion brief describes comparison group designs and provides tips on choosing and successfully conducting them, including thoughts on using administrative data. See Avellar et al., Tips for Planning an Impact Evaluation, October 2017.

#### What is RPG?

The RPG program supports partnerships between child welfare agencies, substance use disorder (SUD) treatment providers, and other systems to address the needs of children who are in, or at risk of, out-of-home placement due to a parent's or caretaker's SUD. The grant funder is the Children's Bureau within the Administration on Children, Youth, and Families; Administration for Children and Families; U.S. Department of Health and Human Services.

The legislation that authorizes the partnerships requires the agencies to collect and report on a set of performance measures. The Children's Bureau also requires partners to evaluate their programs and participate in a national cross-site evaluation (Administration for Children and Families 2012, 2014).

Program evaluations in child welfare struggle with small sample size due to several common factors, including small target populations; limited program capacity; and the challenges of recruiting, enrolling, and retaining eligible participants.

Usually the target population is the same for the program and evaluation. But that is not always true. For example, a program might offer residential and outpatient services. If only residential services are being evaluated, the evaluation target population is a subset of the program's target population. This would further decrease the size of the evaluation sample.

Program size. The size of a program and an evaluation sample are intertwined. Small programs cannot provide large evaluation samples. Or, if a program does not operate at full capacity, both the number of people served and the size of the evaluation sample are smaller. Because the target population is small, funding limited, or services intensive or costly, programs might not be designed to serve many people at the same time. This program capacity affects the size of the program group in an evaluation. Unless a program serves many cohorts over the period of the evaluation, the program sample will be small.

**Recruitment and referrals.** Programs and evaluations must identify eligible participants through referrals, direct outreach, or other methods. Not all eligible people will be interested in services or willing to participate in an evaluation. And some who are interested in the program might be unwilling to participate in the evaluation. Program capacity could also affect the size of this group.

**Enrollment and consent.** The processes of engaging participants in the program and evaluation are linked. Typically, programs recruit people who are eligible for and interested in program services, then obtain consent for participating in an evaluation of the program. For comparison group studies using random assignment, enrollment

#### **Key terms**

**Attrition:** Loss of study participants from the evaluation due to dropout or missing data.

**Baseline data:** Data obtained on or from evaluation participants before or at the beginning of an evaluation.

**Cohort:** A group of people who participate in the program in the same time period.

**Comparison group:** Study participants who do not receive services from the program of interest but may receive other available services; sometimes known as a control group.

**Follow-up data:** Data obtained on or from evaluation participants after baseline data, such as at program completion.

**Program group:** Study participants who can receive program services; sometimes known as a treatment group.

**Response rate:** Proportion of sample members from whom evaluation data are obtained.

in the evaluation occurs before enrollment in the program (if any), for the comparison group. Other designs might start by enrolling people in the program, then enrolling them in the evaluation, if they consent to do so.

Retention and attrition. Keeping participants engaged is critical. Project funders, staff, and other stakeholders naturally want to keep participants in their programs to operate at capacity and serve as many people as possible. They also typically have an intended intensity and duration of services to provide participants the best chance of benefitting from the intervention.

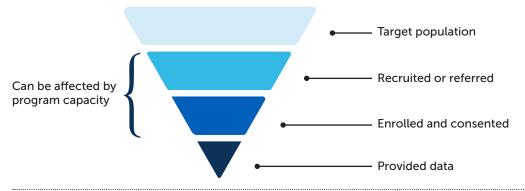


Figure 1. Each stage can reduce the size of the evaluation sample

An evaluation determines attrition by whether someone provides data. Even program completers will not contribute to the evaluation unless they provide data, most critically at follow-up (for example, after program services). Someone who drops out of services is still part of the evaluation. But dropouts can weaken any measured changes or effects because they did not receive all program services. Further, people who disengage from services can be more difficult to find for data collection. People who cannot be found or decline to provide data reduce the evaluation's sample size.

Taking these factors together, a final evaluation sample is usually only a very small subset of the target population (Figure 1).

Given these constraints, it can be helpful for grantees, providers, and evaluators to think through how to maximize their sample at each stage of their evaluation, from initial planning through data collection, drawing on the lessons learned from RPG partnerships.

### Tips for the planning stage

Lower-than-predicted participation rates are common in programs and in evaluations (Karlan and Appel 2016). In previous RPG evaluations, grantees and their referral, provider, and comparison site partners struggled with sample size at many stages. For example, they overestimated the size of the program's target population, had difficulty obtaining referrals and enrolling clients, and experienced low response rates from those in the evaluation—especially for follow-up data. Foreseeing potential problems and addressing them begins in the early planning stages.



**Planning Tip 1.** Develop a realistic estimate of the size of the target population.

Finding data on the number of potentially eligible people or families in a program's service area can be difficult, so grant applicants often use proxy measures instead—but these can be misleading. For example, in determining the need for RPG services, grantees' applications often cited statewide rates of illicit drug use and dependence, admissions to treatment services, or other data, combined with information on the number of reports of child maltreatment in their planned service areas. Applications referred to national, state, or local studies that estimated as many as 80 percent of child welfare cases might include adults with substance use problems. Although this information conveyed the magnitude of the problem RPG addressed, it did not accurately estimate the target population in the program service area.



**Planning Tip 2.** Define a target population that will be interested in and benefit from intended services.

Who does the program intend to serve and how will the services help them? A grantee cannot affect the size of the target population (Figure 1), but can decide whether to serve a broader or narrower group, as long as the group still meets the funding opportunity announcement's requirements.

Program services should be appropriate for the targeted population. This might seem obvious, but it is not always straightforward. For example, a previous grantee offered par-

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ticipants housing services, but after random assignment learned that participants were generally not interested in these services. In another example, one grantee offered services for substance abuse disorder, but the respondents who attended services were not the family members with such a disorder.

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**Planning Tip 3.** Develop a detailed enrollment and data collection plan.

Understanding how potential clients will flow through the evaluation from beginning to end will help prepare for the evaluation, including identifying any potential bottlenecks and ways to resolve them. Previous grantees found that using a reactive approach when a problem arose—such as low enrollment or poor response rates—rather than a proactive and preventive approach, was costly and left insufficient time to carefully think through and implement solutions. The plan should describe, at a minimum, five basic steps, including when they will occur and which staff will be responsible for each step:

- 1. How will potential participants be recruited or referred?
- 2. How will eligibility for the program and evaluation (if different) be assessed?
- 3. How and when will consent to be part of the evaluation be collected?
- 4. How will baseline data be collected?
- 5. How and when will follow-up data be collected?



**Planning Tip 4:** Use as much existing information as available when developing the plan.

Data and past experience are invaluable for developing a realistic, targeted data collection plan.

 For example, if a provider already serves the intended target population, how many families or cases seek or are referred to services in a month? If the new recruitment targets are now higher, such as to accommodate the evaluation, what new or additional referral sources, additional intake staff, or other resources and procedures are needed?

 How many families typically drop out before completing program services? To make up for typical program attrition, it can be helpful to increase recruitment goals.



**Planning Tip 5:** Budget adequately for follow-up data collection.

Programs often underestimate the level of effort associated with locating evaluation participants to provide data—especially for follow-up data. Grantees and evaluators should identify staff to lead this locating effort, such as a tracking coordinator; specify their roles; and sufficiently budget this level of effort (Hall et al. 2003). In previous rounds of RPG, smaller teams in particular, struggled with locating and tracking participants because staff had multiple responsibilities. For example, one grantee's project manager was responsible for conducting intake, facilitating program sessions, collecting program exit data, and locating participants who left the program or did not return exit data.

### Tips for enrollment

Sometimes, sample size problems can be severe enough to end an evaluation—and problems can begin with the crucial step of enrolling people in the program and evaluation. For example, in some randomized controlled trial evaluations, RPG grantees were unable to recruit enough possible participants to fill their RPG programs and therefore did not want to continue randomly assigning participants to the comparison group. In some quasi-experimental design evaluations (designs that create comparison groups using methods other than random assignment), grantees were able to recruit only a handful of people for the planned comparison group, and so had to abandon their evaluation design.



**Enrollment Tip 1.** Identify referral sources who serve the target population and support the evaluation.

When developing partnerships with referrals sources (even if within the grantee agency itself), note the alignment between the referral source and the target population. For example, a previous grantee offered family support services designed for parents and children together, but the referral sources with whom they partnered worked with parents who often did not have custody of their children. Grantees and partners should also make sure they agree about the goals of the evaluation. Some partners were reluctant to refer their clients who were not guaranteed RPG program services, which lowered RPG enrollment. If traditional referral partners are not the right fit or become unable to provide the number of referrals needed, engage alternative sources as soon as possible.



**Enrollment Tip 2.** Determine how eligibility for the evaluation will be assessed, who will do it, and when,

Determine in advance whether all clients served by the program will also be eligible for the evaluation, or whether the evaluation will have additional eligibility criteria. Such additional criteria will further constrain

### **Eligibility**

Not having a detailed plan in place for assessing eligibility reduced past grantees' enrollment.

- In one program, staff could not require an assessment of substance use disorder unless there was a reason to suspect substance abuse. But most parents did not voluntarily disclose information needed to trigger the assessment, so the grantee had few people who seemed eligible for its program.
- In another program, unionized child welfare workers were not permitted to assess participants for study eligibility because it was beyond the scope of their typical duties.

sample size but could be important to answer the evaluation's research questions. This can be an ongoing, iterative process, requiring refinements. For example, one grantee initially limited study eligibility to open child welfare cases, but after not finding enough cases that met the criteria, expanded the eligibility requirements to include participants in closed cases the grantee had served. When you have established eligibility criteria for the evaluation, work with evaluators to determine how and when it will be assessed, and who will be assessing it.



### **Enrollment Tip 3.** Prepare staff for the consent process.

Potential evaluation participants must give informed consent to be part of the evaluation.<sup>2</sup> Grantees and evaluators should train intake staff to obtain consent and be available to answer questions so that staff feel comfortable explaining the study to potential participants. A previous grantee had a hard time enrolling participants because staff had concerns about the evaluation and were not effectively communicating the importance of participating in the study to potential participants. When this was identified, staff concerns were addressed and staff were retrained to get the consent process back on track. For more information about informed consent, see the Office for Human Research Protections' tips for informed consent.

Depending on the target population, programs might have to build extra time or steps into the plan. For example, when a child is placed in out-of-home care, the state must provide consent for including the child in a study. There might be a lag before the state has authority to consent to include the child in an evaluation. Transferring guardianship from parent to state can be a lengthy process and is one factor that the consent plan and overall study timeline might have to address to ensure adequate enrollment.



Ongoing monitoring of enrollment numbers compared with targets throughout

<sup>&</sup>lt;sup>2</sup> Unless waived by an institutional review board, the U.S. Department of Health and Human Services requires grantees and contractors it funds to obtain the legally effective informed consent of individuals before involving them in

the evaluation enrollment process can help track performance to troubleshoot and intervene early, as necessary. It can be helpful to break down long-term recruitment goals into shorter periods, such as monthly recruitment goals. Examining monthly targets can help quickly indicate that enrollment is off track.



**Enrollment Tip 5.** Monitor and communicate with referral partners.

By tracking enrollment regularly, programs or evaluators can more quickly identify when they have to reach out to existing referral partners or approach new ones. For example, referral partners might not provide as many referrals as expected. They could change their focus and begin working with families that are not part of the target population. Or more commonly, the RPG or other program might not be fresh in referral partners' minds because of staff turnover or other pressing issues. Plan for regular communication and documentation to help partners remember the benefits of the program and evaluation, and to bring new staff up to speed as quickly as possible.

### Tips for collecting data

Evaluation attrition can happen when program or comparison group members withdraw their consent to be in the evaluation, do not respond to requests for data, decline to provide some data, or cannot be located at all. Although some attrition is almost inevitable, providers and evaluators can take steps to minimize it.



**Data Collection Tip 1.** Collect detailed contact information from participants at program or study entry.

Clients and study members are frequently mobile, changing their residence or their contact information such as cell phone numbers. A crucial component of data collection is obtaining multiple types of contact information from participants during their initial enrollment so staff can find them later. Along with their own street and email addresses and telephone number(s), this could include contact

#### Staying in touch

There are many ways to reach study participants. An evaluator for one RPG grantee, who achieved high response rates, branded the RPG project by familiarizing participants with logos and program names so the participants recognized the project's materials. The evaluator gave out refrigerator magnets reminding participants to share any changes of address, and sent birthday and holiday cards to invite participants to update their contact information. In addition to this type of individualized outreach, grantees and evaluators should consider more general reminders, such as posters on the wall where services are delivered. Providers and evaluators can use technology as well, such as sending emails and texts or using Facebook. Whenever using technology (and in all contacts with evaluation participants), make sure outreach does not jeopardize privacy or impose costs, such as for text messaging.

information for friends or family who might know a participant's whereabouts later if the participant's contact information changes.



**Data Collection Tip 2.** Maintain regular contact with evaluation participants.

Finding evaluation participants and collecting their follow-up data will be easier if the grantee or local evaluator has regularly contacted them between baseline and follow-up data collection. Although program group members might have regular contact with program staff, who can update contact information and remind their clients about the importance of the evaluation and upcoming data collection, special efforts might be needed for comparison group members. When people become disengaged from services or the study, collecting data from them will be difficult.



Previous RPG cohorts collected follow-up data at the end of services. However, some grantees had difficulty defining the end

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of services. For example, if they offered multiple group workshops, did a family have to participate in each workshop before collecting follow-up data? Setting a concrete program end point for purposes of the evaluation—even if it is not the end of all possible services—will greatly help ensure timely and consistent data collection.



### **Data Collection Tip 4.** Assign dedicated staff—especially for follow-up.

Data collection can be difficult and time consuming. To achieve high response rates, usually it is necessary to assign staff who can focus on and prioritize follow-up data collection activities. Evaluators and their staff members are typically in the best position to do this. Although program staff might spend more time with clients, their priority is typically providing services. They often do not have the time, training, or support necessary to collect data. If the program expects staff to collect data, these staff need dedicated, protected time to do so and training in how to locate respondents and successfully collect data.



**Data Collection Tip 5.** Be prepared to spend more resources on collecting data from the comparison group.

It is often more difficult to get data from the comparison group than the program group. Usually program staff can provide information about those who received services, such as a change of address. Comparison group members might not have any contact with the program of interest or the evaluation since staff collected baseline data (Data Collection Tip 2 offers an alternative). Thus, they can be harder to find and engage in data collection, requiring more resources including staff time and budget.



**Data Collection Tip 6.** Have a response ready for "no."

When first contacted to provide data, study participants might hesitate to give their time or share information. Those who collect data from participants must be ready to address common concerns, and encourage respondents to complete

assessments or surveys needed for measuring program outcomes. Previous RPG grantees also found that developing a phone script and a frequently asked questions document helped when talking to reluctant participants. A separate RPG brief provides more detail on encouraging reluctant respondents.



### **Data Collection Tip 7.** Consider incentives.

A growing research base supports using incentives to increase response rates (D'Angelo et al. 2016). Despite the evidence supporting incentives, stakeholders could be concerned about offering them to vulnerable people, or have questions about what to offer or how much. A separate brief written for RPG stakeholders covers incentives in detail.



### **Data Collection Tip 8.** Track follow-up progress early and often.

Consider tracking response rates by calculating the number or percentage of the initial evaluation sample who provide follow-up data. Response rates can show how the evaluation has performed on overall attrition, as well as attrition that differs between the program and comparison groups (known as differential attrition). The team can then decide if and when to make changes to improve response rates. It can also use the information to identify what changes might be useful. For example, tracking information showing the day of week, time of day, or interviewers who collected follow-up data is useful in determining the best times to reach study participants, or the most productive interviewers.

#### E. The bottom line

Conducting a successful evaluation is challenging. Regardless of the evaluation design or method used, it requires grantee, provider, and evaluation staff to jointly focus from the beginning on ways to maintain as large a sample size as possible to achieve the aims of their evaluation designs.

This brief focused on evaluation tips. But keeping clients engaged in program services is important for a strong test of program services. In addition, it is often easier to find and collect data from program group members if they continue to engage in program services. However, a successful comparison group study also requires data from the comparison group who received alternate or no services, as described earlier.

Although enrolling and maintaining a large evaluation sample can be difficult, it is critical for a good test of the program. An underpowered study will be unable to statistically detect effects or changes over time, even if they occur. Engaging people is key to the success of programs and their evaluations.

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