May 2016 • Brief 11

Developing and Implementing Systems for Tracking Recruitment and Retention for Programs Participating in Effectiveness Evaluations

Demonstrating program effectiveness through rigorous evaluation is possible when (1) sufficient numbers of prospective participants are enrolled in the study and (2) a strong contrast exists between the two research groups. To ensure a program meets its target enrollment, it is essential to track recruitment efforts and record the number of enrollees gained and lost at each step—this can help identify problem phases in the recruitment process and stages that might warrant modification. In addition, to ensure a strong contrast between the two research groups, programs must track ongoing participation in the program—this can help identify the segments in the intervention where attendance is problematic and where modifications to the program to improve attendance might be beneficial.

BRIEF CONTENTS

Programs participating in Teen Pregnancy Prevention effectiveness evaluations benefit from tools to systematically track recruitment and retention to ensure enough youth are enrolled in and participating throughout the study. This brief instructs on how to build such tools and suggestions for organizing monitoring efforts. This brief is structured in the following sections, to provide guidance for both recruitment and retention tracking:

I. What to Track: Recruitment

To track information for recruitment, one must first identify all steps in the recruitment process. Tracking recruitment activities begins with your program's efforts to recruit participants, ends with study enrollment, and requires that all activities that occur in between are recorded. Throughout this brief, the following scenario will serve as an example program:

A new, voluntary Teen Pregnancy Prevention program is starting up in the Oklahoma City metro area to provide center-based, after-school services to youth ages 15 and 16 during the 2015–2016 school year. The program uses flyers and radio ads to market its services and relies on referrals made by friends of program participants. When the youth contacts the program to express interest, eligibility is determined. If the youth is eligible, he or she is invited to attend a required program orientation with a parent. Youth who attend the orientation with their parent are invited to join the study and the program. Before the youth are enrolled in the study, the parent must sign a consent form.

A visual is helpful when identifying each step of the recruitment process. Figure 1 (page 2) displays the progression of the example program.

It is important to design the recruitment process expeditiously to meet the target numbers for the study. However, if there is substantial lag time between youth expressing interest in the program and enrolling in the study, it is possible they will lose interest in participating. Understanding the steps and tracking the number of youth lost at each step will provide insight about when in the recruitment process youth drop out and allows for modifications to prevent future loss of potential study participants.

Figure 1. Recruitment Process
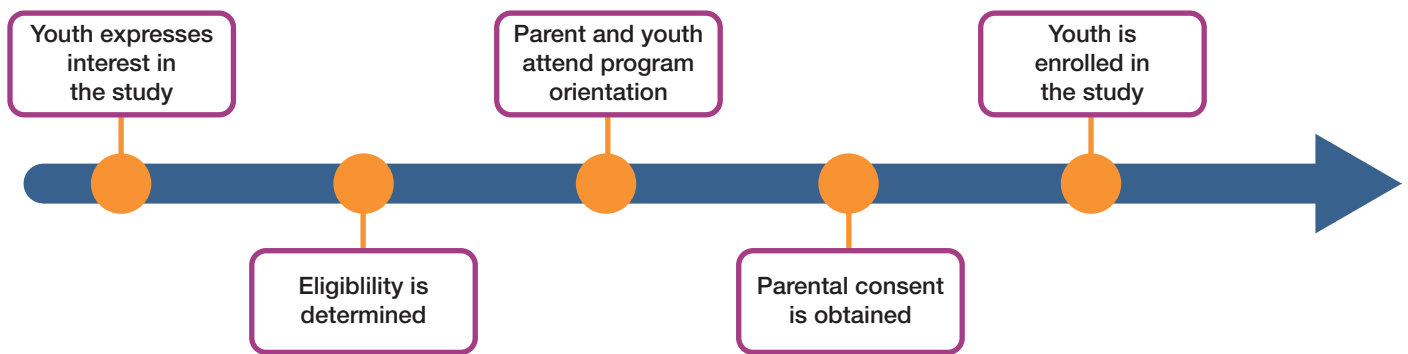
II. Building a Recruitment Tracking Tool

It is imperative to have a tracking system, such as Excel or a Management Information System (MIS), and near real-time data to monitor recruitment and study enrollment. All key staff, such as the program recruiters and the evaluation team, should have access to these data, and staff should frequently examine these data to determine where the recruitment process might need adjustment.

The first step in developing the tracking system is to identify the necessary information to track for each prospect.

It is important to consider each step in the process and specify what information to collect at each step. Using the steps identified in Figure 1 as places where a prospect may be lost, track the following information (at minimum) for each prospect to ensure follow-up activity:[1]

- Prospect name

- Prospect telephone number—It is critical to collect this early in the process, as contact information is important for recruitment, following up to encourage attendance, and also for long-term data collection outreach.

A *prospect*, or *recruit*, differs from a *study participant*, in that these individuals have not yet enrolled. We use the term *prospect* in this memo to highlight the difference.

- Referral source—This varies depending on recruitment strategy. Examples include flyers, friend or family member, community-based organization, and others.

- Age and/or other eligibility criteria—Typically, age is an eligibility requirement for teen pregnancy prevention programs.

- Eligibility (and reason for ineligibility)

- Confirmation of orientation attendance

- Parental consent for youth to participate in the study and program

- Enrollment status

After identifying the necessary information to track, you can create a recruitment tracking tool (Table 1).

Table 1. Example Recruitment Tracking Tool

Name	Telephone Number	Referral Source	Age	Eligible?	Reason Ineligible	Attended Orientation	Parental Consent	Enrollment Status
Youth A	213-323-7564	Flyer	17	No	Age—too old	N/A	N/A	N/A
Youth B	213-456-7891	Radio Ad	16	Yes	N/A	Yes	Yes	Yes
Youth C	213-812-9487	Friend	15	Yes	N/A	No	N/A	N/A
Youth D	213-534-4453	Friend	15	Yes	N/A	Yes	Yes	No

[1] An institutional review board (IRB) must approve whether these data may be collected, as parents/youth have not yet provided consent. In addition, these personally identifiable data about prospects must be stored securely and destroyed at the conclusion of the study, per the requirements of an IRB.

In addition to the items on page 2, it is helpful to track more detailed information about how individuals progress from prospects to program/evaluation participants. This will vary based on program design and recruitment sources; however, some suggested information to track includes:

- Date of initial contact
- Who is assigned to follow up with the potential participant
- Date and time of follow-up contacts/attempts
- Date of scheduled orientation
- Program start date

Equally important to assessing progress toward recruitment goals is knowing the most fruitful referral sources. Keep in mind that the best referral source is not always the one that provides the most youth, but rather is the one that supplies the most youth *who actually enroll and attend*. By tracking the referral source within your recruitment tracking tool (Table 1, page 2), program staff can determine where to focus recruitment efforts. To determine the best referral source, simply count the number of youth who enrolled in the program resulting from each source as an indicator of which of these sources has been most effective.

III. Building a Tool for Recruitment: Funnel Analysis

Another important recruitment tool is the funnel analysis. This resource gives program staff a visual representation of where prospects (youth interested in participating in the study) are getting "stuck" in the recruitment process. A funnel analysis depicts the "funnel" of activities that prospects will pass through. It shows each step in the recruitment process, the total number of youth at each step, the number of youth lost at each step, and the percentage of youth who are retained at each step. Figure 2 (and Table 2, page 4) illustrates a basic funnel analysis, where, at the entrance of the funnel, there are 500 prospects. At the end of the funnel, 320 youth are enrolled. But what happened between the initial recruitment and final enrollment? Where and why were 180 youth lost? A funnel analysis and proper data tracking can answer these questions.

Figure 2. Funnel Analysis

500	Prospects
400	Eligible
335	Attended Orientation
325	Provided Consent
320	Enrolled
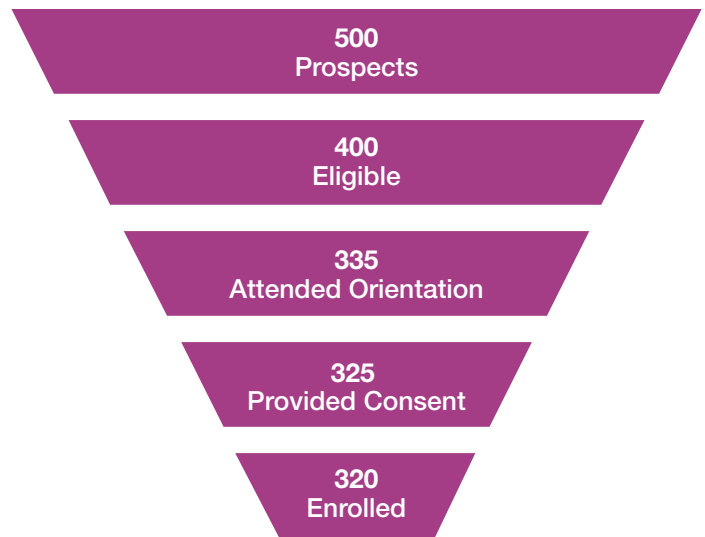
IV. Interpreting Funnel Analysis Data for Strategy Development

This section walks through the details of Table 2 and explains how to interpret the numbers in the funnel analysis and use them to inform enrollment strategies.

A. Number of Prospects. This number represents the total number of youth who are interested in enrolling in the study. This is a subset of the total number of youth to which the program has made outreach efforts, and that number may be known (for example, all youth enrolled in an after-school program) or unknown (for example, all youth ages 15 and 16 in Oklahoma City). If the total is known, add that to the funnel analysis as the topmost entry in the funnel as an upper bound for your recruitment target.

Suggestions on how to increase the number of youth who express interest in the program:

- Use recruitment partners to disseminate information about the program to youth who may be eligible.
- Create engaging recruitment materials with input from youth in the target population.
- Ask youth who previously participated in the program to recruit prospects.

Table 2. Example Funnel Analysis for Enrollment

Recruitment Item	Total Number of Youth	Change +/–	Percentage of youth retained from prior step	Explanation
A. Number of Prospects	500	—	—	Total number of youth who are interested in enrolling in the study
B. Eligible for Program	400	−100	80	Number of prospects (A) who meet eligibility requirements
C. Attended Orientation	335	−65	84	Number of eligible youth (B) who attend the required program orientation
D. Parental Consent	325	−10	97	Number of eligible youth who attended orientation (C) who have submitted a signed parental consent form
E. Enrolled in the Study	320	−5	98	Number of eligible youth who attended orientation and submitted signed parental consent form (D) who are enrolled in the study

Description	Enrollment Rate	Total Change	Percentage	Explanation
F. Enrollment Rate (Total Enrolled/ Total Interested)	320/500	−180	64	Rate of total enrolled (E) to total number of youth initially interested in the study (A)

B. Eligible for Program. This number represents the total number of prospects who meet basic program eligibility requirements. According to the example program, 80 percent of the prospects are eligible for the program (that is, 400 of the 500 prospects meet eligibility requirements).

Ineligible Total. It is important to understand the make-up of the ineligible population reflected in this analysis. In the example program, 100 recruited youth are not currently eligible for the program. However, it is crucial to understand and record the reason for each youth's ineligibility because some eligibility factors might change over time. Overlooking the composition of ineligible prospects in the funnel analysis could mean overlooking a large number of future enrollees.

Recruitment Item	Total Number of Youth	Change +/–	Percentage
A. Number of Prospects	500	—	—
B. Eligible for Program	400	−100	80

Consider the following example:

Youth Z is 14 years old and will turn 15 in two months. The minimum age requirement to enroll is 15. Although Youth Z falls below the minimum age range required for participation at the time of initial contact, this prospect would be considered eligible upon turning 15. Therefore, a follow-up in two months would be advisable.

Suggestions on how to increase the number of eligible youth:

• Ask ineligible youth who will eventually become eligible to return in the future to receive programming.

• Review outreach material to assess whether it effectively communicates the eligibility requirements.

• Remind referral sources about eligibility requirements.

C. Attended Orientation. This number represents the number of eligible youth who attended orientation. Many programs require an orientation session to provide details about the random assignment process and program or evaluation requirements. In the example program, of the 400 prospects eligible for the program, only 335 attended orientation. This means that 65 prospects did not attend.

Orientation Non-Attendees. Each of these 65 youth should receive a follow-up contact to determine why they did not attend their scheduled orientation, and the reason should be noted within the recruitment tracking tool. Some potential reasons could include:

- Scheduling conflicts—Orientation times may not be conducive to the target population's schedule.

- Time lapse leading to disinterest—When too much time lapses between expressed interest and the orientation, interest in a program might drop.

Recruitment Item	Total Number of Youth	Change +/–	Percentage
B. Eligible for Program	400	–100	80
C. Attended Orientation	335	–65	83.75

Suggestions on how to increase the number of youth who attend orientation:

- Hold multiple orientation sessions at various dates and times. This could include holding some sessions earlier in the process to limit the time lapse between expressing interest and enrollment or holding orientation sessions at various times through the day and on various days of the week/weekend to accommodate schedules.

- Market the orientation as a fun event by offering incentives such as a door prize or pizza party.

- Conduct individual orientations as necessary.

D. Parental Consent. This number represents the number of youth who submitted a signed parental consent form. In the example program, 325 of the 335 eligible youth who attended the orientation submitted a signed parental consent form.

Prospects Who Do Not Return Parental Consent Form. Ten prospects did not return the signed parental consent form. Because consent is required for program participation (in the context of an evaluation), youth who do not submit a signed form cannot be enrolled in the study. Knowing the reason why these 10 youth did not turn in the form will indicate whether follow-up is needed. For example, if the parent refused to sign the consent form, then no follow-up is necessary and the

individual should be marked in the tracking system as having a parent refusal. However, if the form is sitting on the kitchen counter waiting to be signed, then a follow-up call might prove helpful to move the process along.

Recruitment Item	Total Number of Youth	Change +/–	Percentage
C. Attended Orientation	335	–65	83.75
D. Parental Consent	325	–10	97

Suggestions on how to increase the number of youth returning signed parental consent forms (whether the response is yes or no):

- Offer incentives for returning forms. If you offer an incentive for returning a signed form, you must provide the incentive to everyone returning a form regardless of whether the parent says yes or no; otherwise, the incentive could be seen as coercion to participate.

- Encourage both youth and parents attend orientation and collect consent forms at this time.

- Provide documentation to parents that addresses frequently asked questions. Keep it clear and concise, yet be sure to address their most likely concerns and questions.

E. Enrolled in the Study. This number represents the number of youth enrolled in the study. In the example program, of the 325 youth who submitted the signed parental consent form, 320 were enrolled in the program.

Not Enrolled in the Study. Because the program is voluntary, prospects can withdraw at any time. The five people who were not enrolled in the study may have changed their mind about participation before their official enrollment. It is imperative to track when this happens and why.

Recruitment Item	Total Number of Youth	Change +/–	Percentage
D. Parental Consent	325	–10	97
E. Enrolled in the Study	320	–5	92

Suggestions on how to increase the number of youth who are enrolled in the study:

- Follow up with the prospects who requested to withdraw from the program to address any concerns or barriers they have that would keep them from participating.

- Create a decision tree that incorporates most the common barriers and incorporate these into orientation to help anticipate a youth's ability to follow through.

F. Enrollment Rate. The enrollment rate, which is the percentage of prospects who were eventually enrolled in the study, is valuable for program recruiters and program management. In general, recruiters work toward targets, and therefore programs should maintain weekly, monthly, or yearly targets. These target numbers will represent enrollments to the program, which is the bottom of the funnel. A common mistake recruiters make is only looking at the enrollment goal number. This number is only an end result, and focusing on this number alone can give recruiters a false sense of the full extent of the challenge. The sample funnel (Figure 2, page 3) shows that recruitment efforts do not equal enrollment outcomes in a one-to-one ratio. In fact, the enrollment rate shows that to enroll 320 people into the study, 500 prospects are needed. This means that if the enrollment target for the study is 1,000 participants, then 1,563 youth need to be recruited.

Recruitment Item	Total Number of Youth	Total Change	Percentage
A. Number of Prospects	500	—	—
E. Enrolled in the Study	320	—	—2
F. Enrollment Rate (Enrolled/ Prospects)	320/500	−180	64

It is difficult to create a formula for how many youth to "over-recruit" without taking into consideration the local setting; however, it is safe to suggest setting a goal of at least 25 to 50 percent more than your target number. The best way to establish your goals is to conduct numerous funnel analyses over time and adjust your targets as needed. For example, if your program enrolls continuously through the year, a quarterly funnel analysis will help you identify any problem periods at different times of the year (for example, in the winter, it might be more difficult for parents to drive children to programming, due to weather). This type of ongoing analysis will also enable you to see whether particular strategies are helping reduce dropout. For example, if you change the community partner site where a recruitment presentation is delivered and then see an increase in the number of eligible youth coming in through that source, you could assume that outreach modification was successful and that it should continue. If, however, the change did not result in additional youth, it might make sense to try a different community partner site to see whether another location might have a greater influence on getting eligible youth to express interest in the program.

V. What to Track: Retention

Tracking for retention is similar to tracking for recruitment. However, retention tracking begins where recruitment tracking ends—at youth enrollment in the study—and continues through the completion of the program. Although tracking for recruitment is necessary to help achieve enrollment targets for an evaluation, simply getting participants in the door is not sufficient. To ensure a strong contrast in the services you are testing, it is important to also track sample retention to help achieve dosage targets for participants.

Program staff may be asked to continue interacting with participants throughout all evaluation activities, such as follow-up surveys, but tracking the details of these data collection activities is typically the responsibility of the evaluators. The following sections provide guidance and a tool for this activity.

VI. Building a Retention Tracking Tool

To effectively ensure a high dosage of program participants, evaluators must track participation at the individual level and make changes to the program when participation lags. Similar to the recruitment tracking tool, you can create a retention tracking tool using Excel or an MIS (Table 3, page 7), populating the fields with attendance data. Alternately, if your program requires submitting attendance records as performance data, then it is likely that you can use reports of these data for tracking retention. At the same time, tracking overall participation and using a funnel analysis (Table 4 , page 7) at various times throughout program implementation enables program staff to identify where participation may be becoming stagnant and/or where participants may be dropping out of the program. Although the funnel analysis shown in Table 4 does not track individual participation, it does monitor trends in the sample. Collectively, these resources provide a more comprehensive view of the program's retention success, so it is important to carefully monitor participation at both the individual and program levels.

Suggestions on how to increase retention:

• By continually monitoring the retention tracking tool and funnel analysis, program staff can focus efforts on keeping participants engaged at targeted points. Even though post-intervention surveying is often handled by an outside evaluator, it is important that both program staff and the evaluators are aware of the surveying progress and the number of surveys completed. This will enable staff to track the progress toward the program goal at any given time. Two additional items that are helpful to track during the retention process are youth's explanation of absences and the incentives process (discussed below).

• By following up with youth who are absent from a session, program staff can determine whether there is a barrier to their participation or whether there is something about the program itself that caused disinterest. Knowing this information will help program staff understand why dropouts occur and provide solutions to barriers or, if necessary, make modifications to the program to minimize dropout.

- Incentives given at various points throughout the program can help maintain participation, but only if the youth are interested in them. Tracking the types of incentives used, as well as the schedule in which they are given, will help program staff determine whether they are contributing to the success of the program.

- Make-up sessions can improve participation rates for some programs, depending on the design of the services and frequency of offerings.

To successfully reach program goals for the number of youth who completed services, program staff must continually monitor and track each step throughout the recruitment and retention process. Tracking allows staff to focus time and energy on strategies that make recruitment and retention efforts more efficient. When efforts are not tracked, it is difficult to know what really works for a program and how to make improvements. This brief provides an overview of some of the foundational elements of tracking recruitment and retention; programs should build upon these recommendations with program-specific conditions and insights.

Table 3. Example Retention Tracking Tool

Name	Enrollment (Date)	Session 1 (Date)	Session 2 (Date)	Session 3 (Date)	Session 4 (Date)	Session 5 (Date)	Session 6 (Date)
Youth A	9/1/14	9/15/14	Did not attend	9/25/14	9/30/14	Did not attend	10/10/14
Youth B	9/1/14	9/25/14	9/30/14	Did not attend	10/10/14	10/15/14	
Youth C	9/1/14	10/10/14	10/15/14				
Youth D	9/1/14	10/25/14					

Table 4. Example Funnel Analysis for Retention

Retention Item	Total Number of Youth	Change +/−	Percentage of youth retained from prior step	Explanation
A. Enrolled in the Study	320	—	—	Number of eligible youth who attended orientation and submitted signed parental consent form (D) who are enrolled in the study
B. Attended at Least One Session	310	−10	97	
C. Attended at Least Two Sessions	300	−10	97	
D. Attended at Least Three Sessions	290	−10	97	
E. Attended at Least Four Sessions	290	0	100	
F. Attended at Least Five Sessions	285	−5	98	
G. Attended All Six Sessions	275	−10	96	

Retention Item	Rate	Total Change	Percentage	Explanation
H. Completion Rate	275/320	−45	86	This is the rate of the total number of youth who completed all program sessions (G) to the number of youth who were enrolled (A)
I. Goal Rate	275/256	+19	107	This is the rate of the total number of youth who completed the program relative to the number of youth expected to complete the program (80 percent of the total enrolled)