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Tracking and Interviewing Family Options Study Participants

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Abstract

Sample retention is a challenge for any longitudinal study. Panel attrition is inevitable. Panel retention is especially difficult with highly mobile, low-income study participants. This article examines the participant-tracking strategy used for the Family Options Study, conducted by the U.S. Department of Housing and Urban Development. Through the Family Options Study, 2,282 homeless families in 12 locations nationwide received three housing services and interventions. The study measures the effect of these housing services and interventions on study participants over a three-year follow-up period. Followup surveys conducted 18 and 36 months after enrollment were the main source of data to measure the effects of the study interventions. The study used a rigorous participant-tracking approach that yielded high response rates. More than 80 percent of study participants responded to the 18-month survey, and 78 percent responded to the survey conducted 3 years after enrollment. Approximately 10 percent of the total evaluation costs were devoted to participant tracking. The tracking strategy used a variety of methods—telephone, mail, and in-person contacts—with varying degrees of frequency and intensity. The article examines the importance of local interviewers, participant

Abstract (continued)

incentives, the continued engagement of participants, and administrative data in the tracking strategy. Lessons from the Family Options Study point to the importance of a combination of methods for successful participant tracking.

Introduction

This article examines the participant-tracking methods used to conduct the Family Options Study, launched by the U.S. Department of Housing and Urban Development (HUD) in 2008 to learn more about the effects of housing and services intervention for homeless families. The Family Options Study analyzes the effects of three housing and services interventions for a sample of 2,282 homeless families staying in emergency shelter in 12 locations across the country. The effects of the three interventions—(1) a short-term rental subsidy, (2) a long-term rental study, and (3) service-intensive transitional housing—were measured and compared with the effects of usual care. The study defined *usual care* as any housing or services that a family accesses in the absence of any other intervention. Because the study was a randomized, controlled trial that compared the study interventions with usual care (and with each other), it was very important to achieve high response rates to the followup surveys that were the main source used to measure the effects of the study interventions. The study achieved remarkably high response rates to the followup surveys—more than 80 percent for the survey conducted about 18 months after families enrolled in the study and 78 percent for the survey conducted 3 years after enrollment.

Because of these high response rates, the study has been able to measure statistically significant effects not only on housing stability but in other areas as well, including family composition, adult well-being, child well-being, and self-sufficiency.

Tracking study participants in a longitudinal study is difficult, because attrition is inevitable. Attrition rates of 20 to 30 percent, and even as high as 70 percent, are not uncommon (Gustavson et al., 2012; Launes et al., 2014). Some participants decide they no longer want to be part of a longitudinal study. The study more frequently cannot locate the study participants for followup surveys because they move or change their telephone numbers. The housing instability that is in the very nature of homelessness made tracking and surveying families over time particularly challenging for the Family Options Study.

Low-income households, taken as a whole, tend to be more mobile than middle-income households. They move more frequently, change telephone numbers more often, or may have telephone numbers temporarily disconnected. Homeless families are even more mobile. During the followup period for the study, families in the Family Options Study were likely to relocate from the emergency shelters from which they were recruited into the study. They also were likely to move back and forth among their own housing units, temporary stays with family and friends, or returns

to shelters that could be different from the shelters in which they were staying originally. Further, many homeless families have experienced violence or trauma that may make them vulnerable and wary of engaging in research or efforts to contact them over time.

Gustavson et al. noted that study participants who have low educational levels, are unemployed, or are not married are likely to have high attrition rates (Gustavson et al., 2012). These characteristics are all common among Family Options Study participants. At the time of enrollment, 83 percent of the study participants were unemployed; 30 percent were unmarried; and 73 percent had a high school diploma, GED (that is, general educational development), or less (Gubits et al., 2013). The Family Options Study implemented a rigorous participant-tracking strategy aimed at overcoming these challenges.

Local interviewers conducted the study enrollment in person, which helped the interviewers build rapport with the families early on. After random assignment, the study team contacted the programs to which families were referred to collect information about whether and when the family enrolled in the assigned intervention. The local interviewers also maintained periodic contact directly with participating families to ensure that the contact information was as accurate as possible leading up to the followup interviews. For each cohort of enrolled families, contacts began 3 months after enrollment and continued for a minimum of 3 years.

The cost of participant tracking totaled approximately $1,500,000, about 10 percent of the total evaluation costs of the Family Options Study.[1] The participant-tracking effort contributed to high response rates for the 18- and 36-month followup surveys and thus maximized the statistical power of the impact analysis. The sample sizes of this rich survey data—coupled with the study's rigorous design—provide a strong basis for drawing conclusions about intervention effects on housing stability, family preservation, adult well-being, child well-being, and self-sufficiency 3 years after study enrollment.

The Family Options Study tracking approach provides lessons that may be useful to other researchers. The most important lesson is that a combination of tracking efforts (face-to-face enrollment, frequent tracking efforts of varied intensity, and incentives), rather than one particular component, influenced the success of followup data-collection efforts. The remainder of this article presents details on the methods used to track the sample and provides qualitative information on the relative merits of these combined methods.

Tracking Strategy Overview

When developing a tracking and data-collection strategy for the Family Options Study, HUD and the research team took the unique characteristics of the study population and previous tracking experiences of the research team into consideration. The Family Options Study research team implemented a tracking strategy that relied on—

- Local site interviewers.
- Frequent contacts with varying levels of intensity.

[1] Evaluation costs include research design, site recruitment, participant enrollment, data collection, analysis, and reporting.

- Incentives.
- Administrative database searches.

Local Site Interviewers

Integral to the Family Options Study tracking plan was the hiring of local site interviewers to conduct the enrollment session and all subsequent tracking and data-collection efforts. The familiarity local interviewers had with the areas in which the study participants lived helped to minimize the challenges associated with recruiting sample members from vulnerable populations. Local interviewers conducted the enrollment sessions in the shelters, which enabled them to build a professional relationship with not only the families but the staff at the shelters as well.[2] The use of local site interviewers also allowed for the study's tracking plan to rely heavily on active tracking efforts—those that involve direct contact with the study participant, such as mailings, telephone calls, and interviews. Such active tracking efforts tend to be very effective ways of strengthening the rapport between the interviewers and families and, ultimately, of strengthening the connection of families to the study. Interviewers received indepth training about the study background, research questions, purpose of each of the individual data-collection components, and guidelines for gaining cooperation from respondents. The interview team expanded as the followup surveys began, but most of the original site interviewers remained part of the study team for the full 36-month followup period.

Frequent Contact With Varying Levels of Intensity

On longitudinal studies with low-income populations, the tracking protocol usually involves contact with participants every 4 to 8 months (or 6 months on average). With more challenging samples, such as in the Family Options Study, tracking might occur more frequently.

On more stable samples, the tracking could stretch to every 8 to 12 months. For example, the Panel Study of Income Dynamics (PSID), one of the longest-running panel studies in the United States, includes a mix of household incomes and sends a tracking mailing to PSID study participants every year in between followup waves of data collection (McGonagle, Couper, and Schoeni, 2011). In a study of Social Security Disability Insurance beneficiaries for the Social Security Administration, study participants are also less mobile than Family Options Study participants. The research team contacted these households 8, 20, and 30 months after enrollment during the 36-month followup period.

[2] One alternative to using local interviewers employed by the research team would have been to have the research team train staff within the shelters to conduct the enrollment sessions. Although this approach has proven effective on other studies in the research team's experience, several drawbacks to this approach made it less appropriate for this study. One possible drawback is that prospective families may not have been as candid in responding to some of the enrollment questions with shelter staff as they were with the study interviewers, for fear of being removed from shelter or of limiting their options. In addition, and most relevant to maintaining high response rates, the study team's interviewers would have had to wait to introduce themselves to the respondents until the first tracking contact began. This delay could have affected followup data collection because interviewers would have had to spend more time and resources locating and earning the cooperation of the respondents.

The team determined that the Family Options Study required a rigorous tracking protocol, with frequent but varied types of contact to minimize attrition and maximize response rates to the 18- and 36-month followup survey efforts. Exhibit 1 illustrates the type of tracking and survey data-collection activities conducted for the Family Options Study sample. The exhibit also shows the timing of each activity, from the baseline survey through the 36-month followup survey. The following list describes each activity briefly.

- **Baseline survey.** The study team collected detailed contact information at the time of enrollment as part of the baseline survey. For the adult respondent, the team collected previous address, multiple telephone numbers, and e-mail addresses. The team also collected information on three people (referred to as secondary contacts) not residing with the participant but with whom the study participant had regular contact. These contacts were normally close family members such as a parent, sibling, or friend.

- **Tracking calls.** Interviewers conducted tracking calls 3 months after random assignment. The tracking calls were repeated 26 months after random assignment. The tracking calls were intended to confirm or update contact information for the study participant and the secondary contacts.

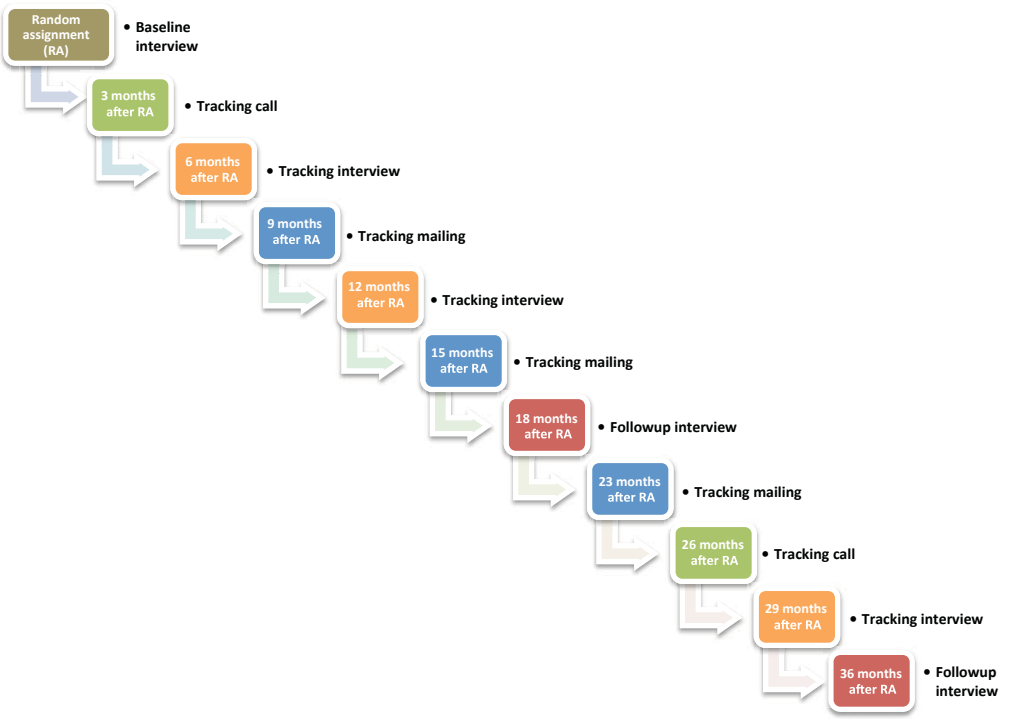
- **Tracking interviews.** The team developed a short tracking interview that was administered 6, 12, and 29 months after random assignment. This interview collected updated contact information for the adult respondent and secondary contacts. The tracking interviews also collected information on the current living situation, receipt of housing assistance, and family composition for each family. Data from these tracking surveys provided crucial information on the housing and homeless assistance programs families used during the followup period and on changes in family composition and living situation.

- **Tracking mailings.** The team sent letters to study families 9, 15, and 23 months after random assignment. These letters reminded the study families that they were part of the Family Options Study and explained the importance of updated contact information. Each letter contained a form with the family's current contact data and information for up to three secondary contacts. Each family was asked to confirm or update the information on that form and return it in the enclosed postage-paid envelope.

- **The 18- and 36-month followup surveys.** These followup surveys are the primary source of data for measuring outcomes. Local interviewers played a major role in locating and interviewing respondents for the surveys. All the previous tracking efforts provided updated contact data for interviewers to draw on in an effort to maximize response rates.

Exhibit 1

Family Options Study Participant-Tracking and Data-Collection Protocol



Incentives

The use of incentives enhanced the ability of local interviewers to engage study participants in all aspects of participant tracking and data collection. Families were offered a financial incentive as a token of appreciation for their time spent participating in each of the tracking and survey data-collection efforts. Exhibit 2 provides a summary of the potential incentives each respondent could receive, ranging from $15 to $50, depending on the activity. The baseline, 18-month, and 36-month incentives were higher than the others because of the increased length and complexity of the survey. The 18- and 36-month followup data collection also included child data-collection components. Adults received incentives on behalf of the focal children who completed the child data-collection activities.

Exhibit 2

Family Options Study Incentive Amounts by Data-Collection Type

	Adult Respondent			Child Respondent[a]		
	Frequency	Amount ($)	Total ($)	Frequency	Amount ($)	Total ($)
Baseline	1	35	35	—	—	—
Participant tracking	8	15	120	—	—	—
18-month followup	1	50	50	1	15	15
36-month followup	1	50	50	1	25	25
Total (maximum value)	**—**	**—**	**255**	**—**	**—**	**40**

[a] *The incentives for the child data collection were provided to the adult respondent on behalf of the child.*

Administrative Database Searches

The team also used some passive tracking approaches, particularly updates from local homeless assistance providers, administrative databases such as Accurint®, and HUD administrative data from the Public and Indian Housing Information Center (PIC) and the Tenant Rental Assistance Certification System (TRACS). These sources are not as productive in maintaining the families' connections to the study, but they can be useful for providing updated contact data if timed appropriately. (For more on timing, see the section titled "Lessons Learned.") They also do not require the same level of labor resources as the tracking calls or interviews. The team used information from these sources to supplement the data collected by the active tracking efforts.

Early Mobility Findings

The decision to implement such an intensive tracking plan was validated by baseline survey data on the housing situation of study participants. Family Options Study participants were, as expected, highly mobile. At the time of enrollment into the Family Options Study, all families were residing in an emergency shelter at 1 of 12 sites. According to baseline survey data, most families in the study reported having entered shelter from housing—either their own housing unit or that of a friend or family member.

- About 26 percent said they had rented or owned their own housing.
- About 46 percent said they had been living with family or friends.
- About 28 percent reported they had been living in some other situation such as group homes, shelters, transitional housing, motels, or on the streets.

The baseline survey also captured data on study participants' most recent address before entering the shelter. These data show that 8 percent of the enrolled families reported living in another state before enrollment in the study. It is unclear how or why those families ended up in shelters in new states. They may have crossed state boundaries to access more robust services or attempted unsuccessfully to double up with family or friends. The interstate mobility shows that participants likely do not have strong ties to their communities, which supported the notion that they would be hard to track.

Tracking and Data-Collection Results

Longitudinal tracking is typically done to maintain contact with study participants between the point of entry into a study and followup data collection. Tracking efforts provide updates of addresses and other contact information that can be used to locate the study participants throughout the life of the study. The effort required to track study participants is less intense than the effort that takes place at the time of followup data collection. The response rates of tracking efforts can provide a sense of how difficult the participants are to locate but are expected to be lower than the response rates that can be achieved the followup surveys.

For the Family Options Study, tracking calls and interviews were done during a 12-week field period, whereas the 18- and 36-month followup survey efforts had, on average, a 6-month field period.[3]

In addition, the tracking efforts did not follow as rigorous a protocol as implemented for the full-scale followup survey data collection at 18 and 36 months. Because high response rates to the followup surveys are critical for measuring outcomes, survey interviewers attempt to complete each case until it becomes clear that locating the family is unlikely or impossible.

Using the same exhaustive approach during multiple rounds of participant tracking would have been overly burdensome on respondents and could have had a negative effect on the ability to achieve high response rates for the followup surveys.

Exhibit 3 shows the results of the tracking activities conducted for the Family Options Study. For each tracking activity conducted between baseline and the 36-month survey, the exhibit shows the number of months elapsed since random assignment and the response rate. The research team anticipated that tracking calls and interviews would achieve a 50-percent response rate and that mailings would achieve a 25-percent response rate. Each tracking effort achieved greater than anticipated response rates. We suspect that these high response rates for tracking activities reflect participants' strong connection to the study that was developed during the face-to-face enrollment sessions and the study's generous participation incentives.

The research team's tracking approach was integrated, with tracking efforts in one mode or at one time likely to affect the success of other efforts. Thus, it is not possible to measure the success of individual tracking components relative to each other. Such measurement would require an experiment to be built into a tracking effort, with the study team applying different tracking protocols to different sample members.

For example, the tracking calls at the 3-month mark achieved a higher-than-expected response rate (78 percent). The tracking interviews at the 6-month mark also achieved a higher-than-expected response rate (73 percent). Without an embedded experiment, the team cannot say with certainty what would have happened to response rates on the 6-month tracking interviews in the absence of 3-month calls. It is the integration of these combined efforts, not any one effort in particular, which contributed to the success of the followup data collection.

[3] A new tracking effort started every 3 months. The tracking calls and interviews occurred during a 12-week period. The first 8 to 10 weeks were spent on data collection, and the remaining weeks were spent processing the data and updating the sample file in preparation for the next quarterly activity.

Exhibit 3

Family Options Study Tracking and Survey Response Rates

Tracking Activity	Months After Enrollment	Response Rate (%)
Before 18-month followup tracking activities		
Baseline interview	0	100
Tracking call	3	78
Tracking interview	6	73
Tracking mailing	9	34
Tracking interview	12	72
Tracking mailing	15	37
18-month followup survey	18	81
After 18-month followup tracking activities		
Tracking mailing	23	28
Tracking call	26	66
Tracking interview	29	62
36-month followup survey	36	78

Source: Survey Project Tracking System

Tracking Results Summary

The 3-month tracking calls concluded with a 78-percent overall response rate, and the post-18-month tracking calls (26 months) achieved a 66-percent overall response rate. Starting the tracking with a telephone call gave the interviewers a chance to confirm the quality of the contact data obtained at baseline and to strengthen the rapport they built with families during enrollment.

The tracking interviews at 6, 12, and 29 months enabled the research team to again renew the family's connection to the study and obtain contact-information updates. The interviews also enabled the team to capture interim information on key outcomes such as housing tenure, housing assistance, and family composition. The 6- and 12-month interviews had response rates of more than 70 percent, and the post-18-month tracking interviews reached a 62-percent response rate.

The tracking mailings at 9, 15, and 23 months after random assignment achieved very good response rates. The typical response to a mail survey ranges from 20 to 30 percent after the first contact (PRA Inc., 2010). The study team has recent experiences with similar, hard-to-locate respondents that achieved only 15-percent response rates to tracking-letter mailings. By contrast, the tracking mailings for the Family Options Study, which occurred at 9 and 15 months after enrollment, had response rates greater than 30 percent despite no additional followup effort on the part of the research team. The post-18-month tracking mailing, done at 23 months after random assignment, achieved a 28-percent response rate, with no reminder postcards or calls to boost response rates.

These mailings were an important component of the tracking strategy for several reasons. First, mailings are less costly than tracking calls or interviews, so they were a low-cost way to maintain contact with participants between the more intensive calls and interviews. Second, mailings

imposed a lesser burden on respondents because they did not require direct communication with the interviewers. Participants could complete and return the forms on their own schedule. Third, mailings were an inexpensive way to determine if a respondent's mailing address was no longer accurate. Undeliverable letters were returned to the research team, sometimes with forwarding addresses. Finally, even if respondents received but did not return the tracking mailing, the letters would remind participants about ongoing data-collection efforts and strengthen their connection to the study.

The 18-Month and 36-Month Followup Survey Data-Collection Efforts

During the effort to locate families and administer followup surveys at approximately 18 and 36 months after random assignment, local interviewers used the address, telephone, and e-mail addresses collected during the previous rounds of tracking. As needed, the interviewers also used contact information for family members or friends of the respondents obtained at baseline and during the followup period. In addition, the researchers searched for updated address or telephone number information using the National Change of Address database, proprietary databases such as Accurint®, local homeless assistance providers who participated in the study, and HUD's PIC and TRACS administrative data systems. As those leads were exhausted, team members also spoke with the homeless assistance providers at each site to determine if families were still in shelter or if they had moved into housing. If they were still in shelter, interviewers went to the shelter to conduct interviews. If the provider was able to provide a new address, the interviewers attempted to locate the family there. Even having all these potential sources of contact information, interviewers often found it difficult to locate and complete interviews with the respondents. It took an average of 6 months for the interviewers to complete the survey effort with each monthly random assignment cohort.

Lessons Learned

The team's experience with the Family Options Study provides several insights for tracking such populations in the future. The most important lesson learned using the tracking activities during the 36-month followup period was that no one tracking approach proved the most useful. This lesson is important for a successful tracking strategy on any longitudinal study and is echoed in Tourangeau et al., 2014.

For the Family Options Study, it was important to blend several approaches to locating and surveying participants to achieve high response rates. Offering participants a variety of ways to update their contact information, with varied levels of intensity, frequently enabled families to respond in a manner that was comfortable for them. Exhibit 4 summarizes some key factors the team took into account when defining the protocol for the Family Options Study.

The team also found that taking time to work each tracking lead to completion was critical on this study, as has been the team's experience on previous studies of hard-to-locate populations. Allowing for at least 6 months for interviewers to work the cases on the 18- and 36-month followup surveys provided time for each tracking lead to be pursued completely.

Exhibit 4

Key Factors To Consider in Choosing Tracking Methods

Tracking Activity	Participant Contact	Benefit	Constraint
Mailing	Direct	Reinforces connection to study; provides contact information updates; provides undeliverable address updates.	Low response.
Call	Direct	Reinforces connection to study; builds rapport building between interviewer and participant; also captures updated secondary contact data.	Can be costly if telephone data are poor; best done shortly after enrollment to maximize the benefit.
Interview	Direct	Reinforces connection to study; builds rapport between interviewer and participant; offers chance to capture intermediate outcomes; updates contact information.	Can be costly if field period is long, if telephone data are not available, or if extensive in-person efforts are required.
Provider update	Indirect	Reminds providers that the research is ongoing; renews their support for the study; captures data on participant status in the program and current address.	Not all providers have data on participants after they exit programs; some may be unwilling to provide updates based on privacy concerns.
PIC/TRACS	NA	Data are collected for analyzing outcomes, so level of effort to obtain data for tracking is low; data are maintained centrally so the format is consistent across sites.	Timing is critical; covers only participants receiving housing assistance.
Proprietary databases	Indirect	Easy to search; match rates enhanced by quality of participant identifying data; updated frequently; flexible search options.	Individual searches can be labor intensive, especially in hard-to-locate samples.
TANF	NA	Coverage could be good for studies with low-income, mobile populations.	Requires negotiating data use agreements at site level; data format likely varies by site; may need to purchase data.

NA = not applicable. PIC = Public and Indian Housing Information Center. TANF = Temporary Assistance for Needy Families. TRACS = Tenant Rental Assistance Certification System.
Notes: TANF data were not pursued for this study, because those data were not part of the planned administrative data collection. The labor requirements and administrative processes were too great to pursue this source for tracking purposes only.

It is natural for researchers to want to know the answers to questions such as, "What tracking activity worked the best?" "Which one will yield the highest response rates?" "Which one should be avoided?" To fully answer such questions would require an experiment. As noted previously, such an experiment was not part of this study's tracking design. The remainder of this section provides a summary of the researchers' views on elements of the Family Options Study's tracking effort that made it successful.

Strong Enrollment Procedures and Local Interviewers Yield Engaged Study Participants

The local interviewers carefully reviewed the informed consent document with families to ensure that they understood both how random assignment would work and the requirements for further participation in the research. This review helped to ensure that families understood what would be expected of them in the future. The evaluation contractor, not one of the participating homeless program providers, employed the local interviewers. This procedure helped put the respondents at ease and encouraged them to answer survey questions more candidly. Having interviewers conduct the enrollment sessions in the local shelters also enabled the interviewers to build a professional relationship with the staff at the shelters.

The frequent active tracking efforts gave the interviewers a chance to strengthen their rapport with the family, update contact information, and remind the family of what the next tracking effort would entail. Interviewers and survey management staff often received calls from respondents asking if it was time for their next interview.

Continuity of Staff Helped To Gain Respondent Cooperation

Other research has shown that continuity of interviewer staff is very important to the success of longitudinal studies, particularly those with in-person interview components (Watson and Wooden, 2009). The Family Options Study hired one local interviewer at each site to recruit and enroll families into the study and had a very high interviewer retention rate. Of the 12 original interviewers, 8 (67 percent) remained part of the study team for the full 36-month followup period. At 2 of the 4 sites where the original interviewers did not remain with the study, the replacement interviewer remained with the study for the remainder of the 36-month followup period. The rolling data collection, in which participants were tracked and interviewed in cohorts based on the date of their random assignment, together with the frequency of participant contacts, helped the team retain so many of the original site interviewers. With almost no break between the enrollment of participants and the 36-month followup survey, local interviewers were steadily employed by the study for more than 3 years. In addition to the helping keep families connected to the study, this continuity minimized the costs associated with hiring and training new interviewers.

Interviewer turnover may have had an effect on response rates at 3 of the 12 sites. Of the 4 sites at which the original interviewers did not remain with the study, 3 were also the sites with the lowest response rates overall on the 36-month followup. Exhibit 5 shows the completion rates for the 18- and 36-month followup surveys for each of the study sites. In Louisville, Kentucky, the response rate did not meet the 75-percent target in either the 18- or the 36-month survey.

Although meeting the 75-percent target response rate, Connecticut and Kansas City, Missouri (at 76 and 75 percent, respectively), were on the lower end of the response rates across all sites. The fourth site with replacement interviewers, Denver, Colorado, did achieve response rates that were close to the study average.

The continuity of local homeless assistance provider staff also seems to have been important. Turnover among provider staff was high at a number of sites. Research team members had to reach out to the new staff and explain the study, the history of the provider's involvement to date, and the

Exhibit 5

Family Options Study Completion Rates by Site

Site	18-Month Completion Rates			36-Month Completion Rates		
	Number Enrolled	Number Completed	Completion Rate (%)	Number Enrolled	Number Completed	Completion Rate (%)
Alameda County	258	207	80	258	207	80
Atlanta	189	151	80	187	147	79
Baltimore	58	46	79	58	48	83
Boston	181	165	91	181	154	85
Connecticut	214	165	77	214	162	76
Denver	172	136	79	170	136	80
Honolulu	218	191	88	216	182	84
Kansas City	175	139	79	174	130	75
Louisville	109	81	74	109	80	73
Minneapolis	181	164	91	181	142	78
Phoenix	279	218	78	278	214	77
Salt Lake City	248	194	78	245	182	74
Total	**2,282**	**1,857**	**81**	**2,271**[a]	**1,784**	**78**

[a] *Before the 36-month followup survey release, 11 participants were confirmed deceased. These 11 participants were not counted in the Number Enrolled column for the 36-month followup survey. The completion rate, however, is based on the full 2,282 enrolled participants.*

Source: Survey Project Tracking System

importance of their cooperation to the success of followup surveys. This process often delayed the ability to obtain quick and, more important, timely updates on the location of study participants. Low staff turnover in Honolulu, Hawaii, is reflected in high response rates at both 18 and 36 months (88- and 84-percent response rates, respectively). Relatively low response rates in Connecticut (77 and 76 percent, respectively) may reflect high turnover in provider staff there.

Flexibility Is Critical

During the 36-month followup period, the team adapted the approach to both the tracking and the followup data collection. These adaptations contributed to the projects' success. The most notable changes were a shift in the order of contact for the 3-month tracking and the post-18-month tracking efforts and the mode of contact, allowing for field staff to complete both tracking and followup surveys by telephone rather than in person.

Order of Contact

The team originally planned to send a letter to each family 3 months after random assignment as the first tracking activity. When the study team found that many families did not have a stable address at the 3-month mark, however, the team determined that the first contact should be by telephone. The brief tracking call conducted at 3 months after study enrollment offered two additional benefits—(1) it enabled the interviewer to strengthen the family's connection to the study and (2) it enabled the team to assess at an early stage the quality of the baseline survey contact information.

The team also shifted the order of activities after the 18-month followup survey. Given the intensity of the contact with families during the 18-month data-collection activities, the team used a less-burdensome approach after the interview. The team sent a letter 5 months after the 18-month sample was released (23 months after random assignment). Then, 3 months later, the team conducted a tracking call to update contact information. Finally, 3 months after that, the team attempted to complete a tracking interview. Shifting the order of tracking activities enabled the team to increase the level of intensity of tracking gradually between the 18- and 36-month followup survey efforts.

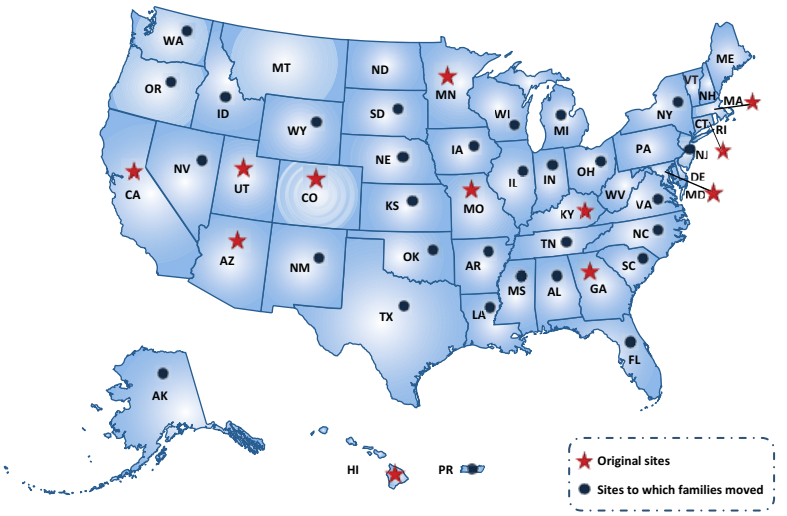
Mode of Contact

Local site interviewers had planned to administer the tracking interviews in person, using Computer-Assisted Personal Interviewing, or CAPI, technology. At most sites, the interviewer was the same person who had administered the baseline survey. The study team modified the plan to allow for interviewers to complete the tracking interviews by telephone, when it was found that many participants were willing to complete the tracking interviews at that moment, expressed a preference for a telephone interview, or both. This approach reduced interviewer travel time and permitted interviewers to complete more interviews within the 12-week window allotted for tracking calls and interviews. The result was higher response rates.

The study team also adapted its approach to allow for mode changes for the 18- and 36-month followup surveys. All 18-month followup surveys originally were to be administered in person by the local site interviewers. As the interviewers started to locate families, however, the team learned that many had moved out of state. At the time of the 18-month followup survey, study families were living in 42 different states, plus Puerto Rico. The map in Exhibit 6 shows the states where at least one participant lived.

Exhibit 6

States Where Participating Families Resided at Family Options Study 18-Month Followup Survey



Note: Of all participating families, 1,857 completed the 18-month followup survey; of those, 4 families did not provide a current address.

The team adapted the 18-month protocols to allow for the local interviewers to conduct the 18-month adult survey and the survey with older children by telephone. Telephone contact enabled the interviewers to conduct adult and child interviews with families who had moved out of state. Interviewers also found that the telephone option appealed to study participants who did not want to meet in person or were willing to do the interview at the time of the initial attempt to schedule an interview. Nearly 41 percent of the adult sample opted to complete the 18-month followup survey by telephone. The telephone option was also used for the 36-month followup survey.

Incentive Payments Encourage Participation

Incentive payments are a powerful tool for maximizing response rates in longitudinal studies. Incentives show appreciation for respondents' time spent completing the research. Previous research has found that sample members with certain socioeconomic characteristics are more likely to become survey respondents when incentive payments are offered. In particular, sample members with low incomes or low educational attainment have proven responsive to incentives, as have minority group members (Duffer et al., 1994; Educational Testing Service, 1991). These characteristics are heavily represented in the Family Options Study sample.

Research has shown that the values of monetary incentives used in longitudinal panels is expected to increase over time—to reflect inflation changes and to show the respondent that their time is valued (Laurie and Lynn, 2008). Several experiments on other longitudinal studies found that the amount of the incentive affected the amount of effort required by survey staff. Increased incentives resulted in fewer outreach attempts by field interviewers (Laurie and Lynn, 2008).

The incentive amounts provided for this study varied based on the type of data collection—as noted previously, higher incentives were provided for the surveys than for the tracking efforts. Interviewers and field managers reported that paying the incentives at the completion of the in-person interview (rather than mailing them to respondents afterward) was very helpful in gaining cooperation from study participants. The research team's sense is that, for the Family Options Study, the offer of the incentive mattered more to study participants than the amount of the incentive for adult respondents. The response rates for the 18- and 36-month surveys were very close (81 and 78 percent, respectively), without an increase in the incentive from $50 to $60, which had been proposed but not approved by the Office of Management and Budget.

The Importance of Continuing To Engage Participants—Even Those Who Did Not Respond Previously

It is important to continue efforts to reach respondents even if they haven't responded to earlier tracking attempts. The evidence from the Family Options Study (see exhibit 7) is that 163 of the 1,857 respondents to the 18-month followup survey (8.8 percent) did not complete either the 6-month or the 12-month tracking interview. Furthermore, 121 of the respondents to the 36-month followup survey (6.8 percent) did not complete any of the previous tracking interviews (at 6, 12, or 29 months), nor did they complete the 18-month followup survey. The group of participants that that did *not* respond to any of the shorter tracking interviews but *did complete both* of the longer 18- and 36-month followup surveys (2.4 percent of the 36-month respondents)

Exhibit 7

Percentage of Family Options Study 18- or 36-Month Survey Respondents Who Did Not Complete at Least One Previous Wave

Tracking Activity	18-Month Followup Survey	36-Month Followup Survey
Number of participant responses	1,857 (81%)	1,784 (78%)
Number of respondents who did not complete the—		
6- and 12-month tracking	163 (8.8%)	—
6- and 12-month tracking and 18-month followup survey	—	—
6- and 12-month tracking, 18-month followup survey, and 29-month tracking	—	121 (6.8%)
6-, 12-, and 29-month tracking (did complete 18-month followup survey)	—	42 (2.4%)

Source: Survey Project Tracking System

may have been motivated by the higher incentives offered for the 18- and 36-month interviews. It is also possible that the interviewer happened to connect with the respondent at the right time. The lesson here is that, for a longitudinal sample, it is imperative to track and retain all study participants throughout the entire followup period to maximize the sample size for surveys that are the basis of outcome measurement.

Administrative Data May Help Locate Respondents

Administrative data such as HUD's PIC or TRACS data, Temporary Assistance for Needy Families (TANF) data, or Medicaid data may provide contact information (addresses or telephone numbers) for tracking sample members. Researchers must negotiate data use agreements to gain access to administrative records, and negotiating these agreements can involve substantial effort and time.

In this study, researchers obtained records from HUD's PIC and TRACS systems to measure outcomes for the study. In addition to information for measuring outcomes, PIC and TRACS also included addresses for the subset of study participants who received housing assistance from HUD programs. Because HUD commissioned the Family Options Study, obtaining the PIC and TRACS data and permission to use them was relatively easy.

The timing of the PIC and TRACS extracts turned out to be important, however. For example, before the 36-month followup data collection, the study team had PIC and TRACS data covering only the period through the 18-month followup period. Therefore, the PIC and TRACS data provided only a very small number of updated addresses. In the future, the team would recommend pulling a current extract of PIC and TRACS records before the start of each data-collection effort.

Researchers may want to consider gaining access to TANF or Medicaid data in future studies of this type of population. TANF data were not used in this study for all sites but were used in a study of predictors of homelessness in New York City (Shinn et al., 1998). For that study, TANF records were an important source of data for locating efforts. Pursuing administrative data from local administrators can be expensive, however. The pursuit of TANF data requires extensive staff

time for both the research team and the program administrators to determine the availability of the data, negotiate data use agreements, and conduct the matching between the study sample and administrative data sources.

Costs Associated With Tracking Activities

The team developed the Family Options Study tracking protocol taking into account the nature of the study population and the estimated level of resources needed to track the sample and conduct data collection at 18 and 36 months. The study was designed, implemented, and monitored with a layered tracking approach. To determine the estimated level of effort for each activity, the team started by estimating the labor and nonlabor resource requirements and assigning a value—low, moderate, or high—to each. Labor requirements include professional and interviewer labor, and nonlabor requirements include other direct costs (travel, postage, telephone, supplies, administrative data costs, and so on) and indirect rates.

Exhibit 8 shows the level of resource requirements and whether the activity requires direct, indirect, or no participant contact.

The Family Options Study evaluation is still under way. The total evaluation costs—including design, site recruitment, participant enrollment, participant tracking and data collection, and analysis and reporting—are estimated to be $15,162,717.[4] The total participant-tracking cost is $1,452,484, representing 9.6 percent of the overall evaluation costs.

The Family Options Study tracking protocol relied heavily on active tracking efforts, which require substantial interviewer time to locate the families, management time (professional labor), and data processing time. Professional labor included the time needed to capture data from participating providers, proprietary databases, PIC, and TRACS. Given the heavy emphasis on intensive active tracking efforts (calls and interviews) rather than passive participant-tracking activities (mailings and database searches), labor—including professional staff and interviewers—accounted for more than 77 percent of the overall tracking costs.

Exhibit 8

Family Options Study Tracking Requirements

Tracking Activity	Labor Requirements	Nonlabor Requirements	Participant Contact
Mailing	Moderate	Moderate	Direct
Call	Moderate to high	Moderate	Direct
Interview	High	High	Direct
Provider update	Low to moderate	Low	Indirect
PIC/TRACS	Low to moderate	Low	NA
Proprietary databases	Low to moderate	Low to moderate	Indirect

NA = not applicable. PIC = Public and Indian Housing Information Center. TRACS = Tenant Rental Assistance Certification System.

[4] The team received a grant from the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development to support the child data collection during the 18-month followup study. This grant is included in the total estimated costs of the evaluation.

Nonlabor costs, 23 percent of tracking costs, included incentives provided to families for responding to each tracking and survey effort. These incentives accounted for 9 percent of the overall tracking budget. Incentives were very helpful to the study and the overall tracking effort. Participants understood that the interviewers would be in touch every few months to collect data from them and knew that they would receive an incentive payment in appreciation for their time. The remaining nonlabor costs associated with tracking include travel for professional staff, postage, telephone charges, and proprietary database lookups. The team completed eight waves of participant tracking and obtained 8,667 tracking responses (completed calls, interviews, or forms received). The average financial costs were—

- Cost per wave of tracking: $181,561.
- Cost per tracking response received: $167.59.

Conclusions

The tracking efforts provided the ability to obtain frequent updates to the participant-tracking data, strengthen the professional rapport between the interviewers and the respondents, and keep the participating families actively engaged in the research requirements of the study. The tracking efforts leading up to the 18- and 36-month followup surveys were instrumental to the research team's success with each effort. The overall cost of participant tracking, relative to the total evaluation budget, was modest given the benefits gained—high response rates to the 18- and 36-month followup efforts (81 and 78 percent, respectively).

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