



### **Promoting Readiness of Minors in Supplemental Security Income (PROMISE): PROMISE 60-Month Sampling and Survey Plan**

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#### I. INTRODUCTION

This report presents Mathematica's methodology for selecting the survey samples for the national evaluation of PROMISE demonstration programs and conducting the second of two follow-up surveys, five years (60 months) after youth enrolled in the evaluation and were randomly assigned to treatment or control groups.

Our sampling plan, presented in Chapter II, is brief because sampling of enrollees was not necessary in five of the six PROMISE programs. In those programs, we will attempt follow-up interviews with all, or virtually all, youth who enrolled in the evaluation and underwent random assignment. In the California program (California PROMISE, or CaPROMISE) only, the number of randomly assigned enrollees exceeded 2,000, the number sufficient to detect policy-relevant impacts. We present the sampling procedures we used in CaPROMISE for the 18-month survey in the first section of Chapter II; the CaPROMISE sample will remain the same for the 60-month survey. The remaining section of the chapter addresses the implications of sampling for the final impact analysis.

Chapter III presents our plan for the 60-month follow-up survey of PROMISE enrollees and their parents or guardians. The chapter covers such critical topics as instrument development and testing; interviewer training; the responsive survey design for data collection via telephone, inperson field efforts, and an abbreviated self-administered questionnaires; and preparation of final data files. In large measure, our plan remains as originally presented in our proposal for the PROMISE evaluation contract and as implemented for the 18-month survey. However, we have modified several components of our current plan to reflect new information we have obtained about the PROMISE programs since being awarded the evaluation contract and experience gained through implementing the 18-month survey. These modifications include:

- Managing the parent and youth surveys concurrently but computing and targeting response rates separately for each survey rather than for the dyad pairs of completed cases
- Using response survey design methodology to help minimize nonresponse bias and make best use of survey resources
- Modifying the incentive structure to motivate non-responders and harder-to-reach cases to complete the 60-month interview
- Expanding the use of abbreviated versions of the full instruments sent in self-administered format by mail to all non-responding, non-finalized cases
- Plans for interviewing Native Americans and residents of thinly-populated areas of the western mountain and northern plains states
- Plans for reaching youth who reside in group homes or other institutions or who have otherwise been removed from their homes

We also discuss the potential impact of overlap of the 60-month survey and related activities with data collection PROMISE programs are conducting as part of their own formative evaluations. Chapter III concludes with a description of imputation methods, as well as the preparation of weights, files, and survey documentation. The Appendix provides additional detail describing the 60-month survey schedule for each cohort (Appendix Table A.1) and outreach efforts by week of the field period (Appendix Table A.2).

#### II. SAMPLING PLAN

The 60-month survey uses the same population included in the 18-month survey and is not contingent upon completion of the 18-month survey. However, eligibility criteria for the 60-month survey exclude cases from the parent and youth surveys when the youth is deceased. Further, eligibility for the parent survey will exclude enrolling parents who are deceased and those who are representatives of an agency that has guardianship of the enrolled youth, such as a child welfare agency or group home. Finally, enrollees who formally withdrew from the national evaluation will not receive an invitation to participate in the survey, but we will consider them eligible for the survey when computing survey response rates. We will not replenish cases in the survey sample to offset case attrition.

As described in the 18-month sampling plan (CyBulski et al. 2014), the national evaluation sought to include up to 2,000 enrolled youth and parent pairs – the number sufficient to detect policy-relevant impacts – in the surveys for each of the six PROMISE programs. Sampling offered a methodologically sound way for Mathematica to limit its survey effort by attempting no more than 2,000 interviews in CaPROMISE, the only program for which Mathematica randomly assigned more than 2,000 youth (and their families) to treatment or control status. Mathematica selected the sample of CaPROMISE youth to attempt to interview in two stages in January and May 2016.

We plan to use the same CaPROMISE cases selected for the 18-month survey sample for the 60-month survey, without replenishing the sample. This decision is driven by three factors:

- 1. It follows the methodology applied in the other five PROMISE programs.
- 2. We have established contact with the majority of cases selected for the sample, most of whom completed an 18-month interview. We plan to continue contact with these cases through interim mailings to maintain a connection with them and to acquire address updates over time. Drawing a new sample for the 60-month survey would include cases for whom we did not have such connections or obtain updated contact information, which could have a negative impact on survey response.
- 3. Attrition (due to youth deaths or withdrawal from the national evaluation) among cases selected for the sample was negligible, so there is no need to replenish the sample.<sup>1</sup>

In the rest of this chapter, we describe the sampling procedures we implemented for CaPROMISE and the implications of those procedures for the final impact analysis. No sampling was necessary for the other five PROMISE programs, as Mathematica will target for the 60-month survey all randomly assigned youth and their families in each program who meet the eligibility criteria described above.

<sup>&</sup>lt;sup>1</sup> As of May 2018, CaPROMISE had experienced attrition from four cases out of the 2,000 sampled (three youth were deceased and one withdrew from the national evaluation).

#### A. Sampling in CaPROMISE

#### 1. Number of evaluation enrollees

CaPROMISE enrolled 3,273 youth, of whom Mathematica randomly assigned 3,097.<sup>2</sup> Because Mathematica's contract with SSA specified that we would attempt 18- and 60-month interviews with 2,000 youth in each program, Mathematica selected a sample of 2,000 youth from the 3,097 randomly assigned in CaPROMISE to attempt to interview.

#### 2. Stratification

We wanted the relative distribution of sample cases across key dimensions to mirror that of all enrollees. To ensure that result, we conducted stratified random sampling, with the strata defined by:

- Local education agency: 19 strata
- Treatment/control status: 2 strata

These strata define 38 cells, which were the basis for the random selection of cases for the survey sample.

#### 3. Random sampling

Enrollment in CaPROMISE ran from August 2014 through April 2016, a period of 21 months. Mathematica conducted its first survey at 18 months post-enrollment. Because the enrollment period exceeded 18 months, Mathematica selected the sample in two stages to avoid delaying the interviews of early enrollees. We used the following procedure to implement two-stage sampling:

- **Step 1.** In January 2016, we selected a primary sample from the 2,604 youth randomly assigned from August 2014 through December 2015.
- Step 2. In February 2016, we began releasing cases who had been enrolled 18 months from the primary sample and contacting them to complete the 18-month survey.
- Step 3. In May 2016, we selected a secondary sample from the 493 youth randomly assigned from January 2016 through April 2016.
- Step 4. We combined the cases in the secondary sample with those in the primary sample and continued to release cases for the 18-month survey.

When we conducted the first round of sampling in January 2016, CaPROMISE had enrolled 2,759 youth in the evaluation through December 2015, of which Mathematica had randomly assigned 94.4 percent (2,604) (Table II.1). We expected that CaPROMISE would enroll a total of

<sup>&</sup>lt;sup>2</sup> Mathematica non-randomly assigned 171 enrolled youth to the same treatment or control status as their siblings who enrolled before them. We used this approach because PROMISE services were provided to family members, including siblings, as well as youth. Mathematica non-randomly assigned an additional 5 youth to the treatment group because CaPROMISE requested to enroll the youth as *wild cards*. For information on wild cards, see Fraker and McCutcheon (2013).

3,172 youth, the goal established in its cooperative agreement application, and that 94.4 percent (2,994) would be randomly assigned. Based on these expectations, we chose an initial sampling rate of 66.8 percent (2,000 youth sample / 2,994 youth randomly assigned). Using this sampling rate, we sampled 1,739 cases in the first round of sampling (1,739 youth sampled in the first round / 2,604 youth randomly assigned through December 2015 = 66.8 percent).

	Number of youth enrolled	Number of youth randomly assigned	Percentage of youth enrolled who were randomly assigned	Number of youth selected for sample	Percentage of youth randomly assigned who were selected for sample
Round 1	2,759	2,604	94.4	1,739	66.8
Round 2	514	493	95.9	261	52.9
TOTAL	3,273	3,097	94.6	2,000	64.6

#### Table II.1. Selection of the CaPROMISE sample

Ultimately, CaPROMISE enrolled 3,273 youth, of which Mathematica randomly assigned 3,097 (94.6 percent). From January 2016 through April 2016, 493 youth were randomly assigned and thus were eligible for the second round of sampling. Because we had selected 1,739 youth in the first round, we needed to select 261 youth in the second round to produce a total sample of 2,000 youth. These considerations yielded a second-round sampling rate of 52.9 percent (261 sampled in the second round/493 randomly assigned from January 2016 through April 2016 = 52.9 percent).

Tables II.2 and II.3 show the allocation of youth eligible for and selected for the CaPROMISE sample across the 38 strata.

	Treatment group		Contro	l group	Total	
Local education agency	Eligible population	Sample allocation <sup>a</sup>	Eligible population	Sample allocation <sup>a</sup>	Eligible population	Sample allocation <sup>a</sup>
Centinela Valley UHSD	35	23	34	22	69	45
Compton USD	38	25	39	26	77	51
Desert Mountain SELPA	100	67	99	67	199	134
East Side UHSD	44	29	42	28	86	57
Expandability	44	29	44	29	88	58
Irvine USD	67	45	65	44	132	89
Lodi USD	150	100	150	100	300	200
Long Beach USD	62	41	61	41	123	82
Los Angeles USD	170	114	171	115	341	229
Oakland USD	49	33	50	33	99	66
Riverside COE	135	90	135	90	270	180
San Bernardino City USD	40	27	40	26	80	53
San Diego	71	48	71	48	142	96
Solano COE	51	34	50	33	101	67
Vallejo City USD	25	17	25	17	50	34
West Contra Costa USD	18	12	20	13	38	25
West End SELPA	120	80	120	81	240	161
Whittier UHSD	85	56	84	56	169	112
TOTAL	1,304	870	1,300	869	2,604	1,739

## Table II.2. Population counts and sample allocation for the CaPROMISE stage1 sample

<sup>a</sup> The sample allocations were obtained through proportional allocation using stochastic rounding.

## Table II.3. Population counts and sample allocation for the CaPROMISE stage2 sample

	Treatment group		Contro	l group	Total	
Local education agency	Eligible population	Sample allocation <sup>a</sup>	Eligible population	Sample allocation <sup>a</sup>	Eligible population	Sample allocation <sup>a</sup>
Centinela Valley UHSD	14	8	14	7	28	15
Compton USD	11	6	11	6	22	12
Desert Mountain SELPA	0	0	1	0	1	0
East Side UHSD	5	3	7	4	12	7
Expandability	6	3	8	5	14	8
Irvine USD	7	4	8	4	15	8
Lodi USD	23	12	23	12	46	24
Long Beach USD	13	7	13	6	26	13
Los Angeles USD	79	41	79	42	158	83
Oakland USD	4	2	2	1	6	3
Riverside COE	24	13	24	12	48	25
San Bernardino City USD	11	6	11	6	22	12
San Diego	27	14	28	15	55	29
Solano ČOE	0	0	1	1	1	1
Vallejo City USD	0	0	0	0	0	0
West Contra Costa USD	8	5	5	2	13	7
West End SELPA	0	0	0	0	0	0
Whittier UHSD	12	6	14	8	26	14
TOTAL	244	130	249	131	493	261

<sup>a</sup> The sample allocations were obtained through proportional allocation using stochastic rounding.

#### 4. Sampling weights

Sampling weights are calculated as the inverse of the probability of selection. Because this is a stratified random sample for each round, the sampling weights are simply the population size in each stratum divided by the sample size. Because the sample was proportionately allocated to each stratum, the sampling weights are approximately equal to 1.50 for all strata in the first round and 1.89 for all strata in the second.<sup>3</sup> We will also calculate weights to correct for nonresponse to the follow-up surveys.

#### **B.** Implications for the final impact analysis

The sampling procedures outlined in section A have implications for the final analysis of the impacts of CaPROMISE. Here we discuss those implications, first for the analysis that will be based on the follow-up survey data and then for the analysis that will be based on the administrative data we will obtain from SSA and other sources.

#### 1. Analysis of survey data

Having different sampling weights for cases in each round of sampling will result in a larger design effect (and more loss of power to detect impacts) due to unequal weighting than would be the case with the nonresponse weights alone. However, the design effect due to the different sampling rates is only 1.007.<sup>4</sup> This design effect implies that the variance will be 0.7 percent higher than it would have been had we not used a different sampling rate for each round of sampling, so the effect is rather small.

#### 2. Analysis of administrative data

The additional cost of obtaining and analyzing administrative data on enrolled cases in excess of the number required for the follow-up surveys is essentially zero. Therefore, we plan to include all youth who enrolled in the CaPROMISE evaluation (less the non-randomly assigned youth) in the final impact analysis of administrative data just as we are doing for the interim impact analysis that is currently underway. This will increase the power of the analysis to detect impacts on administratively measured outcomes.

<sup>&</sup>lt;sup>3</sup> These values were obtained by dividing the population size by the sample size within each stratum. The population sizes are 2,604 in round 1 and 493 in round 2 across strata, and the sample sizes are 1,739 in round 1 and 261 in round 2 across strata. We obtain 1.50 by dividing 2,604 by 1,739 and 1.89 by dividing 493 by 261. The actual weights will vary from stratum to stratum, but because we used proportional allocation to strata, they will not differ very much from 1.50 and 1.89.

<sup>&</sup>lt;sup>4</sup> This value was calculated using the formula for the unequal weighting effect, with numerator 2,000 x (1,739 x  $1.50^2 + 261 \times 1.89^2$ ) and denominator (1,739 x  $1.50 + 261 \times 1.89^2$ ). 2,000 is the overall sample size, 1,739 is the round 1 sample size, 1.50 is the round 1 sampling weight, 261 is the round 2 sample size, and 1.89 is the round 2 sampling weight.

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#### **III. SURVEY PLAN**

We planned to conduct follow-up surveys of enrollees in the PROMISE evaluation at 18 and 60 months after random assignment (Fraker et al. 2014). The surveys provide data critical to the evaluation's impact analysis. All of the PROMISE programs collected youth and parent/guardian contact data just prior to random assignment as part of the consent process. These data facilitate administration of the surveys. Below we describe the 60-month follow-up survey, including the data items we will collect, the modes of collection, and the methods we will employ to ensure that the data are of high quality. The focus of our discussion in this chapter is the 60-month survey, with occasional references to the 18-month survey (for more information on the 18-month survey, see CyBulski et al. 2014).

#### A. Clearance from OMB and other entities

We anticipate receiving OMB approval for the 60-month follow-up survey by March 2019. OMB clearance does not expire for 36 months, so we do not expect to need an extension. We base this expectation on four assumptions:

- The total enrollment period for the six PROMISE programs lasted 25 months, beginning in April 2014 and ending in April 2016. Survey cases were grouped into cohorts based on the month of enrollment.
- Because the first enrollment cohort is small (29 cases), we plan to combine it with the second cohort, which is scheduled for release in May 2019.<sup>5</sup> As a result, the 25 cohorts will be spread across 24 monthly releases from May 2019 through April 2021.
- Each eligible parent and youth will have up to 24 weeks to respond to the 60-month survey, meaning that a parent and youth will complete the survey by the end of the 65th month following enrollment in the evaluation. This assumption, together with the previous assumption of 24 monthly releases of 25 enrollment cohorts, yields a 29-month survey field period (ending in September 2021).
- We will receive OMB approval within nine months of submitting the draft notice of data collection in May 2018 for publication in the *Federal Register*.

Because we anticipate achieving at least an 80 percent response rate for both the parent and the youth 60-month surveys, we do not expect to submit a nonresponse bias analysis to OMB. We will, however, use SSA administrative data to assess the extent of differences between survey respondents and nonrespondents at 60-month follow-up. We will calculate survey nonresponse weights and determine how well they perform with respect to reducing differences between survey respondents and nonrespondents.

At the 18-month survey, SSA determined that outside approval from an institutional review board (IRB) was not necessary because SSA's research involving the study and evaluation of public benefit programs and procedures is exempt from the Common Rule's requirement for IRB review of human subjects research. SSA's research remains exempt, so neither Mathematica nor

<sup>&</sup>lt;sup>5</sup> Releasing the first cohort one month later than originally planned helps the evaluation make efficient use of resources with minimal impact on data quality.

SSA will seek IRB approval for the 60-month survey. A detailed Privacy Act Statement describing SSA's authorization to collect information through the 60-month survey will be included on all 60-month survey letters and read to survey respondents, upon request.

Prior to the start of enrollment in the PROMISE evaluation, SSA determined it would not seek to obtain a certificate of confidentiality from the National Institutes of Health for the national evaluation surveys. The purpose of this certificate is to further protect youth from forced disclosure of identifying information. Such a certificate would have allowed the staff of Mathematica and SSA to refuse to disclose identifying information on PROMISE study enrollees in civil, criminal, administrative, legislative, or other proceedings, whether at the federal, state, or local level.<sup>6</sup> By protecting researchers and institutions from being compelled to disclose information that would identify research subjects, certificates of confidentiality help achieve research objectives and promote participation in studies by helping to ensure confidentiality and privacy for enrollees. Because of the prior SSA determination not to obtain a certificate of confidentiality, we will not pursue obtaining a certificate before launching the 60-month survey unless otherwise directed by SSA.

#### **B.** Instrument development

Each of the two follow-up surveys of PROMISE evaluation enrollees focuses on outcomes that might be affected by the demonstration programs and collects information that cannot be obtained readily from administrative data files and other sources. Such outcomes include both intermediate outcomes, such as the receipt of services, as well as longer-term outcomes, such as educational attainment, employment, earnings, and benefit receipt. In the rest of this chapter, we generally use *instruments* (plural) to refer to the youth and parent instruments for the 60-month survey. However, in a few instances we use the term to refer collectively to the various instruments for the 18-month and 60-month surveys.

We developed one survey instrument for youth enrollees and one for the enrolling parents. Each will be translated into Spanish. We anticipate that the parent interview will take 25-35 minutes and the youth interview will take 20-35 minutes to complete, on average. Although we have proposed adding new items to each instrument, we have eliminated questions on service provision for parents and youth and on limitations and barriers and on activities of daily living for youth. In addition to the full-length survey instruments, Mathematica will create abbreviated, self-administered versions, as we did for the 18-month survey. The abbreviated instruments will contain a subset of critical items found in the full-length interview and should take about 10 minutes for a parent or youth to complete.<sup>7</sup> Although the abbreviated versions of the questionnaires cannot capture the same volume of data collected in the full instruments (that is,

<sup>&</sup>lt;sup>6</sup> Most youth with disabilities can provide more accurate data on their school and work activities than can potential proxy respondents. If necessary, parents or other trusted adults can assist youth rather than complete the entire interview for them. In the 18-month survey, more than three quarters of the youth who completed the survey did so by self-report or with a trusted adult providing emotional or logistical supports needed to facilitate the youth's self-reporting.

<sup>&</sup>lt;sup>7</sup> The self-administered questionnaires used in the 18-month survey were sent only to ASPIRE enrollees residing in areas where we did not perform field follow-up because of the geographic distribution of those cases. As discussed in section III.F, we propose to use self-administered questionnaires more broadly for the 60-month survey.

there will be item nonresponse), they will enable us to mitigate unit nonresponse by helping to include youth and parents who may not respond to interviewer-administered surveys and those residing in rural or frontier areas, where it is not feasible to mount a cost-effective field follow-up effort. They will also provide a means of completing interviews with sample members who do not speak English or Spanish; we plan to translate the abbreviated questionnaire into the most prevalent non-English/non-Spanish languages of enrolled parents and youth (described in section III.4).

The instruments will accommodate data collection via three modes: (1) interviewer administration by telephone, (2) interviewer administration in person, and (3) self-administration by mail. We delivered drafts of the interviewer-administered versions of the instruments to SSA for review in March 2018. We will deliver drafts of the self-administered versions in May 2018. The interviewer-administered instruments, using computer-assisted telephone and personal interviewing (CATI, CAPI) follow the same item routing, with minor modifications to wording of selected items to reflect the mode of administration. For example, rather than saying "I am calling from," a field interviewer would read "I am here on behalf of." The interviewer-administered instruments (for example, self- to proxy administration or English to Spanish), and ask all applicable items for each respondent. The self-administered instrument will be available on paper only and will contain a subset of critical items. In that instrument, we will minimize use of skip patterns to mitigate respondent burden.

The instrument design team included Dr. Erik Carter of Vanderbilt University and Dr. Karrie Shogren of the University of Kansas. Dr. Carter's work on the roles that students, families, and schools play in determining postsecondary education and employment (Carter et al. 2011) informed the selection of measures of parental expectations and youth high school completion, postsecondary education, and work experiences. Dr. Shogren's structural equation modeling to compare different self-determination scales (Shogren et al. 2008), as well as her work on the individual and ecological predictors of self-determination (Shogren et al. 2007), was critical to developing measures of how PROMISE services educate, support, and empower youth.

In developing the 60-month instruments, we sought (1) to identify and drop items in the 18month instrument that were no longer relevant for outcomes at the five-year mark; (2) to add new items that could support analysis of long-term outcomes for youth and parents; and (3) to build new response categories, where needed, based on open-ended responses to the 18-month survey items. In seeking items to measure newly added topics, such as youths' exposure to the criminal justice system or challenges they anticipate in pursuing postsecondary education, we drew on previous surveys of youth with disabilities and their parents, including the Youth Transition Demonstration (YTD) evaluation and the National Longitudinal Transition Study (NLTS). When our research needs were not met by existing items from these surveys, we crafted new items. These new items will be included in our cognitive testing described in section C. Table III.1 provides a list of domains and measures for the 60-month instruments, roughly in the order that the items will be covered during the interviews. Most of the youth items from the 18-month survey are repeated in the 60-month survey, with the exception of service receipt (for parents and youth) and activities of daily living (for youth).

Modules and	
domains	Measures
	Parent instrument
	Parent educational credentials and employment experience
Education and training	Whether parent/guardian and spouse had any postsecondary degree, certificate, or license; type of highest degree, certificate, or license (bachelor's, associate's, certificate, or license) achieved by parent/guardian and spouse
Employment and earnings	For parent/guardian and spouse (if applicable) separately: employment, hours of work, earnings, and access to fringe benefits through paid jobs in past year; current employment; barriers to employment (if not currently employed)
	Parent and family well-being
Income and program participation	Household income in past year (total and by source); household's current participation in other public-assistance programs
Health insurance	Any current health insurance coverage; any current private health insurance coverage, any current public health insurance coverage; and any current coverage through the health insurance exchanges for parent/guardian and spouse (if applicable)
	Parent expectations for youth
Expectations	Parent's expectations about youth's future education, and employment, residential, and financial independence at age 25
	Youth instrument
	Youth education and training
Secondary and postsecondary education	Current school enrollment status; type of school currently attending; whether currently receiving education accommodations; highest grade completed; high school completion; type of high school credential received; age at high school completion; postsecondary educational attainment, by type of institution or degree; barriers to pursuing further education
Training	Currently attending a training program; type of training program currently attending; whether currently receiving training accommodations; receipt of training diploma, certificate, or license in past year
Y	outh employment-related service receipt and employment experience
Employment-related service receipt	Receipt of employment-related transition services (services to prepare for, get, and keep a job; services to continue education beyond high school; services to get accommodations for school, work, or living independently)
Employment	Employment in paid and unpaid jobs in the past year; self-employment; how youth found the job(s); employment, hours of work and earnings in paid jobs in the past year; current employment; types of jobs; employment in integrated setting(s); current receipt of job supports; unemployed youth: barriers to employment; job-seeking activities
	Youth self-determination and expectations for the future
Self-determination	Index of self-determination; indices of autonomy, psychological empowerment, self- realization, and agentic action
Expectations	Youth's expectations about highest level of schooling and employment, residential and financial independence at age 25
	Youth contact with the justice system
Arrested or charged	Ever arrested or charged with delinquency or criminal complaint; number of times arrested; whether arrested in past year
Conviction and incarceration	Ever convicted of or pled guilty to a charge; ever incarcerated (in jail, prison, or detention home); duration of incarceration

# Table III.1. Youth and parent/guardian instruments for 60-month survey:Domains and measures of interest

#### Table III.1. (continued)

Modules and domains	Measures						
	Youth health						
Health status	Self-assessment of health status						
Health insurance	Any current health insurance coverage; any current private health insurance coverage, any current public health insurance coverage; any current coverage through the health insurance exchanges						
Parenthood	Whether ever became a biological parent; age at parenthood						
	Youth well-being						
Living arrangement	Currently lives alone or with friends, with family, in group home or other institution; currently married or cohabiting; number of people in (independent) youth's household						
Income and	All youth: knowledge of SSA benefits, work incentives, and wage reporting policies						
program participation	Independent youth (only): Income in past year (total and by source); household income in past year; household's current receipt of SSA disability benefits and household's current participation in other public-assistance programs						

Social Security numbers, which would provide a mechanism to collect and link administrative data for enrollees, are not included in the domains of interest. These data were captured during enrollment only as part of the consent process and only for the youth enrollee and his or her enrolling parent or guardian. Because of the complexity involved with making contact with and securing the participation of all household members, we do not plan to capture these data for additional household members during the 60-month interview.

We designed the instruments to accommodate a wide range of disabilities. We have built in breaks in case a disability causes stamina limitations and worded questions as simply as possible to be accessible to those with mild cognitive disabilities. Our readability analysis of the youth instrument indicates that items have a 0-17.3 grade level range and an average level of 6. The higher scoring items contain words with multiple syllables, such as "Social Security Administration." To help youth understand items, we include probes for interviewers to use as needed. Some items also provide definitions of key terms to help youth understand words that they may not use in daily life (such as public benefit programs, health insurance programs, and self-employment).

While we cannot design instruments that will address every possible disability that we may encounter, these basic design characteristics will enable us to interview most youth in the study without the use of proxies.<sup>8</sup> However, we will design proxy wording for circumstances in which a youth cannot complete an interview independently or with supports. Likewise, we have incorporated proxy wording into the parent instrument should the enrolling parent not be able or available to complete the survey. We will train interviewers to seek self-reported interviews whenever possible, as this contributes to high quality data and conveys our respect for the right of youth with disabilities to describe their life experiences themselves.

<sup>&</sup>lt;sup>8</sup> Most youth with disabilities can provide more accurate data on their school and work activities than can potential proxy respondents. If necessary, parents or other trusted adults can assist youth rather than complete the entire interview for them. In the 18-month survey, more than three quarters of the youth who completed the survey did so by self-report or with a trusted adult providing emotional or logistical supports needed to facilitate the youth's self-reporting.

The instruments contain items specific to the youths' ages and to the PROMISE programs. Following best practice, the instruments begin with easy-to-answer, non-sensitive items and continue with harder-to-answer, more sensitive items. They end with a section that collects contact information that will enable us to (1) mail payments to those completing by telephone; (2) reach out to respondents, if needed, to seek their assistance in locating the parent or youth who has not yet completed an interview; (3) collect updated address information if thank-you letters are returned, or (4) validate field interviews (described in Chapter III). Because high itemresponse rates are as important as high unit-response rates, we will designate questions that will be most important for the impact analysis. An interview will not be deemed complete until all those items have been answered. To the extent feasible, we will place the critical items toward the beginning of the instruments to avoid having missing data on those items for respondents who cannot or will not finish an interview.

Once the instruments have been tested, approved by SSA's contracting officer's representative (COR), and deemed to be in near-final state, we will translate them into Spanish.<sup>9</sup> We will employ a team-based approach to the translation process. Our team will consist of a group of translators with different talents and functions to ensure the mix of skills and expertise needed to produce an optimal Spanish translation. Each stage of the team translation process builds on previous steps and uses the documentation required for the previous step to inform the next. In addition, each phase of translation engages the appropriate personnel for that particular activity (that is, multiple translators, reviewers, adjudicators, pretest interviewers, and CATI testers). One or more adjudicators will decide when the translation is ready for fielding.

Early in the evaluation, we shared the topics for the instruments with the PROMISE programs as part of the evaluation design report (Fraker et al. 2014) to support information needed for their IRBs or other human subjects review committee applications. Later, we shared the 18-month instruments. For the 60-month instruments, we will invite the PROMISE programs to provide input during the OMB public comment period because the programs will be nearing the end of operations and may not have staff available to review the instruments. Any feedback received will be filtered back to the instrument design team, and proposed modifications will be discussed with the COR before the survey instruments are finalized.

#### **C.** Instrument pretesting

After incorporating feedback from the COR on draft versions of the instruments, we will conduct pretest interviews with up to nine youth and nine parents to gauge respondent burden, assess the question skip logic and overall flow, and gather feedback from the respondents regarding their understanding of questions. We will conduct two youth and two parent pretest interviews in Spanish to capture feedback from Spanish-speakers and time how long it takes to complete interviews in Spanish. We will select pretests respondents from the pool of nonresearch cases (that is, cases that did not undergo random assignment).<sup>10</sup> We will offer participation first

<sup>&</sup>lt;sup>9</sup> In section III.F.4, we describe how we plan to administer the survey instruments to youth and parents who speak languages other than English and Spanish.

<sup>&</sup>lt;sup>10</sup> Nonresearch cases are eligible youth who enrolled in the PROMISE evaluation and were nonrandomly/purposively assigned to the same treatment or control status as their siblings who were randomly assigned

to the participants in the 18-month pretest effort and move to others as needed. We will conduct at least one pretest interview with a proxy for each instrument. Interviewers will administer the entire interview to collect complete data on administration time and respondent reactions. Then we will ask the respondents to tell us about their interview experiences overall and debrief them on specific newly created questions. Highly trained staff will conduct cognitive testing of new items. Although it is optimal to conduct such interviews in person to observe body language and non-verbal communications, we were able to collect a wealth of information during telephone administration at the 18-month pretest and therefore will repeat this methodology for the 60month pretest. Participants in the pretest interviewing and cognitive testing will each receive a \$40 gift card as thanks for their time.

We will create the abbreviated versions of the parent and youth survey instruments after pretesting is completed. Draft copies of the abbreviated, self-administered instruments will be sent to the COR prior to being finalized and included in the OMB package. Although the selfadministered abbreviated questionnaires will be included in the OMB package, they will not be included in pretesting because (1) all the items are included in the full instruments and (2) the nine pretest respondents help inform overall burden estimates across a range of potential respondents' experiences. Instead, we will compute the burden estimate based on the number of items and their average length of administration from the full interview. In addition, we will monitor returns from early cohorts to determine whether skip patterns are being understood as instructed and whether there are any enhancements of the layout that could improve item or unit nonresponse specifically and data quality generally. We can place a limited number of follow-up calls to these respondents, as needed, to better understand their experience completing interviews in the self-administered format.

We will submit to the COR a memo report on the findings from the pretest activities. The report will provide both individual and summary-level statistics regarding burden for particular sections of the instruments. It will include a discussion of (1) any difficulties with the data collection process, (2) the internal consistency of the responses, and (3) our recommendations related to item sequencing, modifications to specific items, or definitions and standardized probes to be added. Based on these findings and subsequent revisions, additional testing may be necessary. Therefore, we propose to include five cases from each of the two respondent groups (that is, youth and parents) at the onset, leaving four cases from each group in reserve. This will be especially important if we find that the administrative burden exceeds the intended target length. We will keep SSA informed during the testing phase if any unforeseen circumstances surface, such as the instrument administration time being too long or certain questions failing to work as intended.

<sup>(</sup>continued)

before them. Non-research cases also include wild cards, youth who were assigned to the treatment group at the request of program staff.

#### **D. CATI/CAPI** programming and testing

Once the instruments have been pretested, approved by SSA, and translated into Spanish, we will program them using Confirmit® software.<sup>11</sup> This multi-mode platform enables interviews to be conducted via telephone in Mathematica's Survey Operations Centers (SOCs) in New Jersey or Arizona using CATI or in person by field interviewers using a tablet device connecting to web-based CAPI versions of the same instruments. Confirmit's® software is designed to ensure deployment consistency and has all the advantages found in CATI/CAPI administration, including range and logic checks, pre-programmed skips based on item responses or pre-loaded variables, dynamic text fills, and logic and range checks. To help facilitate high quality design, Mathematica's survey staff will review the template as applied to the PROMISE instruments to ensure that each item contains all the necessary specifications that our systems analysts will need to program the instrument as intended. Further, these same specifications will be used for testing the instruments (once programmed) and for reviewing the resultant test data to ensure that all appropriate logical paths through the instruments are being followed.

After programming is complete, we will thoroughly test the programmed instruments. The testing plan will include basic testing, such as ensuring the text on the computer screen matches the text in the specifications document (including fills for particular respondents) and usability testing for the web version of CAPI, as well as more advanced features, such as practice case scenarios designed to ensure testers have passed through different paths of the instruments. These testing scenarios will later be used during interviewer training. We will run a comprehensive check on skip logic using Confirmit's® "Random Data Generator," which produces a test data set of randomly generated responses that is run through the programmed instrument to simulate real interviews. Staff will review the resulting data set to ensure that all skip patterns are working as intended and subgroups of respondents are routing to all applicable items. For example, they will check that proxy responses populate only items designed for proxy administration and that questions intended only for youth of certain ages are working as intended. We will check the programmed wording matches specifications using "Export to Word," which supports review of the programmed instrument to ensure that survey text, question properties, and soft/hard check texts appear as intended. This tool facilitates comprehensive review of these areas without requiring testers to manually enter complex testing scenarios in an effort to route to every possible screen for instruments with complex branching.

Confirmit<sup>®</sup> can toggle between English and Spanish during an interview. While it is necessary to check that the Spanish language on the screen is accurate, it is not necessary to test skip logic and consistency checks in Spanish, as both languages are supported by the same underlying system logic.

<sup>&</sup>lt;sup>11</sup> Confirmit® is the new computer-assisted interviewing system and survey-processing tool Mathematica is using for survey data collection. The software was developed by Confirmit® for the Windows® operating system and web browsers.

Finally, SSA staff will be able to access the instruments electronically and test them directly, if they wish. Results of this testing of the CATI/CAPI versions of the instruments will be submitted to SSA in a memo report.

#### E. Interviewer training

A critical underpinning of any high quality survey data collection effort is identifying and training a team of skilled interviewers to administer the survey. It is also critical to ensure that enough of these staff will be available to cover the number of interviews that are likely to be conducted at any one time. The majority of the telephone interviewing staff for the PROMISE evaluation will be working out of our New Jersey SOC. As the field period progresses, we may bring on staff based at our Arizona SOC to ensure optimal coverage for Mountain and Pacific time zones, as well as bolster Spanish-language interviewing capacity. Across our telephone and field interviewing teams, we anticipate rehiring staff who successfully contributed to the 18-month survey, as their experience will help support the team's success in reaching our data collection goals for the 60-month survey.

The number of interviewers trained to conduct youth or parent interviews will fluctuate across the survey period, in alignment with the volume of available sample to contact, which will reflect the evaluation's enrollment rate 60 months earlier. We expect there to be a minimum of 10 telephone interviewers working in any given week to ensure coverage across all shifts and each day of the week. Field staffing is based on our overall anticipated volume of sample, as well as how these cases cluster within the program states. Based on results from the 18-month survey, we expect that about 20 percent of parent completes and 25 percent of youth completes will come from the field. However, we anticipate that only a small number of cases will need field interviewer attention at any time. We expect to have two or three locally-based field interviewers per program in Maryland, Wisconsin, New York, Arkansas, and the ASPIRE consortium (based in Colorado and Arizona in proximity to clusters of cases). In California, we will bring on four field staff due to the wide geographic distribution of cases. We will hire two dedicated travelers who will be able to supplement field efforts of local staff, as needed, and help us maintain operations in the event of field interviewer turnover or spikes in field sample volume for a particular cohort and site. We will leverage paradata to inform field staffing needs by cohort based on 18-month survey results.<sup>12</sup> This staffing model for the 60-month survey interviewers is based on our experience from both the 18-month PROMISE survey and the YTD evaluation surveys and assumes that the majority of sample members will be able to complete the interview by telephone with appropriate supports and assistive technologies. Field efforts will focus on locating individuals we are unable to contact by telephone and interviewing those who cannot respond by telephone. Because we have planned for a 29-month survey administration period, we anticipate holding at least three trainings to best align field staffing with available cases and to account for telephone interviewer turnover.

<sup>&</sup>lt;sup>12</sup> Paradata can be used to inform next steps in a responsive survey design, make decisions that help control costs, and mitigate risks related to data quality. On PROMISE, these data include (1) survey status (completed or not and mode of completion); (2) number of contact attempts made; (3) travel distance to reach a sample member; and (4) labor hours spent on tasks supporting survey completion, such as in-house locating.

After the 60-month survey instruments have been programmed, tested, and cleared by OMB, we will proceed with training the data collection team to conduct the youth and parent interviews. The survey director will lead all trainings, with support from telephone and field operations task leads. Because field follow-up starts later in the field period, our first training will be held for telephone interviewers, supervisors, and monitors only. Subsequent trainings may combine field and telephone staff, when needed, should we need to increase capacity of the telephone interviewing team (based on turnover). All trainees will also receive a project binder with background materials. All the interviewers will have previously completed Mathematica's basic interviewer training prior to attending the PROMISE-specific training. We will train telephone interviewers to use the Confirmit® CATI system to administer the 60-month youth and parent instruments and to pace their work with respondents who may need to complete interviews over multiple sessions. We will also train them to use assistive technologies (for example, voice magnification software and engagement with relay operators). We will train field interviewers to use tablet devices with a web-based interface to manage their assigned cases, track contact attempts, and use the Confirmit® CAPI system to conduct the PROMISE interviews.

Training length varies by interviewing team. Telephone interviewer training will take place across two days, with about five hours of training each day. To optimize project resources and to be responsive to different learning styles, field staff will complete their training in a mixed-mode format. Field staff training is about 20 hours in total across all modes and includes:

- Self-paced, computer-based tutorials. Prior to in-person training, field staff will review their hard-copy manual and complete three self-paced tutorials that contain quizzes assessing mastery of key concepts. Trainers will review results prior to training and use these data to tailor more intensive supports to individuals, as needed (time: 4.5 hours).
- **In-person training.** We will train field staff at the New Jersey SOC or other Mathematica offices, based on the trainees' location and the timing of the training. In-person training will feature a lecture-style format to review the purpose of the data and our data collection procedures and goals, as well as detailed review of the survey instruments. Trainees will also complete exercises to build their skills using SmartField, complete interactive exercises led by the survey director, and practice administering the interviews multiple times through both group and paired practice (time: 12 hours over 2 days, plus travel).

Training will occur in discrete modules, as shown in Table III.2.

#### Table III.2. Survey interviewer training modules

Modules for all trainees	Modules for field staff only
<ul> <li>Study background, data collection procedures, and goals</li> <li>Security and confidentiality</li> <li>Conducting interviews with people with disabilities, use of assistive technologies</li> <li>Frequently asked questions and refusal-aversion responses</li> <li>Conducting parent and youth interviews, including question-by-question specifications and round-robin format of interview with trainer</li> <li>Paired practice using Confirmit® CATI/CAPI systems on computer, tablet</li> <li>Leveraging additional contact(s) for parent and youth</li> <li>Protocols for special populations (incarcerated, institutionalized, etc.)</li> </ul>	<ul> <li>Case delivery and use of SmartField</li> <li>Best practices for field locating and refusal conversion</li> <li>Interactive exercise: (1) confidentiality and security, (2) strategies for locating and refusal conversion</li> <li>Using the tablet device for GPS navigation, case management, and interviewing</li> <li>Using the time-expense reporting system</li> </ul>

• Performance evaluations

We will continually assess all trainee interviewers during the training, with additional support, attention, and coaching provided to them as needed. Further, at the end of the training, we will formally evaluate the trainees to ensure that they (1) have the knowledge necessary to share the purpose of the study, answer basic questions about the evaluation, and persuade people to take part; (2) can successfully navigate the Confirmit® CATI/CAPI systems to conduct the interviews; (3) demonstrate understanding of the voluntary nature of participation in the survey by enrollees and their parents; (4) demonstrate knowledge and skills needed to document contacts and manage assigned cases in SmartField; and (5) uphold Mathematica's high standards for collecting data by using skills such as probing without introducing bias, reading verbatim and deploying appropriate modulation of their voice, and engaging all sample members in a dignified manner.

We will prepare an interviewer training manual and provide it to the COR prior to the initial training. The manual will include both (1) PowerPoint slides that the trainers will use in their presentations to the interviewers and (2) a detailed supporting narrative. Staff from SSA and the other federal agencies that are partnering on the PROMISE initiative will be invited to attend the training in person, by telephone, or through video-based conferencing.

#### F. Data collection

As of May 2018, there were 11,416 youth and 11,324 parents eligible for the 60-month survey (Tables III.3 and III.4).<sup>13</sup> All youth who enrolled in the PROMISE evaluation and were randomly assigned are eligible for the survey unless (1) the youth is deceased or (2) the youth was not selected for the CaPROMISE survey sample. All parents or guardians who enrolled in the PROMISE evaluation and were randomly assigned are eligible for the survey unless (1) the parent or guardian is deceased; (2) the youth is deceased; (3) the parent or guardian represents an agency that has guardianship of the youth, such as a group home or a child welfare agency; or

<sup>&</sup>lt;sup>13</sup> The number of parents eligible for the 60-month survey is a preliminary figure. We are still processing the data to determine which enrolling parents or guardians represent an agency that has guardianship of the youth and are thus ineligible for the survey.

(4) the parent or guardian was not selected for the CaPROMISE survey sample. Enrollees who formally withdrew from the national evaluation will not receive an invitation to participate in the survey, but we will consider them eligible for the survey when computing survey response rates.

Data collection will span 29 months, with a rolling release of sample in cohorts that will mirror the months of study enrollment (section III.A). As with the 18-month survey, youth and parent cases are aggregated into cohorts and released by month to simplify the sample management process. Cohorts range from 57 to 1,477 youth and parent cases, with an average of 910 youth and parent cases. Appendix Table A.1 provides the specific dates when each of the cohorts will open and close across the field period.

Cohort	Enrollment month	AR	ASPIRE	СА	MD	NY	wi	Total	% of total eligible
1	April 2014	0	0	0	17	0	12	29	0.3
2	May 2014	0	0	0	53	0	76	129	1.1
3	June 2014	0	0	0	62	0	74	136	1.2
4	July 2014	0	0	0	66	0	66	132	1.2
5	August 2014	0	0	14	54	0	78	146	1.3
6	September 2014	35	0	129	63	0	42	269	2.4
7	October 2014	56	17	122	70	4	45	314	2.8
8	November 2014	139	27	108	57	15	41	387	3.4
9	December 2014	241	89	68	73	5	14	490	4.3
10	January 2015	85	97	85	93	30	51	441	3.9
11	February 2015	81	98	66	81	27	74	427	3.7
12	March 2015	122	121	68	80	34	70	495	4.3
13	April 2015	124	90	92	77	47	64	494	4.3
14	May 2015	141	116	75	75	56	48	511	4.5
15	June 2015	114	134	130	98	78	67	621	5.4
16	July 2015	38	122	148	112	134	103	657	5.8
17	August 2015	44	103	143	118	145	110	663	5.8
18	September 2015	54	98	154	105	174	77	662	5.8
19	October 2015	82	61	121	107	214	88	673	5.9
20	November 2015	99	76	125	122	207	111	740	6.5
21	December 2015	86	88	84	99	233	79	669	5.9
22	January 2016	73	63	82	94	194	59	565	4.9
23	February 2016	84	118	96	73	205	106	682	6.0
24	March 2016	87	194	40	0	131	114	566	5.0
25	April 2016	14	213	42	0	32	217	518	4.5
TOTAL		1,799	1,925	1,992	1,849	1,965	1,886	11,416	100.0

#### Table III.3. Youth cases eligible for 60-month survey by cohort and program

Cohort	Enrollment month	AR	ASPIRE	СА	MD	NY	WI	Total	% of total eligible
1	April 2014	0	0	0	17	0	11	28	0.2
2	May 2014	0	0	0	53	0	76	129	1.1
3	June 2014	0	0	0	62	0	72	134	1.2
4	July 2014	0	0	0	66	0	62	128	1.1
5	August 2014	0	0	14	53	0	77	144	1.3
6	September 2014	34	0	129	61	0	42	266	2.3
7	October 2014	56	17	122	69	4	45	313	2.8
8	November 2014	135	27	108	56	15	41	382	3.4
9	December 2014	234	89	68	71	4	14	480	4.2
10	January 2015	85	96	84	93	30	51	439	3.9
11	February 2015	80	98	66	81	27	74	426	3.8
12	March 2015	120	119	65	78	34	70	486	4.3
13	April 2015	123	90	92	77	45	64	491	4.3
14	May 2015	140	115	74	74	56	48	507	4.5
15	June 2015	114	133	130	98	77	65	617	5.4
16	July 2015	38	118	146	110	134	103	649	5.7
17	August 2015	44	103	142	117	145	108	659	5.8
18	September 2015	53	98	153	105	172	77	658	5.8
19	October 2015	79	61	121	107	211	88	667	5.9
20	November 2015	97	76	124	122	207	111	737	6.5
21	December 2015	86	87	84	99	233	78	667	5.9
22	January 2016	71	63	82	94	192	58	560	4.9
23	February 2016	83	118	96	73	204	106	680	6.0
24	March 2016	86	192	40	0	130	114	562	5.0
25	April 2016	14	211	42	0	31	217	515	4.5
TOTAL		1,772	1,911	1,982	1,836	1,951	1,872	11,324	100.0

#### Table III.4. Parent cases eligible for 60-month survey by cohort and program

In the following sections, we describe key features of the data collection plan, including: (1) target respondents and expected completes by mode, (2) survey incentives, (3) use of responsive survey design, (4) language of interview administration, (5) survey protocols for special populations, and (6) monitoring production and data quality during the field period.

#### 1. Target respondents and expected completes by mode

The target respondent for the parent survey will be the parent/guardian who helped the youth enroll in PROMISE and signed the enrollment consent form. It is also likely to be the parent or guardian who is most engaged in the youth's receipt of PROMISE services (if the youth is in the treatment group). The enrolling parent was the survey respondent for the vast majority of 18-month survey interviews. As described in Chapter I, proxies will be permitted for either the parent or the youth interview, as needed. Based on our recent experience conducting the NLTS-2012 survey of transition-aged youth and their parents, as well as the 18-month survey for PROMISE, we expect to complete the youth and parent interviews on the same day for at least 50 percent of sample cases. The Confirmit® CATI/CAPI system for the PROMISE evaluation will be designed to allow either the youth or the parent interview to be completed first. At the end of each interview, text is provided for interviewers to ask to speak with the parent linked to the pending case or set an appointment to do so, as applicable. At the end of each youth interviewer will ask to speak to or set an appointment with the parent if the parent has not yet completed an interview. The interviewer will do the same for youth at the end of each parent interview.

The 60-month survey will be fielded across three modes (telephone, field, and mail). Based on the 18-month survey results, across all programs we anticipate that 75 percent of completes will be by telephone, 23 percent by field, and 2 percent by mail (based on youth cases, 6,852 by telephone; 2,101 by field; and 183 by mail). We will use Mathematica's sample management system (SMS) to (1) release eligible cases and ensure they are worked as intended, (2) mail invitation and reminder letters and incentive payments, and (3) track and store sample cases' updated contact information. Field interviewers will use the SMS's SmartField module to manage their assigned cases and track contact attempts. The interviewing period for each cohort will be 24 weeks. Over the full 29-month survey period, Mathematica's data collection managers will use a range of production reports to monitor the data collection effort to ensure it aligns with production goals and anticipated costs. They will also monitor the quality of the data collected and the response rates for each program, as well as for different groups of sample within each program (such as treatment and control groups, age groups, alternate languages, etc.). Because of the eligibility criteria described in Chapter I, the parent and youth surveys will be fielded concurrently but managed separately. We will, however, leverage the paired nature of the cases in our locating and other outreach efforts. The parent and youth surveys each have a target response rate of 80 percent.

#### 2. Survey incentives

The base incentive of \$30 offered to eligible parents and youth, remains unchanged from the 18-month survey. Each respondent will receive the \$30 incentive for completing his or her interview (\$60 total, if parent and youth both complete). However, to help minimize nonresponse, we are proposing an incentive bonus strategy that differs somewhat from the strategy used for the 18-month survey. We will use information from the 18-month survey to inform 60-month survey eligibility and to develop a response propensity measure that we will use to determine the size of a differential bonus offered and inform nonresponse follow-up (described in the next section). Mathematica will assign cases with a medium to high propensity to respond to group A and cases with a low propensity to respond to group B (this will include cases that were finalized as refusals or unlocatable at the 18-month survey).

The proposed incentive bonus strategy offers a \$30 base plus a \$10 early call-in bonus (\$40 total) for group A and a \$30 base plus a \$20 early call-in bonus (\$50 total) for group B. This strategy offsets follow-up costs associated with more difficult-to-reach cases by generating completes from "early responders" from both groups who call the SOC in response to the survey invitations and by providing greater motivation for the hardest-to-reach cases to respond. By deploying a differential incentive, resources can be targeted to sample cases that otherwise are likely to require intensive efforts to locate, contact, or gain cooperation for interviews. Mathematica has justified similar differential incentives to OMB. Table III.5 describes the groups and incentive structure in greater detail.

Parent survey	Youth survey	Incentive per respondent <sup>a</sup>	Survey group
60-month eligible 18-month respondent	60-month eligible <sup>a</sup> 18-month respondent	\$30 base \$10 early call-in bonus (\$40 total possible)	А
60-month ineligible	60-month eligible 18-month respondent	\$30 base \$10 early call-in bonus (\$40 total possible)	A
60-month eligible 18-month respondent	60-month ineligible	\$30 base \$10 early call-in bonus (\$40 total possible)	А
60-month eligible 18-month respondent	60-month eligible 18-month non-respondent	\$30 base \$20 early call-in bonus (\$50 total possible)	В
60-month eligible 18-month non-respondent	60-month eligible 18-month respondent	\$30 base \$20 early call-in bonus (\$50 total possible)	В
60-month eligible 18-month non-respondent	60-month ineligible	\$30 base \$20 early call-in bonus (\$50 total possible)	В
60-month ineligible	60-month eligible 18-month non-respondent	\$30 base \$20 early call-in bonus (\$50 total possible)	В
60-month eligible 18-month non-respondent	60-month eligible 18-month non-respondent	\$30 base \$20 early call-in bonus (\$50 total possible)	В
60-month ineligible	60-month ineligible	n/a – case not released for survey	n/a

### Table III.5. Proposed incentives for 60-month survey based on 18-month survey response

<sup>a</sup> Incentives shown are based on each respondent included in the parent-youth pair. Therefore, survey respondents in group A could each receive up to \$40 for completing the survey (\$80 total for parent and youth). Respondents in group B could each receive up to \$50 (\$100 total).

The vast majority of cases in the 18-month survey (81 percent) represent a dyad where both parent and youth completed their interviews. In the minority are cases where neither completed (14.6 percent), the parent completed but the youth did not (4 percent), or the youth completed but the parent did not (0.4 percent). We will conduct group assignment at the case dyad level to avoid circumstances where one individual becomes disinclined to take part because he/she feels he/she should have been offered the same (higher) incentive as the other member of the case.

#### 3. Responsive survey design

To optimize project resources and deploy best practices in survey methodology, we will use a responsive survey design for the 60-month survey (Groves 2006; Brick et al. 2017; Durivant et al. 2017; Axinn et al. 2011; and Couper 2017). This approach breaks follow-up efforts into sequential phases that seek to mitigate both unit and item nonresponse while making best use of project resources. We plan to use five phases, as shown in Table III.6. Cases that do not complete an interview in one phase will either move on to the next or be finalized (as refusals, unlocatable, or non-Spanish language barriers). Finalized cases will not receive any further follow-up.

Phase	Descriptor	Pending cases included	Phase begins
1	Inbound calls with \$10 or \$20 early-responder bonus	All receiving survey invitation outreach	Launch of cohort field period
2	Outbound calls	All where working telephone numbers are available	Cohort launch date plus 13 days
3	Supervisor review, in- house locating	All	After all available telephones numbers hit maximum attempts or no telephones numbers are viable for dialing
4	Field locating, interviewing	All where residential addresses are available from prior records or in-house locating efforts, where field staff are based, or where a cluster of cases makes travel viable	After supervisor review and locating are completed, on a flow basis (approximately week 10 for 18-month survey nonrespondents and week 12 for 18- month survey respondents)
5	Mail (abbreviated questionnaire)	All with a viable mailing address	Week 23

#### Table III.6. Responsive survey design for 60-month survey by phase

The survey process begins with an advance notification letter from Mathematica, inviting the youth and the enrolling parent to contact us to complete the interview. We will leverage findings from the recent National Beneficiary Survey experiment that found a "concrete" approach to the survey invitation yielded the highest percentage of inbound calls (Johnson et al. 2017). In contrast to a standard approach to such invitations, this format directs sample members to call a specific telephone number to exercise one of three options: (1) complete the interview, (2) schedule an appointment for later completion, or (3) decline to participate in the survey. We will create two versions of the survey invitation letter, based on the 18-month responder group. Version A will highlight the \$30 gift card for completing the 20- or 25-minute interview as well as the additional incentive of \$10 to those who call Mathematica to complete the interview by a specified date (\$40 total, conveyed in a single gift card). Version B will be tailored to nonresponders and will highlight the \$30 gift card for completing the interview as well as the \$20 early call-in bonus (\$50 total, conveyed in a single card). Based on results from the 18month survey, combined with the findings from the National Beneficiary Survey, we anticipate about 20 percent of enrolling parents and 15 percent of youth will call in during phase 1 and receive the bonus.

Phases 2 through 5 comprise our outbound calls and a series of reminder mailings (see Appendix Table A.2 for the timing of the mailings). At the start of phase 2, we will leverage 18month survey paradata to schedule our first call attempt for the day of the week and time of day when we completed the 18-month interview (for all 18-month survey respondents). From there, we will continue call attempts through all available telephone numbers linked to each case. We will send mailings during the remaining weeks of the survey period to all outstanding sample cases to (1) encourage them to participate and let them know that an interviewer will be contacting them soon by telephone or in person; (2) respond to concerns they may have about the study, and (3) notify them the survey will be ending soon and that their unique experiences and input are critical to the success of the study. We will also reach out to additional contacts provided during the 18-month survey should we encounter difficulty locating youth or enrolling parents. In all our contacts with the sample cases, we will stress that their participation in the survey is voluntary and their SSA or other program benefits will not be affected regardless of whether they participate. Appendix Table A.2 shows the survey outreach activities by week of the field period. Additional mailings, sent as needed, will include refusal and locating letters and letters to enrolling parents for cases where the enrolling parent interview is completed and the youth is still pending.

We anticipate that the majority of interviews (75 percent) will be completed via CATI in our SOC. The New Jersey SOC is open seven days a week and can accept call-ins any time it is open. We will make outbound calls from 9 a.m. to 9 p.m. on weekdays, from 10 a.m. to 5 p.m. on Saturdays, and from noon to 9 p.m. on Sundays (sample members' time). We will not contact sample members after 9:00 p.m. local time unless a sample member requests that we do so.<sup>14</sup> Further, if a sample member requests that we do not contact him or her during a specific timeframe, we will record this information in the SMS so staff can adhere to the request. We will follow the same protocol if a sample member requests not to be called on a specific telephone number, such as a work telephone number.

Some sample cases will be extremely difficult to locate or contact or will require an inperson interview because of a disabling condition. Field staff will use CAPI to complete interviews with such cases. We anticipate completing about 23 percent of all interviews via CAPI. Field follow-up will occur in phase 4 of the interviewing period for each monthly cohort of sample cases, with up to 13 weeks of field work following 10 to 12 weeks of work in the SOC. Once a case is sent to the field, it will be retired from outbound calls at the SOC. Field staff will conduct interviews using tablet computers either in the sample member's home or at an agreed-upon alternate location. If, for a given sample case, the parent interview has not yet been completed at the time of the youth interview (or vice versa), the field interviewer will capitalize on the rapport established with the respondent to solicit information and assistance in locating and contacting the other member of the case. Field staff will record all contacts in SmartField and adhere to the study protocols reviewed in training. These include:

- Not visiting sample members' homes after 9:00 p.m. local time unless a sample member requests that we do so.
- Not interviewing youth when no adult is present. If field staff visit a home and are greeted by a youth, they will ask the youth if the enrolling parent or guardian or another adult is home. If no adult is present, field staff may ask if the youth can call the parent or guardian so that the field staff can schedule an appointment with the parent or guardian to return to the house when the parent or guardian is home.

By offering the survey in different modes, we increase the likelihood of participation for cases who may not be able to participate in a given mode. For example, those without telephone service or access to telephones or who are wary of contact with strangers by telephone will likely not respond to our outreach in phase 1 or 2. Case review in phase 3 might conclude that no other telephone numbers can be found and perhaps no viable addresses are available, as all mailings

<sup>&</sup>lt;sup>14</sup> If a significant number of sample members express concern about evening telephone calls or visits, we will consult with SSA to determine whether a different cut-off time is appropriate.

have been returned as undeliverable. Field follow-up (phase 4) is a useful resource for such cases, as we can send staff to visit last known addresses and make contact with friends, relatives, neighbors, or other informants who can help us reach the parent and youth. However, not all cases will be eligible for field follow-up in phase 5 because they are not concentrated in close proximity to other cases, making in-person contact extremely costly and inefficient. Therefore, we plan to offer all non-responding, non-finalized cases the opportunity to complete the survey by mail, in an abbreviated format, to attempt to reach these individuals. The abbreviated mail format can also address reasons for nonresponse related to the survey length and facilitate completion by individuals who may require assistance from a close contact because they speak a language other than English or Spanish.

For the 18-month survey, the self-administered version of the questionnaire was offered only to ASPIRE enrollees who resided in rural and frontier areas that were ineligible for field followup because the cases were too few and too geographically dispersed. Those in regions without field follow-up were sent the mailing twice over the field period (once in week 15 and again in week 19 if no response was received). The 60-month mailing protocol includes just one mailing of this questionnaire across all programs. The plan is based on the diminished returns we experienced with the second mailing in the 18-month survey. We believe that offering the abbreviated mail survey in all the programs can reduce nonresponse by addressing the particular reasons for nonresponse described above. Those who complete the abbreviated questionnaire will receive the same \$30 gift card as those who complete the full interview.

#### 4. Language of interview administration

Interviews will be conducted primarily in English and Spanish, with instruments in both languages available in the CATI system. Based on 18-month survey data, 12 percent of parent cases and 11 percent of enrolled youth are Spanish-speaking. All Spanish-speaking interviewers will have completed professional certification to ensure they are qualified to conduct the interview in Spanish. Cases designated as Spanish-speaking from the 18-month survey or from enrollment will be worked by bilingual interviewers only. If an English-speaking interviewer identifies a new Spanish-language case, the interviewer will transfer the case to an available Spanish-speaking interviewer or make arrangements for the interview to be competed in Spanish at a later time.

The evaluation enrolled some youth and parents or guardians who speak neither English nor Spanish. However, based on results from the 18-month survey, these cases accounted for less than 2 percent of all research cases. Of these, only a small number (13 parents, 9 youth) were finalized as non-completes because of language barriers. These parents and youth did not have another person who could help them complete the interview, either in a supported format (using translation, where needed) or as a proxy on their behalf. When working with cases who speak neither English nor Spanish for the 60-month survey, we will first turn to our cadre of certified bilingual interviewers to conduct the interview using ad hoc translation of questions when respondents' limited skills in English or Spanish would preclude their participation in the 60month survey. As we did for the 18-month survey, if we do not have a particular language capacity in house, we will determine whether there is an English-speaking adult member of the sample member's household who can assist the youth or parent in completing the interview. To ensure as much standardization as possible in how questions are asked and terms are communicated in the non-translated languages, all the bilingual interviewers will be trained to conduct the 60-month survey in English. When conducting interviews in languages other than English or Spanish, these interviewers will interpret from and code the survey responses directly into the English version of the CATI/CAPI instrument. This approach ensures that all interviews are subject to the same rigorous data quality checks regardless of the language of administration.

We will also explore with SSA the possibility of translating the abbreviated version of the questionnaire into languages other than English and Spanish spoken by a significant proportion of sample members. If we pursue this approach, we will send the translated abbreviated questionnaire to sample members in phase five of the survey plan if we are unable to complete the full interview using the core strategies described above.

Because of the strategies described above (that is, use of bilingual staff, assisted interviews, proxy interviews, and potential translation of the abbreviated questionnaire), we are not pursuing outside translator services.

#### 5. Survey protocols for special populations

In addition to the data collection strategies described above, there are some unique features of the ASPIRE program that necessitate special survey strategies for subpopulations of enrollees. We describe these features and the proposed strategies below.

ASPIRE enrollees include a nontrivial proportion of Native Americans, some of whom might reside on reservations. ASPIRE collected self-reported data from parents and youth who identified as belonging to a Native American tribe. In data that ASPIRE provided in November 2017, 120 youth and 122 parents among ASPIRE's 1,934 research cases self-identified as belonging to a Native American tribe (6.2 and 6.3 percent, respectively). Of these, 101 pairs of parents and youth self-identified as belonging to a Native American tribe (5.2 percent of all ASPIRE survey cases). This population is considered hard to survey for several reasons, including (1) mistrust of outside researchers, who may be perceived as judgmental; (2) concerns about how the survey data will be used; (3) high concentrations of poverty and other household complexities; and (4) reduced access to telephone service as a result of limited household resources or cultural norms (Basto et al. 2012; Brugge and Missaghian 2006; Getrich et al. 2013; Gilder et al. 2013; Hodge et al. 2010; Israel et al. 2008; Jones 2008; Ver Ploeg et al. 2002). To address these challenges, we collaborated with ASPIRE staff to build upon the positive outreach they have conducted with tribal leaders. Further, prior to launching the 18-month survey in ASPIRE, SSA sent a letter to tribal leaders to inform them of the study and to obtain their endorsements for the survey. In response, leaders of the Sisseton Wahpeton Oyate requested that we not conduct interviews with members of their tribe without first securing approval from their IRB. At SSA's request, we did not include the one eligible case from this tribe in the survey outreach efforts. Overall, the survey outreach strategies were successful in reaching this population, demonstrated by completed interviews with 87 of these youth and 92 parents, with 72 completed dyads (response rates of 72.5, 75.4, and 71.3 percent, respectively).<sup>15</sup> Thus, we plan to use similar efforts in working with this population for the 60-month survey and will assist

<sup>&</sup>lt;sup>15</sup> The case outcomes for these cases are similar to other cases where field follow-up was not feasible due to geographic dispersion.

SSA in identifying the appropriate tribal contacts to whom to send a letter similar to that sent for the 18-month survey. Mathematica will work with leaders thereafter to determine how best to conduct outreach to reservation-based sample cases.

The ASPIRE program serves not only rural but also frontier areas (geographic areas with extremely low population density), for which exceptionally long distances may exist between households. <sup>16</sup> We analyzed the ZIP codes linked to best known addresses for ASPIRE research cases and found that 7.2 percent reside in frontier areas. We will attempt to complete the 60-month interview by telephone with sample members in frontier areas, using whatever accommodations might be necessary. When necessary and feasible, we will use alternative means of communication, such as WebEx, to connect with sample cases using Voice over Internet Protocol. If cases are unreachable by telephone and have no Internet access, we will determine whether a sufficient concentration exists to make efficient use of field interviewers. Finally, in phase 5, Mathematica will mail the abbreviated questionnaires to all nonresponding enrolling parents and youth.

Finally, cases from any of the programs, especially control group members, might not remember enrolling in the PROMISE evaluation. To address their concerns, we will provide a copy of their signed consent/assent forms upon request if the forms are available. These forms may also be useful in helping survey staff work with gatekeepers to gain permission to contact youth who are institutionalized or incarcerated. Because the majority of the PROMISE programs will no longer be in operation at the time of the 60-month survey, we have asked SSA to request these forms from the programs during the close-out process. The forms can be stored securely at either SSA or Mathematica.

#### 6. Monitoring production and data quality

To ensure the data collected are of high quality, all interviewers will receive regular, ongoing feedback on their work during the survey period. This will include monitoring their performance in engaging sample members and conducting the interviews, as well as providing them with statistics on their productivity relative to the entire team of interviewers (such as attendance, rates of refusal, and hours per completed case). Mathematica's SOC managers, many of whom are highly skilled former interviewers, will provide this feedback to the telephone interviewers. Field interviewers will also meet with their managers regularly to receive ongoing feedback on their production statistics, debrief on challenging cases, and prioritize their workload. In addition, a portion of all field interviews will be validated. The process entails (1) selecting cases for validation (random subset of 10 percent of each field interviewer's completed interviews, as well as outliers for length of interview, manually identified by managers); (2) contacting these cases by mail and then by telephone (if no response) to confirm that the interviews took place and was conducted in a professional manner; (3) reviewing the responses of these cases to look for missing data, many similar responses, or incongruent responses; and (4) reviewing the electronic signatures from respondent payment records to ensure a variety of handwriting is observed, as anticipated. We may also utilize GPS data, where

<sup>&</sup>lt;sup>16</sup> One commonly used definition of frontier areas is ZIP codes where the majority of residents live 60 minutes or more from urban areas with populations of 50,000 people or more. Available at <u>https://www.ers.usda.gov/data-products/frontier-and-remote-area-codes.aspx</u>. Accessed May 11, 2018.

needed, to verify the location of an interview. Finally, managerial review of frequency distributions of critical data elements and open-ended responses may identify field interviewers who need retraining.

#### G. Minimizing attrition and maximizing response rates

Mathematica's contract with SSA for the PROMISE evaluation specifies that we complete interviews with 80 percent of the eligible sample at 18 months and 60 months after random assignment. To allow for attrition of sample cases between the two surveys, we targeted a response rate of 85 percent for the 18-month survey. Although the final unweighted response rate for the parent-youth dyad was 81 percent, we achieved an 85.1 percent rate for parents and an 81.4 percent rate for youth.<sup>17</sup>

As of May 2018, there were 11,416 youth and 11,324 parents eligible for the 60-month youth survey. To obtain an 80 percent response rate, we will need to complete interviews with 9,133 youth and 9,059 parents. Tables III.7 and III.8 show the anticipated number of eligible sample members and the target number of completes by program.

		-	
Program	Eligible youth	Target completes (80%)	% of total cases
Arkansas	1,799	1,439	15.8
ASPIRE	1,925	1,540	16.9
California	1,992	1,594	17.4
Maryland	1,849	1,479	16.2
New York	1,965	1,572	17.2
Wisconsin	1,886	1,509	16.5
TOTAL	11,416	9,133	100.0

Table III.7. Number of eligible youth and target completes by program

#### Table III.8. Number of eligible parents and target completes by program

Program	Eligible parents	Target completes (80%)	% of total cases
Arkansas	1,772	1,418	15.6
ASPIRE	1,911	1,529	16.9
California	1,982	1,586	17.5
Maryland	1,836	1,469	16.2
New York	1,951	1,561	17.2
Wisconsin	1,872	1,498	16.5
TOTAL	11,324	9,059	100.0

In addition to achieving an 80 percent response rate, we must also ensure that (1) response rates do not vary by more than 5 percentage points between the treatment and control groups for a given program and (2) questions on the instruments that are critical to the impacts analysis are answered in order for an interview to be classified as complete.

We anticipate that one of the biggest challenges to achieving a high survey response rate will be out-of-date contact information due to the high mobility of the low-income target

<sup>&</sup>lt;sup>17</sup> Final weighted response rates are not yet available at the time of this report.

population. The physical addresses and telephone numbers of sample cases could change between their enrollment in the study and the 18-month survey and also between the 18-month survey and the 60-month survey. Our proactive approach to addressing this challenge includes the following strategies:

- We collected multiple types of contact information for enrollees at enrollment through the programs' consent forms. These data included landline telephone number, cell phone number, email address, and physical address. We collected updated information during the 18-month survey from survey respondents, SSA, and the programs. In general, cell phone numbers and email addresses will not change when sample members move from one physical address to another.
- We collected contact information for one or more individuals who would be able to assist us in contacting an enrollee at a later date. This information was collected during the 18-month interview for use in the 60-month survey. Survey records were updated on a flow basis as data from completed interviews were processed.
- We will seek to interview or establish contact with the enrolling parent and the youth on the same day an interview is conducted with either one. When completing an interview with a youth, we will ask to complete an interview with the parent or guardian and vice versa. When that is not possible, we will ask the responding party to assist us in contacting the party who has not yet responded. We had success with this strategy for more than half the cases in which both the parent and youth completed the 18-month survey.
- We will use interim contacts after the 18-month interview to keep in touch with mobile sample members. We will use text messages, emails, post cards, and letters to conduct outreach to sample cases. This outreach will expand our opportunities to obtain updated contact information for sample cases by varying our modes and connecting with cases in modes that are most salient for them. We will send text messages only to 18-month survey respondents who provided consent for us to contact them by text and will explain that standard text messaging rates may apply. Due to security and privacy concerns, we will not include or solicit personally identifiable information via test messages, emails, and post cards. Instead, we will ask sample cases to call our SOC to update their contact information.
- We will leverage updated contact information available through electronic searches and SSA's administrative records. Our locating efforts will be informed by efficient deployment of web-based search engines such as Accurint and National Change of Address. Twice a year, SSA will provide us with updated contact information on sample cases from its records. We will upload the updated information into our SMS, which also provides a cumulative locating history for each youth and enrolling parent, along with any changes in the youth's representative payee over time.

In addition to challenges associated with *locating* enrolling parents and youth five years after enrollment, we anticipate facing challenges with *motivating* sample members to respond when they might face competing demands for their time, might not respond to calls from unknown telephone numbers, or might not remember enrolling in the study. Our proactive plan to address these challenges includes:

- Our offer of a \$10 or \$20 differential incentive to motivate sample members to call our SOC to complete their interviews within 12 days of receiving their advance notification letters. This strategy has been proven effective on previous Mathematica surveys in generating call-ins from sample members for whom no working telephone number could be found even after extensive locating efforts. On the 18-month survey, 14 percent of parents and 11 percent of youth called in within the bonus window. Combining this strategy with clear directives in the advance letter should bolster call-in rates even further (section III.F).
- Asking the PROMISE programs to provide copies of enrollees' signed consent forms so that we can make them available for sample members upon request. As discussed earlier, this benefits two key groups of enrollees: (1) members of the control group, for whom enrollment in PROMISE may have lost salience after a five-year period and (2) youth who reside in group homes or institutions. Although SSA excluded SSI recipients who were living in institutions from the lists of PROMISE-eligible youth provided to the programs for recruitment, youth may move to such settings over time. We will work closely with the enrolling parent to determine optimal contact strategies. This can include establishing contact with the manager of the facility, describing the study, and explaining how we received parental consent to contact the youth. We will send the manager a cover letter accompanied by a redacted copy of the signed evaluation consent form. <sup>18</sup> We will follow up to ensure that these materials were received and to work with the facility staff to contact and interview the youth.
- Highlighting SSA as the study sponsor in our letters and introductory remarks made by telephone and in person. Because all youth enrolling in PROMISE must have received SSI benefits to qualify for the evaluation, the agency name will be salient and may alleviate potential concerns about legitimacy of the survey efforts.
- We will use a mixed-mode survey design and have local area codes appear in caller identification devices, where feasible, from calls placed by interviewers. As more sample members use cell phones, we anticipate that call-screening will increase, and we acknowledge that potential survey respondents might block calls from unknown numbers, especially if the numbers do not have local area codes. As we did for the 18-month survey, we will employ technology that allows the SOC to leverage a local area code when placing calls. In addition, we will provide field staff with cell phones that have local area codes. We will also place calls to sample members at a variety of possible telephone numbers (cell, landline, work, or other). This helps to address challenges associated with screening calls or not picking up calls from unknown numbers. If telephone outreach is not successful, nonresponding cases will move on to subsequent phases where outreach can be optimized through other modes, such as in person or by mail.
- Ensure that highly trained, experienced data collectors engage with all potential respondents in a professional, respectful manner. As described in section III.E, both telephone and field staff will successfully complete PROMISE 60-month survey training before beginning work. This includes knowledge of assistive technologies and best practices for interviewing individuals with disabilities. Ongoing monitoring will ensure consistent

<sup>&</sup>lt;sup>18</sup> We will redact Social Security numbers and other information that the managers of group homes do not need to verify informed consent.

high quality efforts among all data collection staff. Additional refresher trainings may be used to address challenges the team is facing on an as-needed basis across the 29-month field period.

Finally, Mathematica will continue to use our extensive reporting tools that enabled us to successfully monitor a wide range of production statistics across the 18-month survey field period. In addition, we will leverage paradata from the 18-month survey to strategize on optimal calling patterns as well as enrich the training materials with detailed examples from (de-identified) PROMISE cases.

#### H. Coordination with program formative evaluation surveys

Two of the PROMISE programs (New York State PROMISE and ASPIRE) conducted surveys of youth enrollees as part of their formative evaluations. We anticipate no overlap of the interim mailings or 60-month survey with the New York State PROMISE program's survey efforts. Although the 60-month survey does not overlap with ASPIRE's data collection efforts for its 36-month survey, one of our interim mailings does overlap with the ASPIRE 36-month survey. To avoid confusing or overburdening ASPIRE enrollees, we will exclude ASPIRE cases from our 36-month interim mailing.<sup>19</sup>

By the time the field period for the 60-month survey begins, the programs' own survey efforts will have ceased. Although their surveys will no longer be in the field, sample members could confuse the roles of the programs and Mathematica or believe that they are being asked to provide excessive, duplicative feedback on their experiences in PROMISE. Of even greater concern are those youth who, as part of their lived experience of having a disability, may feel that they have been singled out because they did not do well on one survey and so are being asked to repeat the exercise. These issues have the potential to negatively impact response rates. Recognizing these potential challenges, we will train interviewers to deal appropriately with such situations by providing adequate explanations to questions or concerns these potential respondents might have when approached for the 60-month survey.

#### I. Imputation methods

In the impact analysis, we will address missing data on outcome measures from the 60month survey (arising as the result of item nonresponse) using one of two approaches.<sup>20</sup> Our basic approach will be to exclude cases with missing information on outcome measures from the impact analysis of those respective outcomes. However, for some outcomes, the elimination of cases with missing information could introduce bias. This could occur when an outcome is known to have a specific value or range of values conditional on the value of another outcome.

<sup>&</sup>lt;sup>19</sup> ASPIRE has offered to provide updated contact information for all enrollees before the program terminates operations. The contact information will reflect updated information the program obtained during its 36-month survey efforts.

<sup>&</sup>lt;sup>20</sup> The small fraction of survey respondents who are expected to respond to a short, self-administered version of the 60-month questionnaire will be treated as though they have item-specific missing data for any outcome measures based on variables that were not captured in the shorter survey.

Consider the following examples based on a sequence of two survey questions: (1) "Have you worked for pay in the last year?" and (2) How much did you earn during the last year?"

- Cases with "no" values for Question 1 would not have been asked Question 2 so, in principle, there would be missing data on earnings for these cases. However, because cases that did not work for pay could not have had any earnings, the analyst would assign those cases a value of zero for earnings.
- Cases with "yes" values for Question 1 would have been asked Question 2, and some of them may have been unable to report their earnings, resulting in missing data on earnings for those cases. Those cases did work for pay, so it is virtually certain that they had positive earnings, but because those earnings are unknown, a naive analyst might drop those cases. Doing so would bias the final measure of earnings toward zero because only cases known to have positive earnings would be at risk of being dropped.

To reduce the risk of bias in outcome measures that could result from the exclusion of cases with conditionally missing data, such as illustrated in the above example, we will use a multiple imputation procedure (Puma et al. 2009). This procedure will assign such cases credible values for conditionally missing outcomes and allow us to retain the cases in the analysis, thus avoiding potential bias.

#### J. Preparing weights, files, and documentation

For the 60-month survey, Mathematica researchers, SSA, and the public will need clean, well-documented data files that satisfy SSA's Disclosure Review Board guidelines. To meet this need, we will perform data-processing activities with as much care as we will take in collecting the data. We will clean and edit the data to ensure consistency and completeness. The file will contain weights to account for survey nonresponse by sample members and differential sampling rates in the California program (section II.A).

For the 60-month survey data, Mathematica will provide SSA with a restricted access file (RAF) containing identifiers to allow internal, security-cleared SSA researchers to conduct future analyses. We will also prepare a public-use file (PUF) and documentation. Preparing microdata files for public dissemination is a complex process that involves balancing the potential consequences of disclosure of information with its availability from other sources, its analytic value, assurances regarding confidentiality that may have been given to survey respondents or program participants, and legal consequences of disclosure. We anticipate that preparation of the PUF will be an iterative process. Variables that threaten disclosure of individuals (geographic identifiers, income levels, contextual variables, verbatim responses, created variables, and subpopulation identifiers) will be recoded or removed. We will then turn our attention to an assessment of the incidence of readily observable respondent attributes. These attributes are characteristics such as gender, race and ethnicity, and age that are generally known to potential data intruders and could be used to re-identify a survey respondent and thus compromise the confidentiality of the information provided. We will prepare a list of attribute keys and identify combinations of these keys that pose a disclosure risk. We then will suggest procedures for altering the data to minimize the risk. Many techniques can be used to reduce the likelihood of data disclosure for cases with rare combinations of attribute keys, including top-coding or

grouping responses; blanking, imputing, or suppressing values; modifying, blurring, or scrambling data; data swapping; and controlled, fixed, or random rounding.

The PUF and RAF for the five-year survey data will each be accompanied by a codebook and data dictionary containing (1) a general description of the data file; (2) a description of each data field in the file, including the data field name, definition, and width; (3) the n, mean, standard deviation, minimum, and maximum value for numeric data fields; (4) the n, category label, frequency count, and frequency percentage for categorical data fields; and (5) information related to missing data, such as data indicators of the reason for missing data. We will also provide computer programs to convert the flat files into Statistical Analysis System and Stata formats, including a label that will provide an adequate description of each data field.

#### REFERENCES

- Axinn, W., C. Link, R. Groves, W.G. Axinn, C.F. Link, and R.M. Groves. "Responsive Survey Design, Demographic Data Collection, and Models of Demographic Behavior." *Demography*, vol. 48, no. 3, 2011, pp. 1127–1149. doi:10.1007/s13524-011-0044-1.
- Basto, E., E. Warson, and S. Barbour. "Exploring American Indian Adolescents' Needs Through a Community-Driven Study." *The Arts in Psychotherapy*, vol. 39, 2012, pp. 134–142.
- Brick, J.M., and R. Tourangeau. "Responsive Survey Designs for Reducing Nonresponse Bias." *Journal of Official Statistics*, vol. 33, no. 3, 2017, pp. 735–752. doi:10.1515/JOS-2017-0034.
- Brugge, D., and M. Missaghian. "Protecting the Navajo People Through Tribal Regulation of Research." *Science and Engineering Ethics*, vol. 12, 2006, pp. 491–507.
- Carter, E., D. Austin, and A. Trainor. "Factors Associated with the Early Work Experiences of Adolescents with Severe Disabilities." *Intellectual and Developmental Disabilities*, vol. 49, 2011, pp. 233–247.
- CyBulski, Karen, Tom Fraker, Eric Grau, and Holly Matulewicz. "Sampling Plan and 18-Month Follow-up Survey Plan for the National Evaluation of PROMISE Demonstration Programs." Washington, DC: Mathematica Policy Research, 2014.
- Durrant, G.B., O. Maslovskaya, and P.F. Smith. "Using Prior Wave Information and Paradata: Can They Help to Predict Response Outcomes and Call Sequence Length in a Longitudinal Study?" *Journal of Official Statistics*, vol. 33, no. 3, 2017, pp. 801–833. doi:10.1515/JOS-2017-0037.
- Couper, M.P. "New Developments in Survey Data Collection." *Annual Review of Sociology*, vol. 43, 2017, pp. 121–145. doi:10.1146/annurev-soc-060116-053613.
- Fraker, Thomas, Gina Livermore, Jacqueline Kauff, and Todd Honeycutt. "Promoting Readiness of Minors in Supplemental Security Income (PROMISE) National Evaluation Data Collection Plan." Washington, DC: Mathematica Policy Research, January 2014.
- Getrich, C., A. Sussman, K. Campbell-Voytal, J. Tsoh, R. Williams, A. Brown, M. Potter, W. Spears, N. Weller, J. Pascoe, K. Schwartz, and A. Neale. "Cultivating a Cycle of Trust with Diverse Communities in Practice-Based Research: A Report from PRIME Net." *Annals of Family Medicine*, vol. 11, 2013, pp. 550–558.
- Gilder, D., J. Luna, J. Roberts, D. Calac, J. Grube, R. Moore, and C. Ehlers. "Usefulness of a Survey on Underage Drinking in a Rural American Indian Community Health Clinic." *American Indian and Alaska Native Mental Health Research*, vol. 20, no. 2, 2013, pp. 1–26.
- Groves, Robert M., and Steven Heeringa. "Responsive design for household surveys: tools for actively controlling survey errors and costs." *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, vol. 169, part 3, 2006, pp. 439–457.

- Hodge, F., M. Cadogan, T. Itty, B. Cardoza, and S. Maliski. "Learning How to Ask: Reflections on Engaging American Indian Research Participants." *American Indian Culture and Research Journal*, vol. 34, 2010, pp. 77–90.
- Israel, B., A. Shulz, E. Parker, A. Becker, A. Allen, and J. Guzman. "Critical Issues in Developing and Following CBPR Principals." In M. Minkler and N. Wallerston (eds.), *Community Based Participatory Research for Health: From Process to Outcomes*, Second edition. San Francisco: Jossey-Bass, 2008, pp. 47–66.
- Johnson, Amy, Ryan Callahan, Jesse Chandler, and Jason Markesich. "Using Behavioral Science to Improve Survey Response: An Experiment with the National Beneficiary Survey." In Focus Brief, Mathematica Policy Research, November 2017. Available at <u>https://www.mathematica-mpr.com/our-publications-and-findings/publications/if-usingbehavioral-science-to-improve-survey-response-an-experiment-with-the-nationalbeneficiary</u>. Accessed March 23, 2018.
- Jones, L. "The Distinctive Characteristics and Needs of Domestic Violence Victims in a Native American Community." *Journal of Family Violence*, vol. 23, 2008, pp. 113–118.
- National Council on Disability. "Addressing the Needs of Youth with Disabilities in the Juvenile Justice System: The Current Status of Evidence-Based Research." 2003. Available at <u>http://www.ncd.gov/newsroom/publications/2003/juvenile.htm</u>. Accessed July 22, 2013.
- Puma, M., R. Olson, S. Bell, and C. Price. "What to Do When Data Are Missing in Group Randomized Controlled Trials" NCEE 2009-0049. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, October 2009.
- Shogren, K., M. Wehmeyer, S. Palmer, J. Soukup, T. Little, N. Garner, and M. Lawrence. "Examining Individual and Ecological Predictors of the Self-Determination of Students with Disabilities." *Exceptional Children*, vol. 73, no. 4, 2007, pp. 488–509.
- Shogren, K., M. Wehmeyer, S. Palmer, J. Soukup, T. Little, N. Garner, and M. Lawrence. "Understanding the Construct of Self-Determination: Examining the Relationship Between the Arc's Self-Determination Scale and the American Institutes for Research Self-Determination Scale." *Assessment for Effective Intervention*, vol. 33, 2008, pp. 94–107.
- Ver Ploeg, M., R. Moffitt, and C. Citro. Studies of Welfare Populations: Data Collection and Research Issues. Committee on National Statistics, Division of Behavioral and Social Sciences and Education, National Research Council. Washington, DC: National Academy Press, 2002.
- Wittenburg, D. "Testimony for Hearing on Supplemental Security Income Benefits for Children." Presented at the Subcommittee on Human Resources Committee on Ways and Means, U.S. House of Representatives. Washington, DC: Mathematica Policy Research, 2011.

APPENDIX

DATA COLLECTION AND OUTREACH SCHEDULES

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Cohort	Launch date	<sup>↑</sup> Incentive cutoff (12 days post- launch)	Outbound calls begin (13 days post launch)	Group 3, 4 to field (~week 10)	Groups 1, 2 to field (~week12)	Week 24 cohort closing date
1 <sup>a</sup> and 2	5/1/19	5/12/2019	5/13/2019	7/4/2019	7/18/2019	10/16/2019
3	6/3/2019	6/14/2019	6/15/2019	8/6/2019	8/20/2019	11/18/2019
4	7/1/2019	7/12/2019	7/13/2019	9/3/2019	9/17/2019	12/16/2019
5	8/1/2019	8/12/2019	8/13/2019	10/4/2019	10/18/2019	1/16/2020
6	9/2/2019	9/13/2019	9/14/2019	11/5/2019	11/19/2019	2/17/2020
7	10/1/2019	10/12/2019	10/13/2019	12/4/2019	12/18/2019	3/17/2020
8	11/1/2019	11/12/2019	11/13/2019	1/4/2020	1/18/2020	4/17/2020
9	12/2/2019	12/13/2019	12/14/2019	2/4/2020	2/18/2020	5/18/2020
10	1/1/2020	1/12/2020	1/13/2020	3/5/2020	3/19/2020	6/17/2020
11	2/3/2020	2/14/2020	2/15/2020	4/7/2020	4/21/2020	7/20/2020
12	3/2/2020	3/13/2020	3/14/2020	5/5/2020	5/19/2020	8/17/2020
13	4/1/2020	4/12/2020	4/13/2020	6/4/2020	6/18/2020	9/16/2020
14	5/1/2020	5/12/2020	5/13/2020	7/4/2020	7/18/2020	10/16/2020
15	6/1/2020	6/12/2020	6/13/2020	8/4/2020	8/18/2020	11/16/2020
16	7/1/2020	7/12/2020	7/13/2020	9/3/2020	9/17/2020	12/16/2020
17	8/3/2020	8/14/2020	8/15/2020	10/6/2020	10/20/2020	1/18/2021
18	9/1/2020	9/12/2020	9/13/2020	11/4/2020	11/18/2020	2/16/2021
19	10/1/2020	10/12/2020	10/13/2020	12/4/2020	12/18/2020	3/18/2021
20	11/2/2020	11/13/2020	11/14/2020	1/5/2021	1/19/2021	4/19/2021
21	12/1/2020	12/12/2020	12/13/2020	2/3/2021	2/17/2021	5/18/2021
22	1/4/2021	1/15/2021	1/16/2021	3/9/2021	3/23/2021	6/21/2021
23	2/1/2021	2/12/2021	2/13/2021	4/6/2021	4/20/2021	7/19/2021
24	3/1/2021	3/12/2021	3/13/2021	5/4/2021	5/18/2021	8/16/2021
25	4/1/2021	4/12/2021	4/13/2021	6/4/2021	6/18/2021	9/16/2021

### Table A.1. 60-month survey data collection schedule by cohort

<sup>a</sup> Cohort 1 will launch in month 61 following enrollment to optimize survey resources in a way that places minimal impact on data quality.

	Outreach efforts					
Week of field period	Letter	Email	Text message	Post card	Telephone outreach to additional contacts	Self- administered questionnaire
1	Х	x				
2			X			
2–24						
3		X				
4				X		
5			X			
8				X		
8–9					X	
10	Xa					
11		X				
12	Xa					
14			Х			
16				Х		
18		X			X	
19			X			
21		X				
23						X
24				X		

### Table A.2. 60-month survey outreach by mode and week of field period

<sup>a</sup> The field notification letter will be sent to group 3 in approximately week 10 and to groups one and two in week 12.

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