

## Final Report

# National Beneficiary Survey–General Waves Round 6: (Volume 2 of 3) Data Cleaning and Identification of Data Problems

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**ACRONYMS**

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ACS	American Community Survey
ADL	Activities of daily living
CAPI	Computer-assisted personal interviewing
CATI	Computer-assisted telephone interviewing
DCF	Disability Control File
IADL	Instrumental activities of daily living
ICD-9	International Classification of Diseases—9th revision
NAICS	North American Industry Classification System
NBS	National Beneficiary Survey
PSU	Primary sampling unit
SOC	Standard Occupational Classification
SSA	Social Security Administration
SSDI	Social Security Disability Insurance (Title II of the Social Security Act)
SNAP	Supplemental Nutrition Assistance Program
SSI	Supplemental Security Income (Title XVI of the Social Security Act)
SVRA	State Vocational Rehabilitation Agency (also called VR)
TRS	Telecommunications relay service
TTW	Ticket to Work and Self-Sufficiency Program

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## NBS DATA DOCUMENTATION REPORTS

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The following publicly available reports are available from SSA through its website ([https://www.ssa.gov/disabilityresearch/nbs\\_round\\_6.html](https://www.ssa.gov/disabilityresearch/nbs_round_6.html)):

- **User’s Guide for Restricted- and Public-Use Data Files** (Callahan et al. 2019). This report provides users with information about the restricted-use and public-use data files, including construction of the files; weight specification and variance estimation; masking procedures employed in the creation of the Public-Use File; and a detailed overview of the questionnaire design, sampling, and NBS–General Waves data collection. The report provides information covered in the Editing, Coding, Imputation and Weighting Report and the Cleaning and Identification of Data Problems Report—including, procedures for data editing, coding of open-ended responses, and variable construction—as well as a description of the imputation and weighting procedures and development of standard errors for the survey. In addition, this report contains an appendix addressing total survey error and the NBS.
- **NBS Public-Use File Codebook** (Bush et al. 2019). This codebook provides extensive documentation for each variable in the file, including variable name, label, position, variable type and format, question universe, question text, number of cases eligible to receive each item, constructed variable specifications, and user notes for variables on the public-use file. The codebook also includes frequency distributions and means as appropriate.
- **NBS–General Waves Questionnaire** (Callahan et al. 2019). This document contains all items on Round 6 of the NBS–General Waves and includes documentation of skip patterns, question universe specifications, text fills, interviewer directives, and checks for consistency and range.
- **Editing, Coding, Imputation, and Weighting Report** (Grau et al. 2019). This report summarizes the editing, coding, imputation, and weighting procedures as well as the development of standard errors for Round 6 of the NBS–General Waves. It includes an overview of the variable naming, coding, and construction conventions used in the data files and accompanying codebooks; describes how the sampling weights were computed to the final post-stratified analysis weights for the representative beneficiary sample; outlines the procedures used to impute missing responses; and discusses procedures that should be used to estimate sampling variances for the NBS.
- **Cleaning and Identification of Data Problems Report** (current report). This report describes the data processing procedures performed for Round 6 of the NBS–General Waves. It outlines the data coding and cleaning procedures and describes data problems, their origins, and the corrections implemented to create the final data file. The report describes data issues by sections of the interview and concludes with a summary of types of problems encountered and general recommendations.
- **NBS Nonresponse Bias Analysis** (Grau 2019). This report discusses whether the nonresponse adjustments applied to the sampling weights of Round 6 of the NBS–General Waves appropriately accounted for differences between respondents and nonrespondents or whether the potential for nonresponse bias still existed.

The following restricted-use report is available from SSA through a formal data sharing agreement:

- **NBS Restricted-Access Codebook** (McDonald et al. 2019). This codebook provides extensive documentation for each variable in the file, including variable name, label, position, variable type and format, question universe, question text, number of cases eligible to receive each item, constructed variable specifications, and user notes for variables on the restricted-access file. The codebook also includes frequency distributions and means as appropriate.

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## I. INTRODUCTION

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The National Beneficiary Survey-General Waves (NBS-General Waves), sponsored by the Social Security Administration’s (SSA’s) Office of Retirement and Disability Policy, collects data on the employment-related activities of working-age beneficiaries of Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI). In 2017, Mathematica conducted the sixth round of data collection since the NBS began in 2004, and we will implement a seventh round in 2019. The first four rounds of the survey—in 2004, 2005, 2006, and 2010—helped glean information about beneficiary impairments; health; living arrangements; family structure; occupation before disability; and use of non-SSA programs (for example, the Supplemental Nutrition Assistance Program, or SNAP). Rounds 1–4 also evaluated the Ticket to Work and Self-Sufficiency (TTW) program. In Rounds 5–7, we seek to uncover important information about the factors that promote beneficiaries’ self-sufficiency and, conversely, the factors that impede beneficiaries’ efforts to maintain employment.<sup>1</sup>

For Round 6 of the NBS, we met the goals of the study through two samples: (1) a sample of all beneficiaries (the Representative Beneficiary Sample, or RBS), and (2) a sample of a subset of beneficiaries who maintained a minimum level of earnings for a sustained period (a “successful worker” sample, or SWS). Both of these cross-sectional samples were conducted simultaneously, with a subset of SWS cases to be followed longitudinally in Round 7. Mathematica collected data by using computer-assisted telephone interviewing (CATI). We deployed in-person field locators to follow-up with CATI non-respondents and conducted computer-assisted personal interviewing (CAPI) with sample members who preferred or needed an in-person interview to accommodate their disabilities. Both CATI and CAPI modes were fully integrated to simplify reporting and data processing.

Mathematica conducted an extensive review of the NBS data in order to identify data problems before analysis. In the following discussion, we describe the data processing procedures that we performed for Round 6 of the NBS–General Waves. In the remaining sections of Chapter I, we provide an overview of the NBS-General Waves, including the objectives of the study, sample design, survey procedures, and final response rates. In Chapter II, we summarize the NBS data collection instrument while in Chapter III, we describe the data coding and cleaning procedures and highlight the main data issues that we encountered. We present a section-by-section summary of findings in Chapter IV, and provide concluding comments in Chapter V.

### A. NBS–General Waves Objectives

The NBS–General Waves collects important beneficiary data that are not available from SSA administrative data or other sources. The survey addresses five major questions:

1. What are the work-related goals and activities of SSI and SSDI beneficiaries, particularly as they relate to long-term employment?

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<sup>1</sup> In this report, we refer to the NBS rounds conducted in 2004, 2005, 2006, 2010, 2015, and 2017 as Round 1, Round 2, Round 3, Round 4, Round 5, and Round 6 respectively. We refer to the planned 2019 round as Round 7.

2. What are the short-term and long-term employment outcomes for SSI and SSDI beneficiaries who work?
3. What supports help SSA beneficiaries with disabilities find and keep jobs and what barriers to work do they encounter?
4. What are the characteristics and experiences of beneficiaries who work?
5. What health-related factors, job-related factors, and personal circumstances hinder or promote employment and self-sufficiency?

SSA will combine data from the NBS–General Waves with SSA administrative data to provide critical information on access to jobs and employment outcomes for beneficiaries. As a result, SSA and external researchers who are interested in disability and employment issues may use the survey data for policymaking and program planning efforts.

We addressed the core research questions in Rounds 1 through 4 through two surveys, one of all beneficiaries (the RBS) and one of participants in the TTW program (the Ticket Participant Sample, or TPS). The NBS–General Waves (Rounds 5 through 7) no longer focuses on TTW. The survey design for Rounds 5 through 7 initially called for three national cross-sectional surveys of SSI and SSDI beneficiaries (the RBS)—one each in 2014, 2016, and 2018. It also called for cross-sectional surveys, in the same years, of beneficiaries whose benefits were suspended or terminated due to work (with a subset followed longitudinally across rounds). However, due to difficulties in identifying beneficiaries experiencing benefit suspense in SSA’s administrative data, we subsequently revised the design to focus on beneficiaries with successful work attempts (the SWS). We delayed the start of NBS–General Waves by one year (from 2014, 2016, and 2018, to 2015, 2017, and 2019) to allow time to redesign the successful worker portion of the survey and sample, and ultimately opted not to administer the SWS in Round 5. In Round 6, we conducted the second cross-sectional survey for the RBS in the NBS–General Waves,<sup>2</sup> using the same primary sampling units (PSUs) that were selected in Round 5, while simultaneously conducting the first cross-sectional survey for the SWS. Some of the sampled SWS members will be followed in a longitudinal sample in Round 7.<sup>3</sup> A summary of the samples that were processed in Rounds 1 through 6, and will be processed in Round 7, is given in Table I.1.

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<sup>2</sup> Although this is the second RBS in the NBS–General Waves, it is the sixth RBS over the entire history of the NBS project.

<sup>3</sup> Only SWS members who were working at the time of the Round 6 interview are eligible for the longitudinal sample in Round 7. A new cross-sectional SWS sample will also be included in the Round 7 SWS.

**Table I.1. Summary of Samples Processed in Rounds 1 through 7**

Round	Year	Study	RBS	TPS	SWS
1	2004	NBS-TTW	√	√	
2	2005	NBS-TTW	√	√	
3	2006	NBS-TTW	√	√	
4	2010	NBS-TTW	√	√	
5	2015	NBS-General Waves	√		
6	2017	NBS-General Waves	√		√
7	2019	NBS-General Waves	√		√

## B. NBS–General Waves Sample Design Overview

For all survey rounds, the NBS used a multistage sampling design for both the RBS and SWS, with an independently drawn supplemental single-stage sample for some successful worker populations.<sup>4</sup> In Round 6, we drew the SWS and RBS independently, from separate frames, although the SWS frame was a subset of the RBS frame.

For the RBS in Round 6, we fielded a nationally representative sample of 7,947 SSA disability beneficiaries. Except for the way we stratified the sample of the PSUs,<sup>5</sup> the sample design for the RBS was nearly identical to the design of the RBS in the Rounds 1 through 5. The target population for the RBS consisted of SSI recipients and SSDI beneficiaries between the ages of 18 and full retirement age who resided in all 50 states and the District of Columbia, excluding outlying territories, and who were in an active pay status as of June 30, 2016.<sup>6</sup> As of that date, the target population consisted of approximately 13.9 million beneficiaries. As in prior rounds, we stratified the cross-sectional RBS by four age-based strata within the PSUs: (1) 18- to 29-year-olds, (2) 30- to 39-year-olds, (3) 40- to 49-year-olds, and (4) 50-year-olds and older. To ensure a sufficient number of persons seeking work, we oversampled beneficiaries in the first three cohorts (18- to 49-year-olds). The target number of completed interviews for Round 6 was 1,111 beneficiaries in each of the three younger age groups. For those age 50 and older, the target number of completed interviews was 667 beneficiaries. We summarize the actual sample

<sup>4</sup> The RBS and the main sample of the SWS involved sampling individuals within selected clusters of geographic areas, and is therefore referred to as a “clustered sample.” The supplemental sample (for the SWS only) was sampled across the entire population of successful workers and was therefore not limited to those residing in selected clusters. It is therefore referred to as an “unclustered sample.” This is discussed in detail later.

<sup>5</sup> As noted earlier, the sample design for Rounds 1 through 4 included two samples, one for all beneficiaries (the RBS) and one for the ticket participants (the Ticket Participant Sample). To accommodate the rollout of the TTW program, the primary sampling units (PSUs) were sampled within strata defined by the three phases of the rollout. The sample design for Round 5 included one sample only, that of all beneficiaries. The PSUs were not drawn within strata, except those defined by the two certainty PSUs. The Round 6 sample used the same PSUs as those sampled in Round 5.

<sup>6</sup> Active status includes beneficiaries who are currently receiving cash benefits as well as those whose benefits have been temporarily suspended for work or other reasons. Active status does not include beneficiaries whose benefits have been terminated.

sizes and number of completed interviews for both the RBS and SWS under the revised Round 6 design in Table I.2.

The SWS was limited to SSI and SSDI beneficiaries who were eligible for the RBS, but were considered “successful workers” because their earnings for a sustained period were sufficiently high. In particular, the SSI/SSDI beneficiaries were required to (1) have earnings above SSA’s non-blind substantial gainful activity (SGA) monthly earnings level (\$1,130 in 2016 and \$1,170 in 2017) for a minimum of three consecutive calendar months at any time between August 1, 2016, and July 31, 2017, and (2) be less than 62 years old on June 30, 2016. The successful work must have occurred within a time frame so that the vast majority would be interviewed within six months of the end of their successful work (if they were not currently working), and their earnings had to have been revealed in the Disability Control File (DCF) at the time of data extraction—removing from the sample frame any successful workers who had a long delay in having their earnings recorded on the DCF.<sup>7</sup> Using these constraints to define the target population, we identified a population of 89,936 successful workers.<sup>8</sup> From this frame, we fielded a nationally representative sample of 13,271<sup>9</sup> successful workers. We included a screening question as an additional constraint: the sampled successful workers had to indicate that they had been working in the past six months.<sup>10</sup> To ensure a large enough number of successful workers for sampling, we selected seven samples of successful workers from seven successive mutually exclusive frames. The SWS sampling frames were all subsets of the same sampling frame used for the Round 6 RBS sample, and are therefore referred to as “extracts” from the larger frame. Within each of the seven extracts, we stratified the SWS into two strata defined by beneficiary type (SSDI only, and SSI, which included both SSI only and concurrent beneficiaries).

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<sup>7</sup> Some SSI and SSDI beneficiaries would be considered successful workers because their earnings and age met the threshold, but had to be excluded from the target population for the sampling effort due to a delay in recording their earnings on the DCF. For these individuals, a lag of up to six years would exist between the time that they received their earnings and the time that the earnings data were recorded in the DCF, though most had their earnings recorded within three years. There was no way they could be identified in time for the data extraction. In November 2020, we conducted an updated extract of DCF earnings data for the time period in question, and post-stratified the analysis weights to these new totals.

<sup>8</sup> This total did not include successful workers whose earnings were not included in the DCF at the time of extraction due to a lag in the posting of earnings for some beneficiaries. Furthermore, it did include a small number of cases (4,746 out of 89,936) that met the successful work criteria at the time of the initial extraction, but in an updated extraction from November 2020, were found to not meet the criteria during the time period in question. In the later extraction, the actual weighted total number of successful workers was found to be 288,576. We post-stratified the provisional analysis weights to match this total.

<sup>9</sup> For reasons explained later in this chapter, this sample includes 490 duplicates. As a result, 12,781 unique cases were sampled. The frame from which the SWS was drawn was provisional. In an updated extraction from November 2020, we found that 725 of the 13,271 sample cases did not meet the criteria for successful work. In the updated final analysis weights, where the provisional analysis weights were post-stratified to totals from the November 2020 frame, these 725 sample members were given zero weight.

<sup>10</sup> This screening question was included to account for situations where a long period of time had elapsed between the date when the case was released for data collection and the interview date. Few cases were actually removed from the sample due to this screening question, especially in later extracts.



Because of the concerns about the number of successful workers within strata and their distribution across PSUs within each extract, we decided to supplement the main SWS (within the PSUs) with a second independent sample of successful workers. This supplemental sample was divided into two geographic strata (successful workers residing in a PSU, and successful workers not residing in any of the PSUs).<sup>11</sup> We refer to the initial sample design as the “clustered” sample, and to the second independent sample as the “unclustered” sample.<sup>12</sup> We call the combination of data from the clustered and unclustered samples to calculate estimates a “paired” sample design. The clustered sample included in-person follow-up for sample members who could not be located or otherwise did not respond by phone; the unclustered sample did not have in-person follow-up. We created a single set of composite weights that combined information from the clustered and unclustered SWS, appropriately accounting for the different follow-up rules between the two samples.<sup>13</sup> Table I.2 includes the total across the two samples in the SWS, and does not break out the counts between clustered and unclustered samples; the 490 duplicate cases that were selected for both the clustered and unclustered samples are counted twice in this table.

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<sup>11</sup> Given that the target population for the NBS did not include Puerto Rico or other outlying territories, we excluded from the frame all beneficiaries and successful workers who resided in these areas.

<sup>12</sup> Because of the small populations of successful workers, Mathematica often selected successful workers who resided in both the selected PSUs for the clustered and in-PSU strata of the unclustered samples. Hence, we had to account for these duplicate cases in the weighting process (discussed later).

<sup>13</sup> These composite weights, combining weights from the clustered and unclustered samples in the SWS, should not be confused with the composite weights that combined the RBS sampling weights and the SWS sampling weights that we briefly alluded to in the introductory paragraphs.

**Table I.2. NBS–General Waves (RBS and SWS) Round 6 Actual Sample Sizes, Target Completes, and Completes**

<u>Sampling strata</u>	<u>Selected sample size<sup>a</sup></u>	<u>Original target completed interviews<sup>b</sup></u>	<u>Actual completed interviews<sup>c</sup></u>
<b>Representative Beneficiary Sample</b>			
18- to 29-year-olds	7,947	4,000	4,002
30- to 39-year-olds	2,356	1,111	1,120
40- to 49-year-olds	2,243	1,111	1,081
50-year-olds or older	2,153	1,111	1,129
	1,195	667	672
<b>Successful Worker Sample</b>			
December 2016 extract	2,647	631	982
SSDI only	1,123	250	397
SSI (SSI only + concurrent)	1,524	381	585
January 2017 extract	2,096	737	723
SSDI only	1,017	344	336
SSI (SSI only + concurrent)	1,078	393	387
March 2017 extract	1,890	773	740
SSDI only	873	373	351
SSI (SSI only + concurrent)	1,017	400	389
April 2017 extract	1,607	627	606
SSDI only	854	344	324
SSI (SSI only + concurrent)	753	283	282
June 2017 extract	1,849	657	582
SSDI only	922	350	313
SSI (SSI only + concurrent)	927	307	289
July 2017 extract	1,373	573	442
SSDI only	895	315	283
SSI (SSI only + concurrent)	478	258	159
September 2017 extract	1,807	502	512
SSDI only	1,123	274	324
SSI (SSI only + concurrent)	684	228	188
Total	13,271	4,500	4,587
SSDI only	6,807	2,250	2,328
SSI (SSI only + concurrent)	6,464	2,250	2,259

Source: NBS Round 6.

<sup>a</sup>The 13,271 SWS sample cases include 725 that were later found to not be successful workers.

<sup>b</sup>The target completed interviews for the SWS shown here were calculated prior to receiving the first extract, using data from simulated successful worker populations in 2011-12, 2013-14, and 2015-16. In fact, there were actually seven allocations, with a new sample allocation calculated after the population sizes for each extract were revealed. This explains the sometimes large deviation between the target allocation and the actual number of completed interviews.

<sup>c</sup>The 4,587 SWS completed interviews include 219 that were later found to not be successful workers. In the final post-stratification, these cases had zero weight.

### C. Round 6 Survey Overview

The NBS was designed and implemented to maximize both response and data quality. Table I.3 describes the most significant sources of potential error identified at the outset of the

NBS and how we attempted to minimize the impact of them. A more detailed discussion of our approach to minimizing total survey error can be found in Appendix A of the Round 6 User's Guide (Callahan et al. 2019).

**Table I.3. Sources and Descriptions of Potential Error, Description, and Methods to Minimize Impact**

Source of Error	Description	Method to Minimize Impact
Sampling	Error that results when characteristics of the selected sample deviates from the characteristics of the population.	Select a large sample size; select primary sampling units (PSUs) with probability proportional to size, basing the measure of size for each PSU on the counts of beneficiaries in the study population; use stratified sampling by age categories to create units within each stratum that are as similar as possible.
Specification	An error that results when the concept intended to be measured by the question is not the same as the concept the respondent ascribes to the question.	Cognitive interviewing during survey development <sup>a</sup> and pre-testing; use of proxy if sample member unable to respond due to cognitive disability
Unit Nonresponse	An error that occurs when a selected sample member is unwilling or unable to participate (failure to interview). This can result in increased variance and potential for bias in estimates if nonresponders have different characteristics than responders.	Interviewer training; intensive locating, including field locating; in-person data collection; refusal conversion; incentives; nonresponse adjustment to weights
Item Nonresponse	An error that results when items are left blank or the respondent reports that he or she does not know the answer or refuses to provide an answer (failure to obtain and record data for all items). This can result in increased variance and potential bias in estimates if nonresponders have different characteristics than responders.	Use of probes; allowing for variations in reporting units; assurance of confidentiality; assistance during interview; use of proxy if sample member unable to respond due to cognitive disability; imputation on key variables
Measurement	An error that occurs as a result of the respondent or interviewer providing incorrect information (either intentionally or unintentionally). This may result from inherent differences in interview mode.	Use of same instrument in both interview modes; use of probes; adaptive equipment; interviewer training, validation of field interviews; assistance during interview; use of proxy if sample member is unable to respond due to cognitive disability
Data Processing	An error in data entry, coding, weighting, or analyses.	Coder training; monitoring and quality control checks of coders; quality assurance review of all weighting and imputation procedures

<sup>a</sup>Conducted during survey development phase under a separate contract held by Westat.

We did not expect item nonresponse to be a large source of error because the survey contained few obviously sensitive items. In fact, item nonresponse was greater than 5 percent only for select items asking for wages and household income. Unit nonresponse was the greater concern given the population; thus, the survey was designed with a dual-mode approach. Mathematica made all initial attempts to interview beneficiaries using CATI. If a sample member could not participate in the survey because of an intellectual disability, even with help from a friend or family member, Mathematica sought a proxy respondent. To promote response among Hispanic sample members whose primary language is Spanish, we translated the questionnaire into Spanish. For languages other than English or Spanish, interpreters, if available in the sample

person's home, helped to conduct the interviews. If no one in the household was available to interpret for the respondent, then we flagged the case as a "language barrier." We elected not to use an interpreter service to help contact and complete these cases, as we did not have a sufficient number in any language that made it cost effective to do so. At the conclusion of Round 6 data collection, we final statused 92 cases as language barriers. We made a number of additional accommodations for those with hearing or speech impairments, including using a telecommunications relay service (TRS) and amplifiers.

If Mathematica could not locate and contact a sample member by telephone, a field locator was deployed to make contact in person. After locating the sample member, the field locator attempted to facilitate an interview with him or her via CATI, using a staff cell phone to call into the data collection center (or the sample member's own phone, if preferred). If a sample member could not complete the interview by telephone in this manner due to his or her disability, trained field staff conducted the interview in person using CAPI. To reduce measurement error, the survey instrument was identical in each mode.

We began Round 6 CATI data collection for the NBS in February 2017. In April 2017, Mathematica began in-person locating and CAPI, which continued concurrently with CATI interviewing through November 2017.

## 1. Completed Interviews and Response Rates

In total, Mathematica completed 8,589 interviews across the RBS and SWS (including 131 partially completed interviews)—4,002 from the RBS and 4,587 from the SWS.<sup>14</sup> An additional 290 beneficiaries from the RBS and 463 successful workers were deemed ineligible for the survey.<sup>15</sup> Because of the independence of the RBS and SWS sample selections, and the independence of the clustered and unclustered sample selections within the SWS, individuals could be selected for more than one sample. Therefore, the number of unique completed interviews was 8,410.<sup>16</sup> Across both samples, Mathematica completed 8,402 cases by telephone and 8 by CAPI.<sup>17</sup> During Round 6, we completed proxy interviews for 1,090 sample members in the RBS, and for 409 sample members in the SWS, for a total of 1,499 proxy interviews across

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<sup>14</sup> As noted in Section I.B, the frame from which the SWS was drawn was provisional. In an updated extraction from November 2020, we found that 219 of the 4,587 completed interviews did not meet the criteria for successful work. In the updated final analysis weights, where the provisional analysis weights were post-stratified to totals from the November 2020 frame, these 219 sample members were given zero weight

<sup>15</sup> Ineligible sample members include those who were deceased, incarcerated, in active military, or no longer living in the continental United States and those whose benefit status was pending at the time of the interview. For the SWS, ineligibles also included sample members who had not worked in the past six months at the time of the interview.

<sup>16</sup> Among sample cases that were completed interviews only, there were 38 duplicates between the RBS and SWS (76 sample cases total) and 141 duplicates (282 sample cases total) between the clustered and unclustered samples within the SWS, for a total of 179 duplicates. The counts of ineligible cases included 15 duplicates; the number of unique ineligible cases across both samples was 738.

<sup>17</sup> We reserved the CAPI mode for situations in which respondents were unable to complete the interview by telephone; only eight respondents requested an in-person interview.

the two sample groups. In addition, we completed a total of 280 interviews in Spanish--129 in the RBS and 151 in the SWS.

The unweighted and weighted response rates for the RBS were 54.0 and 58.8 percent, respectively. For the SWS, the unweighted and weighted response rates were 38.1 and 41.3 percent, respectively.<sup>18</sup>

## 2. Nonresponse Bias

Because the weighted response rates were less than 80 percent for both samples, we conducted a nonresponse bias analysis at the end of data collection. We examined all 7,947 selected sample cases in the RBS and all 13,271 selected sample cases in the SWS to determine if there were systematic differences between respondents and nonrespondents for a variety of covariates.<sup>19</sup> Our analysis revealed differences between respondents and nonrespondents for some variables, but the nonresponse adjustments to the weights appear to have eliminated all such differences in both samples.

There were other potential sources of bias for some small populations representing county-level economic indicators, but this was unrelated to nonresponse. In these cases, the weighted estimates of the small populations differed from those in the frame because we did not control for those populations when we created the initial sampling weights. This was because the variables representing these populations (1) were not considered important enough to be used in post-stratification, relative to the variables we used for this adjustment, and (2) were not included as covariates in the final nonresponse models, generally because the samples were too small. We therefore could not reconcile these differences when adjusting these weights for nonresponse or when post-stratifying them to marginal population totals.

The full nonresponse bias analysis can be obtained from SSA ([https://www.ssa.gov/disabilityresearch/nbs\\_round\\_6.html](https://www.ssa.gov/disabilityresearch/nbs_round_6.html)).

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<sup>18</sup> Using information from the updated frame from November 2020, the updated weighted SWS response rate was 40.8 percent. This reduction of 0.5 percent was due to the fact that a large percentage of the 725 sampled cases who were not successful workers were found to be ineligible at data collection. Removing these sample cases had a negative effect on the weighted response rate.

<sup>19</sup> The nonresponse bias analysis was conducted on all 13,271 sample cases. However, in the updated extraction from November 2020, 725 sampled cases did not meet the criteria for successful work. In the final post-stratification, the weights for these cases were set to zero.

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## II. DESCRIPTION OF THE NBS–GENERAL WAVES INSTRUMENT

The NBS collects data on a wide range of topics—including, employment, disability, experience with SSA programs, employment services used in the past year, health and functional status, health insurance, income and other assistance, and sociodemographic information. Under a separate contract, Westat developed and initially pre-tested the survey items. Mathematica subsequently made revisions to the survey items to prepare the instrument for CATI/CAPI programming and made minor wording changes in response to pre-testing results. For Round 6, we added new questions to the instrument to capture employment within the last six months, benefit suspense, and additional details about employment and health experiences. In addition, we removed some questions regarding current jobs and employment-related services used, and revised a few questions in order to accommodate changes in reference periods and changes in federal programs. The revised survey instrument was pretested to confirm the order, flow, and clarity of the revisions; it is available from SSA ([https://www.ssa.gov/disabilityresearch/nbs\\_round\\_6.html](https://www.ssa.gov/disabilityresearch/nbs_round_6.html)).

To promote responses among Hispanic populations, Mathematica translated the questionnaire into Spanish. Certified bilingual interviewers administered the Spanish interviews. If a Spanish speaker was more familiar with a word or term in English than in Spanish, we provided the term in both languages—allowing interviewers to reinforce the question by using the second language as a probe, if necessary.<sup>20</sup> We treated measurements in a similar way. Questions that mentioned a particular weight also mentioned the kilogram equivalent.<sup>21</sup> We did not conduct interviews in languages other than English and Spanish unless someone in the home, such as an adult child or other family member, could interpret the questions for the sample member.<sup>22</sup>

### A. Summary of Modules

The questionnaire is divided into 13 sections, labeled A through M:<sup>23</sup>

- Section A—Introduction and Screener
- Section B—Disability and Current Work Status
- Section C—Current Employment

<sup>20</sup> For example, on Item K11: Did {you/NAME} receive any food stamps last month? Spanish: Recibió {usted/NAME} food stamps o cupones de alimentos el mes pasado?

<sup>21</sup> For example, on Item I35: {Do you/Does NAME} have any difficulty lifting and carrying something as heavy as 10 pounds, such as a full bag of groceries? Spanish: Tiene {usted/NAME} cualquier dificultad en levantar y cargar algo que pesa hasta unas 10 libras {5 kilos}, tal como una bolsa llena con compras del mercado?

<sup>22</sup> We considered using an interpreter service to help contact and interview sample members who did not speak English or Spanish, and who had no one in the household who could interpret the questions for them. However, we decided not to use an interpreter service as we did not have a sufficient number of cases in any one language that made it a cost-effective option.

<sup>23</sup> Sections F and H were deleted from the Round 5 of the NBS–General Waves survey, as they were focused on the TTW program.

- Section C\_B—Employment in Past 6 Months
- Section D—Jobs/Other Jobs During 2016
- Section SC—Benefit Suspense
- Section E—Awareness of SSA Work Incentive Programs
- Section G—Employment-Related Services and Supports Used in 2016
- Section I—Health and Functional Status
- Section J—Health Insurance
- Section K—Income and Other Assistance
- Section L—Sociodemographic Information
- Section M—Closing Information and Observations

Descriptions of each section follow.

### 1. Section A—Introduction and Screener

This section confirms that the interviewer has contacted the correct sample person and verifies that the sample person is still eligible for the survey. Ineligible respondents are deceased, incarcerated, not living in the continental United States, are active duty military, or have not received any SSA disability benefits in the last five years.<sup>24</sup> Additionally, SWS respondents who are not currently working and did not work in the last six months are ineligible for the survey. The screener allows interviewers to do the following:

- **Identify any barriers to participation** and, if needed, identify a proxy respondent. The sample member is offered every opportunity to complete the interview himself or herself; a proxy responds only if necessary.
- **Identify the need for an interpreter** for a respondent who speaks a language other than English or Spanish.
- **Administer a cognitive assessment** to ensure that the respondent is capable of completing a complex survey. This assessment includes elements of informed consent for participation, as it provides respondents with an overview of the survey and informs them of the voluntary nature of the interview.

We present three statements in the screener: (1) a brief description of what it means that the survey is confidential, (2) what it means that the survey is voluntary, and (3) an overview of the study topics. Then we ask respondents to reiterate the concepts in their own words. If a respondent cannot restate a concept, the question is read a second time. If the respondent still cannot restate a concept, we ask if someone else (such as a friend, parent, caseworker, or payee) can answer questions about the respondent's health, daily activities, and jobs. We then pursue an interview with the proxy respondent, if available. Proxy respondents are administered the same

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<sup>24</sup>The screening of respondents who had not received any SSA benefits in the last five years occurs in Section B of the instrument.



cognitive assessment to ensure that they are capable of completing the complex survey on the sample member's behalf and also understand the voluntary nature of the survey. To minimize bias in reporting, we do not ask the proxy respondent to provide subjective assessments on behalf of the sample person with respect to, for example, satisfaction with jobs or programs. The constructed variable C\_Rtype indicates whether the sample person or a proxy completed most of the interview.

## **2. Section B—Disability and Current Work Status**

This section collects information on the beneficiary's limiting physical or mental conditions and current employment status. We ask about the disability status of the beneficiary by identifying the health condition or conditions that affect the beneficiary's work or daily activities and the age at which the condition first began limiting the beneficiary's activities. Then, we ask questions about the beneficiary's current work status. If a beneficiary is not currently employed, we explore the reasons for not working. If a respondent reports that they have not received SSA disability benefits in the last five years, they are determined to be ineligible for the survey. If an SWS respondent reports that they are not currently working and have not worked in the last 6 months, they are ineligible for the survey. We also ask questions to determine the job characteristics that are important to beneficiaries and collect information about work-related goals and expectations.

## **3. Section C—Current Employment**

In this section, we collect detailed information about the beneficiary's current job. We ask beneficiaries for information about their job, such as job title, the type of work performed, type of employer, hours worked, benefits offered, and wages earned. These questions are asked for each job that the beneficiary currently holds. We also ask questions about the beneficiary's primary job (if they have more than one job), including questions about work-related accommodations—those received as well as those needed but not received. We ask additional questions to determine if the beneficiary's employer made changes to the workplaces to help the beneficiary work. We also solicit information about job satisfaction.

## **4. Section C\_B—Employment in Past 6 Months**

Questions in this section collect information about employment in the last 6 months, if the respondent is not currently working. We ask beneficiaries for information about all of the jobs they have worked in the last 6 months, including the type of employer; hours worked; wages earned; and the reasons for leaving employment, if applicable. We also ask whether beneficiaries worked or earned less than they could have (and, if so, why) and collect information about their experiences with adjustments to social security benefits due to work.

## **5. Section D—Jobs/Other Jobs During 2016**

Questions in this section collect information about employment during the 2016 calendar year, excluding jobs noted in Section C or Section C\_B. For example, we ask beneficiaries questions about the type of employer; hours worked; wages earned; and the reasons for leaving employment, if applicable. In other questions, we ask whether beneficiaries worked or earned less than they could have (and, if so, why) and collect information about their experiences with adjustments to social security benefits due to work.

## 6. Section SC—Benefit Suspense

This section is asked only of beneficiaries who are currently employed, or who have been employed within the last six months or in 2016. It asks beneficiaries how their work experiences have affected their social security disability benefits. Questions in this section differentiate between three types of beneficiaries: 1) beneficiaries who have **not** received a suspension of benefits because of employment in the past year, 2) beneficiaries who are no longer receiving social security benefits due to recent employment, and 3) beneficiaries who received a suspension of social security benefits because of employment in the past year, but are now receiving benefits again. If beneficiaries are currently experiencing a suspension of benefits, or did so in the last year, we ask them for more information about the factors that affected their benefit receipt, specifically factors related to health, employment, and personal circumstances.

## 7. Section E—Awareness of SSA Work Incentive Programs

In this section, we ask questions to assess whether the beneficiary is aware of or is participating in SSA work incentive programs and services.

## 8. Section G—Employment-Related Services and Supports Used in 2016

Questions in this section ask beneficiaries about their use of employment-related services and supports in calendar year 2016, including employment, job training, medical, therapy or counseling, and educational services. We also ask sample members about their reasons for, and satisfaction with, services and the nature of any services needed but not received.

## 9. Section I—Health and Functional Status

In this section, we ask about the beneficiary's health status and daily functioning, including the need for special equipment or assistive devices. We ask for information about general health status (via the SF-8™ scale), unmet health needs, informal supports, difficulties with activities of daily living (ADLs) and instrumental activities of daily living (IADLs), functional limitations, substance abuse or dependence, and treatment for mental health conditions.<sup>25</sup>

## 10. Section J—Health Insurance

Questions in this section collect information about the beneficiary's sources of health insurance, both at the time of interview and during calendar year 2016.

## 11. Section K—Income and Other Assistance

In this section, we ask about sources of income, including income received from earnings, social security, workers' compensation, and other government programs and sources.

## 12. Section L—Sociodemographic Information

This section collects basic demographic information about the beneficiary, such as race, ethnicity, education, parental education, height and weight, marital status, living arrangements, and household income.

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<sup>25</sup> SF-8™ is a trademark of QualityMetric, Inc.

### 13. Section M—Closing Information and Observations

In this section, we collect address information for the sample person so that the \$30 incentive check may be mailed. The interviewer also records the reasons that a proxy or other assistance was required, if appropriate, and documents special circumstances.

#### B. Instrument Pathing and Preloaded Data

CATI and CAPI respondents received the same questionnaire. Round 6 of the NBS–General Waves required 67 minutes to administer on average. The interview length ranged from 29 minutes to 207 minutes, excluding TRS interviews.

Interviewers asked all respondents questions from Sections A, B, E, G, I, J, K, L, and M. Only respondents who reported that they were currently working answered the questions in Section C. Similarly, only respondents who reported working in the last 6 months received Section C\_B, and only respondents who reported working in 2016 answered the questions in Section D. Respondents who reported working currently, in the last 6 months, or in 2016, received Section SC. Table II.1 provides a summary description of the main questionnaire pathing.

**Table II.1. NBS–General Waves Instrument Sections**

Section	Title of Section	Respondents Receiving the Section
A	Introduction and Screener	All respondents
B	Disability and Current Work Status	All respondents
C	Current Employment	Respondents who are currently working (B24 = YES) Question B24: Are you currently working at a job or business for pay or profit?
C_B	Employment in the Last 6 Months	Respondents who are not currently working, but who worked in the last 6 months (B24 = NO and B24b = YES) Question B24b: Did you work for pay or profit at any time during the last 6 months?
D	Jobs/Other Jobs During 2016	Respondents who worked in 2016 (B30 = YES) Question B30: Did you work at a job or business for pay or profit any time in 2016?
SC	Benefit Suspense	Respondents who are currently working, have worked in the past 6 months, or worked in 2016 (B24 = YES or B24b = YES or B30 = YES)
E	Awareness of SSA Work Incentive Programs	All respondents
G	Employment-Related Services and Supports Used in 2016	All respondents
I	Health and Functional Status	All respondents
J	Health Insurance	All respondents
K	Income and Other Assistance	All respondents

Section	Title of Section	Respondents Receiving the Section
L	Sociodemographic Information	All respondents
M	Closing Information and Observations	All respondents

Source: NBS Round 6.

The NBS–General Waves instrument, which Mathematica programmed in Blaise, is complex and involves several integrated skips within and across sections. The use of preloaded SSA administrative data and allowances for proxy participation introduce further complexities into the questionnaire pathing. Preloaded data on respondents’ disability benefits status (SSI, SSDI, or both) and age at which respondents first received SSI benefits determine pathing for certain survey items. Other administrative variables serve as fills for particular items to provide respondents with names of local programs or to prompt recognition of program participation. Table II.2 provides a list and description of the preloaded variables.

**Table II.2. Survey Preloads**

Variable	Definition	Purpose
Bstatus	SSA benefit type (SSI only, SSDI only, or SSI and SSDI) received by sample member	Used to determine pathing for awareness of SSA work incentive items. Only respondents who received SSDI benefits were asked Items E3 through E12. Only respondents who received SSI were asked Items E15 and E17.
DOB	Sample member date of birth	Reported date of birth (or age) matched with administrative data to verify that the correct person was contacted in the screener portion of the survey.
SSlage	Age at which sample member first received SSI benefits	Used to determine pathing at Item E12. Only respondents who received SSI before age 22 (and were 25-years-old or younger) were asked this item.
StateMed	State name for Medicaid, based on state of residence reported at time of survey	Used at Item J2 to identify, by name, the Medicaid program in the respondent’s state.
VRname	State name for State Vocational Rehabilitation Agency, based on state of residence reported at time of survey	Used at Items B29 and to identify, by name, the State Vocational Rehabilitation Agency in the respondent’s state.
SampGrp	Sample group (RBS or SWS)	Used to screen SWS respondents who have not worked within the last six months (A73b and B24c) and to collect information on future moves for SWS respondents (M2c).

Source: NBS Round 6.

Given that proxies are needed when the sample member’s disability precludes participation, we programmed the instrument to fill in the proper pronoun or name in the question text after the interviewer indicated that the survey respondent would be either a sample member or a proxy. In addition, the instrument was programmed to skip attitudinal and opinion items for proxy respondents to minimize bias in reporting. (See Table II.3 for a complete list of items not asked of proxy respondents.) As mentioned previously, interviewers completed 1,500 proxy interviews.

**Table II.3. Items Skipped for Proxy Respondents**

Survey Item	Question Text
B29_3a	You said that one of the reasons you did not accept a job you were offered was because it did not pay enough. What is the lowest wage or salary you would have accepted for this job?
B29_3b	If you did get a job offer that matched your current needs and abilities, what is the lowest wage or salary you would be willing to accept for such a job?
B29_8a	You said that one of the reasons you are unable to find a job is that the jobs that are available do not pay enough. What is the lowest wage or salary you would accept for a job that matched your current needs and abilities?
B29_8b	If you did get a job offer that matched your needs and abilities, what is the lowest wage or salary you would be willing to accept for such a job?
B29_8c	How many hours per week would you expect to work for this amount of pay?
B29_8d	Would you expect to work full-time or part-time?
B29_12a	If you did get a job offer that matched your current needs and abilities, what is the lowest wage or salary you would be willing to accept for such a job?
B29_12b	How many hours per week would you expect to work for this amount of pay?
B29_12c	Would you expect to work full-time or part-time?
C18	Taking all things into account, how satisfied are you with your {main/current} job? Would you say very satisfied, somewhat satisfied, not very satisfied, or not at all satisfied?
C39a – C39h	Again, thinking about your {main/current} job, how much do you agree with each of the following statements? Would you say you strongly agree, agree, disagree, or strongly disagree?
C39a	You had a chance to develop your abilities.
C39b	You had recognition or respect from others.
C39c	You could work on your own in your job if you wanted to.
C39d	You could work with others in a group or team if you wanted to.
C39e	Your work was interesting or enjoyable.
C39f	Your work gave you a feeling of accomplishment or contribution.
C39g	Your supervisor was supportive.
C39h	Your co-workers were friendly and supportive.
C_B18	Taking all things into account, how satisfied are you with your {main/current} job? Would you say very satisfied, somewhat satisfied, not very satisfied, or not at all satisfied?
C_B39a – C_B39h	Again, thinking about the {main} job {you/NAME} had within the past six months, how much do you agree or disagree with each of the following statements? Would you say you strongly agree, agree, disagree, or strongly disagree?
C39a	You had a chance to develop your abilities.
C39b	You had recognition or respect from others.
C39c	You could work on your own in your job if you wanted to.
C39d	You could work with others in a group or team if you wanted to.
C39e	Your work was interesting or enjoyable.
C39f	Your work gave you a feeling of accomplishment or contribution.
C39g	Your supervisor was supportive.
C39h	Your co-workers were friendly and supportive.

Source: NBS Round 6.

During the study introduction, we informed respondents that we could stop the interview and resume it at a later date and/or time if they began to tire or otherwise felt that they could not continue with the interview. We also trained interviewers to periodically ask respondents about their level of fatigue during the course of the interview. If an interviewer sensed that a respondent was tiring, they asked the respondent if it was okay to continue with the interview or if they needed to complete it in another call. In Round 6, 2,676 sample members (1,006 from the RBS and 1,670 from the SWS), or about 13 percent of the total sample, broke off the interview after they had completed the cognitive screener. Of these cases, we completed 1,808 interviews (709 from the RBS and 1,099 from the SWS), or about 68 percent of the total number of “break off” cases.

### C. Changes Made to Survey Instrument in Round 6

Mathematica modified the survey instrument prior to administration in Round 6. In Section 1 below, we describe the questions that we added to the Round 6 instrument. These items pertain to disability and work, job characteristics, sources of information about work and benefits, health and functional status, income, veteran status, items to screen for recent benefit suspension, and items to facilitate the tracking of longitudinal SWS members for Round 7. In Section 2, we note the questions from the Round 5 instrument that were not included in the NBS Round 6 survey instrument. In Section 3, we discuss the modifications that we made to some of the questions from Round 5. A detailed description of the changes between the Round 5 and the Round 6 questionnaire is included in Appendix A.

#### 1. New Questions Applicable to All Sample Members

As described in the NBS Final Design Report (Livermore et al., 2015), we added several questions in order to better understand (1) the factors that appear to be the most important in determining the likelihood and success of beneficiary work efforts and (2) why work attempts succeed or fail. Table II.4 summarizes the new questions that we added to the Round 6 instrument.

**Table II.4. New Questions in Round 6**

Question Number	Topic Addressed
<b>Screener (Section A)</b>	
A73a, A73b	Work in the previous six months
<b>Disability and Work Status (Section B)</b>	
BP1, BP1b, BP1b_other	Respondent ability to perform the same job he or she performed before starting to receive disability benefits
B24b	Work in the previous six months
BP3, BP3_Other	Reasons why health limits work
BP4a1, BP4a1_1, BP4a1_oth, BP4a2, BP3a2_1, BP4a2_oth, BP4a3, BP3a3_1, BP4a3_oth BP4b1, BP4b1_1, BP4b1_oth, BP4b2, BP4b2_1, BP4b2_oth, BP4b3, BP4b3_1, BP4b3_oth	Reasons beneficiaries do not believe they will work or leave benefits

Question Number	Topic Addressed
<b>Job Characteristics (Section C, Section C_B, and Section D)</b>	
<i>Main current job (Section C)</i>	
C1a, C1a_oth	Motivation for working
CP2, CP2_Oth, CP2a, CP2b, CP2_Other	How respondents found current job
CP3, CP3k.1, CP3k.1_oth, CP3l, CP3lm_oth, CP4, CP5, CP5_oth, CP6, CP6_oth, CP12, CP12a, CP12a_other	Formal and informal supports used to keep the current job and job features that facilitate employment
CP7, CP7a, CP7a_other	Disability disclosure
CP8	Comfort discussing disability with others at work
CP10	Other people with disabilities employed at job
CP13a, CP13.a1, CP13.a1_oth, CP13.b1, CP13.b1_Oth, CP13.c1, CP13.c1_Oth, CP14, CP14_oth	Challenges in current job and how they were addressed
CP16, CP16a	Work activity affected by an overpayment
<i>Jobs held in the previous six months (Section C_B)</i>	
Section C_B	Information about the main job held during the previous six months among all sample members not employed at interview but who indicate they worked in the previous six months. Follows the layout of Section C.
<i>Jobs held in the previous calendar year (Section D)</i>	
DP1a, DP1a_1, DP1a_1_oth, DP1b, D1b_1, DP1b_1_oth, DP1c, DP1c_1, DP1c_1_oth, DP2, DP2a_other	Reasons for leaving jobs
DP3, DP3a	Work activity affected by an overpayment
<b>Benefit Suspense (Section SC)</b>	
SC1a, SC1, SC2, SC3	Screen for resent benefit suspense
SA7, SA8	Questions applicable for all reporting a recent suspense
SS2, SS2a_1, SS2b_1, SS2c_1, SS3, SS3a	Questions applicable to those in suspense at interview
SB1, SB1a_1, SB1b_1, SB1c_1, SB2, SB2a_other, SB3, SB3a, SB3a_oth, SB4, SB4a, SB4b	Questions applicable to those back on benefits at interview
<b>Sources of Information About Work and Benefits and Knowledge of SSA Work Supports (Section E)</b>	
EP1, EP1a, EP1b, EP1d, B23_3, B23_2	Where beneficiaries obtain information
E15a, EP3	Knowledge of substantial gainful activity (SGA)
<b>Health and Functioning (Section I)</b>	
IP1	Episodic poor health
IP2	Unmet health care needs
IP5	Number of "bed days," or days where illness or disability results in a person having to be confined to bed
IP7, IP8a, IP8b, IP8c, IP8d	Informal supports
IP9, IP9.a, IP10	Transportation

Question Number	Topic Addressed
<b>Income (Section K)</b>	
KP1	Perception of financial situation
KP2	Savings to weather health- or employment related crises
<b>Veteran Status (Section L)</b>	
LP23	Veteran status
<b>Longitudinal Locating (Section L)</b>	
L21b, M2c	Home ownership and intention to relocate

## 2. Questions Deleted

Mathematica removed a number of questions previously administered in the Round 5 NBS instrument because the focus on the topic was no longer warranted (for example, questions that were originally intended for purposes of the Ticket to Work (TTW) evaluation) or because the question provided limited analytic value. Table II.5 lists the Round 5 questions that we did not include in the Round 6 NBS instrument.

**Table II.5. Round 5 Questions Not Included in Round 6**

Question Number	Topic Addressed
<b>People with whom Respondents Discuss Work Goals (Section B)</b>	
B41, B42, B42_oth, B43, B44, B45, B45_oth, B46	These questions collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. They were removed due to limited analytic value and high burden. Earlier questions were revised to focus on the <i>main</i> individual with whom the respondent discusses work goals.
<b>Characteristics of Main/Current Job (Section C)</b>	
C39_a, C39_b, C39_k, C39_u, C39_m	Several questions from the C39 grid were removed. These questions ask specific details about the sample member's main/current job.
<b>Service Use Questions (Section G)</b>	
G37 – G39	Questions G37 through G39 attempted to ascertain service use intensity for every provider identified by respondents as having been used during the previous calendar year.
G40 and G40_1	Questions G40 and G40_1 collected information about the usefulness of services sample members received from each service provided identified, and if not useful, the reasons why.
G54 – G57	Questions G54 through G57 solicit information about whether, who, and how respondents were pressured to use any of the services they received during the previous calendar year.

## 3. Other Modifications to the Round 6 Survey Instrument

Mathematica made several minor modifications to the Round 5 NBS instrument for administration in Round 6 of the NBS, including (1) changing reference periods from 2014 to 2016, (2) updating items to reflect changes in SSA programs or policies, and (3) improving question wording and adding response categories.



**Changes to the Reference Period.** The NBS Round 6 was administered in 2017. As a result, we updated year references for questions and response categories. For example, in Section D (Jobs/Other Jobs in 2016), we changed the reference year from 2014 to 2016. Similarly, in Section G (Employment-Related Services and Supports in 2016), we changed the reference year from 2014 to 2016. Further, on items asking about the year in which services were last received, we changed the response options from “in 2015” or “before 2015” to “in 2016,” or “before 2016,” respectively.

The change in the reference period also necessitated changes to the upper bound of soft and hard edit checks for certain numeric items. For example, in Section C (Current Employment), we changed the upper bound for the year in which the respondent started his or her current job from 2015 to 2017 because Round 6 was fielded in that year.

**Changes to Reflect Changes in SSA Programs or Policies.** In some instances, we updated items to reflect the 2017 dollar amounts for some SSA work support provisions (e.g., trial work period).

**Changes to Question Wording and Response Categories.** For a few items, we revised the question wording slightly or added a response category. These changes were based on (1) survey best practice and (2) technological changes since the inception of NBS. With regard to survey best practice, for items with a 4-point Likert scale from strongly agree to strongly disagree, we included both ends of the continuum in the question itself. For example, on item B47, rather than asking respondents “Please tell me how much you agree with the following statements,” we now ask “Please tell me how much you agree or disagree with the following statements.” This change more readily informs the respondent that the question is eliciting either an affirmative (agree) or negative (disagree) response.

Technology advancements since the first round of the NBS necessitated question wording changes for a few items. For example, item B23\_2 had asked respondents about using a computer to access the internet. Because laptops, tablets, and smartphones are now commonplace, Item B23\_2 now includes a probe that indicates that internet access could be by a computer, smartphone, tablet, or some other means. Similar changes were made at B23\_3, an item that asks about using a computer to access information; now, the respondent is asked if he/she uses the internet to access information.

**Modifications to Section G.** Section G collects information from respondents about their services and their service providers. It collects information about five different types of services – employment, job training, medical, therapy/counseling, and education. In Round 5, for each service, the respondent was asked to identify the name of the service provider and to characterize the type of provider. Questions about service intensity were removed (G37 through G39 for each provider) from this section. We also streamlined this section by making the following changes:

- We decided to focus only on services received during the previous calendar year. For each of the five service types (employment services, training, medical services, therapy or counseling, school or classes), we ask whether specific services that fall under the broad headings (previously asked about at item G36) were received in 2016.

- Rather than enumerating the specific providers from which sample members received services, we ask collectively the types of providers services were received from in a check-all-that-apply format. For example, “What kind of [place / places] did you go to receive employment services?” Interviewer: check all that apply.

**Pretest of the Instrument Changes.** In order to test the order, flow, and clarity of the questionnaire, as well as the timing of new items, we conducted a pretest in early 2016. Thirty-six pretest interviews were completed in both English and Spanish. The pretest sample included benefit suspense status in order to test the new questions focused on the SWS sample. The pretest was conducted by eight telephone interviewers using a paper and pencil instrument. We evaluated and revised the instrument based on feedback from both interviewers and the respondents (including proxies and self-reporting respondents), regarding comprehension, clarity, questionnaire flow, and skip logic. Overall, the results of the pretest suggested that the new questions performed well, and that we needed to make only a few minor changes to the instrument.

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### III. ROUND 6 DATA PROCESSING

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#### A. Coding of Open-Ended and Verbatim Responses

The NBS questionnaire includes several questions designed to elicit open-ended responses. To make it easier to analyze the data connected with these responses, we grouped the responses and assigned them numeric codes when possible. The methodology used to code each variable depended upon the variable's content. Three types of questions did not have designated response categories; rather, responses to these questions were recorded verbatim:

1. **Open-ended questions** have no response options specified. For example, Item G61 asks, "Why {were you/was NAME} unable to get these services?" For such items, interviewers recorded the verbatim response. Using common responses, we developed categories and reviewed them with analysts. Coders then attempted to code the verbatim response into an established category. If the response did not fit into one of the categories, coders coded it as "other."
2. **Other/specify** is a response option for questions with a finite number of possible answers that may not necessarily capture all possible responses. For example, Item B29 asks, "Did you do anything else to look for work in the last four weeks that I didn't mention?" For such questions, respondents are asked to specify an answer to the question "anything else?" or "anyone else?"
3. **Field-coded responses** are answers coded by interviewers into a predefined response category without reading the categories aloud to the respondent. If none of the response options seems to apply, interviewers select an "other/specify" category and type in the response. For example, Item G53 asks "Thinking only about the services {you/NAME} used in 2016, what are the main reasons {you/he/she} decided to use these services?" Interviewers then coded the verbatim response into seven established categories. If the response did not fit into one of the categories, interviewers selected "other."

As part of data processing and based on an initial review of data, we examined verbatim responses in an attempt to uncover dominant themes for each question. We developed a list of categories and decision rules for coding verbatim responses to open-ended items. We also added supplemental response categories to some field-coded or "other/specify" items in order to facilitate coding if a sufficient number of such responses could not be back-coded into pre-existing categories. In Chapter IV, we indicate which items in each instrument section required coding and list all additional response categories created during coding. Thus, we categorized verbatim responses for quantitative analyses by coding responses that clustered together (for open-ended and "other/specify" responses) or by back-coding responses into existing response options if appropriate (for field-coded and "other/specify" items). We applied categories developed during prior rounds of the NBS. In some cases, we added to the questionnaire categories developed in earlier rounds in order to minimize back-coding.

If the need for changes to the coding scheme became apparent during coding (for example, the addition of categories or clarification of coding decisions), we discussed and documented new decision rules. Coders used the Ascribe coding software to apply codes to verbatim responses. The Ascribe program allowed coders to sort and filter verbatim responses in several

ways to facilitate the coding effort. We sorted verbatim responses alphabetically by item for coders. Records could also be filtered to show responses that had been reviewed by a supervisor, or to show cases with comments for a coder. When it was impossible to code a response, when a response was invalid, or when a response could not be coded into a given category, we assigned a two-digit supplemental code to the response (Table III.1). The data files do not include the verbatim responses, although we note in Chapter IV which items in each instrument section required coding and list any additional response categories created during coding.

**Table III.1. Supplemental Codes for “Other/Specify” Coding**

Code	Label	Description
94	Invalid Response	Indicates that response should not be counted as an “other” response and should be deleted.
95	Refused	Used only if verbatim response indicates that respondent refused to answer question.
96	Duplicate Response	Indicates that verbatim response has already been selected in a “code all that apply” item.
98	Don't Know	Used only if verbatim response indicates that respondent does not know answer.
99	Not Codeable	Indicates that a code may not be assigned based on verbatim response.

Source: NBS Round 6.

## B. Data Cleaning

Once we incorporated coded data into a preliminary data file, we conducted a systematic review of the frequency counts of the individual questionnaire items. We reviewed the counts by each questionnaire path to identify possible errors in skip patterns.

The CATI software sets data entry ranges to limit the entry of improbable responses. However, the ranges intentionally encompass a wide spectrum of values to permit the interview to continue in most instances. Several consistency checks embedded throughout the NBS instrument also flag potential problems during the interview. To minimize respondent burden, however, interviewers are able to suppress all consistency checks encountered during the interview. Interviewers are trained to probe and reconcile such inconsistencies before moving to the next question, but this is not always possible as it may be too time consuming to resolve the inconsistencies with the respondent. We reviewed the data for these potential inconsistencies, such as duplicate conditions listed under the main limiting condition at B2, jobs ending prior to the start date, take home job pay that is greater than gross pay, or very high or very low hours per week on the job. Many of these same consistency and range checks were used in prior rounds of NBS data processing. We reviewed the output of flagged cases and set data to “don't know” (.D) if an error likely occurred. As in earlier rounds, we took the general approach of editing only those cases with an obvious data entry or respondent error. As a result, although substantial time went into meticulously reviewing individual responses, some suspect values remain in the file.

During data processing, we created several constructed variables to combine data across items. For these items, we reviewed the specifications and all data values for the constructed variables based on composite variable responses and frequencies. Many of these constructed variables are the same as in prior rounds of the NBS.

For open-ended items assigned numeric codes, we examined frequencies to ensure the assignment of valid values.

### **C. Identification of Data Problems**

The data problems we identified during the course of checking the data file may be characterized as either measurement error or processing error. Measurement error is the difference between the observed value of a variable and the true, but unobserved, value of that variable. Sources of measurement error may include the questionnaire itself (including, design, format, and content); data collection mode; the interviewer; and the respondent. As discussed below, the questionnaire, interviewer, and respondent likely all contributed to data problems identified in the NBS. Processing errors discussed in this report consist of incorrect specification or implementation of a complicated skip pattern or edit. We discuss programming errors that resulted in incorrect skip patterns throughout the NBS–General Waves and focus on measurement errors and processing errors at the individual-item level.

The identification of data problems in the NBS–General Waves file occurred at several points during the data cleaning and data preparation processes. Specifically, errors may have surfaced during the systematic review of frequency counts of individual questionnaire items or during the identification of cases flagged by the inconsistency and range checks. Other problems surfaced during development of the constructed variables and implementation of the imputation procedures. In Chapter IV, we describe the results of the review by instrument section.

Table III.2 summarizes the problems we encountered when we cleaned the data along with our plans to adjust data cleaning, coding, imputation, or interviewing procedures in Round 7. These problems are described in further detail in Chapter IV.

**Table III.2. Main Problems Encountered**

Item	Description of Problem	Plans to Correct in Round 7
A68, A68a, A68b (Self-reported date of birth)	In 675 cases, the responses to A68, A68a, and A68b are missing in the output. From reviewing our internal audit trails, we can tell respondents provided answers to these questions (and passed the identity verification); however the data are missing.	We will: 1) correct the programming error that resulted in this missing data, 2) develop testing scenarios focused on this item prior to the start of data collection, and 3) conduct periodic data reviews for this item during the Round 7 data collection effort to ensure the error has been fixed.
Cognitive screener	In 675 cases, the data for the cognitive screener items—either at A74 or at A86—are missing in the output. From reviewing our internal audit trails, we can tell respondents provided answers to these questions (and passed the cognitive screener); however, the data are missing.	We will: 1) correct the programming error that resulted in this missing data, 2) develop testing scenarios focused on this item prior to the start of data collection, and 3) conduct periodic data reviews for this item during the Round 7 data collection effort to ensure the error has been fixed.
IP8 series (Frequency of contact with relatives/friends, interaction with community)	This field was programmed to accept up to 3 numerical digits, rather than the suggested 2 numerical digits. There are 84 cases in which a respondent reported a value with 3 digits. We left all responses as reported for this question, even if they reported values that do not seem logical.	We will restrict this field to 2 numerical digits during the Round 7 data collection.
G7 (Provider of employment services)	G7 should have been asked when G2_e = 1 (only received employment services from an “other” support service) but was skipped. G7 was set to .M for these cases (112 cases).	We will correct the programming error that resulted in this missing data.
L10 (live with partner)	An instrument programming error caused all respondents who answered “3” (divorced) at L8 (marital status) to skip L10. L10 was set to .M for these cases (1,261 cases).	We have revised the Round 7 programming specifications to correct this error. We will 1) develop testing scenarios focused on this item prior to the start of data collection and 2) conduct periodic data reviews for this item during the Round 7 data collection effort to ensure the error has been fixed.

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## IV. SECTION-BY-SECTION DESCRIPTION OF FINDINGS

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### A. Section A—Introduction and Screener

We designed the NBS screener to identify and gain the cooperation of the respondent in addition to verifying that the sample person was still eligible for the survey. We also determined if the sample member was capable of completing the interview and if the sample member required special accommodations, such as TRS or an in-person interview.

#### 1. Date of Birth

We used sample member name and date of birth from SSA records to verify that the correct person had been contacted. If two of the three date of birth elements provided by SSA matched self-reported information (for example, month and year), we continued the interview. If none or only one of the elements matched, we terminated the interview and the case was sent to locating. If the respondent could not provide date of birth, we requested the age of the sample member. If the age fell within two years (plus or minus) of the age in the SSA records, we continued the interview.

Of the successfully screened respondents, date of birth provided by SSA differed from the self-reported date of birth by one field (day, month, or year) in 333 cases. For 143 cases, the discrepancy was in the day of birth but the month and year matched what was provided by SSA. For 82 cases, the month of birth was different but the day and year matched. We did not edit these discrepancies and they remain in the file. The remaining 108 cases had a discrepancy in the year of birth, compared to SSA records. Of the 108 cases in which year of birth did not match:

- 17 cases differed by one year, and 20 cases differed by two to nine years. We did not edit these discrepancies and they remain in the file.
- 71 cases differed by 10 or more years. For these cases, we set the year of birth as equal to the year of birth from SSA records because the discrepancy appeared to be the result of a data entry error.

In addition, for cases in which age was provided in lieu of date of birth (20 cases), we used date of birth from SSA records to populate the self-reported date of birth (Items A68, A68a, and A68b). As previously noted, self-reported date of birth information is missing for about 8 percent of cases (675 cases) due to an instrument programming error. For these cases, we used date of birth from SSA records to populate the items on self-reported date of birth (Items A68, A68a, and A68b).

#### 2. Discrepancies in Respondent Type

We used three screener items to determine if the sample member was cognitively able to participate in the survey. The items addressed important elements of informed consent—the study topics, the voluntary nature of participation, and confidentiality. If the sample member did not pass any of the three items (within two attempts), the interviewer sought a proxy respondent. For the proxy to complete the survey on the sample member's behalf, the proxy also had to pass the cognitive screener. In addition, interviewers could complete the interview with a proxy if a

knowledgeable informant indicated that the sample person would not be able to participate even with an accommodation or if it became clear during the course of the interview that the sample person was not capable of responding. Whenever possible, we preferred the beneficiary to participate instead of a proxy because sample members generally provide more complete and more accurate information than proxy respondents.

At the end of Section A, before the interview begins, the interviewer had to indicate whether the survey respondent was a sample member or a proxy. This determines which questions the respondent receives during the interview, as some questions are asked only of sample members and not asked of proxies. At the end of the interview (in Section M), the interviewer records whether the sample member or proxy completed the majority of the survey. For a small number of cases, there was a switch in respondents after the cognitive screener. We were not surprised by a switch in respondents and expected that some sample members would pass the cognitive screener but then be unable to recall or report information for the vast number of survey questions. We considered the data collected by the interviewer at the end of the survey as the most accurate data for purposes of creating the constructed variable C\_Rtype (respondent type). That is, if the sample member began the interview but the interviewer indicated that the proxy completed most of it, we recoded respondent type to proxy.

In terms of the survey questions, we asked perception and attitudinal questions only of sample members. These questions focused on overall job satisfaction and satisfaction with various work characteristics, awareness of SSA programs, and satisfaction with state vocational rehabilitation services. We skipped specific questions (see Table II.3) for proxy respondents. In some cases, the sample member answered some sample member-only items before a proxy stepped in and completed the rest of the survey. In these cases, we recoded respondent type to proxy. For those items that were skipped by proxies but should have been answered, we set the data to missing (.M). For items that were asked of proxies that should not have been asked, we set the data to logical skip (.L).

## **B. Section B—Disability and Current Work Status**

In Section B, we asked about the sample member's limiting physical or mental conditions and employment status. We also included questions designed to determine what job characteristics were important to sample members and collected information about work-related goals and expectations.

### **1. Health Condition Coding**

In Section B of the questionnaire, we asked each respondent to cite the primary and secondary physical or mental conditions that limit the type or amount of work or daily activities that he or she performs. Respondents could report main conditions in one of four questions: B2 (primary reason limited), B6 (primary reason eligible for benefits), B12 (primary reason formerly eligible for benefits if not currently eligible), and B15 (primary reason limited when first receiving disability benefits). The majority of respondents (83 percent) reported a primary limiting condition in Item B2. The main purpose of the other questions (B6, B12, and B15) was to collect information on a health condition from people who reported no limiting conditions in Item B2. For example, if respondents reported no limiting conditions, they were asked if they were currently receiving social security benefits (Item B5). If they answered "yes," they were



asked about the main reason that made them eligible for benefits (Item B6). If respondents said that they were not currently receiving benefits, we asked whether they had received disability benefits in the last five years (Item B9). If they answered “yes,” we asked for the condition that made them eligible for social security benefits (Item B12) or the reason that first made them eligible if they no longer had that condition (Item B15). If respondents said that they had not received disability benefits in the last five years, we screened them out of the survey and coded them as ineligible. We assigned a value for the three health condition constructs to each response for Items B2, B6, B12, and B15. Although respondents were asked to cite one “main” condition in question B2, B6, B12, or B15, many listed more than one. We maintained the additional responses under the primary condition variable and coded in the order in which they were recorded.

For each item on a main condition, we asked respondents to list any other, or secondary, conditions. For example, in Item B4, we asked respondents who had reported a main condition in Item B2 to list other conditions that limited the type or amount of work or daily activities that they could perform. In Item B8, we asked respondents who had reported the main reason for their eligibility for disability benefits in Item B6 to list other conditions that made them eligible. For respondents who reported that they were not currently receiving benefits but who reported a main condition in Item B12 (the condition that made them eligible to receive disability benefits in the last five years), we asked in Item B14 for other reasons that made them eligible for benefits. Those who reported that their current main condition was not the condition that made them eligible for benefits and who were asked for the main reason for their initial limitation were also asked if any other conditions limited them when they started receiving benefits (Item B17).

In prior rounds of data collection, we coded respondents’ verbatim responses by using the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9) five-digit coding scheme. The ICD-9 is a classification of morbidity and mortality information developed in 1950 to index hospital records by disease for data storage and retrieval. A newer version of the coding scheme (ICD-10) was released prior to Round 6 of data collection. Rather than switching to the ICD-10, which included a new layout of the codes and more complex mapping, SSA agreed that we should use a broader, three-digit coding scheme derived from the ICD-9 categories for Round 6. The list of 21 codes used for Round 6 of data collection is included in Table IV.1. The coders, many of whom had medical coding experience, attended a four-hour training session before they started coding; they also attended weekly check-in meetings with coding supervisors throughout the coding effort.

For cases in which the respondent reported several distinct conditions, all conditions were coded (for example, three distinct conditions would be recorded and coded as B2\_1, B2\_2, and B2\_3). Each code was applied a maximum of one time per question, even in instances in which the same medical code could be applied to more than one condition reported within a question. For instance, “bipolar” and “schizophrenia” are distinct conditions that fall under the same medical code (050 – mental disorders). If both conditions were reported within the same response, “bipolar” and “schizophrenia” would receive code 050 one time. If each condition was reported in a separate question (for instance, if the respondent reported “bipolar” at Item B2 and “schizophrenia” at Item B4), both conditions were coded.

Following the health condition coding, we created a series of three constructed variables based on Item B2 in order to collapse the codes into three classes of broad disease groups:

1. Main Condition Primary Diagnosis Groups (C\_MainConDiagGrpNew), 16 levels
2. Main Condition Primary Diagnosis Groups Collapsed (C\_MainConColDiagGrp), 5 levels
3. Main Condition Body Groups (C\_MainConBodyGroup), 18 levels

Each of these constructed variables are created for every condition listed at B2 (C\_MainConDiagGrpNew\_1, C\_MainConDiagGrpNew\_2, etc.).

We created a set of separate constructs that use the same three methods to collapse responses provided in Items B4 (other limiting conditions) and B6 (primary reason eligible for benefits) for those currently receiving benefits. The B4 constructs include the prefix “C\_SecCon,” as B4 is the secondary condition reported (C\_SecConDiagGrpNew, C\_SecConColDiagGrp, and C\_SecConBodyGroup). The B6 constructs include the prefix with “C\_MainReasElig” for the main reason the respondent became eligible for disability benefits.

Lastly, we created another set of three constructs to summarize responses provided across B6, B12, and B15 collectively to determine the main reason for becoming eligible for disability benefits, regardless of current status. These variables are prefixed with “C\_ReasBecElig” for reason became eligible. They clarify the eligibility of sample members who indicated in Item B2 that they did not have a disabling condition.

**Table IV.1. Round 6 Coding Scheme**

Code	Label	Description of ICD-9 Codes	Corresponding ICD-9 Codes
010	Infectious and parasitic diseases	Borne by a bacterium or parasite and viruses that can be passed from one human to another or from an animal/insect to a human, including tuberculosis, HIV, other viral diseases, and venereal diseases (excluding other and unspecified infectious and parasitic diseases)	001.0–135, 137.0–139.8
020	Neoplasms	New abnormal growth of tissue (i.e., tumors and cancer), including malignant neoplasms, carcinoma in situ, and neoplasm of uncertain behavior	140.0–239.9
030	Endocrine/nutritional disorders	Thyroid disorders, diabetes, abnormal growth disorders, nutritional disorders, and other metabolic and immune disorders	240.0–279.9
040	Blood/blood-forming diseases	Diseases of blood cells and spleen	280.0–289.9
050	Mental disorders	Psychoses, neurotic and personality disorders, and other non-psychotic mental disorders. EXCLUDES Intellectual disability (formerly termed mental retardation)	290.0–302.9, 305.00–314.9, 315–316
051	Intellectual disability	Intellectual disability	317.0–319.9
060	Diseases of nervous system	Disorders of brain, spinal cord, central nervous system, peripheral nervous system, and senses, including paralytic syndromes	320.0–359.9

Code	Label	Description of ICD-9 Codes	Corresponding ICD-9 Codes
061	Diseases and disorders of the eye and ear	Disorders of eye and ear	360.0–389.9
070	Diseases of circulatory system	Heart disease; disorders of circulation; and diseases of arteries, veins, and capillaries	390-459.9
080	Diseases of respiratory system	Disorders of the nasal, sinus, upper respiratory tract, and lungs, including chronic obstructive pulmonary disease	460-519.9
090	Diseases of digestive system	Diseases of the oral cavity, stomach, esophagus, and duodenum	520.0-579.9
100	Diseases of genitourinary system	Diseases of the kidneys, urinary system, genital organs, and breasts	580.0-629.9
110	Complications of pregnancy, child birth, and puerperium	Complications related to pregnancy or delivery and complications of puerperium	630-677
120	Diseases of skin/subcutaneous tissue	Infections of the skin, inflammatory conditions, and other skin diseases	680.0-709.9
130	Diseases of musculoskeletal system	Muscle, bone, and joint problems, including arthropathies, rheumatism, osteopathies, and acquired musculoskeletal deformities	710-719, 725-739
131	Diseases of the musculoskeletal system: back disorders.	Intervertebral disc disorders, other disorders of cervical region, and other and unspecified disorders of the back	720-724
140	Congenital anomalies	Problems arising from abnormal fetal development, including birth defects and genetic abnormalities	740.0-759.9
150	Conditions in the perinatal period	Conditions that have origins in birth period, even if disorder emerges later	760.0-779.9
160	Symptoms, signs, and ill-defined conditions	Ill-defined conditions and symptoms; used when no more specific diagnosis can be made	780.01-799.9
170	Injury and poisoning	Problems that result from accidents and injuries, including fractures, brain injury, and burns (excluding complications of medical care NEC)	800.00–998.9
180	Physical problem, NEC	The condition is physical, but no more specific code can be assigned	No ICD-9 codes
95	Refused	Verbatim indicates that respondent refused to answer the question	No ICD-9 codes
96	Duplicate condition reported	The condition has already been coded for the respondent	No ICD-9 codes
97	No condition reported	The verbatim does not contain condition or symptom to code	No ICD-9 codes
98	Don't know	The respondent reports that he or she does not know the condition	No ICD-9 codes
99	Uncodeable	A code cannot be assigned based on the verbatim response	No ICD-9 codes

Source: NBS Round 6.

### **a. Several Primary Conditions**

Health condition coding of respondent-provided data is complex. Often, respondents either do not know the name of a condition or describe it in vague terms (for example, “he is slow,” or “she has trouble breathing”). As previously mentioned, although respondents were asked to provide one “main” condition in Item B2, B6, B12, or B15, many listed more than one. Despite the emphasis in interviewer training on collecting one main condition, 15 percent of respondents reported more than one condition in Item B2. Rather than attempting to discern which condition was the main condition among more than one condition listed, we coded conditions in the order provided by the respondent and named on the file as \_1, \_2, and so on.

### **b. Duplicate Conditions**

In 223 cases (approximately 3 percent), respondents reported a secondary condition already reported as a main condition. During the process of coding such responses, coders identified any duplicate conditions by assigning the code 96. As mentioned previously, each code was applied only one time per question, even in instances in which the same medical code could be applied to more than one condition reported within a question. The same medical code was applied to both primary and secondary conditions when the secondary condition differed from the primary condition, but fell under the same medical category as the primary condition (for example, if a sample member reported “asthma” at item B2, and “Chronic Obstructive Pulmonary Disease” at item B4, both items would be coded as 080 – diseases of respiratory system). If the sample member reported the same condition at item B2 and item B4, the secondary condition was assigned the code 96 – duplicate condition. In the event that the only condition reported as a secondary condition in Item B4, B8, B14, or B17 was a duplicate of the main condition reported in B2, B6, B12, or B15, the secondary code received a code of 96 indicating that it was a duplicate condition.

### **c. Uncodeable Conditions**

We expected that not all verbatim responses would contain enough information to allow coders to assign a specific medical code. We could not code approximately 6 percent of the medical condition verbatim responses. In such cases, we coded responses as “don’t know” (if the respondent indicated he or she did not know the answer; code 98), “refused” (if the respondent indicated he or she refused to answer; code 95), “uncodeable” (a response was provided but not enough information was given to code; code 99), or “no condition reported” (no condition is reported in the verbatim; code 97).

## **2. Back-Coding Responses to “Other/Specify” Items**

At Item B25 we asked respondents if any one of a series of items (Item B25\_a through Item B25\_p) was a reason that they were not currently working. In addition, at Item B26 we asked respondents if there were any other reasons not already mentioned that explain why they were not working. If they answered “yes,” we collected a verbatim response at B27. Before coding, verbatim responses to Item B27 were reviewed to determine whether they could be back-coded into Items B25\_a through B25\_p, or if not, whether they could be clustered into additional categories. Table IV.2 shows the response categories added during coding. We back-coded responses whenever possible into one of the existing or newly created categories. We retained responses that could not be coded as “other.” If all responses could be coded, we recoded Item B26 to “no” to indicate that there were no additional reasons that explain why the sample

member was not working. If a verbatim response could not be coded into any of the B25 categories, we kept the code for Item B26 as “yes.”

**Table IV.2. Response Categories Added to Section B During Coding**

Item	Question Text	Categories Added
B25	Are you not working because...	q = Can't find a job r = Lack skills
B29_6	What benefits are you most worried about losing?	14 = Health Insurance Unspecified
B29_10	What benefits are you most worried about losing?	14 = Health Insurance Unspecified
B29_11b	What benefits were you most worried about losing?	14 = Health Insurance Unspecified

At Items B29\_6, B29\_10, and B29\_11b, we asked respondents which benefits they were most worried about losing if they took a job. Responses coded as “other” by the interviewer were reviewed by coders and back-coded into existing response options when possible. We added the category “Health Insurance Unspecified” during coding in a previous round to capture responses that could not be classified into the more specific insurance categories.

We also included “other/specify” responses at Items B29 (what did you do to look for work), B29\_2 (reasons did not accept a job), B29\_7 (reasons have not found a job), B39 (main person you discuss work goals with), BP1b (reasons you are no longer able to do the same kind of work), BP3 (reason health prevents you from working), BP4a1-BP4a3 (health-, job-, or personal circumstance-related problems that might prevent you from working), and BP4b1-BP4b3 (health-, job-, or personal circumstance-related problems that might prevent you from working enough to leave benefits), which were examined by coders and back-coded when possible.

### **C. Section C—Current Employment**

In Section C, we collected information about the respondent’s current job or jobs by asking respondents about the type of work performed, type of business, hours worked, benefits offered, and wages earned. We also asked about the receipt of work-related accommodations and those needed but not received. We also gathered information on job satisfaction.

We collected job-specific information (Items C2 through C13) separately for each current job held. We represent these items in the data file with an `_n` indicating the job to which the data refer (for example, `C4mth_1` indicating month started first job, `C4mth_2` indicating month started second job, and so on). Respondents reported first on their main job (that is, the job at which they worked the most hours) and then on other jobs currently held. For purposes of the constructed variables based on data collected in Section C, we named constructs pertaining to the “main” job based on responses provided in the first job slots (`_1`).

#### **1. Occupation and Industry Coding**

In Item C2, we asked respondents to describe the type of work they performed at each of their current jobs (occupation). In previous rounds of data collection, we used the Bureau of Labor Statistics 2000 Standard Occupational Classification (SOC) to code verbatim responses to

occupation items. For Round 6, we used the updated 2010 Standard Occupational Classification (SOC) scheme for coding to align our process with the latest codes.<sup>26</sup> The SOC classifies all occupations in the economy, including private, public, and military occupations in which work is performed for pay or profit. Occupations are classified on the basis of work performed, skills, education, training, and credentials. The sample member's occupation was assigned an occupation code. The first two digits of the SOC codes classify the occupation to a major group and the third digit to a minor group. For the NBS–General Waves, we assigned three-digit SOC codes to describe the major group that the occupation belonged to and the minor groups within that classification (using the 23 major groups and 96 minor groups). Round 6 codes applied using the 2010 SOC are comparable to earlier rounds that used the 2000 SOC, as all major and minor group codes remained consistent across both coding schemes.

At Item C3, we collected information about the type of business employing the sample person (industry). In previous rounds of data collection, we coded verbatim responses to the industry items according to the 2002 North American Industry Classification System (NAICS). For Round 6, we used the 2017 North American Industry Classification System (NAICS).<sup>27</sup> The NAICS is an industry classification system that groups establishments into industrial categories based on the activities in which those establishments are primarily engaged. It uses a hierarchical coding system to classify all economic activity into 20 industry sectors. For the NBS—General Waves, we coded NAICS industries to three digits, with the first two numbers specifying the industry sector and the third specifying the subsector. Round 6 codes applied using the 2017 NAICS are comparable to earlier rounds that used the 2002 NAICS, as all industry sector and subsector codes remained consistent across both coding schemes. Most federal surveys use both the SOC and NAICS coding schemes, thus providing uniformity and comparability across data sources. Although both classification systems allow coding to high levels of specificity, SSA and the analysts decided based on research needs to limit coding to three digits. More information on coding responses to the occupation and industry items is available in “The National Beneficiary Survey—General Waves: Round 6 Editing, Coding, Imputing, and Weighting Procedures” report (Grau et al. 2018).

The verbatim responses to Items C2 and C3 do not appear in either the restricted- or public-use version of the file. Rather, we provided the coded responses to Item C2 in the constructed variables C\_MainCurJobSOC, C\_CurJob2SOC, and so on; the coded responses to Item C3 were provided in C\_MainCurJobNAICS, C\_CurJob2NAICS, and so on.

#### **a. Uncodeable Occupation and Industry Verbatim Responses**

We expected that some verbatim responses would lack sufficient detail to permit coding at the three-digit level. We provided coders with supplemental two-digit codes to allow assignment of a general code in such cases (Table IV.3).

If a respondent did not provide a codeable occupation but indicated either in the verbatim response or in Item C7 (job part of sheltered workshop) that the occupation was a sheltered workshop position, we assigned code 94 only if the position could not be assigned an SOC code.

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<sup>26</sup> See Standard Occupational Classification Manual (2010) available at <http://www.bls.gov/soc>.

<sup>27</sup> For more information, see North American Industry Classification System, 2017, or <https://www.census.gov/eos/www/naics/index.html>

If a position in a sheltered workshop was described by an accompanying codeable occupation, we coded the occupation with the SOC classification. When respondents indicated in Item C7 that their current job was a sheltered workshop position, we coded the industry as 624 (social assistance), which encompasses service for people with disabilities. If the occupation was uncodeable with no indication that the position was a sheltered workshop position, we assigned code 99 (uncodeable) to the occupation. In all, approximately 5 percent of both the current occupation verbatim responses (Item C2) and the industry verbatim responses (Item C3) for each job were uncodeable.

**Table IV.3. Two-digit Supplemental Codes for Occupation and Industry Coding**

Code	Label	Description
94	Sheltered workshop	Code used if occupation is in sheltered workshop and a specific occupation cannot be coded from the verbatim response. All industry responses for sheltered workshop are coded as 624.
95	Refused	The respondent refused to give his or her occupation or type of business.
98	Don't know	The respondent reports that he/she does not know the occupation or industry.
99	Uncodeable	A code cannot be assigned based on the verbatim response.

## 2. Hours Worked

In Item C8, we asked respondents to provide the number of hours per week that they usually worked at their current job. We incorporated a soft edit check into the Blaise instrument to prompt interviewers to verify that the response was correct for any response over 60 hours per week (22 cases for job 1). We reviewed all responses under 5 hours per week (64 cases for job 1) during data cleaning. After a review of other job-related information, including occupation and industry verbatim responses, wage rates, self-employment, and sheltered workshop indicators, we did not recode any cases. In general, if the respondent was working in a sheltered employment setting, we determined that low values for hours worked were not unreasonable and should be retained. Similarly, if the respondent's occupation was consistent with a high number of hours worked per week (for example, truck driver), we retained the values. Although some values were suspect, our general approach was to recode only those cases that appeared to be obvious data entry or respondent errors.

## 3. Weeks per Year

Item C9 asked respondents how many weeks per year they usually worked at their current job. We reviewed responses of fewer than 20 weeks during data cleaning (102 cases for job 1), along with other job-related information, in order to determine if the values were reasonable. In general, if the occupation verbatim and other job-related information was consistent with the possibility of minimal weeks worked per year, we retained the original values. In some cases, the respondents apparently interpreted the question as asking how many weeks they had worked if they had just started their job—despite the inclusion of the probe, “If you have worked less than a year, please answer for the number of weeks you expect to work.” Because it was not possible

based on other information to determine whether such values were errors, we retained them in the data file.

#### 4. Pay

At Item C11 or C12amt, we asked respondents to report their pretax earnings for each current job. In Item C13amt, we asked for respondents' take-home pay. We created three constructed variables: one designed to combine pretax responses into an hourly wage (C\_MainCurJobHrPay, C\_CurJob2HrPay, and so on); one into a monthly wage (C\_MainCurJobMnthPay, C\_CurJob2MnthPay, and so on) regardless of where the initial reporting occurred; and one for monthly take-home pay (C\_MainCurJobMnthPayTH, C\_CurJob2MnthPayTH, and so on). In addition, we constructed a total monthly pay variable to sum across all jobs (C\_TotCurMnthPay). Given that the earning constructs are subject to imputation, we were concerned that outliers might become imputation donors and exacerbate the outlier problem. Thus, we performed a detailed review of high and low values for both the source variables and constructs. The donor pool for imputation excluded cases with very high and very low values.

We included a soft edit check included in the Blaise instrument to prompt interviewers to verify any response that was more than \$25 per hour in Item C11. The check could be suppressed, however, leading to 138 cases reporting hourly rates over \$25. Because other job-related information, including the verbatim occupation response, indicated that the entries could be valid, we retained all in the file. We also examined all hourly wage values of \$3 and below. In such cases (five cases), we retained the value because the verbatim job descriptions indicated that the low value for hourly wages was not unreasonable.

We built soft edit checks into the instrument to flag high entries for each of the various reporting units in Items C12amt and C13amt. We examined values that were suppressed or that were at the high and low ends of the range. Because other job-related information, including the verbatim occupation and industry descriptions indicated that the values could be valid, we retained all high-value entries in the file. If the respondents were working in a sheltered employment setting or the verbatim job descriptions indicated that the low values for wages were not unreasonable, we retained the values.

During post-processing, we also compared take-home and pretax values. There were 10 cases that reported a monthly take-home pay that exceeded the monthly gross pay. For 9 of these cases, we set C13amt\_1 and/or C13hop\_1 to "don't know" (D). For one case, we adjusted the value of C13hop\_1 to be consistent with the value of C12hop\_1.

#### 5. Back-Coding Responses to "Other/Specify" Items

In Items C33\_a through C33\_e, we asked whether the sample member's employer made a series of accommodations. If the respondent indicated that other accommodations were made (C33\_f = 1), we collected a verbatim response. We reviewed and back-coded the responses into questions C33\_a through C33\_e when possible.

We also included the "other/specify" option at Item CP3 (things you did to find or keep working), Item CP5 (who helped you find job or keep working), Item CP7 (coworkers who know about disability), Item C39b (reasons work fewer hours or earn less money), and Item C39\_3



(supports needed to work or earn more). During coding, we added response options to 4 items in Section C, outlined in Table IV.4.

## 6. Back-Coding Field-Coded Responses

Items C1a (main reasons decided to work), CP2 (how did you find your job), CP3\_k (special equipment or devices used to keep working), CP6 (type of help received), CP12a (supports provided to work with disability), CP13a-CP13c (health-, personal circumstances-, or job-related reasons for working less), CP14 (things that helped you keep working), and C39\_2 (benefits reduced or ended as a result of job) were all open-ended items that interviewers attempted to code into one of several predefined response categories during the interview. We reviewed responses coded as “other” by the interviewer and back-coded them into existing response options when possible. We added the category “Health Insurance Unspecified” during a prior round of coding to Item C39\_2 to capture responses that could not be classified into the more specific insurance categories (Table IV.4). We kept verbatim responses that could not be recoded into one of these categories as “other.”

**Table IV.4. Response Categories Added to Section C Items During Coding**

Item	Question Text	Categories Added
CP13b1	What was it about [your/NAME's] [main/current] job that might have caused [you/NAME] to have to work less or stop working?	20= Found another job 22= Work schedule 23= Did not like/get along with co-workers 24= Did not like/get along with manager, supervisor, or boss 25= Did not like/get along with other staff responsible for hiring or providing accommodations (such as Human Resources)
CP13c1	What was it about [your/NAME's] personal circumstances that might have caused {you/NAME} to have to work less or stop working?	19= Moved to another area 21= Loss or potential loss of government benefits
C39b	{Do you/Does NAME} work fewer hours or earn less money than {you/he/she} could because {you/he/she}...	g = Poor health/health concerns
C39_2	What benefits have been reduced or ended as a result of your main/current job?	14 = Health insurance unspecified

## 7. Coding Open-Ended Responses

We asked respondents whether any changes were needed but not made to the sample member’s workplace (Item C34). If the answer was yes, we collected a verbatim response at Item C35 on the specific changes needed. We reviewed the verbatim responses before coding and used five categories from earlier rounds to summarize them. We retained responses that could not be coded into one of the five categories as “other.”

## D. Section C\_B—Employment in the Last 6 Months

In Section C\_B, we collected information about the respondent’s job or jobs held in the last 6 months by asking them about the type of work performed, type of business, hours worked, benefits offered, and wages earned. We also asked about the receipt of work-related

accommodations and those needed but not received. We also gathered information on job satisfaction.

We collected job-specific information (Items C\_B2 through C\_B13) separately for each job held in the last 6 months. We represent these items in the data file with an `_n` indicating the job to which the data refer (for example, `C_B4mth_1` indicating month started first job, `C_B4mth_2` indicating month started second job, and so on). Respondents reported first on their main job (that is, the job at which they worked the most hours) and then on other jobs held in the last 6 months.

### **1. Uncertainty about Current Work Status**

Section C\_B is asked of respondents who report they are not currently working (`B24 = 0`) and report that they have worked in the last 6 months (`B24b = 1`). During data processing, we found 7 cases that were not sure, or refused to report, if they were currently working, but reported they had worked in the last 6 months. Given the ambiguity around current work status, these cases did not receive Section C or Section C\_B; however, 6 of them reported working in 2016 and subsequently received Section D. For these 7 cases, we coded the first question in Section C\_B as missing (“M”). For the next round of NBS, we will adjust instrument specifications to ensure that cases like the ones described above receive Section C\_B, even if they are unsure about whether or not they are currently working.

### **2. Job End Dates**

During data processing, we found 29 cases in which a respondent reported working at a job during the last 6 months in Section C\_B, but provided a job end date indicating they had not worked at that job in the last 6 months. We built soft edit checks into the instrument to flag issues like this during the interview, but these checks could be suppressed by the interviewers. For these 29 cases, we coded the job end date to “don’t know” (.D).

### **3. Occupation and Industry Coding**

In Item C\_B2, we asked respondents to describe the type of work they performed at each of their jobs held in the last 6 months (occupation). At Item C\_B3, we collected information about the type of business employing the sample person (industry). As mentioned previously, we used the Bureau of Labor Statistic’s 2010 Standard Occupational Classification (SOC) to code verbatim responses to the occupation items, and the 2017 North American Industry Classification System (NAICS) to code industry questions. The verbatim responses to Items C\_B2 and C\_B3 do not appear in either the restricted- or public- use versions of the data file.

#### **a. Uncodeable Occupation and Industry Verbatim Responses**

As previously noted, we expected that some verbatim responses would lack sufficient detail to permit coding at the three-digit level. We provided coders with the same supplemental two-digit codes used in Section C to allow assignment of a general code in such cases (Table IV.3).

If a respondent did not provide a codeable occupation but indicated either in the verbatim response or in Item C\_B7 (job part of sheltered workshop) that the occupation was a sheltered workshop position, we assigned code 94 (sheltered workshop) only if the position could not be assigned an SOC code. If a position in a sheltered workshop was described by an accompanying

codeable occupation, we coded the occupation with the SOC classification. When respondents indicated in Item C\_B7 that their recent job was a sheltered workshop position, we coded the industry as 624 (social assistance), which encompasses services for people with disabilities. If the occupation was uncodeable with no indication that the position was a sheltered workshop position, we assigned code 99 (uncodeable) to the occupation. In all, approximately 15 percent of both the recent occupation verbatim responses and the industry verbatim responses for each job were uncodeable.

#### **4. Hours Worked**

In Item C\_B8, we asked respondents to provide the number of hours per week that they usually worked at their job. We incorporated a soft edit check into the Blaise instrument to prompt interviewers to verify that any response over 60 hours per week (21 cases for job 1) was correct. We reviewed all responses under 5 hours per week (11 cases for job 1) during data cleaning. After a review of other job-related information, including occupation and industry verbatim responses, wage rates, self-employment, and sheltered workshop indicators, we did not recode any cases. In general, if the respondent was working in a sheltered employment setting, we determined that low values for hours worked were not unreasonable and should be retained. Similarly, if the respondent's occupation was consistent with a high number of hours worked per week (for example, truck driver), we retained the values. Although some values were suspect, our general approach was to recode only those cases that appeared to be obvious data entry or respondent errors.

#### **5. Weeks per Year**

Item C\_B9 asked sample members how many weeks per year they usually worked at their job. We reviewed responses of less than 20 weeks during data cleaning (238 cases for job 1), along with other job-related information, in order to determine if the values were reasonable. As noted previously, if the occupation verbatim response and other job-related information was consistent with the possibility of minimal weeks worked per year, we retained the original values.

#### **6. Pay**

At Item C\_B11 or C\_B12amt, we asked respondents to report their pretax earnings for each job worked during the last 6 months. In Item C\_B13amt, we asked for respondents' take-home pay. We created three constructed variables: one designed to combine pretax responses into an hourly wage (C\_Main6MoJobHrPay, C\_6MoJob2HrPay, and so on); one into a monthly wage (C\_Main6MoJobMnthPay, C\_6MoJob2MnthPay, and so on) regardless of where the initial reporting occurred; and one for monthly take-home pay (C\_Main6MoJobMnthPayTH, C\_6MoJob2MnthPayTH, and so on). In addition, we constructed a total monthly pay variable to sum across all jobs (C\_Tot6MoMnthPay).

We included a soft edit check in the Blaise instrument to prompt interviewers to verify any response that was greater than \$25 per hour in Item C\_B11. The check could be suppressed, however, resulting in 46 cases that reported hourly rates greater than \$25 per hour. Because other job-related information, including the verbatim occupation response, indicated that the entries could be valid, we retained all responses in the file. We also reviewed the data for hourly wage values of \$3 and below. There were no such cases in Section C\_B.

We built soft edit checks into the instrument to flag high entries for each of the various reporting units in Items C\_B12amt and C\_B13amt. We examined values that were suppressed or that were at the high and low ends of the range. Because other job-related information, including the verbatim occupation and industry descriptions indicated that the values could be valid, we retained all responses in the file. If the respondents were working in a sheltered employment setting or the verbatim job descriptions indicated that the low values for wages were not unreasonable, we retained the values.

### **7. Back-Coding Responses to “Other/Specify” Items**

In Items C\_B33\_a through C\_B33\_e, we asked whether the sample member’s employer made a series of accommodations. If the respondent indicated that other accommodations were made (C\_B33\_f = 1), we collected a verbatim response. We reviewed and back-coded the responses into questions C\_B33\_a through C\_B33\_e when possible.

We also included the “other/specify” option at, Item C\_BP3 (things you did to find or keep working), Item C\_BP5 (who helped you find job or keep working), Item C\_BP7 (coworkers who know about disability), Item C\_B39b (reasons work fewer hours or earn less money), and Item C\_B39\_3 (supports needed to work or earn more). We added one category during coding for Item C\_B39b (Table IV.5).

### **8. Back-Coding Field-Coded Responses**

Items C\_B1a (main reasons decided to work), C\_BP2 (how did you find your job), C\_BP3\_k (special equipment or devices used to keep working), Item C\_BP6 (type of help received), Item C\_BP12a (supports provided to work with disability), C\_BP13a-C\_BP13c (health-, personal circumstances-, or job-related reasons for working less), Item C\_BP14 (things that helped you keep working), and C\_B39\_2 (benefits reduced or ended as a result of job) were all open-ended items that interviewers attempted to code into one of several predefined response categories during the interview. We reviewed responses coded as “other” by the interviewer and back-coded them into existing response options whenever possible. We added the category “Health Insurance Unspecified” during a prior round of coding to Item C39\_2 to capture responses that could not be classified into the more specific insurance categories. We incorporated the same additional response into C\_B39\_2 this round. We kept verbatim responses that could not be recoded into one of these categories as “other.”

### **9. Coding Open-Ended Responses**

We asked respondents whether any changes were needed but not made to the sample member’s workplace (Item C\_B34). If the answer was yes, we collected a verbatim response at Item C\_B35 on the specific changes needed. We reviewed the verbatim responses before coding and used five categories from earlier rounds to summarize them. We retained responses that could not be coded into one of the five categories as “other.”

**Table IV.5. Response Categories Added to Section C\_B Items During Coding**

Item	Question Text	Categories Added
C_BP13b1	What was it about [your/NAME's] [main/current] job that might have caused [you/NAME] to have to work less or stop working?	20= Found another job 22= Work schedule 23= Did not like/get along with co-workers 24= Did not like/get along with manager, supervisor, or boss 25= Did not like/get along with other staff responsible for hiring or providing accommodations (such as Human Resources)
C_BP13c1	What was it about [your/NAME's] personal circumstances that might have caused {you/NAME} to have to work less or stop working?	19= Moved to another area 21= Loss or potential loss of government benefits
C_B39b	{Do you/Does NAME} work fewer hours or earn less money than {you/he/she} could because {you/he/she}...	g = Poor health/health concerns
C_B39_2	What benefits have been reduced or ended as a result of your main/current job?	14 = Health insurance unspecified

### E. Section D—Job/Other Jobs During 2016

In Section D, we collected information about employment during the 2016 calendar year, including types of employers, hours worked, wages earned, and reasons for leaving employment, if applicable. We also asked if respondents worked or earned less than they could have (and, if so, why) and collected information about experiences related to any adjustments made in social security benefits due to work.

As in Section C and C\_B, we collected job-specific information (Items D2 through D23) for each job held in 2016. We represent data for each job in the data file with an `_n` indicating the job to which the data refer (for example, `D6mth_1` indicating month started first job, `D6mth_2` indicating month started second job, and so on). Respondents reported first on their main job—that is, the job at which they worked the most hours—and then reported on other jobs held. To reduce respondent burden, respondents did not have to report on any jobs held during 2016 that were mentioned in Section C as current employment or Section C\_B as employment in the last 6 months. Rather, we copied employment data from Section C and C\_B into Section D during data processing for all current jobs also held during 2016. Table IV.6 lists all job-specific items that were filled in with Section C or Section C\_B data. Items in Section D that had no equivalent in Section C or Section C\_B (`C_B4bmth`, `C_B4byr`, `D8mth`, `D8yr`, `C_BP13a-C_BP13c`, `DP1a-DP1c`) were coded as `.L` (indicating logical skip).

**Table IV.6. Job Variables in Sections C, C\_B, and D**

Variable in Section C	Variable in Section C_B	Variable in Section D	Variable Description
C2	C_B2	D4	Occupation
C3	C_B3	D5	Industry
C4mth, C4yr	C_B4amth, C_B4ayr	D6mth, D6yr	Start month and year of job
No equivalent item	C_B4bmth, C_B5byr	D8mth, D8yr	Stop month and year of job
C6	C_B6	D14	Self-employed status
C7	C_B7	D15	Sheltered workshop status
C8	C_B8	D16	Hours usually worked per week
C9	C_B9	D17	Weeks usually worked per year
C10	C_B10	D18	Paid by the hour
C11	C_B11	D19	Hourly pay
C12amt, C12hop	C_B12amt, C_B12hop	D20amt, D20hop	Amount of pretax pay
C13amt, C13hop	C_B13amt, C_B12hop	D21amt, D21hop	Amount of after tax pay
No equivalent item	C_BP13a-C_BP13c	DP1a-DP1c	Reasons for stopping work

### 1. Including Current Jobs Held in 2016 and Jobs in Last Six Months Held in 2016 in Section D

We included jobs mentioned in Section C and Section C\_B as held in 2016 if Item C4yr (year started current job) or Item C\_B4yr was earlier than or equal to 2016. We copied each applicable job from Section C and Section C\_B into the first blank job slot in Section D (for example into D6mth\_2 if D6mth\_1 already contained data and into D6mth\_3 if both D6mth\_1 and D6mth\_2 already contained data). We included the variables C\_Job\_From\_SecC\_1 through C\_Job\_From\_SecC\_5, and C\_Job\_From\_SecC\_B\_1 through C\_Job\_From\_SecC\_B\_5 in the data file to indicate which jobs from Section C and Section C\_B (by job number) were copied into specific Section D job slots.

### 2. Determining Main Job Held in 2016

In addition to copying job data from Section C and C\_B into the Section D items, we had to determine which job held in 2016 was the main job. Before including the jobs from Section C and C\_B, we stored the main jobs held in 2016 as job 1. Given that it was possible that a job reported in Section C or C\_B was the respondent's main job in 2016, we compared hours worked in 2016 on each job with the first job mentioned in Section D after incorporating the jobs from Section C and C\_B. We deemed the job with the greatest number of hours per year (number of hours per week multiplied by the number of weeks per year) the main 2016 job.<sup>28</sup> We used the

<sup>28</sup> If hours per year could not be calculated because of missing data on either number of hours per week or number of weeks per year, we coded the hours as missing. If hours per year were missing for all 2016 Section C or C\_B jobs, job 1 in Section D was counted as the main job in 2016. If no jobs were listed in Section D and hours per year were missing for all 2016 jobs in Section C, the first job listed in Section C or C\_B that was a 2016 job was counted as the main job in 2016. If hours per year were missing for job 1 in Section D, the Section C or C\_B job with most hours per year was counted as the main 2016 job. If there was no 2016 job from Section C or C\_B or hours per year

variable `Main_Job_grid_num`, which identifies the job number of the main job held in 2016 based on number of hours worked, to create a series of variables ending with `_m` to represent each job-specific item listed in Table IV.6 for the main job held in 2016 (for example `D6mth_m` and `D6yr_m`). We did not delete information related to the main job from the `job_1` through `job_5` variables. For example, for a case with three jobs listed in Section D (after copying relevant jobs from Section C or `C_B`) that had the second job deemed the main job, information related to hours worked on the second job is available in both Items `C8_m` and `C8_2`. Therefore, `_m` jobs should not be counted as additional jobs. The public-use version of the file provides only the main job variables (`_m`) for jobs held in 2016.

For purposes of the constructed variables created in Section D, we created separate constructs for each job mentioned (job 1, job 2, and so on) as well as additional constructs for the “main” job (`C_MainJob2016SOC`, `C_MainJob2016NAICS`, `C_MainJobHrPay2016`, `C_MainJobMnthPay2016`, `C_MainJobMnthPayTH2016`, and `C_MnthsMain2016Job`) as identified by the variable `Main_Job_grid_num`. As stated, information in the main job constructs is replicated in one of the other job slots in the restricted-use file and does not represent an additional job.

During data processing, we found 123 cases in which a respondent answered “don’t know,” “refused,” or reported in Item B30 that he or she did not work in 2016 ( $B30 = D, R, \text{ or } 0$ ), but the respondent also had a reported a job start date in Section C or `C_B` that indicated that the individual had held a job in 2016. We recoded such cases to  $B30 = 1$  (indicating that the respondent did work in 2016). It is important to note that we did not recode Item D3 (“Other than the current jobs you just told me about, how many other jobs did you hold for at least one month in 2016?”) to reflect the number of jobs held in 2016 after including jobs from Section C or `C_B`. To determine the total number of jobs held in 2016, the data user should sum Item D3 and `C_Totjobcopied`, a construct that indicates the number of jobs copied from Section C and `C_B` to Section D.

### 3. Occupation and Industry Coding

In Item D4, we asked respondents to describe the type of work they performed on each job held in 2016 (occupation). In Item D5, we asked respondents to describe the corresponding type of business (industry). As for equivalent items in Section C and `C_B`, we coded the verbatim responses to these items by using the SOC and NAICS classification systems described in Section IV.C.1. We did not include the verbatim responses to Items D4 and D5 in the restricted- or public-use version of the data file. Rather, the coded responses to Item D4 are in the construct `C_MainJob2016SOC`, `C_Job12016SOC`, and so on. The coded responses to Item D5 are in `C_MainJob2016NAICS`, `C_Job12016NAICS`, and so on.

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were missing for all Section C and `C_B` 2016 jobs, job 1 in Section D was counted as the main 2016 job. If hours per year were missing for all 2016 Section C or `C_B` jobs and for job 1 in Section D, job 1 in Section D was counted as the main job in 2016.

#### **4. Uncodeable Occupation and Industry Verbatim Responses**

Coders used the same codes described in IV.C.1 during the coding process. In all, we deemed uncodeable approximately 2 percent of the 2016 occupation verbatim responses and industry verbatim responses for each job in Section D for any given item.

#### **5. Dates Worked at 2016 Job**

In Items D6mth, D6yr, D8mth, and D8yr, we collected start and stop dates for each job held in 2016. We built soft edit checks into the Blaise instrument to verify that stop dates were later than start dates and that each job was held for at least one month in 2016. If the interviewer verified that the job ended before 2016 or was held for less than one month in 2016, we skipped items collecting job-specific information in Items D14 through D21hop. We retained occupation and industry data as well as start and stop dates for these jobs in the data file because respondents answered other items in Section D (why they stopped working at the job in Item D23 and general questions about working in 2014 in Items D25 through D30).

#### **6. Hours Worked**

In Item D16, we asked respondents for the number of hours per week usually worked in their 2016 job. As in Section C and C\_B, we incorporated a soft edit check into the Blaise instrument to prompt interviewers to verify that the response was correct for any response greater than 60 hours per week. We examined responses over 60 hours per week (44 cases for job 1, for example) and under 5 hours per week (89 cases on job 1) during data cleaning. After a review of other job-related information, we retained all data. In general, if the respondent was working in a sheltered employment setting, we determined that low values for hours worked were not unreasonable and should be retained. Similarly, if the respondent's occupation was consistent with a high number of hours worked per week, we retained the values.

#### **7. Weeks per Year**

In Item D17, we asked respondents how many weeks per year they usually worked in their 2016 job. We reviewed responses indicating fewer than 20 weeks during data cleaning (413 cases for job 1). In general, if the occupation verbatim response and other job-related information were consistent with the possibility of few weeks worked per year, we retained the original values. It was not possible, based on other information, to determine whether the values were errors; therefore, we retained them in the file.

#### **8. Pay**

Respondents reported their pretax earnings for each 2016 job in Item D19 (if reported as an hourly wage) or in Item D20amt (if reported in another unit, such as daily, weekly, monthly, or annually) and their take-home pay in Item D21amt. We combined pretax responses from three constructed variables into an hourly wage (C\_MainJobHrPay2016, C\_Job1HrPay2016, and so on), a monthly wage (C\_MainJobMnthPay2016, C\_Job1MnthPay2016, and so on) regardless of where the initial reporting occurred, and monthly take-home pay (C\_MainJobMnthPayTH2016, C\_Job1MnthPayTH2016, and so on). In addition, we created a constructed total monthly pay variable to sum pay across all jobs (C\_Tot2016Pay). We examined source variables and constructed variables for extremely high and low values. There was 1 case where the monthly take-home pay reported exceeded the monthly gross pay. For this case, we set D21\_1 and D21hop\_1 to "don't know" (D).



We incorporated a soft edit check into the Blaise instrument to prompt interviewers to verify any response over \$25 an hour in Item D19. We examined responses over \$25 an hour (142 cases for job 1). We retained all of these entries in the file because other job-related information, including the verbatim occupation response, indicated that the entries could be valid. We also examined hourly wage values of \$3 and below (8 cases). In all cases, respondents were working in a sheltered employment setting or the verbatim job description indicated that the low values for hourly wages were not unreasonable; thus, we retained the values.

We built soft edit checks into the instrument and flagged high entries for each of the various reporting units in Items D20amt and D21amt. As for hourly wages, we examined values that were suppressed or that were at the high and low ends of the range by looking at other job-related information. In most cases, the verbatim occupation and industry descriptions indicated that the values could be valid; thus, we retained the values in the file. Generally, if the respondent was working in a sheltered employment setting or the verbatim job description indicated that the low values for wages were not unreasonable, we retained the values. Recoding of data occurred only in cases of an obvious data entry error or when the respondent's job characteristics were inconsistent with reported earnings or pay.

## 9. Back-Coding Responses to “Other/Specify” Items

We asked Items D25\_a through D25\_f if respondents indicated several issues were the reasons that they had worked fewer hours than they might have worked. In Items D26a through D26h, we asked if several issues were the reasons that the sample member did not work or earn more. We reviewed responses coded as “other” during data processing. For both Items D25 and D26, we added categories during a prior round of coding to allow further categorization of responses (Table IV.7).

## 10. Back-Coding Field-Coded Responses

Where possible, interviewers attempted to code verbatim responses to Items DP1a-DP1c (why the sample person quit working at the job held in 2016) and D25\_2 (benefits reduced or ended as a result of 2016 job) into a series of predetermined categories. We reviewed responses coded as “other reason” to determine if they could be back-coded into an existing category. We retained responses that could not be coded as “other.”

**Table IV.7. Response Categories Added to Section D During Coding**

Item	Question Text	Categories Added
DP1b_1	What was it about [your/NAME's] job that made [you/him/her] leave it?	20= Found another job 22= Work schedule 23= Seasonal/Temporary job
DP1c_1	What was it about [your/NAME's] personal circumstances that made [you/him/her] leave the job?	19= Moved to another area 21= Loss or potential loss of government benefits
D25	Did you work fewer hours or earn less money than you could have because [you/he/she] you...	g= Had medical problems/complications
D25_2	What benefits were reduced or ended as a result of [your/NAME's] job in 2016?	14= Health insurance unspecified

Item	Question Text	Categories Added
D26_h	In 2016, do you think [you/NAME] could have worked or earned more if [you/he/she] had:	i= Better health/treatment j= More supportive/helpful employer and/or coworker

## F. Section SC – Benefit Suspense

In Section SC, we ask beneficiaries who are currently employed (B24=1), have been employed within the last six months (B24b=1), or were employed in 2016 (B30=1) how their work experiences affected their social security disability benefits.

### 1. Skip Logic from Other Sections

One case was updated during data cleaning to indicate they worked in the last 6 months (B24b = 1) based on responses to other items. This case previously reported not working and subsequently skipped Section SC. We recoded the value of SC1a and SC1 to “.M” for this case.

Items SC1a and SC1b both ask if the respondent ever completely stopped receiving cash disability benefits in the past year because of employment. Item SC1a is asked if the respondent reports that his or her Social Security disability benefits were reduced or ended because of a recent job (C39\_2=06 or CB39\_2=06 or D25\_2=06), while Item SC1b is worded slightly differently for those who do not report reduced benefits. After backcoding “Other” responses at C39, CB39, and D25, we flagged several cases that should have received SC1a instead of SC1b. We did not recode these two variables during data cleaning because SC1a and SC1b are essentially the same question. SC1a just acknowledges the earlier reference to reduced benefit receipt.

### 2. Back-Coding Responses to “Other/Specify” Items

Several questions in Section SC (Items SS2a\_1, SS2b\_1, SS2c\_1, SS3a, SB1a\_1, SB1b\_1, SB1c\_1, SB2a\_other, SB3a, SB4a, and SB4b) included an “other” option that prompted a verbatim response. During data processing, we reviewed the verbatim responses to determine whether they could be clustered into additional categories. In Table IV.8, we provide the response categories that we added during the coding process. Whenever possible, we back-coded responses into one of the existing or newly created categories. We retained responses that could not be coded as “other.”

**Table IV.8. Response Categories Added to Section SC During Coding**

Item	Question Text	Response Categories Added
SS2b_1	What was it about [your/NAME's] job that makes [you/NAME] think [you/he/she] might go back on benefits?	20= Found another job 22= Work schedule 23= Did not like/get along with co-workers 24= Did not like/get along with manager, supervisor, or boss 25= Did not like/get along with other staff responsible for hiring or providing accommodations (such as Human Resources)
SS2c_1	What was it about [your/NAME's] personal circumstances that makes [you/NAME] think [you/he/she] might go back on benefits?	19= Moved to another area 21= Loss or potential loss of government benefits
SB1b_1	What was it about [your/NAME's] job that made [you/NAME] have to go back on benefits?	20= Found another job 22= Work schedule 23= Did not like/get along with co-workers 24= Did not like/get along with manager, supervisor, or boss 25= Did not like/get along with other staff responsible for hiring or providing accommodations (such as Human Resources)
SB1c_1	What was it about [your/NAME's] personal circumstances that made [you/NAME] have to go back on benefits?	19= Moved to another area 21= Loss or potential loss of government benefits

## **G. Section E—Awareness of SSA Work Incentive Programs**

In Section E, we assessed whether the beneficiary was aware of or participating in specific SSA work incentive programs and services.

### **1. Student Earned-Income Exclusion**

Item E12 was intended to be asked of all SSI beneficiaries 25 years old or younger, and who received SSI benefits before they were 22 years old. During data review, we found 15 cases that met this criteria, but the instrument incorrectly routed these cases to skip Item E12. To correct for this routing error, we recoded E12 to be missing (.M) instead of logically skipped (.L) for these fifteen cases.

## **H. Section G—Employment-Related Services and Supports Used in 2016**

In Section G, we collected information from respondents about their use of employment-related services in 2016, including types of services received, types of providers used, how long services were received, payments for services, and reasons for and satisfaction with service utilization. We asked questions about the sources of information for services and the nature of any services needed but not received.

### **1. Employment Service Provider**

In Item G7, we ask for information about the sample member's employment service provider. Item G7 is asked only if the sample member reports receiving any employment services at Item G2a – G2e. A programming skip logic error skipped Item G7 if the respondent did not report receiving any of the predefined employment services outlined in G2a – G2\_d, but did report receiving an "Other" type of employment service at G7\_e. In these instances, G7 was

set to .M (114 cases). In a subset of these cases (11 cases), the “Other” response provided at G2\_e was backcoded into a pre-existing category at G2\_a – G2\_d during data cleaning.

## 2. Back-Coding Responses to “Other/Specify” Items

Each of the questions on type of service received and provider type in Section G (Items G2, G7, G11, G13, G16, G18, G20, and G22) included an “other” option that prompted a verbatim response. During data processing, we reviewed the verbatim responses to determine whether they could be clustered into additional categories. In Table IV.9 we provide the response categories added during coding. Responses were then back-coded whenever possible into one of the existing or newly created categories. We retained responses that could not be coded as “other.”

## 3. Back-Coding Field-Coded Responses

Items G28 (type of degree working toward) and G53 (reasons for service use) were open-ended items that required interviewers to attempt to code respondents’ verbatim responses into predetermined categories. Coders reviewed responses coded as “other” by the interviewer and back-coded them into existing response options when possible.

## 4. Coding Open-Ended Items

Item G61 (reasons unable to get needed services) was an open-ended question with no response options. We reviewed responses and developed seven categories based on common responses (Table IV.9). Coders then attempted to code the verbatim response into an established category. We retained the response “other” if it did not fit into one of the categories.

**Table IV.9. Response Categories Added to Section G During Coding**

Item	Question Text	Response Categories Added
G13	Where did {you/NAME} go to get this training? Please think about all of the places {you/NAME} went in 2016.	9= On the job training (unspecified)
G18	Where did {you/NAME} go to receive these medical services? Please think about all of the places {you/NAME} went in 2016. Did {you/NAME} go to:	05= A school 06= A nursing home/group home 07= A government agency 08= In home care 09= A medical equipment store 10= A rehabilitation/counseling center 11= Physical therapy center
G22	Where did {you/NAME} receive this mental health therapy or counseling? Please think about all of the places {you/NAME} went in 2016. Did {you/NAME} go to:	06= Residential treatment program/facility 07= Rehab center/counseling center/day program 08= Church or religious institution
G61	Why [were you/was NAME] unable to get these services?	01= Not eligible/request refused 02= Lack information on how to get services/didn't know about services 03= Could not afford/insurance would not cover 04= Did not try to get services 05= Too difficult/too confusing to get services 06= Problems with the service or agency 07= Other

## **I. Section I—Health and Functional Status**

In Section I, we collect information about the respondent’s general health status and daily functioning, including the need for special equipment or assistive devices. We also collect information on difficulties with ADLs and IADLs, functional limitations, substance abuse or dependence, and treatment for mental health conditions.

### **Back-Coding Responses to “Other/Specify” Items**

Items I20 (equipment used for seeing), I24 (equipment used for hearing), I28 (equipment used for speaking), and I32 (equipment used for walking) were all open-ended items that required interviewers to attempt to code respondents’ verbatim responses into predetermined categories. Coders reviewed responses coded as “other” by the interviewer and back-coded them into existing response options when possible.

## **J. Section J—Health Insurance**

In Section J, we collected information about the sources of the beneficiary’s health insurance coverage both at the time of the interview and during calendar year 2016.

### **1. Back-Coding Responses to “Other/Specify” Items**

Items J6 (type of private insurance), J9 (type of health coverage), and J11 (type of health coverage in 2016) were all open-ended items that required interviewers to attempt to code respondents’ verbatim responses into predetermined categories. Coders reviewed responses coded as “other” by the interviewer and back-coded them into existing response options when possible.

## **K. Section K—Income and Other Assistance**

In Section K, we asked about sources of income, including income received from earnings, social security, workers’ compensation, and other government programs and sources.

### **1. Earnings Last Month**

In Item K3, we asked respondents how much they earned last month before taxes and deductions. In Item K3a, we then asked how much remained after taxes and deductions. We built soft edit checks into the instrument and flagged high and low values for both items, although the checks were set to accept a wide range of responses. According to the distribution of responses, we examined extremely low (less than \$50 per month) and high (over \$5,000 per month) values for both pretax and take-home pay. In most cases, we were able to evaluate the values in the context of the job-specific information in Section C by reviewing the number of jobs currently held by the sample person, the number of hours worked, the sample person’s occupation, and whether the sample person was in a supported employment setting. Of the sample members who reported earnings less than \$50 a month in either pretax or take home pay (n=74), more than half worked in a sheltered workshop or were involved in a self-employment activity that could explain low monthly wages (n=38). In most cases that reported \$0 income, sample persons were employed in seasonal work or sporadic work such as substitute teaching and photography.

## 2. Income from Other Sources

We built soft edit checks into the instrument to flag high and low values for income received from each source specified (Items K7\_a through K7\_h). We examined values for cases in which the edit check had been suppressed (over \$1,000 per month) and cases at the high and low ends of the distribution. In general, as in prior rounds, although some values exceeded the maximum benefit amounts for 2016, we decided to retain the values on the original items. However, for purposes of creating the imputed variable, we did not use values above the limits when calculating the median from which the imputed values were derived. In addition, we did not use values over \$8,000 per month for Item K7\_g (other regular sources) when calculating the median for the imputed variables. Similarly, we reviewed values associated with questions K7\_h (other non-regular sources) and K14 (other government assistance), but we did not edit them because we could not clearly identify them as data entry errors. In general, we did not recode values of “0” for amounts received from other sources.

## 3. SNAP Dollar Value

In question K12, we asked respondents who had reported receiving SNAP last month to report the dollar value of the SNAP. We instructed respondents to include SNAP benefits received only by the sample person, not by other family members. Despite reports of some high values (89 values of \$500 or greater), we retained the values in the file.

## 4. Irregular SSI Income

Item K7\_h (amount of income received from other sources not on a regular basis) inquired about irregular SSI payments as non-regular income. For cases that reported the receipt of income from other sources on an irregular basis, we reviewed verbatim responses at Item K6\_h regarding the source of the income to determine if any SSA or SSI benefits were included. None of the responses suggested that SSA or SSI benefits were the source. A constructed variable, C\_AmtOthNonReg contains the amount captured in this survey question.

## 5. Back-Coding Responses to “Other/Specify” Items

If respondents indicated receipt of income from other sources on either a regular (Item K6\_g) or non-regular (Item K6\_h) basis, they were asked to specify the source. Although we could have created additional categories during coding to cluster responses to the query about income sources, such categories would have necessitated the development of additional amount variables in Item K7 in order have appropriate coding of the amount of income received from each source. Cases reporting more than one source would not lend themselves to disaggregation of amounts. Therefore, we did not back-code “other” responses for these items into any newly created categories. We back-coded the “other” responses to K6\_a through K6\_f when applicable (17 cases). This involved also moving the income reported at K7 to the correct response option for K7\_a-K7\_f.

## 6. Coding Open-Ended Items

Item K14 (type of assistance received from other government program) was an open-ended question with no response options. Following a review of the responses, we developed categories based on common responses (Table IV.10). Coders then attempted to code each verbatim response into an established category. If the response did not fit into one of the categories, we kept it as “other.”

**Table IV.10. Response Categories Added to Section K as a Result of Coding**

Item	Question Text	Response Categories Added
K14	What other assistance did {you/NAME} receive <u>last month</u> ?	1 = Housing assistance 2 = Energy assistance 3 = Food assistance 4 = Other

## L. Section L—Sociodemographic Information

In Section L, we collected basic demographic information about the beneficiary, such as race, ethnicity, education, parental education, marital status, living arrangements, and household income.

### 1. Living Situation

In Item L11, we asked respondents to indicate whether they live alone; live with parents, guardians, a spouse or partner, or other relative; live with friends or roommates; live in a group setting; or live in some other arrangement. Then, in Item L12, we asked respondents to describe the place where they live. We built a soft edit check into the instrument to prompt interviewers to clarify answers in which the respondent indicated that he or she lived alone at Item L11, but at Item L12 reported living in a group setting, such as a supervised apartment, group home, halfway house, personal care or board-and-care home, assisted living facility, nursing or convalescent home, center for independent living, or some other type of supervised group residence or facility. In some cases, the interviewer suppressed the edit check (57 cases) and the inconsistency remained. For these cases, we recoded question L11 to 4 (live in another group setting).

Item L10 (live with partner) should be asked of all respondents except those who report being married at L8. Due to an instrument programming error, this question was not asked of respondents who reported being divorced at L8. We changed the response to Item L10 to missing (.M) for these 1,261 cases.

### 2. Number of Children

In Item L17, we asked how many children under age 18 lived in the sample person's household. We then asked respondents who reported the presence of children how many of the children were their own (Item L19). In 77 cases, the number of the respondent's own children living in the household (Item L19) was greater than the number of children living in the household (Item L17). For these cases, we set the value of question L19 to don't know (.D).

### 3. Reporting of Household Income

In Item L23Aamt, we asked respondents to provide either their total income in 2016 or the total combined income of their household, before taxes and other deductions. Respondents who experienced difficulty in calculating an annual amount could report their income in monthly, twice-a-month, weekly, biweekly, or daily units (recorded in Item L23Ahop). The level of item nonresponse for L23Aamt was 35 percent. We asked those answering "don't know" or "refused" to indicate which of a series of ranges described their income (Item L24). Of the 2,958 respondents who did not respond to Item L23Aamt, 55 percent (1,636 cases) provided income data in Item L24.

We created the construct C\_HhInc2016 to combine the responses expressed in various units into an annual income amount. We first examined high and low values of Item L23Aamt by unit reported (Item L23Ahop) and then examined high and low values on C\_HhInc2016 to determine if any appeared to be invalid. Forty-eight cases reported an annual income of less than \$100. After reviewing work status, household size, and other sources of income, we did not change any values of L23Aamt. We created and imputed a more general construct C\_FedPovertyLevel (2016 Federal Poverty Level) based on reported income, household size, and respondent's age. We examined other cases on a case-by-case basis by reviewing household size and work-related variables in 2016.

#### 4. Back-Coding Responses to “Other/Specify” Items

As mentioned, we asked respondents to indicate which of a series of items best described their living situation in Item L11. Coders reviewed responses of “some other living situation” and back-coded them when possible. We also reviewed “other” responses to Item L23ahop (how often paid), although we could not back-code any into an existing category.

#### 5. Back-Coding Field-Coded Responses

Item L12 (type of place respondent lives) was an open-ended item that required interviewers to attempt to code the respondent's verbatim response into a predetermined category. Coders reviewed responses coded as “other” by the interviewer and back-coded them into existing response options when possible. If a respondent indicated they reside in a townhouse or condo in the “other” field, coders back-coded this response as a single family home.

Several questions in Section L are contingent upon the response to Item L12 (type of place respondent lives). Item L15 asks if the home you live in is primarily a place for people with disabilities, and is asked only of sample members living in a group setting. L16 and L17 which collect information on household size, is only asked of respondents who do not live in a group setting. As a result of backcoding “Other” responses at Item 12, several cases were recoded into pre-existing responses that would have resulted in different instrument pathing. Specifically, during data cleaning we assigned a value of “.M” to 46 cases at items L16 and L17 that were determined to live in a group setting based on backcoded responses. Following a review of responses, we added a new response category to question L12 (Table IV.11).

**Table IV.11. Response Categories Added to Section L as a Result of Coding**

Item	Question Text	Response Categories Added
L12	The next question is about the place where you live. Was this place a...	13 = Homeless

#### M. Section M—Closing Information and Observations

In Section M, we updated the sample member's contact information so that the incentive check could be mailed. The interviewer recorded the reasons that a proxy or assistance was required, if appropriate, and documented special circumstances.



## **1. Back-Coding Field-Coded Responses**

In Items M2a\_oth1, M2\_oth2, and M13, we asked interviewers to indicate the relationship of the proxy respondent to the sample person. We reviewed responses coded as “other relative” or “other not related” and back-coded them when possible. At Item M14 (why assistant/proxy needed), we required interviewers to attempt to code respondents’ verbatim responses into predetermined categories. We reviewed responses coded as “other” by the interviewer and back-coded them into existing response options when possible.

## **2. Respondent Type**

At Item M11, we asked the interviewer to code whether the interview was conducted with the sample member or with a proxy. We compared this item to the responses asked of sample members only or proxies only. We used the value of M11 and information from these items to construct C\_RType. We did not make any edits to the value of M11.

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## **V. CONCLUSIONS**

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In this report, we highlighted data quality issues identified during the NBS–General Waves Round 6 data editing and cleaning process. In sum, both programming errors and interviewer errors led to the loss of some survey data.

In general, although survey data processing could have been made more efficient by introducing stricter range checks for unusually high or low values, we were hesitant to apply checks that could have overwhelmed and frustrated respondents by rejecting survey responses during the interview. Any addition of checks must balance the complications associated with survey instrument programming to account for known data complexities against the need to address data complexities after survey completion.

We continued to strengthen interviewer training to emphasize areas of the questionnaire where data problems surfaced during Round 6. Such areas include the importance of correct data entry for job-specific items, probing for sufficient information on open-ended items, and avoiding the suppression of edit checks. The improved training aimed to sensitize interviewers to areas of the questionnaire that were particularly error-prone or to survey concepts that were particularly difficult.

In conclusion, the NBS Round 6 data file provides a rich array of data. As a result of data cleaning and editing, we identified and reported some instances where micro-level errors were obvious.

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**APPENDIX A**

**CHANGES IN QUESTIONNAIRE CONTENT BETWEEN NBS ROUND 5  
AND NBS ROUND 6**

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**Table A.1. Changes in Questionnaire Content Between Round 5 and Round 6 NBS**

Item	Change	Reason
<b>Section A</b>		
A2. Social Security just sent {NAME} a letter about an important national health study. I work for Mathematica Policy Research, a well-known research company based in Princeton, New Jersey. We were hired by Social Security to conduct this survey. This is a scientific study. We are not selling anything or asking for money.	Item revised	We updated the language in the introductory text to reduce the reading level and to clarify that SSA has hired Mathematica to conduct the interviews on SSA's behalf (and that the advance letters are sent from SSA).
A73a. {Are you/Is NAME} currently working at a job or business for pay or profit?	Item added	We added screening questions for SWS sample members to confirm they have been working in the past 6 months before beginning the interview.
A73b. Did {you/NAME} work for pay or profit at any time during the last 6 months?	Item added	We added screening questions for SWS sample members to confirm they have been working in the past 6 months before beginning the interview.
<b>Section B</b>		
Section B. We revised the survey text to consistently refer to "a mental or physical condition" (instead of intermittently reversing the order and referring to "a physical or mental condition").	Items modified	
BP1. {Are you/Is NAME} now able to do the same kind of work {you/he/she} did before {you/he/she} started receiving Social Security disability benefits?	Item added	Item added to address respondent's ability to perform the same job he or she performed before starting to receive disability benefits.
BP1b. Why {are you/is NAME} no longer able to do the kind of work {you/he/she} did before {you/he/she} started receiving Social Security disability benefits?	Item added	Item added to address respondent's ability to perform the same job he or she performed before starting to receive disability benefits.
BP1b_oth. What other reason?	Item added	Item added to address respondent's ability to perform the same job he or she performed before starting to receive disability benefits.
B23_3. {Have you/Has name} ever used the Internet to access information about {your/his/her} disability, services, or work from websites other than the SSA's website?	Item relocated	We have relocated questions about internet usage to Section E to improve the flow of Section B and place related questions together in the instrument.
B23_2. How often {do you/does NAME} access the Internet?	Item relocated	We have relocated questions about internet usage to Section E to improve the flow of Section B and place related questions together in the instrument.

## APPENDIX A (continued)

Item	Change	Reason
B24b. Did {you/NAME} work for pay or profit at any time during the last 6 months?	Item added	Item added to screen out successful workers who are not currently working or who have not worked in the past 6 months.
<p>B25_o. Other beneficiaries have said that they are not working for a number of reasons. I am going to read you a list of these reasons. For each, please tell me if it is a reason why {you are/NAME is} <u>not</u> currently working. {Are you/ Is NAME} not working because...</p> <p>{You/NAME} cannot get the help {you need / he needs / she needs} with personal care. This includes things like help dressing and bathing to get ready for work or eating lunch and using the restroom at work.</p>	Item revised	Item added to collect more detailed information about how and why a beneficiary's health prevents or inhibits work.
<p>B25_p. {Are you/ Is NAME} not working because...          {You/NAME} cannot get help {you need/he needs/she needs} with tasks you would do at work. This includes having someone help you with things like writing, reading, lifting or reaching.</p>	Item added	Item added to collect more detailed information about how and why a beneficiary's health prevents or inhibits work.
<p>BP3. You said that one of the reasons {you are/NAME is} not working is because a physical or mental health condition prevents {you/him/her} from working. I am going to read you a list of reasons why some people say their health prevents them from working. For each, please tell me "yes" if it is a reason why {your/NAME's} health prevents {you/him/her} from working.</p> <ul style="list-style-type: none"> <li>a. {Your/NAME's} health would interfere with job performance</li> <li>b. {You do/NAME does} not have the physical energy or stamina required to work at a job</li> <li>c. {You experience/NAME experiences} severe pain that interferes with a job or work schedule</li> <li>d. Working at a job is too stressful</li> <li>e. Work would be physically harmful to {your/NAME's} health</li> <li>f. Medical and therapy appointments {you need/NAME needs} for your health condition interfere with a regular work schedule</li> <li>g. The time {you need/NAME needs} for personal care and to take care of {your/his/her} health interferes with a regular work schedule</li> <li>h. {Your/NAME's} health goes up and down in unpredictable ways</li> <li>i. {You are/NAME is} unable to get the medical treatment {you need/he needs/she needs} to improve {your/his/her} health enough to go to work</li> <li>j. Any other reasons not mentioned?</li> </ul>	Item added	Item added to collect more detailed information about how and why a beneficiary's health prevents or inhibits work.
BP3_Oth. What other reasons?	Item added	Item added to collect more detailed information about how and why a beneficiary's health prevents or inhibits work.
B36b. In what year did {you/NAME} last work for pay or profit?	Item added	Item added to solicit more complete employment history.

## APPENDIX A (continued)

Item	Change	Reason
B39. Who is the main person {you discuss/NAME discusses} work goals with?	Item revised	Item modified to solicit information about the <i>main</i> person with whom the respondent discusses work goals. Previously, the series B39 – B46 asked respondents to identify up to three individuals with whom they discuss work goals.
B41. {Do you/Does NAME} discuss {your/his/her} work goals with anyone else?	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.
B42. Who else {do you/does NAME} discuss {your/his/her} work goals with?	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.
B42_oth. Who was it?	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.
B43. Please tell me how much you agree or disagree with the following statement. Would you say you strongly agree, agree, disagree, or strongly disagree? {Your/NAME's} {RESPONSE FROM B42} thinks {your/NAME's} personal goals should include working at a job, moving up in a job, or learning new job skills.	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.
B44. {Do you/Does NAME} discuss {your/his/her} work goals with anyone else?	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.
B45. Who else {do you/does NAME} discuss {your/his/her} work goals with?	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.
B45_oth. Who was it?	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.

## APPENDIX A (continued)

Item	Change	Reason
B46. Please tell me how much you agree or disagree with the following statement. Would you say you strongly agree, agree, disagree, or strongly disagree? {Your/NAME's} {RESPONSE FROM B5} thinks {your/NAME's} personal goals should include working at a job, moving up in a job, or learning new job skills.	Item removed	Items collected information about up to three individuals who have a large influence on the employment expectations and outcomes of beneficiaries. Items removed due to limited analytic value and high burden.
BP4a1. You said that you don't see {yourself/NAME} working in the near future. {Do you/Does NAME} have any problems with {your/NAME's} <u>health</u> , that may prevent {you/him/her} from working in the near future?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a1_1. What is it about {your/NAME's} health that may prevent {you/NAME} from working?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a1_oth. What else?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a2. {Do you/Does NAME} have any <u>job related</u> problems that may prevent {you/him/her} from working in the near future?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a2_1. What was it about a job that may prevent {you/NAME} from working?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a2_oth. Please specify.	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a3. {Do you/ Does NAME} have any problems with {your/NAME's} <u>personal circumstances</u> , that may prevent {you/him/her} from working in the near future?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a3_1. What was it about {your/NAME's} personal circumstances that may prevent {you/NAME} from working?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4a3_oth. Please specify.	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b1. You said that you don't see {yourself/NAME} working enough to stop receiving disability benefits in the near future. {Do you/Does NAME} have any problems with {your/NAME's} <u>health</u> , that may cause {you/him/her} to not work enough to leave benefits?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b1_1. What is it about {your/NAME's} health that may cause {you/NAME} to not work enough to leave benefits?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.

## APPENDIX A (continued)

Item	Change	Reason
BP4b1_oth. Please specify.	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b2. {Do you/Does NAME} have any <u>job-related</u> problems that may cause {you/him/her} to not work enough to leave benefits?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b2_1. What is it about a job that may cause {you/NAME} to not work enough to leave benefits?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b2_oth. Please specify.	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b3. {Do you/Does NAME} have any problems with {your/NAME's} <u>personal circumstances</u> that may cause {you/him/her} to not work enough to leave benefits?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b3_1. What is it about {your/NAME's} personal circumstances that may cause {you/NAME} to not work enough to leave benefits?	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
BP4b3_oth. Please specify.	Item added	Reasons beneficiaries do not believe they will work or leave benefits.
<b>Section C</b>		
C1a. What are the main reasons {you/NAME} decided to work?	Item added	Item added to determine whether motivation to work emerges as the most important among a more representative population.
C1a_oth. Please specify.	Item added	Item added to determine whether motivation to work emerges as the most important among a more representative population.
CP2. How did {you/NAME} find {your/his/her} {main/current} job?	Item added	Item added to solicit information about how respondents found their current job.
CP2_Oth. Please specify.	Item added	Item added to solicit information about how respondents found their current job.
CP2b. What was the main way {you/NAME} found {your/his/her} {main/current} job?	Item added	Item added to solicit information about how respondents found their current job.
CP2_Oth. What other way did {you/NAME} find this job?	Item added	Item added to solicit information about how respondents found their current job.

## APPENDIX A (continued)

Item	Change	Reason
<p>CP3. I am going to read a list of things that some people use or receive to help them find or keep a job. Please tell me if {you/NAME} used or received each to help find or keep working at {your/his/her} {main/current} job. Did {you/NAME}...</p> <ul style="list-style-type: none"> <li>a. use a job coach?</li> <li>b. use a sign language interpreter?</li> <li>c. use a reader or interpreter for the blind?</li> <li>d. use an assistant or caregiver for personal care?</li> <li>e. use a personal care assistant at work to help with job-related tasks?</li> <li>f. receive on the job training?</li> <li>g. receive counseling about how work will affect your benefits?</li> <li>h. receive help with transportation?</li> <li>i. receive help with child or family care?</li> <li>j. use special equipment or devices?</li> </ul>	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP3k.1. What special equipment or devices did you use?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP3k.1_oth. Please specify.	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP3l. Did {you/NAME} use or receive anything else to help find or keep working at {your/his/her} {main/current} job?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP3lm_oth. Please specify.	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP4. Did a friend, family member, coworker, caseworker, or anyone else help {you/him/her} find or keep working {IF C15=00 keep working} {your/his/her} {main/current} job?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.

## APPENDIX A (continued)

Item	Change	Reason
CP5. Who did {you/NAME} get help from?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP5_oth. What else?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP6. What kind of help did {you/NAME} get from this person/these people?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP6_oth. What else?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP7. As far as you know does anyone at {your/NAME's} {main/current} job know that {you have/he has/she has} a disability? a. {Your/NAME's} co-workers? b. {Your/NAME's} manager, supervisor, or boss? c. Other staff responsible for hiring or providing accommodations (such as Human Resources)? d. Anyone else?	Item added	Item added to solicit information about disability disclosure.
CP7a. Who at {your/NAME's} {main/current} job knows that {you have a disability}?	Item added	Item added to solicit information about disability disclosure.
CP7a_oth. Who else?	Item added	Item added to solicit information about disability disclosure.
CP8. How comfortable or uncomfortable {do you/does NAME} feel about discussing {your/his/her} disability or health condition with others at {your/his/her} (current/main} job?	Item added	Item added to solicit information about negative disability attitudes encountered at work.
CP10. As far as you know, do other people with disabilities work at {your/NAME's} {main/current} job?	Item added	Item added to determine whether the beneficiary works in a "disability-friendly" workplace by asking if others with disabilities work there.

## APPENDIX A (continued)

Item	Change	Reason
C22. {Do you/Does NAME} use any special equipment related to {your/his/her} disability that helps {you/him/her} work at {your /his/her} job{s}, for example a brace, cane, wheelchair, modified computer hardware or modified computer software?	Item removed	Item removed. Information about special equipment used is now asked in the CP3.
C23. What kind of special equipment {do you/does NAME} use?	Item removed	Item removed. Information about special equipment used is now asked in the CP3.
C23_Other. What kind of other special equipment?	Item removed	Item removed. Information about special equipment used is now asked in the CP3.
C24. Who paid for the equipment {you use/he/she uses}?	Item removed	Item removed due to limited analytic value.
C24_Other. Who else paid for the equipment {you use/NAME uses}?	Item removed	Item removed due to limited analytic value.
C25. {Do you or your/Does NAME or (his/her)} family have to pay for any part of the cost of the equipment {you use/(he/she) uses}?	Item removed	Item removed due to limited analytic value.
C27. {Do you/Does NAME} use any personal assistance services related to {your/his/her} disability that help {you/him/her} work, for example, a job coach, a sign language interpreter, a reader or interpreter for the blind, or a personal care attendant?	Item removed	Item removed. We have integrated the questions related to personal assistance into item CP3.
C28. What kind of personal assistance services {do you/does NAME} use?	Item removed	Item removed. We have integrated the questions related to personal assistance into item CP3.
C28_Other. What is the other kind of personal assistance services {you/NAME} use?	Item removed	Item removed. We have integrated the questions related to personal assistance into item CP3.
C29. Who paid for the personal assistance services {you use/NAME uses}?	Item removed	Item removed due to limited analytic value.
C29_Other. Who else paid for the personal assistant services {you use/NAME uses}?	Item removed	Item removed due to limited analytic value.
C30. {Do you or your/Does NAME or (his/her)} family have to pay for any part of the cost of the personal assistance services {you use/(he/she) uses}?	Item removed	Item removed due to limited analytic value.
CP12. Is there anything special about {your/NAME's} {main/current} job that helps {you/NAME} to keep working with a disability?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.



## APPENDIX A (continued)

Item	Change	Reason
CP12a. What is special about {your/NAME's} {main/current} job that helps {you/NAME} to keep working with a disability?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP12a_oth. What else about {your/NAME's} {main/current} job allows {you/NAME} to keep working?	Item added	Item added to solicit information about formal and informal supports used by beneficiaries to keep their current jobs and about specific features of the job that allow respondents with disabilities to work.
CP13a. Next I am going to ask you about types of problems some people experience that could cause them to work less or stop working. During the past year, did {you/NAME} have any problems with {your/NAME's} health, that caused {you/him/her} to work less or stop working, for example worsening illness or the need to go to medical appointments?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13.a1.What was it about {your/NAME's} health that might have caused {you/NAME} to have to work less or stop working?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13.a1_Oth. Please specify.	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13b. During the past year, did {you/NAME} have any problems with {your/NAME's} job, that caused {you/him/her} to work less or stop working, for example the need for accommodations, or problems with {your/NAME's} co-workers?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13.b1. What was it about {your/NAME's} {main/current} job that might have caused {you/NAME} to have to work less or stop working?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13.b1_Oth. Please specify.	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13c. During the past year, did {you/NAME} have any problems with {Your/NAME's} personal circumstances, that caused {you/him/her} to work less or stop working, for example the need for childcare, not having reliable transportation, or worry about losing other benefits?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13.c1. What was it about {your/NAME's} personal circumstances that might have caused {you/NAME} to have to work less or stop working?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP13.c1_Oth. Please specify.	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.

## APPENDIX A (continued)

Item	Change	Reason
CP14. What {did you/NAME do} or what things helped {you/NAME} to be able to keep working?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
CP14_oth. What other things helped {you/NAME} be able to keep working?	Item added	Item added to collect information about disability-related challenges experienced since starting work at the current job.
<p>C39. Again, thinking about your {main/current} job, how much do you agree or disagree with each of the following statements? Would you say you strongly agree, agree, disagree, or strongly disagree?</p> <ol style="list-style-type: none"> <li>You have a chance to develop your abilities</li> <li>You have recognition or respect from others</li> <li>You can work on your own in your job if you want to</li> <li>You can work with others in a group or team if you want to</li> <li>Your work is interesting or enjoyable</li> <li>Your work gives you a feeling of accomplishment or contribution</li> <li>IF {NAME} IS NOT SELF-EMPLOYED (C6=00, d, or r): Your supervisor is supportive</li> <li>Your co-workers are friendly and supportive</li> </ol>	Item modified	<p>Some response options were dropped from this question because SSA considered them a lower priority. The items that were dropped include:</p> <ol style="list-style-type: none"> <li>The pay is good</li> <li>The benefits are good</li> <li>IF {NAME} IS NOT SELF-EMPLOYED (C6=00, d, or r): The job security is good. IF {NAME} IS SELF-EMPLOYED (C6=01): The work is steady</li> <li>IF {NAME} IS NOT SELF-EMPLOYED (C6=00, d, or r): You have a chance for promotion</li> <li>You plan to stay at this job for the next five years</li> </ol>
CP16. Did {you/NAME} change how much {you/he/she} worked because {you were/he was/she was} asked to re-pay the Social Security Administration?	Item added	Item added as a follow-up to existing item C39_6 to assess whether a benefit overpayment affected employment.
<p>CP16a. What did {you/NAME} change about the hours {you/he/she} worked? Did {you/he/she}...</p> <ol style="list-style-type: none"> <li>Reduce {your/his/her} work hours by a little</li> <li>Reduce {your/his/her} work hours by a lot</li> <li>Increase {your/his/her} work hours by a little</li> <li>Increase {your/his/her} work hours by a lot</li> </ol>	Item added	Item added as a follow-up to existing item C39_6 to assess whether a benefit overpayment affected employment.
<b>Section C_B</b>		
All questions in Section C_B are new to the instrument. All questions in C_B mirror Section C with a few exceptions which are noted below.	Items added	Section added to capture the recent employment experiences of those who are not employed at the time of the interview. Section C_B mimics the questions pertaining to current employment asked in Section C and captures experiences and characteristics associated with the main job held during the prior six months among those not employed at interview but employed during the prior six months.
C_B4bmth. In what month and year did {you/NAME} stop working there?	Item added	Item does not exist in Section C because Section C covers current employment.

## APPENDIX A (continued)

Item	Change	Reason
C_B4byr. In what month and year did {you/NAME} stop working there?	Item added	Item does not exist in Section C because Section C covers current employment.
<b>Section D</b>		
D23. Why did {you/NAME} stop working at this job?	Item removed	Item deleted and replaced with a set of new questions (DP1a – DP2a) that probe for greater detail on the motivations for leaving jobs.
DP1a. I'm going to ask you about reasons {you/NAME} might have left this job. Did {you/NAME} leave this job because of {your/NAME's} health, for example, because of worsening illness or the need to go to medical appointments?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP1a_1. What was it about {your/NAME's} health that made {you/him/her} leave this job?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP1b. I'm going to ask you about reasons {you/NAME} might have left this job. Did {you/he/she} leave this job because of {your/NAME's} job, for example because of the need for accommodations or problems with {your/his/her} co-workers?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP1b_1. What was it about {your/NAME's} job that made {you/him/her} leave it?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP1b_1_oth. Please specify	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP1c. I'm going to ask you about reasons {you/NAME} might have left this job. Did {you/he/she} leave this job because of {your/NAME's} personal circumstances, for example because {you/he/she} need(s) childcare, {don't/doesn't} have reliable transportation, or {worry/worries} about losing other benefits?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP1c_1. What was it about {your/NAME's} personal circumstances that made {you/him/her} leave the job?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP1c_1_oth. Please specify	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP2. Are there any other reasons that we haven't talked about why {you/NAME} left this job?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.

## APPENDIX A (continued)

Item	Change	Reason
DP2a_oth. What other things made {you/NAME} leave this job?	Item added	We replaced previous question D23 with a set of new questions that probe for greater detail on the motivations for leaving jobs.
DP3. Did {you/NAME} change how much {you/he/she} worked because {you were/he was/she was} asked to re-pay the Social Security Administration?	Item added	Item added to ask if the requirement to repay Social Security disability benefits (among those indicating they had to do so) affected respondents' work behavior.
DP3a. What did {you/NAME} change about how much {you/he/she} worked? Did {you/he/she}... Reduce your work hours by a little Reduce your work hours by a lot Increase your work hours by a little Increase your work hours by a lot	Item added	Item added to ask if the requirement to repay Social Security disability benefits (among those indicating they had to do so) affected respondents' work behavior.
<b>Section SC</b>		
All questions in Section SC are new to the instrument.	Items added	Section added to capture information about the circumstances and experiences of beneficiaries surrounding benefit suspense.
<b>Section E</b>		
EP1. If {you/NAME} needed information about {your/his/her} disability benefits or how work affects {your/his/her} benefits who would {you/NAME or (his/her) representative} contact to get that information?	Item added	Item added to explore where beneficiaries obtain disability-related information, and an alternative question to assess their awareness of the substantial gainful activity (SGA) earnings amount.
EP1a. In 2016, did {you/NAME or (his/her) representative} use any of the following to contact the Social Security Administration (SSA) for information about {your/his/her} disability benefits or how work affects {your/his/her} benefits... a. telephone? b. visiting a Social Security Administration office in person? c. going online to the Social Security Administration's website or by email?	Item added	Item added to explore where beneficiaries obtain disability-related information, and an alternative question to assess their awareness of the substantial gainful activity (SGA) earnings amount.
EP1b. In general, how easy was it for {you/NAME or (his/her) representative} to get the information {you/they} wanted about {your/his/her} disability benefits or how work affects {your/his/her} benefits from the Social Security Administration (SSA)?	Item added	Item added to explore where beneficiaries obtain disability-related information, and an alternative question to assess their awareness of the substantial gainful activity (SGA) earnings amount.
EP1d. Overall, how helpful was the information {you/NAME} got about {your/his/her} disability benefits or how work affects {your/his/her} benefits from the Social Security Administration (SSA)?	Item added	Item added to explore where beneficiaries obtain disability-related information, and an alternative question to assess their awareness of the substantial gainful activity (SGA) earnings amount.

## APPENDIX A (continued)

Item	Change	Reason
B23_3. {Have you/Has name} ever used the Internet to access information about {your/his/her} disability, services, or work from websites other than the SSA's website?	Item relocated	We have relocated questions about internet usage from Section B to this group of questions to improve the flow of Section B and place related questions together in the instrument.
B23_2. How often {do you/does NAME} access the Internet?	Item relocated	We have relocated questions about internet usage from Section B to this group of questions to improve the flow of Section B and place related questions together in the instrument.
E15a. Most people receiving Social Security disability benefits will lose their cash benefits if they work and earn more than \$1,170 in a month for more than nine months. Is this something {you/NAME} knew before today?	Item added	Item added for Social Security Disability Insurance beneficiaries to assess the extent to which they are aware of the concept of the SGA earnings cliff.
EP3. Most people who start working and lose their disability benefits are able to keep their health insurance. Is this something {you/NAME} knew before today?	Item added	Item added to measure whether sample members are aware that most people who start working and lose their disability benefits are able to keep their health insurance.
E20b. {Have you/Has NAME} ever used Expedited Reinstatement?	Item removed	Item removed due to limited analytic value.
<b>Section G</b>		
G1. Next, I will ask about different types of services that people with disabilities sometimes get in order to improve their ability to work or live independently. Please think only about services {you/NAME} received in 2016.	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
First, I will ask about employment services {you/NAME} may have received.		
G2. In 2016, did {you/he/she} receive: a. a work or job assessment to determine if a job is a good fit for {you/him/her}? b. help to find a job? c. advice about modifying {your/his/her} job or work place? d. job coaching or support services? e. any other employment support services to help {you/NAME} get a job or live independently?	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G2_oth. Please specify	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.

## APPENDIX A (continued)

Item	Change	Reason
<p>G7. Where did {you/NAME} go to get these employment services? Please think about all of the places {you/NAME} went in 2016. Did {you/NAME} go to a...</p> <ul style="list-style-type: none"> <li>Vocational rehabilitation agency or {STATE VRNAME}</li> <li>Welfare agency or {STATE WELFARE AGENCY NAME}</li> <li>Mental health agency</li> <li>Some other state agency</li> <li>Workforce center or employment/unemployment office</li> <li>A private business</li> <li>A school or college</li> <li>Some other type of place</li> </ul>	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G7_oth1. PLEASE SPECIFY THE OTHER TYPE OF PLACE	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G7_oth2. PLEASE SPECIFY THE OTHER STATE AGENCY	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G10. Sometimes people get <u>training</u> to help them learn new skills so they can get a new job or change careers.	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
<p>G11. In 2016, did {you/he/she} receive:</p> <ul style="list-style-type: none"> <li>a. training to learn a new job or skill?</li> <li>b. on-the-job training?</li> <li>c. any other training or certification to help {you/NAME} learn new skills or get a job that I didn't mention?</li> </ul>	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G11_oth. PLEASE SPECIFY	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.

## APPENDIX A (continued)

Item	Change	Reason
<p>G13. Where did {you/NAME} go to get this training? Please think about all of the places {you/NAME} went in 2016. Did {you/NAME} go to a:</p> <ol style="list-style-type: none"> <li>1. Vocational rehabilitation agency or {STATE VRNAME}</li> <li>2. Welfare agency or {STATE WELFARE AGENCY NAME}</li> <li>3. Mental health agency</li> <li>4. Some other state agency</li> <li>5. Workforce center or employment/unemployment office</li> <li>6. A private business</li> <li>7. A school or college</li> <li>8. Some other type of place</li> </ol>	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G13_oth1. PLEASE SPECIFY THE OTHER STATE AGENCY	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G13_oth2. PLEASE SPECIFY THE OTHER TYPE OF PLACE	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
<p>G16. In 2016, did {you/he/she} receive:</p> <ol style="list-style-type: none"> <li>a. physical therapy?</li> <li>b. occupational therapy?</li> <li>c. speech therapy?</li> <li>d. special equipment or devices?</li> <li>e. prescription medications?</li> <li>f. any other medical services to improve {your/NAME's} ability to work or live independently that I didn't mention?</li> </ol>	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G16_oth. PLEASE SPECIFY	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
<p>G18. Where did {you/NAME}: go to receive these medical services? Please think about all of the places {you/NAME} went in 2016. Did {you/NAME} go to:</p> <ol style="list-style-type: none"> <li>1. A clinic or doctor's office</li> <li>2. A hospital</li> <li>3. Some other type of place</li> </ol>	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.

## APPENDIX A (continued)

Item	Change	Reason
G18_oth. PLEASE SPECIFY	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
<p>G20. Sometimes people go to a mental health professional to get therapy or counseling to improve their ability to work or live independently. In 2016, did {you/he/she} receive:</p> <ol style="list-style-type: none"> <li>a. personal counseling or therapy?</li> <li>b. group therapy?</li> <li>c. any other mental health services to help {you/NAME} work or live independently that I didn't mention?</li> </ol>	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G20_oth. PLEASE SPECIFY	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
<p>G22. Where did {you/NAME} receive this mental health therapy or counseling? Please think about all of the places {you/NAME} went in 2016. Did {you/NAME} go to:</p> <ol style="list-style-type: none"> <li>1. A mental health agency</li> <li>2. A clinic or doctor's office</li> <li>3. A hospital</li> <li>4. Some other type of place</li> </ol>	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G22_oth. PLEASE SPECIFY	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G23. At any time in 2016, did {you/ NAME} enroll in school or take any classes to help {you/him/her} get a new job or change careers? Please do not include any training you have already told me about.	Items revised heavily	Items in Section G were heavily revised to focus only on services received during the previous calendar year and to not identify the name of every service provider.
G37. In 2014, how many times did {you/NAME} receive these services from {PROVIDER FROM G30_1 DE-DUPLICATED LIST IF USED IN 2014}? You can tell me either the total number of times in 2014 or the total number of times per week or per month.	Item removed	Item removed given the likely poor respondent recall and large burden associated with these questions, and the fact that information on service intensity is no longer needed for the TTW evaluation.



## APPENDIX A (continued)

Item	Change	Reason
G37_T2014. How many times did {you/NAME} go to the place or have contact with the service provider in 2014?	Item removed	Item removed given the likely poor respondent recall and large burden associated with these questions, and the fact that information on service intensity is no longer needed for the TTW evaluation.
G39. About how long did each service session with {PROVIDER FROM G30_1 DE-DUPLICATED LIST IF USED IN 2014} last?	Item removed	Item removed given the likely poor respondent recall and large burden associated with these questions, and the fact that information on service intensity is no longer needed for the TTW evaluation.
G40.How useful to {you/NAME} were the services provided by {PROVIDER FROM G30_1 DE-DUPLICATED LIST IF USED IN 2014}? Would you say they were very useful, somewhat useful, not very useful, or not at all useful?	Item removed	Item removed given the likely poor respondent recall and large burden associated with these questions, and the fact that information on service intensity is no longer needed for the TTW evaluation.
G40_1. Were the services provided to you by {PROVIDER FROM G30_1 DE-DUPLICATED LIST IF USED IN 2014} not useful because... a. you had not received all of your services yet? b. you did not receive enough services? c. the services you received did not fit your needs? d. your medical condition or other personal circumstances kept you from fully participating in the services? e. The services provided were of poor quality. f. Are there any other reasons the services provided to you were not useful?	Item removed	Item removed given the likely poor respondent recall and large burden associated with these questions, and the fact that information on service intensity is no longer needed for the TTW evaluation.
G53. The next question is about why {you/NAME} decided to use the employment, job training, medical, or therapy services {you/he/she} used in 2016. Thinking only about the services {you/NAME} used in 2016, what are the main reasons {you/he/she} decided to use these services?	Item revised	Item revised to include job training services.
G54. Did anybody pressure {you/NAME} to use any services when {you/NAME} did not want to?	Item removed	Item removed as it is no longer needed for the TTW evaluation.
G55. Who pressured {you/NAME} to use these services?	Item removed	Item removed as it is no longer needed for the TTW evaluation.
G55_oth. PLEASE SPECIFY	Item removed	Item removed as it is no longer needed for the TTW evaluation.

## APPENDIX A (continued)

Item	Change	Reason
G56. How did {your/NAME's} {FILL PERSON(S) FROM G55} pressure {you/him/her} to use these services?	Item removed	Item removed as it is no longer needed for the TTW evaluation.
G58_oth. PLEASE SPECIFY	Item removed	Item removed as it is no longer needed for the TTW evaluation.
G57. Now that {you have/NAME has} used these services, listen to this statement and tell me if you strongly agree, agree, disagree, or strongly disagree. Being pressured to use these services was in {my/NAME's} best interest.	Item removed	Item removed as it is no longer needed for the TTW evaluation.
G59. In general, how easy was it for {you/NAME} or {your/his/her} representative to get the information {you/they} wanted about these services?	Item removed	Item removed as it is no longer needed for the TTW evaluation.
<b>Section I</b>		
IP1. {Do you/Does NAME} have a physical or mental health condition that gets worse every now and then that requires more than a few days to recover from?	Item added	Item added to capture the phenomenon of episodic poor health.
IP2. Sometimes people delay or skip getting the health care they need for different reasons. Please tell me if any time in the past 12 months {you/NAME} delayed or skipped getting... <ul style="list-style-type: none"> <li>a. prescription medicines</li> <li>b. special equipment or medical devices</li> <li>c. mental health care or counseling</li> <li>d. any other type of medical care I didn't mention</li> </ul>	Item added	Item added to collect information about unmet health care needs and the reasons that respondents did not immediately seek out or obtain needed health care.
IP5. During the past 12 months, about how many days did illness or injury keep {you/NAME} in bed more than half of the day (include days while an overnight patient in a hospital)?	Item added	Item added to capture the number of "bed days," or days where illness or disability results in a person having to be confined to bed.

## APPENDIX A (continued)

Item	Change	Reason
<p>IP7. People sometimes look to others for support. For each of the following kinds of support, please tell me how often {you are/NAME is} able to get it when {you need/he needs/she needs} it. Would you say . . . none of the time, a little of the time, some of the time, most of the time, or all of the time?</p> <ol style="list-style-type: none"> <li>Someone to help {you/NAME} with bathing, dressing, or preparing meals if {you/NAME} needed it</li> <li>Someone to give {you/NAME} good advice about a crisis or a personal problem if {you/NAME} needed it</li> <li>Someone to take {you/NAME} to the doctor if {you/he/she} needed it</li> <li>Someone to help {you/NAME} with {your/his/her} daily chores if {you/NAME} needed it</li> <li>Someone to help {you/NAME} with {your/his/her} expenses if {you/NAME} needed it</li> </ol>	Item added	Items added to solicit information about the availability of informal supports and social capital.
IP8a. In a typical week, how many times {do you/does NAME} talk on the telephone with family, friends, or neighbors?	Item added	Items added to solicit information about the availability of informal supports and social capital.
IP8b. In a typical week, how often {do you/does NAME} get together with friends or relatives?	Item added	Items added to solicit information about the availability of informal supports and social capital.
IP8c. In a typical week, how often {do you/does NAME} attend church or religious services?	Item added	Items added to solicit information about the availability of informal supports and social capital.
IP8d. In a typical week, how often {do you/does NAME} attend meetings of clubs or organizations {you belong/he belongs/she belongs} to?	Item added	Items added to solicit information about the availability of informal supports and social capital.
IP9. Can {you/NAME} drive {yourself/himself/herself} when {you need/he needs/she needs} to go places?	Items added	Items added to capture information about transportation, as beneficiaries mention it as one of the primary reasons that they do not work.
IP9.a. {Do you/Does NAME} have some way of getting to places when {you need/he needs/she needs} to go such as having someone else drive or using public transportation?	Items added	Items added to capture information about transportation, as beneficiaries mention it as one of the primary reasons that they do not work.
IP10. Overall, how satisfied or dissatisfied {are you/is NAME} with {your/his/her} ability to get transportation when {you need/he needs/she needs} it?	Items added	Items added to capture information about transportation, as beneficiaries mention it as one of the primary reasons that they do not work.

**Section K**

## APPENDIX A (continued)

Item	Change	Reason
<p>KP1. Which of the following best describes {your/NAME's} current financial situation?</p> <ol style="list-style-type: none"> <li>1. Struggling to meet {your/his/her} basic needs</li> <li>2. Meeting {your/his/her} basic needs, but not able to save or improve {your/his/her} standard of living</li> <li>3. Able to save a little, but not completely financially comfortable</li> <li>4. Financially comfortable with few worries about money</li> </ol>	Item added	Item added to measure perception of financial situation.
<p>KP2. If {you/NAME} had to support {yourself/himself/herself} for three months without any income or gifts from others, would {you/he/she} have enough money in savings to get by?</p>	Item added	Item added to collect information on savings or other assets that might be used by beneficiaries to weather health- or employment-related crises.
<b>Section L</b>		
<p>L21b. {Do you own/Does NAME} or rent your home?</p>	Item added	Added to facilitate follow-up with longitudinal sample members in 2019. This question aims to establish members' propensity to become unlocatable based on data collected in 2017.
<p>LP23. {Have you/Has NAME} ever served on active duty in the U.S. Armed Forces, Reserves, or National Guard?</p>	Item added	Item added because of the strong interest in veterans with disabilities and limited knowledge about SSDI and SSI beneficiaries who are veterans.
<b>Section M</b>		
<p>M2c. {Are you/Is NAME} planning to move within the next two years?</p>	Item added	Added to facilitate follow-up with longitudinal sample members in 2019.
<p>M2c. Where are {you/NAME} planning to move to?</p>	Item added	Added to facilitate follow-up with longitudinal sample members in 2019.

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