

# National Beneficiary Survey-General Waves Round 7 (Volume 3 of 3): User's Guide for Restricted Access and Public Use Files

Final report

October 20, 2021

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## Contents

ACRONYMS .....	XIII
NBS DATA DOCUMENTATION REPORTS.....	XV
I. INTRODUCTION.....	1
A. Overview of the National Beneficiary Survey .....	2
1. Survey objectives .....	2
2. Round 7 survey overview.....	3
B. NBS Restricted Access and Public Use Data Files.....	5
II. SAMPLE DESIGN.....	7
A. Overview of the design .....	7
1. RBS.....	7
2. Cross-sectional SWS.....	8
3. Longitudinal SWS.....	9
B. Target population and sampling frames.....	9
C. Primary sampling unit formation and selection.....	12
D. Strata definitions and sample sizes.....	14
III. QUESTIONNAIRE DESIGN .....	19
A. Summary of modules.....	19
1. Section A—Introduction and Screener.....	20
2. Section B—Disability and Current Work Status.....	21
3. Section C—Current Employment.....	21
4. Section C_B—Employment in Past 6 Months .....	21
5. Section D—Jobs/Other Jobs During 2018.....	22
6. Section SC—Benefit Suspense .....	22
7. Section E—Awareness of SSA Work Incentive Programs .....	22
8. Section G—Employment-Related Services and Supports Used in 2018 .....	22
9. Section I—Health and Functional Status .....	22
10. Section J—Health Insurance .....	23
11. Section K—Income and Other Assistance.....	23
12. Section L—Sociodemographic Information .....	23
13. Section M—Closing Information and Observations .....	23
B. Instrument Pathing and Preloaded Data .....	23

C.	Comparisons with other questionnaires and surveys.....	27
D.	Special design considerations .....	28
E.	Changes Made to Survey Instrument in Round 7 .....	28
1.	New Questions Applicable to Longitudinal Sample Members .....	29
2.	Other Modifications to the Round 7 Survey Instrument .....	29
IV.	DATA COLLECTION.....	31
A.	Data collection procedures .....	31
1.	Advance contacts.....	31
2.	Interviewer training.....	32
3.	Locating.....	33
4.	CATI data collection .....	33
5.	In-field locating and CAPI data collection .....	34
6.	Assisted interviews and proxy respondents.....	37
B.	Case disposition summaries.....	38
V.	VARIABLE CONSTRUCTION AND EDITING .....	41
A.	Editing of questionnaire variables.....	41
B.	Imputation of missing values .....	41
C.	Coding Verbatim Responses.....	42
1.	Coding Open-Ended, “Other/Specify,” and Field-Coded Responses .....	42
2.	Health Condition Coding .....	44
3.	Industry and Occupation .....	56
D.	Constructed variables .....	57
1.	Survey administration .....	57
2.	Logical zero.....	57
3.	Duration and amount standardization.....	58
4.	Pathing combinations.....	58
5.	Scales .....	59
6.	Other .....	59
E.	SSA administrative data .....	59
F.	Public use variables.....	59
1.	Variable exclusion.....	60
2.	Masking and constructing new variables .....	60
G.	Additional details on selected constructed variables.....	60
1.	Jobs held in 2018.....	60

	2. Employment-related services.....	62
VI.	WEIGHTS .....	65
	A. Computing and adjusting the weights: A summary .....	65
	1. RBS.....	65
	2. Cross-sectional SWS .....	68
	3. Longitudinal SWS.....	69
	4. Composite weights for combining the RBS and cross-sectional SWS .....	70
	5. Quality assurance .....	70
	B. Computing weights for the RBS .....	71
	1. Base sampling weights .....	71
	2. Response rates and nonresponse adjustments to the weights .....	73
	3. Post-stratification and trimming.....	83
	C. Cross-sectional SWS.....	84
	1. Initial probability weights .....	86
	2. Dual-frame estimation.....	86
	3. Nonresponse adjustment.....	88
	4. Post-stratification and trimming.....	98
	D. Longitudinal SWS .....	99
	1. Base sampling weights .....	100
	2. Base weights incorporating dual sample design.....	100
	3. Nonresponse adjustment.....	100
	4. Post-stratification and trimming.....	114
VII.	IMPUTATIONS.....	117
	A. NBS Imputations of Specific Variables.....	119
	1. Section L: Race and ethnicity .....	120
	2. Section B: Disability status variables and work indicator.....	121
	3. Section C: Current jobs variables .....	122
	4. Section I: Health status variables.....	124
	5. Section K: Sources of income other than employment.....	129
	6. Section L: Personal and household characteristics .....	130
VIII.	USING THE NBS RESTRICTED ACCESS AND PUBLIC USE FILES .....	133
	A. File Content and Technical Specifications .....	133
	B. Choosing a Sample and Weight Variable.....	133
	C. Estimating Sampling Variance for NBS.....	134

D. Codebook .....	135
REFERENCES.....	137
APPENDIX A TOTAL SURVEY ERROR AND THE NATIONAL BENEFICIARY SURVEY—GENERAL WAVES .....	A.1
I. INTRODUCTION.....	A.3
II. SOURCES OF ERROR .....	A.5
A. Unit nonresponse .....	A.5
Minimizing unit nonresponse on the NBS .....	A.5
B. Item nonresponse.....	A.6
Approaches to minimizing item nonresponse on the NBS .....	A.6
C. Specification error.....	A.7
Approaches to minimizing specification error on the NBS .....	A.7
D. Measurement error .....	A.8
1. Respondent-based measurement error .....	A.8
Approaches to minimizing respondent-based measurement error on the NBS.....	A.8
2. Interviewer-based measurement error.....	A.9
Approaches to minimizing interviewer-based measurement error on the NBS .....	A.9
3. Instrument-related measurement error .....	A.10
Approaches to minimizing instrument-related measurement error on the NBS.....	A.11
4. Environment-related measurement error .....	A.11
Approaches to minimizing environmental-related measurement error on the NBS .....	A.11
5. Data processing error .....	A.12
Approaches to minimizing data processing errors on the NBS.....	A.12
III. THE IMPACT OF TSE ON DATA QUALITY FOR THE NBS .....	A.13
A. Unit nonresponse .....	A.13
B. Item nonresponse.....	A.13
C. Measurement error .....	A.13
APPENDIX B AVAILABILITY OF NBS VARIABLES ON THE RESTRICTED ACCESS AND PUBLIC USE DATA FILES .....	B.1
APPENDIX C CHANGES IN QUESTIONNAIRE CONTENT BETWEEN NBS ROUND 6 AND NBS—GENERAL WAVES ROUND 7 .....	C.1
APPENDIX D OTHER SPECIFY AND OPEN-ENDED ITEMS WITH ADDITIONAL CATEGORIES CREATED DURING CODING .....	D.1
APPENDIX E SOC MAJOR AND MINOR OCCUPATION CLASSIFICATIONS .....	E.1

APPENDIX F NAICS INDUSTRY CODES ..... F.1

APPENDIX G DESCRIPTION OF CONSTRUCTED VARIABLES..... G.1

APPENDIX H VARIABLES DROPPED OR REPLACED ON PUBLIC USE FILE AND  
REASON FOR DROP/REPLACEMENT .....H.1

APPENDIX I VARIABLES RECODED FOR THE PUBLIC USE FILE..... I.1

APPENDIX J PARAMETER ESTIMATES AND STANDARD ERRORS FOR  
NONRESPONSE MODELS..... J.1

APPENDIX K SUDAAN PARAMETERS FOR NATIONAL ESTIMATES FROM THE  
NBS-GENERAL WAVES ROUND 7 SAMPLE .....K.1

## Tables

Table I.1. Summary of Samples Processed in Rounds 1 through 7 <sup>a</sup> .....	3
Table I.2. Sources of error, description, and methods to minimize impact.....	4
Table II.1. Earliest acceptable final identified month of successful work for each extract, and resulting first month of ineligibility.....	11
Table II.2. Strata and sampling units for all samples.....	14
Table II.3. NBS—General Waves (RBS and SWS) Round 7 actual sample sizes, target completed interviews, and completed interviews.....	16
Table III.1. NBS—General Waves instrument sections.....	24
Table III.2. Survey preloads.....	25
Table III.3. Items skipped for proxy respondents.....	26
Table III.4. National Beneficiary Survey question sources.....	27
Table III.5. New Questions in Round 7.....	29
Table IV.1. Contact information source by sample type and completion status.....	33
Table IV.2. Cases sent to In-field locating by sample group.....	35
Table IV.3. Summary of reasons for proxy interview.....	38
Table IV.4. Summary case disposition by sample type and sampling strata.....	39
Table V.1. Missing values and description.....	42
Table V.2. Imputation flag values and description.....	42
Table V.3. Supplemental codes for “other/specify” coding.....	44
Table V.4. Rounds 6 and 7 health coding scheme.....	46
Table V.5. Body system diagnosis groups (C_MAINCONBODYGROUP_1-_6, C_SECCONBODYGROUP_1-_12, C_REASBECELIGBODYGROUP, C_MAINREASELIGBODYGROUP_1-_4).....	48
Table V.6. New primary diagnosis groups (C_MAINCONDIAGGRPNEW_1-_6, C_SECCONDIAGGRPNEW_1-_12, C_REASBECELIGDIAGGRPNEW, C_MAINREASELIGDIAGGRPNEW_1-_4).....	50
Table V.7. New primary diagnosis groups (C_MAINCONDIAGGRPNEW_1-_6, C_SECCONDIAGGRPNEW_1-_12, C_REASBECELIGDIAGGRPNEW, C_MAINREASELIGDIAGGRPNEW_1-_4) crosswalk with earlier round primary diagnosis groups (C_MAINCONDIAGGRP, C_SECCONDIAGGRP, C_REASBECELIGDIAGGRP, C_MAINREASELIGDIAGGRP).....	53

Table V.8. Primary diagnosis codes collapsed (C_MAINCONCOLDIAGGRP_1-_6, C_SECCONCOLDIAGGRP_1-_12, C_REASBECELIGCOLDIAGGRP, C_MAINREASELIGCOLDIAGGRP_1-_4).....	55
Table V.9. Supplemental codes for occupation and industry coding.....	57
Table V.10. Job variables in Sections C, C_B and D .....	61
Table VI.1. Study population (as of June 30, 2018), initial augmented sample sizes, and initial weights by sampling strata in the National Beneficiary Survey.....	71
Table VI.2. Weighted location, cooperation, and response rates for Representative Beneficiary Sample, by selected characteristics .....	75
Table VI.3. Location logistic propensity model: RBS .....	80
Table VI.4. Cooperation logistic propensity model: RBS .....	81
Table VI.5. Survey population and initial augmented and final sample sizes, by sampling extracts and strata in the cross-sectional Successful Worker Sample.....	85
Table VI.6. Weighted location, cooperation, and response rates for Successful Worker Sample, by selected characteristics.....	90
Table VI.7. Location logistic propensity model: Cross-sectional Successful Worker Sample .....	95
Table VI.8. Cooperation logistic propensity model: Successful Worker Sample .....	95
Table VI.9. Design effects attributable to unequal weights before and after trimming, within trimming classes in the cross-sectional SWS.....	98
Table VI.10. Estimated survey population and sample sizes, by beneficiary title strata in the longitudinal SWS.....	99
Table VI.11. Weighted location, cooperation, and response rates for longitudinal SWS, by selected characteristics, among those in Round 7 beneficiary frame .....	102
Table VI.12. Weighted location, cooperation, and response rates for longitudinal SWS, by selected characteristics, among those not in Round 7 beneficiary frame .....	107
Table VI.13. Location logistic propensity model: Longitudinal SWS in Round 7 beneficiary frame .....	111
Table VI.14. Cooperation logistic propensity model: Longitudinal SWS in Round 7 beneficiary frame ...	112
Table VI.15. Design effects attributable to unequal weights before and after trimming, within trimming classes in the longitudinal SWS .....	114
Table VII.1. Race and ethnicity imputations.....	120
Table VII.2. Disability status imputations .....	122
Table VII.3. Current jobs imputations.....	124
Table VII.4. Health status imputations, questionnaire variables.....	125
Table VII.5. Health status imputations, constructed variables .....	128

Table VII.6. Imputations on sources of income other than employment..... 129

Table VII.7. Imputations of personal and household characteristics ..... 131

Table A.1. Sources of error .....A.3

Table A.2. Key sources of error and relative impact on data quality .....A.4

Table B.1. Availability of NBS variables on the restricted access and public use data files.....B.3

Table C.1. Changes in Questionnaire Content Between Round 6 and Round 7 NBS ..... C.3

Table D.1. “Other/Specify” and Open-Ended Items with Additional Categories Created During Coding . D.3

Table E.1. SOC major and minor occupation classifications .....E.3

Table F.1. NAICS industry codes..... F.3

Table G.1. Description of Constructed Variables..... G.3

Table H.1. Variables dropped or replaced on public use file and reason for drop/replacement..... H.3

Table I.1. Variables recoded for the public use file ..... I.3

Table J.1. Variables in the location logistic propensity model in the RBS ..... J.3

Table J.2. Variables in the cooperation logistic propensity model in the RBS..... J.4

Table J.3. Variables in the location logistic propensity model in the ..... J.6

Table J.4. Variables in the location logistic propensity model in the cross-sectional SWS ..... J.7

Table J.5. Variables in the cooperation logistic propensity model in the cross-sectional SWS..... J.9

Table J.6. Variables in the location logistic propensity model in the longitudinal SWS, in Round 7  
beneficiary frame..... J.11

Table J.7. Variables in the cooperation logistic propensity model in the longitudinal SWS, in Round 7  
frame ..... J.13

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## Figures

Figure II.1. Timeline for extracts in Successful Worker Sample, including work period, data pull dates, and admissible data collection period for each extract.....	12
Figure IV.1. Summary of the survey administration process .....	36

## ACRONYMS

ADLs	Activities of Daily Living
AIC	Akaike's Information Criterion
CAPI	Computer-assisted personal interviewing
CATI	Computer-assisted telephone interviewing
CHAID	Chi-Squared Automatic Interaction Detector
DCF	Disability Control File
FRA	Full retirement age
IADLs	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 Units
RBS	Representative Beneficiary Sample
SAS	Statistical software, formerly Statistical Analysis System (SAS is a registered trademark of SAS Institute, Inc., Cary, NC)
SGA	Substantial Gainful Activity
SOC	Standard Occupational Classification
SPSS	Statistical Package for the Social Sciences (SPSS is a registered trademark of SPSS, Inc., Chicago, IL)
SSA	Social Security Administration
SSDI	Social Security Disability Insurance (Title II of the Social Security Act)
SSI	Supplemental Security Income (Title XVI of the Social Security Act)
SSU	Secondary Sampling Units
STATA	Statistical software (STATA is a registered trademark of StataCorp LP, College Station, TX.)

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## NBS DATA DOCUMENTATION REPORTS

The following publicly available reports are available from SSA on their website ([https://www.ssa.gov/disabilityresearch/nbs\\_round\\_7.html](https://www.ssa.gov/disabilityresearch/nbs_round_7.html)):

- **User's Guide for Restricted Access and Public Use Data Files** (current report). 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 (described below) —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** (McDonald et al. 2021). 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. 2021). This document contains all items on Round 7 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. 2021). This report summarizes the editing, coding, imputation, and weighting procedures as well as the development of standard errors for Round 7 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 provisional post-stratified analysis weights for the successful worker sample (both cross-sectional and longitudinal) and 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** (McDonald et al. 2021). This report describes the data processing procedures performed for Round 67 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 et al. 2021). This report discusses whether the nonresponse adjustments applied to the sampling weights of Round 7 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. 2021). 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.

## I. Introduction

Sponsored by the Social Security Administration's (SSA's) Office of Retirement and Disability Policy, the National Beneficiary Survey-General Waves (NBS-General Waves), collects data on the employment-related activities of working-age beneficiaries of Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI). In 2019, Mathematica conducted the seventh round of data collection since the NBS began in 2004. The first five rounds of the survey—in 2004, 2005, 2006, 2010, and 2017—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 (2015), 6 (2017), and 7 (2019), we sought to uncover important information about the factors that promote beneficiaries' self-sufficiency and, conversely, the factors that impede beneficiaries' efforts to maintain employment.

For Round 7 of the NBS, we met the goals of the study through three samples: (1) a cross-sectional sample of all beneficiaries (the Representative Beneficiary Sample, or RBS), (2) a cross-sectional sample of a subset of beneficiaries who maintained a minimum level of earnings for a sustained period (a “successful worker” sample, or SWS), and (3) a subset of SWS cases from Round 6, followed longitudinally in Round 7. The survey was administered to all three of these samples simultaneously. Mathematica collected data by using computer-assisted telephone interviewing (CATI). We deployed in-person field locators to follow-up with some CATI nonrespondents,<sup>1</sup> and we offered computer-assisted personal interviewing (CAPI) with sample members who preferred or needed an in-person interview to accommodate their disabilities.<sup>2</sup>

In the discussion that follows, we provide detailed information about the NBS-General Waves to assist users of the NBS Round 7 Public- and Restricted Access Data files. In the remaining sections of Chapter I, we provide an overview of the NBS-General Waves, including the objectives of the study. In Chapter II, we describe the NBS sample design, while in Chapter III, we provide a summary of the questionnaire design. In Chapter IV, we document the NBS data collection effort, including the locating and calling protocols. We devote Chapter V to discussions of variable construction and editing, the coding of verbatim and open-ended responses, and the masking procedures used to create the Public Use Data File. In Chapter VI, we explain the process for computing and adjusting the sampling weights and provide details of the calculation of the weights, while in Chapter VII we describe the procedures used to impute missing responses for selected questions. Finally, in Chapter VIII, we discuss the use of the NBS data files, including weight specification and variance estimation.

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<sup>1</sup> For a portion of the RBS, we did not employ field follow-up. Instead, we randomly selected telephone nonrespondents for a second phase of data collection involving field follow-up, described later in this chapter, in Section A.2. We also did not employ field follow-up for a portion of the SWS. This portion, referred to as the “unclustered” sample, is also described later—in Section A.2. of this chapter

<sup>2</sup> In Round 7, none of the NBS respondents requested a CAPI interview.

## A. Overview of the National Beneficiary Survey

### 1. Survey objectives

The NBS—General Waves collects important beneficiary data that are not available from SSA administrative data or other sources, including information about their disabilities, interest in work, use of services, and employment. 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?
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 combines data from the NBS 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 estimates from 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 successful workers 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 instead 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 for time to redesign the successful worker portion of the survey and sample, and we ultimately opted not to administer the SWS in Round 5. In lieu of the Round 5 SWS survey, we conducted in-depth qualitative interviews with 91 successful workers about their benefit experiences and their attempts to find and keep a job (O'Day et al. 2016). In Round 6, we conducted the second cross-sectional survey for the RBS in the NBS—General Waves, using the same primary sampling units (PSUs) that were selected in Round 5, simultaneously conducting the first cross-sectional survey for the SWS. In Round 7, we conducted the third cross-sectional survey for the RBS in the NBS—General Waves,<sup>3</sup> the second cross-sectional survey for the

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<sup>3</sup> Although this is the third RBS in the NBS—General Waves, it is the seventh RBS over the history of the NBS project.

SWS, and a longitudinal follow-up survey for a subset of SWS cases from Round 6.<sup>4</sup> Table I.1 shows the samples that were processed in Rounds 1 through 7.

**Table I.1. Summary of Samples Processed in Rounds 1 through 7<sup>a</sup>**

Round	Year	Study	RBS	TPS	SWS	Longitudinal 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	√		√	√

Source: NBS Round 7.

<sup>a</sup> Qualitative interviews were also conducted in Round 5 of the NBS-General Waves, in 2015.

## 2. Round 7 survey overview

The NBS was designed and implemented to maximize both response and data quality. In Table I.2, we describe the most significant sources of potential error identified at the outset of the NBS and describe the ways we attempted to minimize the impact of each. We have included a more detailed discussion of our approach to minimizing total survey error in Appendix A.

<sup>4</sup> Only SWS members who were working at the time of the Round 6 interview were eligible for the longitudinal sample in Round 7.

**Table I.2. Sources of 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 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 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 is unable to respond due to cognitive disability
Unit Nonresponse	An error occurring 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 occurring 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 occurring 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 unable to respond due to cognitive disability
Data Processing	An error occurring 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 there were few obviously sensitive items. In fact, item nonresponse was greater than 6 percent only for select items asking for wages and household income.<sup>5</sup> Unit nonresponse was the greater concern given the population; thus, we designed the survey to be executed as a dual-mode survey. If a sample member could not participate in the survey because of an intellectual disability, even with help from a friend or family member, we sought a proxy respondent. To promote response among Hispanic populations, we translated the questionnaire into Spanish. For languages other than English or Spanish, interpreters, if available in the sample person’s

<sup>5</sup>Item nonresponse was less than 5 percent for the vast majority of variables, but it was 5.01 percent for three constructed disability variables. Details are provided in Chapter VII.

home, conducted the interviews. 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 and the case was selected for field follow-up, we deployed a field locator to make contact in person. After locating the sample member, the field locator attempted to facilitate an interview with them via CATI, using a cell phone (or the sample member's own phone, if preferred) to call into the data collection center. If a sample member could not complete the interview by telephone in this manner due to their disability, trained field staff were available to conduct the interview in person using CAPI. In Round 7, none of the NBS respondents requested a CAPI interview.

The Round 7 sample comprised 23,601 cases: 11,299 in the RBS, 8,590 in the cross-sectional SWS, and 3,712 in the longitudinal SWS. In total, Mathematica completed 9,092 interviews (including 137 partially completed interviews). Of these, 4,008 were completed from the RBS, 3,016 from the cross-sectional SWS, and 2,068 from the longitudinal SWS. An additional 261 beneficiaries from the RBS, 311 from the cross-sectional SWS, and 46 longitudinal SWS cases were deemed ineligible for the survey.<sup>6</sup> Because of the independence of the sample selections for the RBS and the cross-sectional SWS, the clustered and unclustered samples within the cross-sectional SWS, and the Round 6 SWS (the source for the Round 7 longitudinal SWS), individuals could be selected for more than one sample. After accounting for 269 cases actually selected for more than one sample, the number of unique completed interviews was 8,823.<sup>7</sup> Mathematica completed all of these interviews by telephone. We completed proxy interviews for 1,113 sample members in the RBS, for 293 sample members in the cross-sectional SWS, and for 151 sample members in the longitudinal SWS, for a total of 1,557 proxy interviews across the three sample groups. In addition, we completed a total of 242 interviews in Spanish—104 in the RBS, 74 in the cross-sectional SWS, and 64 in the longitudinal SWS.

The weighted response rates for Round 7 of the NBS are 54.7 percent for the RBS, 41.0 percent for the cross-sectional SWS, and 54.5 percent for the longitudinal SWS. More information about sample selection and sampling weights is available in Grau et al. (2021).

## B. NBS Restricted Access and Public Use Data Files

To protect the anonymity of NBS respondents while still providing accurate and detailed data, we present the NBS-General Waves data in two formats: a Restricted Access Data File, which is available only to users approved by SSA and for use on specific research projects, and a Public Use Data File, which SSA plans to release for the public's use in various statistical analyses. These two files present the same survey results, but offer differing degrees of accessibility to confidential information. For both data files, we have removed any information that could directly or indirectly identify a respondent, including respondents' names, Social Security numbers, and addresses. Because of its more widespread availability, the Public

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<sup>6</sup> Ineligible sample members include those who were deceased, incarcerated, in active military, or no longer living in the continental United States as well as those whose benefit status was pending at the time of the interview. For the cross-sectional SWS, ineligibles also included sample members who had not worked in the past six months at the time of the interview.

<sup>7</sup> Among sample cases that were completed interviews only, there were 23 duplicates (46 sample cases total) between the RBS and cross-sectional SWS and 76 duplicates (152 sample cases total) between the clustered and unclustered samples within the cross-sectional SWS. Duplicates and triplicates also occurred with the longitudinal SWS.

Use Data File has undergone extensive masking and includes fewer available variables than the Restricted Access Data File. Even with variables masked, however, the Public Use Data File offers a wide variety of pertinent variables and topics for the general public's use. A full discussion of the masking procedures employed to create the Public Use Data File appears in Chapter V. In Appendix B, we provide a list of the variables available in both the Restricted Access Data File and the Public Use Data File.

The Public Use Data File is available to researchers through SSA's website <https://www.ssa.gov/disabilityresearch/publicusefiles.html#tag2>. Researchers must contact SSA to obtain permission to use the Restricted Access Data File.

## II. SAMPLE DESIGN

### A. Overview of the design

For all survey rounds, the NBS has used a multistage sampling design for both the RBS and cross-sectional SWS, with an independently drawn supplemental single-stage sample for some successful worker populations.<sup>8</sup> In Round 7, we drew the cross-sectional SWS and RBS independently, from separate frames, although the SWS frame was a subset of the RBS frame. This means that some sample members could have been selected for both the RBS and the cross-sectional SWS—which occurred for 90 individuals (of which 30 responded<sup>9</sup>). Because most analyses do not require combining the samples, we did not adjust the RBS and cross-sectional SWS weights for these duplicates. However, in case an analysis would require combining the samples, we also created composite weights that accounted for duplicates (individuals who were selected for both samples). These composite weights also accounted for those in the RBS that were not part of the cross-sectional SWS but were part of the SWS frame.<sup>10</sup>

The longitudinal SWS was composed of all sample cases that (1) completed a Round 6 SWS interview and (2) reported to be currently working at the time of the Round 6 survey.<sup>11</sup>

#### 1. RBS

For the RBS in Round 7, we fielded a nationally representative sample of 11,299 SSA disability beneficiaries. The sample design for the Round 7 RBS was similar to the design of the RBS in prior rounds, through there were two important changes: (1) we stratified the sample of PSUs differently in Rounds 1 through 4 than we did in Rounds 5 through 7,<sup>12</sup> and (2) all telephone nonrespondents were followed up in the field in Rounds 1 through 6, but only a random sample of telephone nonrespondents were followed up in the field in Round 7, as described in more detail below. We stratified the RBS by

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<sup>8</sup> The RBS and the main sample of the SWS involved selecting individuals within selected clusters of geographic areas, and they are therefore referred to as “clustered samples.” The supplemental sample (for the SWS only) was selected 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>9</sup> Of the 30 who responded, 28 were considered completes for both the cross-sectional SWS and RBS. Of the remaining 2 respondents, 1 was completed in the field for the SWS but was not selected for field operations in the second phase of the RBS, and thus was not an RBS complete. The other was an RBS complete but was considered ineligible for the cross-sectional SWS because the person had not been working in the past six months. Therefore, there were 29 total RBS completes, and 29 total cross-sectional SWS completes.

<sup>10</sup> There were an additional 56 sampled cases in the RBS, of which 19 responded, that were part of the SWS frame, but were not sampled for the SWS.

<sup>11</sup> We did not create composite weights that combined sample cases from the longitudinal SWS with any other sample. Longitudinal SWS respondents were selected based on their work activity at Round 6; therefore, they cannot be meaningfully combined with any of the other Round 7 samples.

<sup>12</sup> The sample design for Rounds 1 through 4 included two samples: one for all beneficiaries (the RBS) and one for the ticket participants (the TPS). To accommodate the rollout of the TTW program, the PSUs were sampled within strata defined by the three phases of the rollout. The design for Round 5 included one sample only: a sample of all beneficiaries. The PSUs were not drawn within strata, except those defined by the two certainty PSUs. The Round 6 and Round 7 samples used the same PSUs as those sampled in Round 5.

four age-based strata within the PSUs: (1) age 18 to 29, (2) age 30 to 39, (3) age 40 to 49, and (4) age 50 and older.

To reduce data collection costs, we implemented a two-phase sample design for the RBS in Round 7. Our goal was to achieve the same number of completed interviews (4,000) as in past rounds, but with a greater proportion completed by phone instead of in the field. In Phase 1, we reserved a minimum of 12 weeks for cases to work their way through the pre-specified phone interview protocol for each sample release. Next, in Phase 2, we randomly subsampled telephone nonrespondents for field follow-up instead of fielding all of these cases. Because the length of the Phase 1 protocol varied on a case-by-case basis, not all cases were ready for Phase 2 after 12 weeks. By week 15, 27 percent of the total cases that would be selected for Phase 2 were active in Phase 2. By week 25, this increased to 75 percent. By week 35, nearly all Phase 2 selected cases were active in Phase 2. The two-phase approach necessitated increasing the sample size for the RBS compared with prior rounds. Note that, when weighted for the two-phase design, the weighted response rate is the same regardless of what proportion of Phase 1 nonrespondents is subsampled for Phase 2.

## 2. Cross-sectional SWS

The cross-sectional 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; details about the criteria used to define successful workers are provided in Section II.B. To ensure a large enough number of successful workers for sampling, we formed seven successive frames of successful workers over time. Each one was revealed by comparing the full sampling frame to updated earnings information and identifying all successful workers at that time, then removing them from subsequent frames to make the frames mutually exclusive. The SWS sampling frames were all subsets of the same sampling frame used for the Round 7 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) and selected a probability sample from each extract. From these extracts, we fielded a nationally representative sample of 8,590<sup>13</sup> successful workers. We included one screening question as an additional constraint: the sampled successful workers had to indicate that they had been working at any time in the past six months.<sup>14</sup>

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 sampled PSU, and successful workers not residing in any of the sampled PSUs).<sup>15</sup> We refer to the multistage sample design as the “clustered” sample, and to the second

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<sup>13</sup> For reasons explained later in this chapter, this sample includes 395 duplicates. As a result, 8,195 unique cases were sampled.

<sup>14</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.

<sup>15</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.

independent sample as the “unclustered” sample.<sup>16</sup> We call the combination of data from the clustered and unclustered samples to calculate estimates a “dual 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.

### 3. Longitudinal SWS

The Round 7 longitudinal sample consists of Round 6 cross-sectional SWS respondents who were working at the time of the Round 6 interview. In the Round 6 survey, we defined successful workers as SSI or SSDI beneficiaries who (1) were active or in suspense status due to work<sup>17</sup> on June 30, 2016; (2) had earnings above SSA’s nonblind SGA earnings level<sup>18</sup> for at least three consecutive calendar months at any time from August 1, 2016, through July 31, 2017; and (3) were younger than 62 on June 30, 2016. (This is the same definition for successful workers that we used in Round 7, except for the dates and SGA earnings levels.) We used an age limit of 62 to ensure that the longitudinal sample cases would be younger than 65 on the date of the Round 7 interview. Of the 4,587 respondents in the Round 6 SWS, 3,712 were eligible for and included in the Round 7 longitudinal SWS.

#### B. Target population and sampling frames

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, 2018.<sup>19</sup> We constructed the sampling frame according to these criteria. As of that date, the sampling frame consisted of approximately 13.7 million beneficiaries; approximately 2.2 million beneficiaries resided in the sampled PSUs and secondary sampling units (SSUs) (described in the next section).<sup>20</sup>

The cross-sectional 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 and SSDI beneficiaries were required to (1) have earnings above SSA’s non-blind substantial gainful activity (SGA) monthly earnings level (\$1,180 in 2018 and \$1,220 in 2019) for a minimum of three consecutive calendar months at any time between August 1, 2018 and July 31, 2019,

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<sup>16</sup> Because of the small populations where the dual sample design was required, Mathematica often selected successful workers who resided in the selected PSUs for both the clustered and in-PSU strata of the unclustered samples. Hence, we had to count these duplicate cases in the weighting process (discussed later).

<sup>17</sup> “Suspense status due to work” refers to the beneficiaries whose benefits have been temporarily suspended because of work. Those in suspense status for other reasons were not eligible for the sample.

<sup>18</sup> This threshold was \$1,090 in 2015 and \$1,130 in 2016.

<sup>19</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.

<sup>20</sup> The sample frame count (13,670,658 cases) includes sampled cases that were found at data collection to be ineligible, either because they had died, were screened out, or were ineligible for other reasons. The weighted estimate of eligible cases was 12,683,610. The count of beneficiaries living in the sampled PSUs and SSUs (2.2 million) excludes those residing in the certainty PSUs but not in selected SSUs.

and (2) be younger than age 62 on June 30, 2018.<sup>21</sup> The successful work must have occurred within a time frame so that in most cases<sup>22</sup> 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 population any successful workers who had a long delay in having their earnings recorded on the DCF.<sup>23</sup> To ensure that few people would be screened out, we needed to define the extracts so that the potential elapsed time period between the final identified month of the successful work period and the interview date did not exceed six months. This means that each extract had to be limited to successful workers whose successful work ended late enough to satisfy this requirement. The data for each successive frame were extracted at (approximately) six week intervals, to ensure that enough new successful workers could be identified in each new extract. For the first six of the successive frames, data were extracted on the first Monday or Tuesday after the following dates: December 1, 2018; January 15, 2019; March 1, 2019; April 15, 2019; June 1, 2019; and July 15, 2019. Due to the short data collection window available for successful workers in the final extract, we performed the extraction for the final frame on the Tuesday before September 1, 2019 (August 27). Table II.1 summarizes the earliest acceptable final month of successful work for a successful worker to be included in each extract. Also included in this table is the first month of ineligibility for those whose successful work actually ended on the earliest acceptable final month shown. For those who met these criteria to be included in the extract, sample members were asked in the questionnaire if they had worked in the past six months. If they answered negatively, they were screened out.

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<sup>21</sup> We used a 62-year age limit in Round 6 to ensure that longitudinal cases would still be under age 65 at the time of the Round 7 interview. Although we did not plan to follow the Round 7 cross-sectional successful workers longitudinally, we maintained the 62-year age limit in the Round 7 cross-sectional sample for the sake of consistency with Round 6.

<sup>22</sup> As per SSA's specifications, the period between the last month of successful work and the interview date was limited to six months to avoid issues of recall about the sample member's successful work period. We say "in most cases" because it was possible, though unlikely, for the sample member from the first few extracts to have had their successful work cease more than six months ago, even though the frames were constructed to avoid this. For this to occur, (1) the interview had to occur long after the case was released for data collection, meaning that this was only possible in one of the earlier extracts, (2) their successful work did not continue, but ceased long before data collection, and (3) they did not answer the screening question correctly about whether they worked in the past six months, or their work in the past six months did not exceed the SGA threshold.

<sup>23</sup> Some SSI and SSDI beneficiaries would be considered successful workers because their earnings and age met the threshold, but they 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 after three years. There was no way they could be identified in time for the data extraction. In the future (within two years after the completion of this document), the DCF earnings data will be revisited, and the weights will be poststratified to account for the new information that the updated DCF earnings data will provide.

**Table II.1. Earliest acceptable final identified month of successful work for each extract, and resulting first month of ineligibility**

Extract	Earliest acceptable final month of successful work	First month of ineligibility for those with earliest acceptable final month of successful work
December 1, 2018	October, 2018	May, 2019
January 15, 2019	November, 2018	June, 2019
March 1, 2019	December, 2018	July, 2019
April 15, 2019	February, 2019	September, 2019
June 1, 2019	March, 2019	October, 2019
July 15, 2019	May, 2019	December, 2019 <sup>a</sup>
September 1, 2019	June, 2019	January, 2020 <sup>a</sup>

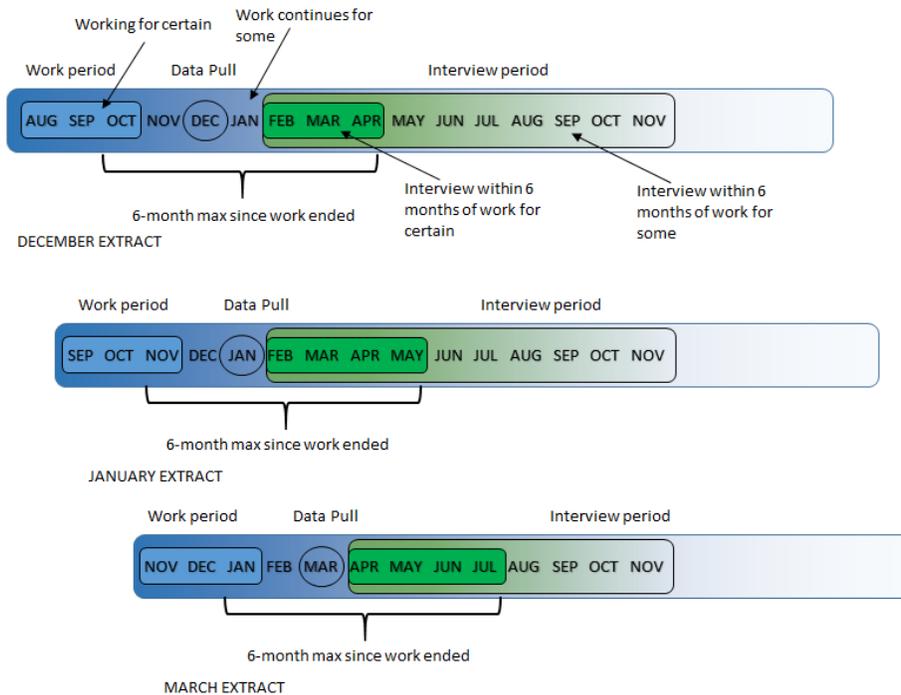
<sup>a</sup>The first month of ineligibility for the July and September extracts occurs after the end of the data collection period.

The window of time that a successful worker could be identified for inclusion in an extract, selected for the sample, and have an attempted interview, is illustrated in Figure II.1 for three of the seven extracts. The figure shows the length of time between the successful work and the interview, and how this elapsed time must not exceed six months. The first rectangle corresponds to the first sample extract, which is limited to those whose successful work either ended in October or November in 2018, or continued at the time of the extract creation in early December. It excludes those whose three consecutive months of successful work ended earlier than October, 2018. This is because, for the December extract, we estimated that the successful workers’ interview date could be as late as April 2019. For someone whose successful work ended in September, this would be more than six months of recall. It is possible that the interview date would be sooner than April 2019, in which case we would be excluding someone from the frame whose successful work ended fewer than six months beforehand. By the same token, if the interview was in May, someone whose successful work ended on October 31 would have more than a six-month gap until the interview date (and would be screened out from the screener question in the questionnaire). However, constructing the frames in this way ensures that most will have a gap that is less than six months, and that few cases would be screened out based on the response to the screening question in the questionnaire.

Using these constraints to define the target population for the sample in this round, we created seven sample frames with a total of 101,698 successful workers.<sup>24</sup> However, we believe there are as many as 300,000 individuals who were successful workers, many of which could not be identified in time to be included in the sample frames. After a period of at least two and a half years, we will post-stratify the weights so that the estimates account for these extra individuals.

<sup>24</sup> This total is provisional, and does 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. Furthermore, it will likely include a small number of cases (perhaps 5 percent, based on experience from Round 6) that met the successful work criteria at the time of the initial extraction, but in a later updated extraction, will not meet the criteria during the time period in question. The provisional sample frame count (101,698) includes sampled cases that were found at data collection to be ineligible, either because they had died, were screened out, or were ineligible for other reasons. The weighted estimate of eligible cases was 92,243.

**Figure II.1. Timeline for extracts in Successful Worker Sample, including work period, data pull dates, and admissible data collection period for each extract**



Note: Solid rectangles identify the “for certain” periods, and gradients represent the decline in certainty over time.

The Round 7 longitudinal sample consists of the Round 6 cross-sectional SWS respondents who indicated that they were working at the time of the Round 6 interview, of which there were 3,712. We do not know what proportion of the 89,636 successful workers in Round 6 were working at the time of the Round 6 interview, but we have an estimate based on our responding sample of 65,871, of which 64,225 were eligible. However, after we processed an updated extract from Round 6, we found that there was a total of 288,576 successful workers, of which 265,514 were eligible. We poststratified the Round 6 weights to this new total; however, we still need to recalculate the longitudinal weights to determine an estimated size of the eligible longitudinal population.<sup>25</sup>

### C. Primary sampling unit formation and selection

We needed to construct and sample PSUs for both surveys that we conducted in the prior NBS rounds (a sample of all beneficiaries, and a sample of participants in the Ticket to Work program), and for both the RBS and cross-sectional SWS in the NBS—General Waves. We constructed them in 2003 prior to the first round using county-level beneficiary counts from data that were available at the time. Based on the design report for the Ticket to Work evaluation (Bethel and Stapleton 2002), the design for the RBS

<sup>25</sup> After we conducted a final extract of Round 6 earnings data in November 2020, we determined that the estimated number of eligible successful workers in Round 6 was actually 265,514; the discrepancy was due to a lag in recording earnings in SSA administrative data for many successful workers. Since it takes three years for this lag to dissipate, we will also need to redo the Round 7 longitudinal weights in 2022 to account for this new total and obtain a new estimate of successful workers who were eligible for the longitudinal population.

called for 60 to 100 PSUs to be formed from counties or groups of counties. Because of the size of the beneficiary populations in Los Angeles and Cook Counties and their geographic size, we formed SSUs using beneficiaries’ ZIP codes.

Construction of the PSUs began with county-level counts of beneficiaries in four age strata (18 to 29 years, 30 to 39 years, 40 to 49 years, and 50 years and older). For sampling purposes, we used a size measure (Folsom et al. 1987) that incorporates the count of beneficiaries and the desired sampling rate of beneficiaries in each age stratum. This measure of size, referred to as a composite size measure, presents a “population” for each PSU that is essentially a weighted average of the population sizes within each age group, where the weight is the sampling rate.<sup>26</sup> It permits an equal probability of selection of beneficiaries within each age stratum across PSUs and gives us a sense of the approximate workload in each PSU. To form the PSUs, we used a score based on latitude and longitude to order counties equal within each state by geography. An eligible PSU needed the composite size measure to exceed a specific level to ensure that adequate counts of beneficiaries existed in each of the four age-based sampling strata. We evaluated the PSUs based on geographic size (square miles), topography (lakes, rivers, and mountain ranges), and transportation access among counties in a PSU (roadways in mountainous areas and bridges around the Great Lakes).

In total, we formed 1,330 PSUs with 48 percent (639 PSUs) having a single county and 84 percent (1,113 PSUs) having three or fewer counties. Of the 1,330 PSUs, just 30 (2.3 percent) included 10 or more counties; mostly rural areas in the western U.S. Because the geographical distribution of beneficiaries changed little between 2003 and 2011, we used these same 1,330 PSUs for the NBS—General Waves.

In Round 5, we conducted a new sample selection of PSUs from the set of 1,330, using a composite measure of size calculated from the most recent counts of beneficiaries in the four age strata. We classified two PSUs as certainty selections (Los Angeles County and Cook County<sup>27</sup>). These counties were certainty selections based on the selection frequencies for the PSUs computed using the composite size measure. We allocated the Los Angeles County PSU twice the sample size allocated to the other PSUs due to its population size relative to the other PSUs. To complete the sample of 80 PSUs, we selected 77 PSUs with probability proportional to size (PPS), where the size was defined by the composite size measure, and with minimal replacement using Chromy’s procedure (1979). We controlled the selection of PSUs using the following implicit stratification variables: U. S. Census division, the component states that comprised each Census division, and a beneficiary weighted score (from 0 to 9) based on the 2013 Urban Influence Code (Area Health Resource File [AHRF], 2016-2017).

We formed SSUs in Los Angeles and Cook Counties by using counts of beneficiaries in each stratum for five-digit ZIP codes and the composite size measure. SSUs consisted of one or more ZIP code areas such that the aggregate composite size measure exceeded the criterion value. We formed 62 SSUs in the Los Angeles PSU, and we selected 4 with probability proportional to the composite size measure. In the Chicago PSU, we formed 44 SSUs and selected 2 with probability proportional to the composite size measure. In total, we selected SSA beneficiaries from 83 distinct locations (77 PSUs and 6 SSUs) across the 50 states and the District of Columbia. We selected PSUs and SSUs once for Round 5 sampling activities, then used the same PSUs and SSUs for Rounds 6 and 7. In this situation, the certainty PSU

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<sup>26</sup> The term “composite” in this setting should not be confused with its use in the context of the composite weights.

<sup>27</sup> Los Angeles County includes the city of Los Angeles; Cook County includes the city of Chicago.

effectively becomes a primary sampling stratum and the SSUs within each certainty PSU become the primary sampling units.

**D. Strata definitions and sample sizes**

We designed the sample to be statistically and operationally efficient and to provide adequate sample sizes for the planned analyses. We used two types of sampling strata for the sample selection in the NBS—explicit strata and implicit strata. Explicit strata are required in cases where oversampling or under sampling are used or in other instances where it is necessary to directly control the size of the sample by certain characteristics. For analysis purposes, the RBS will have three first-stage explicit strata: (1) Cook County certainty PSU, (2) Los Angeles County certainty PSU, and (3) all other beneficiaries. The non-certainty PSUs were all selected from within this third stratum in Round 5. (The clustered SWS has similar first-stage explicit strata, but further subdivides the Cook County and Los Angeles County strata as described below.) Table II.2 shows the explicit sampling strata and sampling units for each sample component. We summarize the actual sample sizes and number of completed interviews for both the RBS and SWS under the revised Round 7 design in Table II.3.

**Table II.2. Strata and sampling units for all samples**

Sample	Certainty PSU	Primary Strata and Substrata	Primary Sampling Units	Secondary Strata	Secondary Sampling Units
RBS clustered	Yes	Cook County	ZIP code group	Age group	Beneficiary
		LA County	ZIP code group	Age group	Beneficiary
	No	Noncertainty	County or county group	Age group	Beneficiary
SWS clustered	Yes	Cook County + SSDIonly/SSI + Extract	Beneficiary		
		LA County + SSDIonly/SSI + Extract	Beneficiary		
	No	Noncertainty	County or county group	SSDIonly/SSI + Extract	Beneficiary
SWS unclustered	N/A	InPSU/OutPSU + SSDIonly/SSI + Extract	Beneficiary		

Source: NBS Round 7

**RBS.** To ensure a sufficient number of persons seeking work in the RBS, we classified the population of SSI and SSDI beneficiaries within PSUs into sampling strata based on age, with persons in the younger age categories selected at higher rates than those in the oldest age category. We made the age groups—18 to 29 years, 30 to 39 years, 40 to 49 years, and 50 years and older—the secondary sampling strata for the RBS. Our goal for the number of completed interviews for Round 7 was 1,111 beneficiaries in each of the three younger age groups (18 to 29 years, 30 to 39 years, and 40 to 49 years), and 667 in the oldest age group (50 years and older).

**Clustered cross-sectional SWS.** As noted in SWS discussion in Section II.A, we stratified the clustered cross-sectional SWS by beneficiary type (SSDI-only and SSI, the latter of which includes both SSI-only and concurrent beneficiaries) within the extracts (within either the certainty PSUs or the noncertainty

sampled PSUs), and selected a probability sample from each stratum.<sup>28</sup> As with Round 6, there were 14 ( $2 \times 7 = 14$ ) second-stage (within-PSU) explicit strata in the Round 7 main cross-sectional SWS in the noncertainty PSUs, corresponding to seven extracts crossed with the two beneficiary-type strata. In the certainty PSUs, there are 28 ( $2 \times 2 \times 7 = 28$ ) first stage strata, corresponding to the cross-classification of county (Cook and Los Angeles), beneficiary type, and extract.

**Unclustered cross-sectional SWS.** As we also discussed in Section II.A, we supplemented the main (clustered) sample of successful workers with a supplemental (unclustered) sample of successful workers. In addition to the explicit strata defined by beneficiary type (SSDI-only and SSI) within extract, this supplemental sample was divided into two geographic strata (successful workers residing in any of the sampled PSUs and successful workers not residing in any of the sampled PSUs).<sup>29</sup> The supplemental cross-sectional SWS in Round 7 had only one stage of sample selection, with 28 ( $2 \times 2 \times 7 = 28$ ) explicit strata, corresponding to the two beneficiary-type strata crossed with the two geographical strata and the seven extracts.

The goal for the number of completed interviews for both of the two beneficiary type strata (SSDI-only and SSI) was 1,500 interviews across all extracts and certainty and noncertainty PSUs. We provide the actual sample sizes and number of completed interviews for the SWS in Table II.3, but do not distinguish between the clustered and unclustered samples, nor do we distinguish between certainty and noncertainty PSUs.

Implicit strata are variables for which the distribution of sample cases must be controlled but where a strict target number of sampled cases for particular variables is not required. We sort the sampling frame by the implicit stratification variables within explicit strata and select the sample using a sequential selection procedure, so that when the sample selection occurs, the distributions of implicit stratification factors in the sample approximate the distributions in the population within each explicit stratum. Implicit stratification variables are priority ordered, as noted below; the sample will be most proportionally distributed across levels of the first implicit stratification variable listed and least proportionally distributed for the last implicit stratification variable. The following variables will be used for implicit stratification in both the RBS and cross-sectional SWS, in priority order:

1. SSI-only or concurrent (applicable only within the SSI explicit stratum)
2. Disability type (five categories)
3. Race/ethnicity (six categories, including a category for “unknown/other”)
4. Gender
5. Zip code

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<sup>28</sup> We combined the SSI-only and concurrent beneficiaries into a single stratum to ensure a large enough number of beneficiaries for sampling in each extract.

<sup>29</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.

**Table II.3. NBS—General Waves (RBS and SWS) Round 7 actual sample sizes, target completed interviews, and completed interviews**

Sampling strata	Selected sample size	Original target completed interviews <sup>a</sup>	Actual completed interviews
<b>RBS</b>			
Total	11,299	4,000	4,008
18- to 29-year-olds	3,237	1,111	1,127
30- to 39-year-olds	3,291	1,111	1,059
40- to 49-year-olds	3,060	1,111	1,181
50-year-olds or older	1,711	667	704
<b>Cross-sectional SWS</b>			
Total	8,590	3,000	3,016
SSDI only	4,221	1,500	1,493
SSI (SSI only + concurrent)	4,369	1,500	1,523
December 2018 extract	1,757	516	714
SSDI only	833	218	328
SSI (SSI only + concurrent)	924	298	386
<b>2019 extract</b>	<b>1,438</b>	<b>456</b>	<b>591</b>
SSDI only	747	222	305
SSI (SSI only + concurrent)	691	234	286
<b>March 2019 extract</b>	<b>1,327</b>	<b>559</b>	<b>446</b>
SSDI only	609	266	207
SSI (SSI only + concurrent)	718	293	239
<b>April 2019 extract</b>	<b>1,043</b>	<b>394</b>	<b>339</b>
SSDI only	545	215	175
SSI (SSI only + concurrent)	498	179	164
<b>June 2019 extract</b>	<b>1,450</b>	<b>444</b>	<b>429</b>
SSDI only	732	230	216
SSI (SSI only + concurrent)	718	214	213
<b>July 2019 extract</b>	<b>998</b>	<b>348</b>	<b>319</b>
SSDI only	468	193	161
SSI (SSI only + concurrent)	530	155	158
<b>September 2019 extract</b>	<b>577</b>	<b>283</b>	<b>178</b>
SSDI only	287	156	101
SSI (SSI only + concurrent)	290	127	77
<b>Longitudinal SWS</b>			
Total	3,712	2,040	2,068
SSDI only	1,863	1,019	1,074
SSI (SSI only + concurrent)	1,849	1,021	994

Source: NBS Round 7

<sup>a</sup>The target completed interviews for the SWS shown here were calculated prior to receiving the first extract, using historical data from Round 6 (2016-17) and the 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.

We did not know the size of each extract before sample selection or what the overall proportion will be in the clustered sample or residing in the PSUs for the unclustered sample. The initial sample size allocation<sup>30</sup> to the samples in each extract was based on a combination of Round 6 data and simulated successful worker populations from prior years. The proportion of the sample that was allocated to the clustered and unclustered samples in each extract was designed to minimize bias and cost. After the release of each extract, we adjusted the allocation of sample sizes to the samples from the remaining extracts to make the allocation as proportional as possible to the population of successful workers over time within each of the two beneficiary-type strata (SSDI-only and SSI). We did not complete sample selection until after the release of the last extract.

For fielding purposes in all samples, we selected a larger sample than needed (called the augmented sample) to ensure that an adequate sample pool would be available if we found that the response and eligibility rates during data collection differed from our initial assumptions. Within each stratum, we selected an equal probability sample of beneficiaries by using a sequential selection algorithm with the sampling frame sorted by disability diagnosis, beneficiary title, race and ethnicity, gender, and ZIP code to form the augmented sample. These sorting factors ensured an approximate proportional allocation of the sample across levels of these factors and therefore enhanced the face validity of the sample across these factors.

For the augmented sample in the RBS, we determined the number of sample members selected in each stratum and PSU by independently allocating four times the target sample size across the 83 PSUs for each stratum,<sup>31</sup> thereby ensuring the availability of ample reserve sample units in case response or eligibility rates were lower than expected, and because we expected lower completion rates due to the implementation of the two-phase sample design, as mentioned in Section II.A.1. The augmented sample size for the two youngest age strata (18- to 29-year-olds and 30- to 39-year-olds) was 4,500 sample members, and for the middle age stratum (40- to 49-year-olds) the sample size was 4,400 sample members. The average across these three age groups was roughly four times the target sample size of 1,111. For beneficiaries age 50 and older, the augmented sample size was 2,600 (again, just under four times the target sample size of 667). We excluded from the sample frame any beneficiaries who were deceased as of June 30, 2018.<sup>32</sup> The size of the augmented sample in the RBS, 16,000 (with 11,299 released), was sufficient to ensure approximately 4,000 target completes.

We randomly partitioned the larger augmented sample in the RBS into subsamples (called waves) to allow for the controlled release of the sample throughout the data collection effort. We created 14 waves

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<sup>30</sup> Sample size allocation refers to both the target number of completed interviews and the selected sample based on assumed yield rates.

<sup>31</sup> We selected an augmented sample that was four times as large as needed in order to allow for both an adequate supplemental sample in all PSUs and sampling strata within the PSUs, as well as to account for expected variation in the response and eligibility rates across PSUs and sampling strata.

<sup>32</sup> We assigned the status “ineligible” to any beneficiaries who were found to be deceased, incarcerated, no longer living in the continental United States, or reported had not received benefits in the past five years at the time of the interview, during the data collection period. The proportion of cases found to be ineligible at data collection was small enough that the impact on yield rates was small, and is somewhat smaller than the ineligibility rates from the fourth round of the NBS.

for each stratum and PSU. During the data collection period, we monitored the sample results and determined whether, and in which strata and PSUs, we needed additional waves of sampled cases. Round 7 of the RBS required two releases, of which the first was the largest. After the first release, the number we needed in the subsequent release in each PSU depended on the number of completed interviews we observed from the cases worked in the earlier releases. For all strata and PSUs, the number of cases we released was smaller than the number available in the augmented sample.

In the cross-sectional SWS, we also selected an augmented sample that was larger than needed. However, we did not anticipate that we would be able to process more than one release of data for each extract due to the constrained fielding period for each SWS extract sample, and would therefore not be able to use the reserve sample. As a result, we created an augmented sample that was at most 1.5 times what we thought would be needed in each PSU and stratum in the clustered sample and, for the unclustered sample, within each stratum. We selected an augmented sample of 11,868 successful workers, of which 8,590 were released.

In the longitudinal SWS, all 3,712 eligible cases were released; there was no augmented sample.

### III. QUESTIONNAIRE DESIGN

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 7, we added 11 new questions to the instrument to capture information on longitudinal sample members’ previous employment. We also added probes to several questions that longitudinal sample members answered in Round 6, and new response options to several “other/specify” questions. Finally, we revised a few questions in order to accommodate changes in reference periods and changes in federal programs. (A detailed description of changes between the Round 6 and Round 7 questionnaire is included in Appendix C.) Prior to the launch of the Round 7 data collection effort, we pretested the survey instrument to confirm the order, flow, and clarity of the revisions. The instrument is available from SSA at [https://www.ssa.gov/disabilityresearch/nbs\\_round\\_7.html](https://www.ssa.gov/disabilityresearch/nbs_round_7.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>33</sup> We treated measurements in a similar way. Questions that mentioned a particular weight also mentioned the kilogram equivalent.<sup>34</sup> For languages other than English or Spanish, interpreters, if available in the sample person’s home, helped 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.” At the conclusion of Round 7 data collection, we dispositioned 117 cases as language barriers. 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.

#### A. Summary of modules

The questionnaire includes 13 sections, labeled A through M:<sup>35</sup>

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

<sup>33</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>34</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>35</sup> Sections F and H were deleted from the Rounds 5, 6 and 7 survey instrument, as they were focused on the TTW program.

- Section C\_B—Employment in Past 6 Months
- Section D—Jobs/Other Jobs During 2018
- Section SC—Benefit Suspense
- Section E—Awareness of SSA Work Incentive Programs
- Section G—Employment-Related Services and Supports Used in 2018
- 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>36</sup> Additionally, cross-sectional 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; 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 summarize 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 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

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<sup>36</sup>The screening of respondents who had not received any SSA benefits in the last five years occurs in Section B of the instrument.

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 their reasons for not working, the reasons that health prevents work among those so indicating, and the reasons why they have no expectation of working in the near future or expectation of receiving benefits. For all respondents who became limited as an adult (after the age of 18), we ask about the respondent's ability to perform the same job they performed before they started to receive disability benefits. 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 a cross-sectional SWS respondent reports that they are not currently working and have not worked in the last six months, they are ineligible for the survey. For those longitudinal SWS cases that are not currently working, we ask why they left their last job. 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, how they found their job, 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 solicit information about job satisfaction. We ask respondents about their motivation for working, the formal and informal supports they use to find or keep a job, the features of their current job that allow them to work with a disability, and the various challenges they face in their current job. We also ask questions that address disability disclosure in the workplace, whether other people with disabilities are employed at the respondent's place of work, and whether a benefit overpayment affected employment.

## **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; benefits offered; how they found their job; 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. We ask beneficiaries about their motivation for working in the last six months, the formal and informal supports they used to find or keep their main job, the features of their former main job that allowed them to work with a disability, and the various challenges they faced in their former job. We ask questions that address disability disclosure in

the workplace, whether other people with disabilities were employed at the respondent's main place of work, and whether a benefit overpayment affected employment.

#### **5. Section D—Jobs/Other Jobs During 2018**

Questions in this section collect information about employment during the 2018 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 (including if their work activity was affected by a disability overpayment).

#### **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 2018. 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, including where they obtain information about SSA programs. We inquire if beneficiaries are aware that their SSDI cash benefits cease if their earnings exceed the substantial gainful activity threshold after completing the trial work period. We also ask a question 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.

#### **8. Section G—Employment-Related Services and Supports Used in 2018**

Questions in this section ask beneficiaries about their use of employment-related services and supports in calendar year 2018, 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>37</sup> In addition, we ask about episodic poor health, number of days confined to a bed, informal supports for daily needs, and transportation usage.

#### **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 2018.

#### **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. Additionally, we ask sample members about their perception of their financial situation and ability to save for an emergency or crisis.

#### **12. Section L—Sociodemographic Information**

This section collects basic demographic information about the beneficiary, such as race, ethnicity, education, parental education, veteran status, height and weight, marital status, living arrangements including homeownership and possible plans to relocate, and household income.

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

In this section, we collect address information for the sample person so that the \$30 gift card 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**

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 six months received Section C\_B, and only respondents who reported working in 2018 answered the questions in Section D. RBS and SWS respondents who reported working currently, in the last six months, or in 2018, received Section SC. In Round 7, longitudinal SWS respondents also received Section SC, even if they reported not working currently or in the last six months or in 2018. Table III.1 provides a summary description of the main questionnaire pathing.

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<sup>37</sup> SF-8™ is a trademark of QualityMetric, Inc.

**Table III.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 2018	Respondents who worked in 2018 (B30 = YES) Question B30: Did you work at a job or business for pay or profit any time in 2018?
SC	Benefit Suspense	All longitudinal SWS respondents and RBS or cross-sectional SWS respondents who are currently working, have worked in the past 6 months, or worked in 2018 (LONGSAMP = YES or 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 2018	All respondents
I	Health and Functional Status	All respondents
J	Health Insurance	All respondents
K	Income and Other Assistance	All respondents
L	Sociodemographic Information	All respondents
M	Closing Information and Observations	All respondents

Source: NBS Round 7.

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. A longitudinal SWS indicator (LongSamp) was used to determine pathing for longitudinal SWS respondents. Longitudinal SWS respondents who reported that they were not currently working, and had not worked in the past six months or in 2018 were asked a new series of questions about the reasons they left their last job. 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 III.2 provides a list and description of the preloaded variables.

**Table III.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 cross-sectional 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).
LongSamp	Successful Worker Sample, Longitudinal case	Used to determine question pathing for longitudinal sample members. Longitudinal respondents were not screened out of the survey because of their current work status. Instead, longitudinal SWS members who were not working at the time of the interview, did not work in the past six months, and did not work in 2018, were asked questions about the reasons they left their last job (B36c-B36f). Longitudinal SWS respondents were also asked about benefit suspense (Section SC), even if they were not currently working, did not work in the past six months, and did not work in 2018.

Source: NBS Round 7.

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 III.3 for a complete list of items not asked of proxy respondents.) As mentioned previously, interviewers completed 1,557 proxy interviews.

**Table III.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 7.

### C. Comparisons with other questionnaires and surveys

The NBS contains a number of questions that are found on other survey instruments. In Table III.4, we list the names of the studies from which NBS questions have been drawn, their sponsors (where relevant), and the NBS question number. In some instances, several studies asked the same question, in which case we list all studies.

**Table III.4. National Beneficiary Survey question sources**

Study/source	Sponsor	Question numbers
A National Study of Health and Activity (NSHA)	Social Security Administration (SSA)	B18, B19, BP1, B25a-j, B47a-d, C6, C8, C9, C11, C20a-i, C33a-f, D14, D16-D19, IP7a-e, IP9, IP9a, IP10, I19, I20, I23, I24, I31, I32, J1, J2, J4-J6, K7, K6a-h
National Organization on Disability (NOD) Harris Survey of Americans with Disabilities	National Organization on Disability	CP7, CP7a, CP8, KP1, KP2
National Health Interview Survey (NHIS)	National Center for Health Statistics, Centers for Disease Control and Prevention	IP2, IP5
National Health and Nutrition Examination Survey (NHANES)	National Center for Health Statistics, Centers for Disease Control and Prevention	IP8a-d
SF-8™ Health Survey	Optum™	I1-I8
Employment Intervention Demonstration Program (EIDP)	Center for Mental Health Services, Substance Abuse and Mental Health Services Administration (SAMHSA)	B47a-d
State Partnership Initiative Participant Employment Data Form	SSA	C20a-i
Project Network Baseline Survey	SSA	K6a-h, K7
Evaluation of the Effects of the 1996 Welfare Reform Legislation on Children with Disabilities	SSA	E3-9, E12, E15-E19, E20a-d
1996 Survey of Income and Program Participation (SIPP) Wave 5 Functional Limitations and Disability Adult Topical Module	Demographic Survey Division, U.S. Census Bureau	IP10, I22, I25, I26, I30, I34-I39, I41, I43, I45, I46, I48-I50, I52-I58, I60-I61
American Community Survey	Demographic Survey Division, U.S. Census Bureau	I17b, I21, I29, I47, I51, I59, LP23
Office of Management and Budget (OMB) Standards for Maintaining, Collecting and Presenting Federal Data on Race and Ethnicity		L1-L2

Source: NBS Round 7

## D. Special design considerations

The NBS survey population represented a wide range of disabilities with varying degrees of severity; in addition, some sample members had several disabling conditions. While the survey could not be designed to overcome all possible challenges, the instrumentation procedures attempted to address three broad categories of common challenges: communication, stamina, and cognitive barriers. Communication challenges include both hearing and speech impairments. Stamina challenges include physical and mental fatigue. Cognitive challenges include, but are not limited to, emotional disturbance, difficulty processing questions and responses, lack of complete or specific knowledge, and confusion about the purpose of the interview (Mitchell et al. 2004).

The NBS featured several techniques designed to overcome the above challenges. For example, the interviews could be conducted via Telecommunications Relay Service (TRS) or amplifiers so that persons with severe hearing or speech impairments could be interviewed by telephone.

The survey instrument included structured probes that both allowed questions to be rephrased and permitted concepts to be defined in a standard manner in the event that respondents required clarification or additional information. In addition, to minimize item nonresponse, the survey instrument included follow-up questions for continuous variables. For example, if a respondent could not provide an exact amount, a “don’t know” response was followed with a modified version of the question that offered response categories. The upper and lower bounds of each category were based on ranges specified by analysts. In general, we attempted to word survey questions simply, clearly, and briefly as well as in an unbiased manner so that respondents could readily understand key terms and concepts. Given the intent of the questions, we made response categories appropriate, mutually exclusive, and reasonably exhaustive.

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 7, 2,928 sample members (1,260 from the RBS, 1,029 from the cross-sectional SWS, and 639 from longitudinal SWS), or about 12 percent of the total sample, broke off the interview after they had completed the cognitive screener. Of these cases, we completed 1,888 interviews (741 from the RBS, 669 from the cross-sectional SWS, and 478 from longitudinal SWS), or about 64 percent of the total number of “breakoff” cases. For the 1,040 cases (519 from the RBS, 360 from the cross-sectional SWS, and 161 from the longitudinal SWS) that did not complete an interview, approximately 19 percent refused to finish the survey, 10 percent were determined to be ineligible or had a barrier to completing the survey, and 9 percent were ineligible for field locating efforts as they were part of the SWS unclustered sample. The remaining 62 percent did not complete the survey by the end of data collection despite repeated outreach attempts.

## E. Changes Made to Survey Instrument in Round 7

Mathematica modified the survey instrument prior to administration in Round 7. In Section 1 below, we describe the questions that we added to the Round 7 instrument. In Section 2, we discuss the modifications that we made to some of the questions from Round 6. No questions were removed between Round 6 and Round 7. A detailed description of the changes between the Round 6 and the Round 7 questionnaire is included in Appendix C.

## 1. New Questions Applicable to Longitudinal Sample Members

For Round 7 survey administration, we added a few questions to account for the longitudinal SWS members who were interviewed in Round 6. Table III.5 summarizes the new questions that we added to the Round 7 instrument.

**Table III.5. New Questions in Round 7**

Question Number	Topic Addressed
<b>Disability and Work Status (Section B)</b>	
B36c, B26c_1, B36c_1_oth, B36d, B36d_1, B36d_1_oth, B36e, B36e_1, B36e_1_oth, B36f, B36f_oth	Reasons longitudinal sample members are no longer working

Source: NBS Round 7.

## 2. Other Modifications to the Round 7 Survey Instrument

Mathematica made several minor modifications to the Round 6 NBS instrument for administration in Round 7, including (1) changing reference periods from 2016 to 2018, (2) updating items to reflect changes in SSA programs or policies, (3) improving question wording and adding response categories, and (4) modifying skip logic.

**Changes to the Reference Period.** The NBS Round 7 was administered in 2019. As a result, we updated year references for questions and response categories. For example, in Section D (Jobs/Other Jobs in 2018), we changed the reference year from 2016 to 2018. Similarly, in Section G (Employment-Related Services and Supports in 2018), we changed the reference year from 2016 to 2018. Further, on items asking about the year in which services were last received, we changed the response options from “in 2016” or “before 2016” to “in 2018,” or “before 2018,” 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 2017 to 2019 because Round 7 was fielded in that year.

**Changes to Reflect Changes in SSA Programs or Policies.** In some instances, we updated items to reflect the 2019 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, added interviewer probes, and/or adjusted response categories. We made these changes as a result of (1) the need to incorporate the longitudinal SWS into the Round 7 instrument and (2) lessons learned during Round 6 data processing. We added interviewer probes for the longitudinal SWS respondents that acknowledged that we spoke to them in 2017, that we would like to conduct another interview, and that some questions may sound similar to their 2017 interview. We also modified some of the skip logic to ensure that longitudinal cases were not deemed ineligible for the survey if they had not worked recently. After completing the Round 6 data processing and back-coding tasks, we added new response options to a number of questions in the instrument. Later in this chapter we provide more detail on this process and the new response options are included in Appendix C.

**Modifying Skip Logic.** During the Round 6 data cleaning effort, we discovered an error in the skip logic affecting item L10 (Do you have a long-term partner who lives in the same household?), which is one of the source variables for the cohabitation status constructed variable, C\_COHAB. We corrected the skip logic in the Round 7 survey instrument to ensure that unmarried sample members who are living with their partner (L8=6 and L9=1) were not asked L10, and divorcees (L8=3) were asked L10.

## IV. DATA COLLECTION

We executed the NBS-General Waves as a dual-mode survey. Initial attempts to interview respondents used CATI. If Mathematica could not locate and contact a sample member by telephone, we deployed a field locator to make contact in person (for SWS clustered and RBS cases). Once located, the field locator attempted to facilitate an interview with the sample member via CATI, using a Mathematica-provided cell phone to call into the data collection center (or the sample member's own phone, if preferred). We sought a proxy respondent when a sample member was not able to participate in the survey because of their disability. If a sample member could not complete the interview by telephone in this manner due to their disability, trained field staff were available to conduct the interview in person using CAPI. In Round 7, none of the NBS respondents requested a CAPI interview.

CATI data collection began in February 2019.<sup>38</sup> In May 2019, Mathematica began in-person locating and interviewing of telephone nonrespondents, which continued concurrently with CATI interviewing through November 2019. At the end of data collection, Mathematica completed 9,092 cases (including 137 partially completed interviews).<sup>39</sup> We deemed an additional 261 beneficiaries from the RBS, 311 beneficiaries from the cross-sectional SWS, and 46 beneficiaries from the longitudinal SWS as ineligible for the survey.<sup>40</sup> Of the 9,092 completed cases, 8,823 were administered via CATI. As discussed in Chapter I, 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. The remaining 269 completes were from duplicate cases that were interviewed only once.

### A. Data collection procedures

#### 1. Advance contacts

To increase respondent trust and rapport before the start of data collection, Mathematica sent all sample members with a valid address an advance letter and a trifold NBS brochure. Printed on SSA letterhead and signed by an SSA official, the advance letter identified SSA as the sponsor of the survey and Mathematica as the survey contractor; explained the purpose of the survey; offered assurances of confidentiality; described the voluntary nature of participation; and included a toll-free number and an e-mail address for respondents so that they could contact Mathematica with questions or to complete the interview at their convenience. To encourage participation and show appreciation for respondents' participation, Mathematica offered a post-paid incentive payment of \$30 to respondents who completed the survey.

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<sup>38</sup> We began interviewing approximately eight months after June 30, 2018, the date which we used to define who was a beneficiary. Sample selection occurred in December 2018, two months prior to the beginning of data collection.

<sup>39</sup> We considered partial interviews completed if responses were provided through Section G of the interview.

<sup>40</sup> We marked as ineligible any beneficiaries who died between the sample selection and the start of data collection, based on information obtained from informants, SSA, or LexisNexis\Accurint prior to the start of data collection. Any beneficiaries we found to be incarcerated, in active military, no longer living in the continental United States, or who reported that they had not received benefits in the past five years at the time of the interview were marked as ineligible during the data collection period. Additionally, for the SWS sample, beneficiaries who reported no work experience in the prior six months were marked as ineligible.

In an effort to help establish the NBS's legitimacy, SSA posted information about the survey on the agency's website and circulated information about the survey to SSA field offices and the SSA teleservice (800) center. We sent the field offices and the SSA teleservice (800) center the names of telephone and in-person locators and field interviewers involved in the NBS so that these individuals could be identified as legitimate contacts. If, upon receipt of the advance letter, disability beneficiaries contacted their local field office or called the SSA teleservice number with questions about the survey or its legitimacy, SSA staff could then assure beneficiaries of the study's legitimacy and encourage them to participate.

## **2. Interviewer training**

CATI interviewers participated in 12 hours of training over two days. The training provided interviewers with the study's background and purpose, a question-by-question review of the instrument, contact protocols, refusal avoidance strategies, and a series of practice interviews. In addition, sensitivity training emphasized the importance of demonstrating patience, professionalism, and unconditional positive regard for respondents, regardless of impairments. Trainers stressed that the greatest barriers that people with disabilities face are often others' prejudgments and erroneous images of them. We taught interviewers how to use positive rather than patronizing language and encouraged them to focus on the individual first and the disability last.

To overcome stamina challenges, we trained interviewers to be aware of behaviors that might indicate that a respondent was too fatigued to continue the interview. If a respondent seemed tired, agitated, or distracted, for example, we encouraged interviewers to ask whether the respondent needed to take a break and schedule another time to continue the interview or to set appointments for times when the respondent was most alert. To ensure that interviewers could address cognitive challenges, the training focused on neutral, nondirected probing methods (repeating the question, repeating response categories, asking for more information, stressing generality, stressing subjectivity, and zeroing in) and using active listening skills and patience. We instructed interviewers to provide neutral feedback and encouragement and to help keep the respondent free of distractions, to say the respondent's name often, and to avoid an exaggerated inflection or tone of voice.

As part of training interviewers on administering the cognitive assessment, we played seven prerecorded mock interactions between an interviewer and a respondent. We asked interviewers to listen to the prerecorded interactions and independently code the outcome. We compared interviewers' answers to an expert assessment, and then discussed the "correct" and "incorrect" responses with the interviewers.

To ensure understanding of the survey instrument and compliance with the study protocol, we administered a 15-item certification test on the final day of training. The certification assessed the interviewers' ability to administer the cognitive screener, address respondent concerns (including longitudinal sample-specific concerns), probe for additional information, and demonstrate sensitivity when interviewing sample members with various types of disabilities. Seven items assessed the trainees' ability to respond adequately to questions and concerns posed by sample members, probe accurately and efficiently, and demonstrate sensitivity and professionalism when interviewing people with disabilities. Eight items required the interviewers to listen to prerecorded mock interactions involving the use of the cognitive screener. Approximately 99 percent of the interviewers passed the certification process. Those who did not certify received additional one-on-one training before they attempted to take the certification test a second time.

### 3. Locating

SSA provided sample members’ contact information drawn from administrative records. Before the mailing of the advance materials, Mathematica verified or updated all addresses using a commercially available database. Over the course of Round 7 data collection, 60 percent of cases required in-house locating; this was consistent with the results of the Rounds 5 and 6 survey administrations. Mathematica used a variety of techniques for locating updated information, including database searches, calling relatives and friends, receiving updated contact information from SSA, and making in-person visits for field locating. Through these efforts, Mathematica eventually located approximately 86 percent of the sample for interviewing or determining ineligibility. Of the located sample cases, 45 percent completed the interview.

Throughout the data collection effort, Mathematica tracked the quality of the contact information provided by SSA. Table IV.1 shows the source of the best address and phone number for sample members at the end of data collection. For example, of the 6,821 unique cases within the cross-sectional samples (i.e., RBS and SWS) that completed an interview, approximately 70 percent had an address that matched at least one of the SSA-provided addresses and 44 percent had a phone number that matched SSA’s records. Table IV.1 also provides information about the source of the best-known contact information for non-completed interviews. It is more challenging to assess the quality of contact information for the sample cases that did not complete an interview, as many sample members were unlocatable or did not confirm their contact information with a Mathematica interviewer or locator.

**Table IV.1. Contact information source by sample type and completion status**

	Cross-Sectional (RBS and SWS)		Longitudinal (SWS)	
	Completes (n=6,821)	Non-Completes (n=12,631)	Completes (n=2,003)	Non-Completes (n=1,601)
<b>Best Address Source</b>				
SSA	70%	72%	1%	5%
Respondent	23%	1%	4%	0%
In-House Locating	7%	28%	4%	19%
Round 6 information	N/A	N/A	91%	77%
None identified	0%	0%	0%	1%
<b>Best Phone Source</b>				
SSA	44%	71%	1%	1%
Respondent	51%	5%	21%	3%
In-House Locating	4%	23%	0%	2%
Round 6 information	N/A	N/A	77%	94%
None identified	0%	1%	0%	0%

Source: NBS Round 7

Note: Table excludes duplicate sample cases and totals may not sum to 100% due to rounding.

### 4. CATI data collection

As previously mentioned, Mathematica completed 8,823 unique cases by telephone (including field locator facilitated interviews). Of the completed interviews, 242 (or about three percent of the completed

interviews) were administered in Spanish. On average, the telephone survey took 65 minutes to administer, with the interview length ranging from 30 minutes to 197 minutes (not including TRS interviews). As part of Mathematica's rigorous quality control procedures, at least 10 percent of each interviewer's calls were monitored, in real-time, for quality assurance. Interviewers were given immediate feedback on their performance and, if necessary, additional training was provided.

**Assistive technologies.** Several technologies were available to assist with telephone interviewing of sample persons who were deaf or hard of hearing, including telephone amplifying volume controls, and telephone or video TRS. The average length of a TRS interview was considerably longer than that of a non-TRS interview. For Round 7 of the NBS, the average time to complete a TRS interview was 112 minutes. The shortest TRS interview lasted about 57 minutes; the longest was 4.5 hours. We completed a total of 55 interviews via TRS.

## 5. In-field locating and CAPI data collection

In-person survey administration can maximize the number of responses among persons with disabilities by facilitating interviews of persons with hearing and speech limitations who are unable to participate by telephone, permitting persons with cognitive challenges to benefit from in-person assistance, and improving the locating rate through in-field searching (Mitchell et al. 2004). To control costs, Mathematica first attempted to contact and interview sample persons via telephone and, if needed, conducted in-field locating to find and contact sample members for an interview (for RBS and SWS clustered sample cases). In most cases, field locators facilitated interviews by providing a cell phone that the sample member used to call into the data collection center so that we could conduct the interview by telephone. A beneficiary could request an in-person interview (using CAPI) but no respondents did so in Round 7.

Mathematica referred eligible cases to in-field locating if we could not find a telephone number, if we could not contact the sample member by telephone, or if the sample member resisted telephone attempts (including refusals and other noncontacts). We sent all of these cases to central office locating first. Central office locating staff verified or updated, if needed, sample members' telephone numbers and addresses and compiled a list of previous addresses before assigning cases to field interviewers. Once central office locating staff had exhausted their resources, they sent cases to the field for in-person locating. In Figure IV.1, we provide a summary of the survey administration process.

We sent 3,778 cases (1,112 from the RBS, 2,634 from the cross-sectional SWS, and 32 from the longitudinal SWS) to in-person locators. Of the cases assigned to the field, we completed a total of 786 cases (21 percent). Of the field generated completes, 615 (78 percent) were administered via CATI with a field locator present during the interview, and the remaining 171 (22 percent) were cases in which the sample member called in to complete the interview on their own without a field locator present.<sup>41</sup>

Table IV.2 summarizes the number of cases sent to the field and the total number completed after starting field locating protocols. The table also provides the breakdown of completes that were conducted with a field locator present compared to those that were completed by CATI after having been assigned to the field.

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<sup>41</sup> These respondents might have called in as a result of receiving various reminder or locating letters, or other communications from the field locators.

**Table IV.2. Cases sent to In-field locating by sample group**

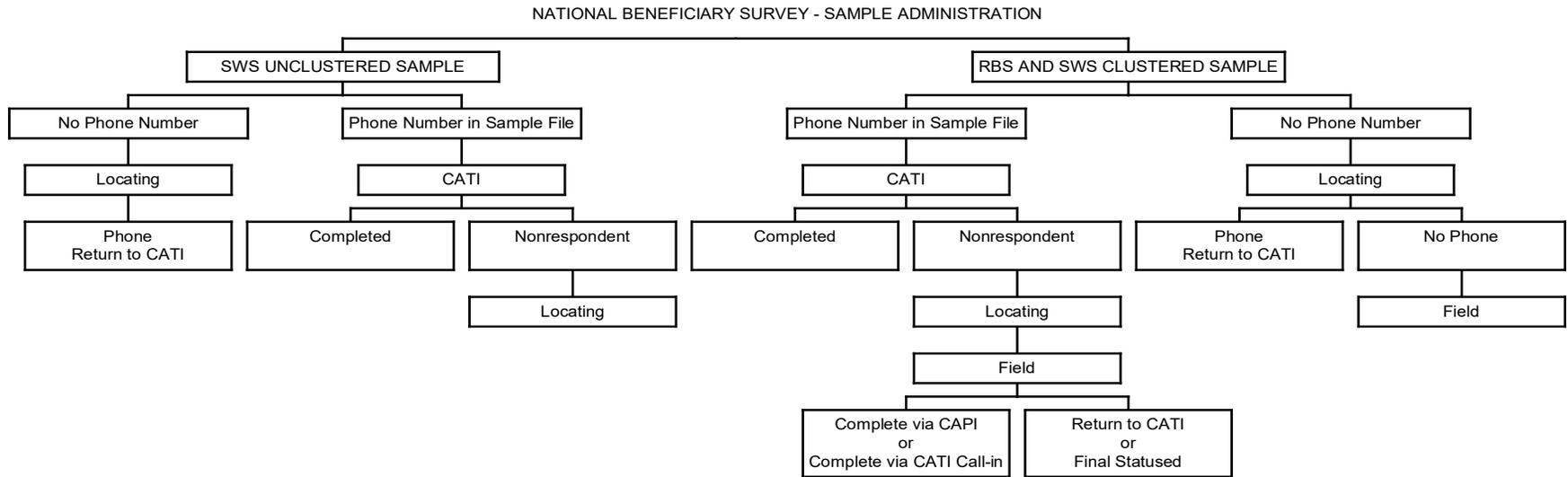
	Sent to field	Total completed from field efforts
<b>Cross-sectional, clustered SWS</b>	<b>2,634</b>	<b>479 (18%)</b>
Completed by CATI with field locator present		367 (77%)
Completed by CATI without field locator		112 (23%)
<b>Longitudinal, clustered SWS</b>	<b>32</b>	<b>11 (34%)</b>
Completed by CATI with field locator present		10 (91%)
Completed by CATI without field locator		1 (9%)
<b>RBS</b>	<b>1,112</b>	<b>296 (27%)</b>
Completed by CATI with field locator present		238 (80%)
Completed by CATI without field locator		58 (20%)
<b>Total</b>	<b>3,778</b>	<b>786 (21%)</b>
Completed by CATI with field locator present		615 (78%)
Completed by CATI without field locator		171 (22%)

Of all of the cases that we sent to the field, approximately 99.6 percent were assigned to field interviewers because they could not be located or lacked a telephone number (99.8 percent for the RBS, 99.4 percent for the SWS, and 100 percent from the longitudinal sample). The remaining 0.4 percent were assigned to field staff because they were difficult to contact by telephone or evaded our contact efforts (about 0.3 percent), or initially refused a CATI interview (about 0.1 percent).

To ensure collection of the highest-quality data, Mathematica put in place several Quality Assurance (QA) procedures. First, we reviewed completed interviews throughout the data collection effort for the frequency of item nonresponse and other data problems. Using such information, we provided feedback and additional instruction to interviewers as needed. To ensure field staff were following the study protocols, we randomly selected 10 percent of each field locator's cases and verified them by either telephone or mail. During verification, we asked respondents several questions about the length of the interview, whether or not the interviewer offered their cell phone to call into our survey center, and some other identity validation questions. In addition, we reviewed field locator rates, dates, and times of completion, as well as the geolocation tags from the locators' smartphones to check for possible data falsification and other problems.

Figure IV.1. Summary of the survey administration process<sup>42</sup>

FIGURE IV.1



<sup>42</sup> SWS sample includes both cross-sectional and longitudinal cases.

## 6. Assisted interviews and proxy respondents

To increase opportunities for self-response, we permitted assisted interviews, which differed from proxy interviews in that beneficiaries answered most questions themselves. The assistant, typically a family member, provided encouragement, interpretation, and verified answers as needed. Assisted interviews minimized item nonresponse, improved response accuracy, and overcame some limiting conditions (such as difficulties with hearing) and language barriers. In all, we conducted 250 assisted interviews (approximately 3 percent of all completes) during Round 7.

As a last resort, we relied on proxy respondents to complete the survey on behalf of respondents who could not complete the survey themselves (even with assistance) either by telephone or in-person. This included sample persons with severe communication impairments, those with severe physical disabilities that precluded participation (in any mode), and those with mental impairments that might have compromised data quality. We strongly preferred reliance on a beneficiary rather than on a proxy when possible because sample members generally provide more complete and accurate information than do proxy respondents. However, allowing the use of proxies when necessary minimized the risk of nonresponse bias that would have resulted from the exclusion of individuals with severe physical or cognitive impairments.

To identify the need for proxy respondents, we administered a mini-cognitive test designed expressly for the NBS.<sup>43</sup> The test provided interviewers with a tool for determining when to seek a proxy rather than leaving the decision to interviewer discretion or a gatekeeper. The test, which included three questions at the start of the interview, combined the ability to understand the survey topics with elements of informed consent. First, we gave a general description of the survey topics to be covered (their health, daily activities, and any jobs they might have) and asked the respondent to state the topics in his or her own words. Second, we described the voluntary nature of the survey and asked respondents to state, in their own words, what that description meant to them. Third, we described the confidential nature of the respondents' answers and asked them to state what that description meant. If respondents were unable to restate accurately any description after two attempts, we asked if someone else could answer questions on their behalf.

In some cases, a knowledgeable informant expressed that a proxy would be necessary before we could administer the cognitive screener to the sample person. In these cases, we relied on several guidelines to determine whether a proxy was indeed warranted. These guidelines included using proxies only when the sample member's physical or mental condition precluded self-response, selecting the most knowledgeable proxy, and ensuring that the proxy answered on behalf of the sampled respondent rather than offering his or her own opinions. We trained interviewers to overcome gatekeepers' objections, and to give sample members the opportunity to speak for themselves whenever possible. The constructed variable C\_Rtype indicates whether the sampled individual or a proxy respondent completed most of the interview.

In Round 7, we completed proxy interviews with 1,113 RBS respondents (approximately 28 percent of all RBS completed interviews), 293 cross-sectional SWS respondents (about 10 percent of all completed cross-sectional SWS interviews), and 151 longitudinal SWS interviews (approximately 7 percent of all completed longitudinal SWS interviews). Table IV.3 summarizes the reasons for proxy response by sample group. For the cross-sectional and longitudinal SWS, the majority of the proxy interviews (61

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<sup>43</sup> Westat designed the test as part of the design of the Ticket-to-Work evaluation; Mathematica modified it after pretesting.

percent and 52 percent, respectively) were due to the sample member not passing the cognitive assessment. However, for the RBS, the majority of the proxy interviews (51 percent) were necessary because a caregiver deemed that the sample member was unable to respond due to an intellectual or physical disability.

**Table IV.3. Summary of reasons for proxy interview**

Reason for Proxy Interview	Representative Beneficiary Sample		Cross-sectional Successful Worker Sample		Longitudinal Successful Worker Sample	
	Count	Percent	Count	Percent	Count	Percent
Caregiver deemed sample member unable to respond	566	51	85	29	46	30
Sample member failed the cognitive assessment	400	36	178	61	78	52
Did not understand the questions or the question-response sequence	76	7	16	5	19	13
Hospitalized or for other reasons	71	6	14	5	8	5
Total	1,113	100	293	100	151	100

There were an additional 239 cases (147 from the RBS, 74 from the cross-sectional SWS, and 18 from the longitudinal SWS) in which sample members could not participate in the interview and proxies could not be identified to complete it on their behalf. Of these cases, 177 (74 percent) were situations in which a gatekeeper reported an intellectual disability and could not serve as a proxy. The remaining 62 (26 percent) were cases in which sample members could not participate because they were unable to successfully complete the cognitive screener and could not identify a proxy to complete the interview.

**B. Case disposition summaries**

In total, Mathematica completed 9,092 interviews across the RBS and SWS (including 137 partially completed interviews)—4,008 from the RBS, 3,016 from the cross-sections SWS, and 2,068 from the longitudinal SWS. An additional 261 beneficiaries from the RBS, 311 from the cross-sectional SWS, and 46 from the longitudinal SWS were deemed ineligible for the survey.<sup>44</sup> In Table IV.4, we summarize the final case disposition for all released cases in the sample by sampling strata.

<sup>44</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.

**Table IV.4. Summary case disposition by sample type and sampling strata**

	Complete				Ineligible			Refused			Unlocated		Nonrespondents			
	Total sample	Count	Un-weighted percent	Weighted percent	Count	Un-weighted percent <sup>a</sup>	weighted percent	Count	Un-weighted percent <sup>a</sup>	Weighted percent	Count	Un-weighted percent <sup>a</sup>	Weighted percent	Count	Un-weighted percent <sup>a</sup>	Weighted percent
<b>Representative beneficiary sample</b>																
Age 18-29	3,237	1,127	34.8	49.0	64	2.0	2.9	306	9.5	16.1	576	17.8	7.2	1,164	35.0	24.8
Age 30-39	3,291	1,059	32.2	47.8	70	2.1	3.2	319	9.7	15.3	605	18.4	8.2	1,238	37.6	25.5
Age 40-49	3,060	1,118	36.5	47.9	70	2.3	2.9	299	9.8	14.7	442	14.4	8.1	1,131	37.0	26.5
Age 50+	1,711	704	41.1	52.3	57	3.3	4.4	231	13.5	19.0	230	13.4	5.9	489	28.6	18.5
Total beneficiary sample	11,299	4,008	35.5	50.8	261	2.3	3.9	1,155	10.2	17.7	1,853	16.4	6.6	4,022	35.6	21.1
<b>Cross-sectional successful worker sample</b>																
SSDI Only	4,221	1,493	35.4	36.7	151	3.6	3.8	426	10.1	11.5	452	10.7	13.4	1,122	26.6	34.6
SSI	4,369	1,523	34.9	37.6	160	3.7	4.0	425	9.7	11.4	335	7.7	10.6	1,186	27.1	36.3
Total cross-sectional successful worker sample	8,590	3,016	35.1	37.2	311	3.6	3.9	851	9.9	11.5	787	9.2	12.1	2,308	26.9	35.4
<b>Longitudinal successful worker sample</b>																
SSDI Only	1,863	1,074	57.7	55.6	18	1.0	1.1	121	6.5	7.1	187	10.0	11.4	442	23.7	24.8
SSI	1,849	994	53.8	50.6	28	1.5	1.6	125	6.8	7.3	171	9.3	10.3	511	27.6	30.2
Total longitudinal successful worker sample	3,712	2,068	55.7	53.2	46	1.2	1.4	246	6.6	7.2	358	9.6	10.9	953	25.7	27.5

Source: NBS Round 7

Note: The number of completed cases includes 137 partially completed interviews.

<sup>a</sup>The unweighted percentages in the RBS are not very meaningful due to the implementation of the two-phase sampling procedure.

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## V. Variable Construction and Editing

The NBS data files contain several types of variables: unedited and edited questionnaire variables, imputed variables and imputation flags, coded verbatim responses, variables masked for the Public Use File, constructed variables derived from questionnaire variables, weights, survey administration variables, and SSA administrative data.<sup>45</sup> In this chapter, we provide an overview of the types of variables in both the Restricted Access and Public Use data files and variable naming conventions as well as additional details on coded items and select constructed variables.

### A. Editing of questionnaire variables

Questionnaire variables are survey items collected directly from the respondent. On the NBS data files, we distinguish these variables by a two-part name with the first part of the variable name representing the section of the questionnaire where the question originates and the second part of the variable name representing the numerical question from the questionnaire (for example, question G11 comes from Section G of the questionnaire and is question 11). Variables on the data file are also preceded by an R7\_ to identify them as Round 7 variables

We thoroughly reviewed the NBS data for discrepancies that might have resulted from programming or interviewer errors. We performed the necessary editing to resolve any inconsistencies in skip patterns and to review and resolve some outlier values by recoding either to an appropriate valid value or a value of missing (.D = don't know). For key variables, we imputed these responses and other missing values. In consultation with SSA and research analysts, we took the general approach of editing only those cases where there appeared to be an obvious data entry or respondent error. As a result, while we devoted substantial time to a meticulous review of individual responses, some suspect values remain in the file. The “National Beneficiary Survey – General Waves: Round 7 Data Cleaning and Identification of Data Problems Report” (McDonald et al. 2021) provides more information on data problems and the completeness of the survey data set.

### B. Imputation of missing values

A case may be missing data for a particular item because of a logical skip (the respondent was ineligible for the item), the respondent refused the item or responded “don't know,” an interviewer or programming error resulted in a loss of data, or the case was a partial complete and is missing data for some items. Data for cases completed up through G61 were included on the file as partial completes. All subsequent items for these cases were coded as .P if the question was not answered during the interview. In Table V.1, we summarize missing value codes and their description. For selected variables in the file, we imputed missing data due to “don't know” or refused responses and those items missing because the case was partially completed (.D, .R, and .P).

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<sup>45</sup> In general, unedited variables are those which contain the original response to a single questionnaire item.

**Table V.1. Missing values and description**

Value	Description
L	Logical skip: Respondent not eligible to receive the item
D	Don't know: Respondent did not know how to answer the item
R	Refused: Respondent refused to respond to the item
P	Partial complete: Data are missing due to partial interview

Source: NBS Round 7

We selected variables for imputation based on their level of missing data and their analytic importance. Imputed variables include those related to race and ethnicity, disability status, current employment, health, income, and personal and household characteristics. In Chapter VII, we provide a complete list of variables selected for imputation and the specific imputation procedures used for each item. Imputed variables share the same name as the original variable but end in an `_i`. The original non-imputed variables are retained on the Restricted Access File, along with imputation flags indicating that a case was imputed and a description of the method of imputation (Table V.2). Imputation flag variables share the same name as the original variable and end in `iflag` (for example, `BMI_cat_i` is the imputed version of the constructed variable `C_BMI`. `BMI_cat_iflag` indicates which cases were imputed and the method used for that imputation).

**Table V.2. Imputation flag values and description**

Imputation flag value	Description
0	No change (self-reported data)
1	Logical imputation
2	Administrative data
3	Hot-deck imputation
4	Imputed by distributional assumptions
5	Imputed by specialized procedures specific to Section K
6	Constructed from imputed variables
7	Imputed by longitudinal assumptions (prior-round data)
L	Legitimate missing

Source: NBS Round 7

### C. Coding Verbatim Responses

The NBS 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.

#### 1. Coding Open-Ended, "Other/Specify," and Field-Coded Responses

Three types of questions (described below) in the NBS did not have designated response categories; rather, the responses to the 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 these items, interviewers recorded the verbatim response. Using common responses, we developed categories and reviewed them with analysts. The coders then attempted to code the verbatim response into an established category. If the response did not fit into one of the categories, the 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 these questions, respondents were asked to specify an answer to “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 seemed to apply, interviewers selected an “other/specify” category and typed in the response. For example, Item G53 asks “Thinking only about the services {you/NAME} used in 2018, 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.”

During data processing, we examined a portion of all 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 to facilitate coding if there were enough such responses and they could not be back-coded into pre-existing categories. (A list of all open-ended items that were assigned additional categories during the coding process appears in Appendix D.) 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 that were 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, during the coding effort, it became apparent that we needed to change the coding scheme—for example, due to the need to include new categories—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 clarifying notes 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 V.3). The data files exclude the verbatim responses. (See McDonald et al. 2021 for full details on back-coding procedures.)

**Table V.3. Supplemental codes for “other/specify” coding**

Code	Label	Description
94	Invalid response	Indicates that this 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 the question
96	Duplicate response	Indicates that the verbatim response already has been selected in a “code all that apply” item
98	Don't know	Used only if the verbatim response indicates that the respondent does not know the answer
99	Not codeable	Indicates that a code cannot be assigned based on the verbatim response

Source: NBS Round 7

## 2. 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 kind or amount of work or daily activities that the 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 main purpose of items 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, we asked if they were currently receiving Social Security benefits. If they answered “yes,” we asked for 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. If they answered “yes,” we asked for the condition that made them eligible for Social Security benefits (Item B12) or for the reason that first made them eligible if they no longer had that condition (Item B15). Respondents who said that they had not received disability benefits in the last five years were screened out of the survey and coded as ineligible. We assigned a value for the three health condition constructed variables for each response to Items B2, B6, B12, and B15. Although we asked respondents to cite one main condition in Items B2, B6, B12, or B15, many listed more than one. We maintained the additional responses under the primary condition variable and coded them 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 kind or amount of work or daily activities 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. For 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, we also asked if any other conditions had 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 and Round 7. The list of 21 codes used for Rounds 6 and Round 7 is included in Table V.4. The coders, many of whom had medical coding experience, attended a four-hour training session before they started coding; they also attended biweekly 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 instance, 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 where 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 Body Groups (C\_MainConBodyGroup), 18 levels (Table V.5)
2. Main Condition Primary Diagnosis Groups (C\_MainConDiagGrpNEW), 16 levels (Table V.6)
3. Main Condition Primary Diagnosis Groups Collapsed (C\_MainConColDiagGrp), 5 levels (Table V.8)

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.

For Rounds 6 and 7, the main condition primary diagnosis groups (C\_MainConDiagGrpNEW\_1-6, C\_SecConDiagGrpNEW\_1-12, C\_ReasBecEligDiagGrpNEW, and C\_MainReasEligDiagGrpNEW\_1-4) include "NEW" in the variable names to denote important differences in the Round 6 and 7 construction specifications compared to those used in the prior rounds of the NBS. As previously mentioned, the primary health coding scheme (Table V.4) that we implemented in Rounds 6 and 7 does not allow us to create the categories exactly as they appeared in Rounds 1 through 5. As a result of these

changes, we do not recommend making comparisons between Round 6 or 7 and prior rounds without comparing the construction techniques used in Round 6 and 7 to those used in Rounds 1 through 5. See Table V.7 for a crosswalk between the two coding schemes.

**Table V.4. Rounds 6 and 7 health coding scheme**

Health Condition 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
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

**Table V.4.** (continued)

Health Condition Code	Label	Description of ICD-9 Codes	Corresponding ICD-9 Codes
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 not elsewhere classified)	800.00–998.9
180	Physical problem, not elsewhere classified	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 Rounds 6 and 7

**Table V.5. Body system diagnosis groups (C\_MAINCONBODYGROUP\_1-\_6, C\_SECCONBODYGROUP\_1-\_12, C\_REASBECELIGBODYGROUP, C\_MAINREASELIGBODYGROUP\_1-\_4)**

Code	Label	Description of ICD-9 codes	Corresponding ICD-9 codes	Corresponding health condition codes
00	Other	Other and unspecified infectious and parasitic disease; alcohol dependence syndrome and drug dependence; learning disorders and developmental speech or language disorders; complications of medical care, not elsewhere classified; other problems not elsewhere classified.	136.0-136.9, 303.00-304.90, 315.00-315.39, 999.0-999.9	180
01	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	010
02	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	020
03	Endocrine/nutritional disorders	Thyroid disorders, diabetes, abnormal growth disorders, nutritional disorders, and other metabolic and immunity disorders	240.0–279.9	030
04	Blood/blood-forming	Diseases of blood cells and spleen	280.0–289.9	040
05	Mental disorders	Psychoses, neurotic and personality disorders, and other non-psychotic mental disorders, including mental retardation (excluding alcohol and drug dependence and learning, developmental, speech, or language disorders)	290.0–302.9, 305.00-314.9, 315.4-319	050, 051
06	Diseases of nervous system	Disorders of brain, spinal cord, central nervous system, peripheral nervous system, and senses including paralytic syndromes, and disorders of eye and ear	320.0-389.9	060, 061
07	Diseases of circulatory system	Heart disease, disorders of circulation, and diseases of arteries, veins, and capillaries	390-459.9	070
08	Diseases of respiratory system	Disorders of the nasal, sinus, upper respiratory tract, and lungs including chronic obstructive pulmonary disease	460-519.9	080
09	Diseases of digestive system	Diseases of the oral cavity, stomach, esophagus, and duodenum	520.0-579.9	090
10	Diseases of genitourinary system	Diseases of the kidneys, urinary system, genital organs, and breasts	580.0-629.9	100

**Table V.5.** (continued)

Code	Label	Description of ICD-9 codes	Corresponding ICD-9 codes	Corresponding health condition codes
11	Complications of pregnancy, child birth, and the puerperium	Complications related to pregnancy or delivery, and complications of the puerperium	630-677	110
12	Diseases of skin/subcutaneous tissue	Infections of the skin, inflammatory conditions, and other skin diseases	680.0-709.9	120
13	Diseases of musculoskeletal system	Muscle, bone, and joint problems, including arthropathies, dorsopathies, rheumatism, osteopathies, and acquired musculoskeletal deformities	710.0-739.9	130, 131
14	Congenital anomalies	Problems arising from abnormal fetal development, including birth defects and genetic abnormalities	740.0-759.9	140
15	Conditions in the perinatal period	Conditions that have origin in birth period even if disorder emerges later	760.0-779.9	150
16	Symptoms, signs, and ill-defined conditions	Ill-defined conditions and symptoms; used when no more specific diagnosis can be made	780.01-799.9	160
17	Injury and poisoning	Problems that result from accidents and injuries including fractures, brain injury, and burns (excluding complications of medical care not elsewhere classified)	800.00–998.9	170
95	Refused	Verbatim indicates respondent refused to answer the question.	No ICD-9 codes	95
96	Duplicate condition reported	The condition has already been coded for the respondent.	No ICD-9 codes	96
97	No condition reported	The verbatim does not contain or symptom to condition to code.	No ICD-9 codes	97
98	Don't know	The respondent reports that he/she does not know the condition.	No ICD-9 codes	98
99	Uncodeable	A code cannot be assigned based on the verbatim response.	No ICD-9 codes	99

Source: NBS Rounds 6 and 7

**Table V.6. New primary diagnosis groups (C\_MAINCONDIAGGRPNEW\_1-6, C\_SECCONDIAGGRPNEW\_1-12, C\_REASBECELIGDIAGGRPNEW, C\_MAINREASELIGDIAGGRPNEW\_1-4)**

Code	Label	Description of ICD-9 Codes	Corresponding ICD-9 Codes	Corresponding health condition codes
00	Other, speech impairment, diseases of skin/ subcutaneous tissue	Other and unspecified infectious and parasitic disease; alcohol dependence syndrome and drug dependence; learning disorders and developmental speech or language disorders; complications of pregnancy, childbirth and the puerperium; conditions in the perinatal period; symptoms, signs and ill-defined conditions; Asphasia, voice disturbance, other speech disturbance; infections of the skin, inflammatory conditions, and other skin diseases; complications of medical care, not elsewhere classified; physical problems not elsewhere classified.	136.0-136.9, 303.00-304.93, 315.00-315.39, 630-677, 760.0-779.9, 780.01-784.2, 784.60-799.99, 999.0-999.9, 784.3-784.5, 680.0-709.9,	110, 120, 150, 160, 180
01	Infectious and parasitic diseases, HIV	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, other viral diseases, and venereal diseases (excluding HIV and other and unspecified infectious and parasitic diseases) HIV infection	001.0-041.9, 045.00-135, 137.0-139.8,	010
03	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	020
04	Endocrine/nutritional disorders	Thyroid disorders, diabetes, abnormal growth disorders, nutritional disorders, and other metabolic and immunity disorders	240.0-279.9	030
05	Blood/ blood-forming diseases	Diseases of blood cells and spleen	280.0-289.9	040

**Table V.6.** (continued)

Code	Label	Description of ICD-9 Codes	Corresponding ICD-9 Codes	Corresponding health condition codes
06	Schizophrenia/psychoses, major affective disorders, other mental disorders	Schizophrenic disorders Affective psychoses including major depression and bipolar disorder Organic psychotic conditions, paranoid states, neurotic disorders, personality disorders, and other non-psychotic mental disorders (excluding alcohol and drug dependence and learning/developmental speech or language disorders, schizophrenia, and major affective disorders)	295.00-295.95 296.00-296.99 297.0-297.9, 298.0-298.9, 299.0-299.9, 300.0-300.9, 301.0-301.9, 302.0-302.9, 303.0-303.9, 304.0-304.9, 305.0-305.9, 306.0-306.9, 307.0-307.9, 308.0-308.9, 309.0-309.9, 310.0-310.9, 311.0-311.9, 312.0-312.9, 313.0-313.9, 314.0-314.9, 315.0-315.9, 316.0-316.9	050
09	Intellectual disability	Mild intellectual disability and other specified and unspecified intellectual disability	317-319	051
10	Visual impairment, Hearing impairment	Disorders of the eye and adnexa Disorders of the ear and mastoid process	360.00-379.99 380.00-389.9	061
13	Other diseases of nervous system	Disorders of brain, spinal cord, central nervous system, peripheral nervous system, and senses, including paralytic syndromes, excluding disorders of eye and disorders of ear	320.0-359.9	060
14	Diseases of circulatory system	Heart disease, disorders of circulation, and diseases of arteries, veins, and capillaries	390-459.9	070
15	Diseases of respiratory system	Disorders of the nasal, sinus, upper respiratory tract, and lungs including chronic obstructive pulmonary disease	460-519.9	080
16	Diseases of digestive system	Diseases of the oral cavity, stomach, esophagus, and duodenum	520.0-579.9	090
17	Diseases of genitourinary system	Diseases of the kidneys, urinary system, genital organs, and breasts	580.0-629.9	100
19	Diseases of musculoskeletal system	Muscle, bone, and joint problems including arthropathies, dorsopathies, rheumatism, osteopathies, and acquired musculoskeletal deformities	710.0-739.9	130, 131
20	Congenital anomalies	Problems arising from abnormal fetal development, including birth defects and genetic abnormalities	740.0-759.9	140
21	Injury and poisoning	Problems that result from accidents and injuries including fractures, brain injury, and burns (excluding complications of medical care not elsewhere classified)	800.00–998.9	170
95	Refused	Verbatim indicates respondent refused to answer the question.	No ICD-9 codes	95
96	Duplicate condition reported	The condition has already been coded for the respondent.	No ICD-9 codes	96

**Table V.6.** (continued)

Code	Label	Description of ICD-9 Codes	Corresponding ICD-9 Codes	Corresponding health condition codes
97	No condition reported	The verbatim does not contain symptom or condition to code.	No ICD-9 codes	97
98	Don't know	The respondent reports that he/she does not know the condition.	No ICD-9 codes	98
99	Uncodeable	A code cannot be assigned based on the verbatim response.	No ICD-9 codes	99

Source: NBS Rounds 6 and 7



**Table V.7** (continued)

Round 6 and 7 Code	Round 6 and 7 Label	Round 6 and 7 Corresponding ICD-9 Codes	Round 5 Code	Round 5 Label	Round 5 Corresponding ICD-9 Codes
15	Diseases of respiratory system	460-519.9	15	Diseases of respiratory system	460-519.9, 08
16	Diseases of digestive system	520.0-579.9	16	Diseases of digestive system	520.0-579.9, 09
17	Diseases of genitourinary system	580.0-629.9	17	Diseases of genitourinary system	580.0-629.9, 10
19	Diseases of musculoskeletal system	710.0-739.9	19	Diseases of musculoskeletal system	710.0-739.9, 13
20	Congenital anomalies	740.0-759.9	20	Congenital anomalies	740.0-759.9, 14
21	Injury and poisoning	800.00–998.9	21	Injury and poisoning	800.00–998.9, 17
95	Refused	No ICD-9 codes	95	Refused	No ICD-9 codes
96	Duplicate condition reported	No ICD-9 codes	96	Duplicate condition reported	No ICD-9 codes
97	No condition reported	No ICD-9 codes	97	No condition reported	No ICD-9 codes
98	Don't know	No ICD-9 codes	98	Don't know	No ICD-9 codes
99	Uncodeable	No ICD-9 codes	99	Uncodeable	No ICD-9 codes

Source: NBS Rounds 5, 6 and 7.

**Table V.8. Primary diagnosis codes collapsed (C\_MAINCONCOLDIAGGRP\_1-6, C\_SECCONCOLDIAGGRP\_1-12, C\_REASBECELIGCOLDIAGGRP, C\_MAINREASELIGCOLDIAGGRP\_1-4)**

Code	Label	Description of ICD-9 codes	ICD-9 and two-digit codes	Corresponding health condition codes
00	Other	Infectious and parasitic diseases; neoplasms; endocrine/nutritional disorders; blood/blood-forming diseases; alcohol dependence syndrome and drug dependence; learning disorders and developmental speech or language disorders; disorders of nervous system; disorders of circulatory system; diseases of respiratory system; diseases of digestive system; diseases of genitourinary system; complications of pregnancy, childbirth and the puerperium; diseases of skin/subcutaneous tissue; conditions in the perinatal period; congenital anomalies; symptoms, signs and ill-defined conditions; injury and poisoning; physical problems not elsewhere classified	001.0-139.8, 140.0-239.9, 240.0-279.9, 280.0-289.9, 303.00-304.93, 315.00-315.39, 320.0-359.9, 390-459.9, 460-519.9, 520.0-579.9, 580.0-629.9, 630-677, 680.0-709.9, 740.0-759.9, 760.0-779.9, 780.01-784.2, 784.6-799.99, 800.00-999.9	010, 020, 030, 040, 060, 070, 080, 090, 100, 110, 120, 140, 150, 160, 170, 180
01	Mental illness	Organic psychotic conditions, paranoid states, other non-organic psychoses, psychoses with origin specific to childhood, neurotic disorders, personality disorders, and other non-psychotic mental disorders (excluding alcohol dependence syndrome and drug dependence; learning disorders and developmental speech or language disorders; and intellectual disability)	290.0-316	050
02	Intellectual disability	Intellectual disability (formerly mental retardation) unspecified mental retardation	317-319	051
03	Muscular/skeletal	Muscle, bone, and joint problems including arthropathies, dorsopathies, rheumatism, osteopathies, and acquired musculoskeletal deformities	710.0-739.9	130, 131
04	Sensory disorders	Visual and hearing disorders	360.00-389.9	061
95	Refused	Verbatim indicates respondent refused to answer the question.	No ICD-9 codes	95
96	Duplicate condition reported	The condition has already been coded for the respondent.	No ICD-9 codes	96
97	No condition reported	The verbatim does not contain symptom or condition to code.	No ICD-9 codes	97
98	Don't know	The respondent reports that he/she does not know the condition.	No ICD-9 codes	98
99	Uncodeable	A code cannot be assigned based on the verbatim response.	No ICD-9 codes	99

Source: NBS Rounds 6 and 7.

### 3. Industry and Occupation

In Section C of the questionnaire, we collected information about a sample member's current employment. In Section C\_B of the questionnaire, we collected information about a sample member's employment in the last 6 months, if the sample member was not currently working at the time of the interview. In Section D of the questionnaire, we collected information about a sample member's employment in 2018. For each job, respondents were asked to report their occupation (Items C2, C\_B2, and D4) and the type of business or industry (Items C3, C\_B3, and D5) in which they were employed. For rounds 1 through 5 of data collection, we used the Bureau of Labor Statistics 2000 Standard Occupational Classification (SOC) to code verbatim responses to these items. For Rounds 6 and 7, we used the Bureau of Labor Statistics 2010 Standard Occupational Classification (SOC) for coding.<sup>46</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 one 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 and 7 codes applied using the 2010 SOC remain comparable with earlier rounds coded using the 2000 SOC, as all major and minor group codes remained consistent across both coding schemes. We list the three-digit minor groups that are classified within major groups in Appendix E.

For rounds 1 through 5 of the survey, we coded verbatim responses to the industry items according to the 2002 North American Industry Classification System (NAICS). For Rounds 6 and 7, we used the 2017 North American Industry Classification System (NAICS).<sup>47</sup> The NAICS is an industry classification system that groups establishments into categories on the basis of 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. Rounds 6 and 7 codes applied using the 2017 NAICS remain comparable with earlier rounds that used the 2002 NAICS, as all industry sector and subsector codes remained consistent across both coding schemes. (Appendix F lists the broad industry sectors.) 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 Mathematica decided, based on research needs, to limit the coding to three digits.

Mathematica developed supplemental codes for responses to questions about occupation and industry that could not be coded to a three-digit SOC or NAICS code (Table V.9). As we did during the health condition coding effort, we reviewed the first several cases coded by each of the coders. Throughout the coding process, we randomly selected 10 percent of the responses for review. In total, a supervisor reviewed approximately 20 percent of all coded responses, including cases that coders flagged for review because they were either unable to code them or did not know how to code them.

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<sup>46</sup> For more information, see *Standard Occupational Classification Manual, 2010*, or <http://www.bls.gov/soc>.

<sup>47</sup> For more information, see North American Industry Classification System, 2017, or <https://www.census.gov/eos/www/naics/index.html>

**Table V.9. Supplemental codes for occupation and industry coding**

Code	Label	Description
94	Sheltered workshop	The code used if the occupation is in a sheltered workshop and the occupation cannot be coded from verbatim.
95	Refused	The respondent refuses to give his or her occupation or type of business.
97	No occupation or industry reported	No valid occupation or industry is reported in the verbatim response.
98	Don’t know	The respondent reports that he or she does not know the occupation or industry.
99	Uncodeable	A code cannot be assigned based on the verbatim response.

Source: NBS Rounds 6 and 7

## D. Constructed variables

To simplify the data file and assist the user, the NBS-General Waves data file required the creation of 390 constructed variables. We created constructed variables by combining information from two or more other sources of data to create one variable. The data file codebooks include the algorithms and specifications used to create the constructed variables.

Constructed variables are positioned to appear at the end of the section of variables from which they were created. All constructed variables begin with “C\_” succeeded by a brief description of what the variable measures. (For example, “C\_TotCurWkHours” measures the total weekly hours the respondent currently worked at all of the jobs he or she listed.)

For the NBS-General Waves, the constructed variables fall into several categories as described below. In Appendix G, we list the constructed variable names and their descriptions.

### 1. Survey administration

The first type of constructed variable includes survey administration and respondent descriptor variables. Included in this set of constructed variables are C\_Rtype (indicating whether the interview was completed by the sample member or a proxy respondent), C\_IntMode (CAPI or CATI interview), C\_Resptype (indicating whether the interview was completed by the sample member only, the sample member with help, or a proxy only), and C\_Intage (age at interview). In some cases, constructs were based on sampling variables, for example C\_Cohort (sampling cohort). We positioned these constructs at the beginning of the file, prior to the questionnaire sections.

### 2. Logical zero

To reduce the number of legitimate missing responses originating from survey skip patterns, we constructed logical zero constructs for variables that assess the amount of income the sample member received from a variety of sources in the month prior to interview (based on K3, K7a-K7h, K12, and K15). These constructs included the amount earned from jobs last month (C\_LstMnthPay), the amount received from private disability insurance (C\_AmtPrivDis), worker’s compensation (C\_AmtWorkComp), veteran’s benefits (C\_AmtVetBen), public assistance (C\_AmtPubAssis), unemployment (C\_AmtUnemploy), private pension (C\_AmtPrivPen), SNAP benefits (C\_AmtFoodStamp), other government programs (C\_AmtOthGov), other sources on a regular basis (C\_AmtOthReg), and from other

sources on a nonregular basis (C\_AmtOthNonReg). For example, if the respondent reported he or she did not receive private disability insurance last month (question K6a), the follow-up question asking how much private disability insurance was received (question K7a) was skipped. During data processing, such .L (logical skip) responses were recoded to \$0. Thus, if the sample member reported not receiving private disability insurance the previous month, then the value of C\_AmtPrivDis was "\$0." We identified logical zero constructed variables in the codebook user notes. C\_AmtOthRegSum sums across all of these regular sources (including SSA administrative records) to create a total.

### **3. Duration and amount standardization**

Throughout the NBS questionnaire, respondents had the option of reporting contacts with providers, income, and expenditures in the unit of their choosing—for instance, daily, weekly, or monthly. We designed the NBS questionnaire with the expectation that allowing respondents to select the time frame (ideally, the time frame with which they were most comfortable) would improve data quality. In these situations, the amount and the unit reported by the respondent existed as two distinct variables in the survey data. For example, question C12amt asked for the amount paid on a job and C12hop, how often the amount was paid. To aid the user, we constructed variables to standardize the time frame and produced a single variable (for example, C\_MainJobHrPay) in one unit. In Sections C, C\_B, and D, we created both hourly pay (C\_MainCurJobHrPay, C\_Main6MoJobHrPay, C\_MainJobHrPay2018 and monthly pay variables (C\_MainCurJobMnthPay, C\_MainCurJobMnthPayTH, C\_Main6MoJobMnthPay, C\_Main6MoJobMnthPayTH, C\_MainJobMnthPay2018, C\_MainJobMnthPayTH2018). We standardized the unit of time for reporting a respondent's current job (Section C) and job within last six months (Section C\_B) to SSA to a week (C\_MainCurJobRepSSA, C\_Main6MoJobRepSSA). We standardized household income, as reported in L23Aamt and L23Ahop, to an annual unit (C\_HhInc2018). The NBS codebook provides the specifications used to create the variables in the construct specification notes for each variable.

### **4. Pathing combinations**

We created other constructs to combine or summarize survey responses when answers could be provided in more than one place. For example, respondents could report current Medicare coverage at J1 when explicitly probed for this type of insurance and at J9 ("What kinds of health insurance coverage do you have?") if they reported having no current insurance at J1-J5. In this case, we created a construct that checked both J1 and J9 to determine if the respondent indicated Medicare coverage at either item (C\_CurMedicare). This type of construct was created for all health insurance variables in Section J. We created similar constructs for the age at which the sample member first became limited (C\_DisAge and C\_AdultChild\_Onset), ever worked for pay (C\_EvrWorked), and worked when limited (C\_WrkdWhenLim). The constructed variable code included in the codebooks provides the original questionnaire variables used to create each constructed variable.

Finally, we created several constructed variables in Section G to summarize information about providers and services. Respondents reported services received in 2018 that were grouped into categories, then reported the type of place they received the services. To facilitate reporting of services received and types of places across the various questions, we created constructs to flag whether each type of service was received in 2018 (C\_UseEmploy2018, C\_ServUse2018) and whether services were received from particular types of providers (for example, C\_UseSVR2018). We discuss the provider constructs created in Section G in more detail below. Please note that Section G was revised extensively between Rounds 5

and Rounds 6. As a result, we do not recommend making comparisons between Section G constructed variables from Round 6 or 7 to earlier rounds of the NBS.

## 5. Scales

We constructed variables to summarize items that were part of a pre-existing scale, including a total SF-8<sup>TM</sup> physical and mental score (C\_PCS8TOT, C\_MCS8TOT), SF-8<sup>TM</sup> intermediate scores (C\_SF8GH, C\_SF8PF, C\_SF8RP, C\_SF8BP, C\_SF8VT, C\_SF8SF, C\_SF8MH, and C\_SF8RE), physical component scores (PCS-8) (C\_PCSGH, C\_PCSPF, C\_PCSR, C\_PCSBP, C\_PCSVT, C\_PCSSF, C\_PCSMH, and C\_PCSRE), mental component scores (MCS-8) (C\_MCSGH, C\_MCSPF, C\_MCSR, C\_MCSBP, C\_MCSVT, C\_MCSSF, C\_MCSMH, and C\_MCSRE), a score on the CAGE alcohol scale (C\_CAGEAlcohol), and a drug dependence indicator (C\_DrugDep). We created a body mass index (C\_BMI) construct based on height and weight.

## 6. Other

We created additional constructs to simplify the analysis of income data (by creating a poverty-level construct), impairments (by creating a series of variables to identify the number of ADL, IADL, physical, emotional, other impairment types), and job information (by collapsing information across jobs).

### E. SSA administrative data

Mathematica received administrative data from SSA for the purposes of selecting the sample; contacting, locating, and verifying sample members; and to fill information or drive instrument pathing in the survey instrument. Neither the Restricted Access nor the Public Use Files include personally identifying information received from SSA (for example, Social Security number, name, address, telephone number). Key items that were used for the creation of sampling strata and those that were used to dictate pathing in the instrument are included. These variables begin with “OrgSampInfo” to indicate that they are original sample file variables.

Given that the questionnaire did not ask respondents for the SSA benefit amount received last month, we retrieved such information from SSA administrative variables and incorporated it into the monthly income variables (C\_AmtOthRegSum, C\_TotGovCashBen). We appended to the Public Use File additional administrative variables from the SSA records to enable more comprehensive data analysis. The data retain their original names and are included at the end of the file. All the appended administrative variables added to the data begin with “N\_” succeeded by a brief description of what the variable measures.

### F. Public use variables

We edited some data to ensure the confidentiality of survey respondents for the Public Use File. File editing excluded variables containing information that could potentially be used either directly or indirectly to identify a sample member; we then constructed new variables to mask extreme or rare values and populations. Using SSA’s Disclosure Review Board guidelines, we developed encryption and masking algorithms to maximize the analytic value of the data while maintaining acceptable confidentiality for program participants. We then created variables for the Public Use File to mask identifying questionnaire data. Such constructs end with a PUB and replace the original survey item in the Public Use File. These variables are also included on the Restricted Access File.

## 1. Variable exclusion

To minimize the likelihood of indirect identification of a sample member, we deleted variables that could identify residents of smaller geographic areas or sample members with rare attributes (outliers). We paid particular attention to variables associated with fewer than 100 sample members distinguished by a given characteristic (small cell sizes). We also simplified the file by dropping variables with little analytic value, including survey administration variables, source variables with corresponding imputed versions, imputation flags, source variables summarized in a constructed variable. In addition, we dropped data elements with quality problems that would reduce the elements' analytic value. We also dropped SSA administrative data appended to the Restricted Access File; in their place, we masked certain key administrative variables and added them to the file as new constructs. In Appendix H, we list all variables dropped or replaced and the reason for the exclusion; in Appendix B, we list all variables included on and dropped from the Public Use File.

## 2. Masking and constructing new variables

We assessed the remaining variables for their confidentiality disclosure risk. When survey questions identified relatively rare populations, we constructed a new variable to combine small groups into larger groups. For many variables that posed a potential risk, constructed variables summarizing the information already existed on the file. When constructed variables did not exist, Mathematica prepared masking algorithms that maximized their analytic value while maintaining acceptable confidentiality for the program participants. Masking algorithms included top and bottom coding of continuous variables, rounding, collapsing continuous variables into categories, and combining responses for categorical variables. We assigned these Public Use File constructs the same variable name as the source variable and ended the constructs with PUB to indicate their creation for the Public Use Data File. In Appendix I, we provide a complete list of all variables edited for confidentiality with a brief description of the re-code. We also included descriptions of the specific re-codes and construct specifications for each variable in the codebook.

## G. Additional details on selected constructed variables

### 1. Jobs held in 2018

In Section C (Current Employment), we collected job-related information for each job held at the time of interview. In Section C\_B (Employment in the Past Six Months), we collected job-related information for all jobs within the past six months for respondents not currently working. In Section D (Jobs/Other Jobs in 2018), we collected information for any other jobs held in 2018 not already reported in Section C or C\_B. Data for each job are represented on the Restricted Access data file with an `_n` indicating which job the data are in reference to (for example, `D6mth_1` indicating month started first job held in 2018, `D6mth_2` indicating month started second job held in 2018, and so on). In all three sections, respondents were asked to report first on their main job, that is, the job at which they worked the most hours, and then to subsequently report on other jobs held. To reduce respondent burden, we did not ask respondents to report on any jobs held during 2018 that had previously been mentioned in Section C as current employment or Section C\_B as employment within the past six months. Rather, during data processing for all current jobs also held during 2018 (Table V.10), we copied employment data from Section C and Section C\_B to Section D. We coded items in Section D with no equivalent in Section C or Section C\_B (`D8mth`, `D8yr`, and `D23`) as `.L` (logical skip).

**Table V.10. Job variables in Sections C, C\_B and D**

Variable in C	Variable in C_B	Variable in D	Variable description
C2	C_B2	D4	Occupation
C3	C_B3	D5	Industry
C4mth, C4yr	C_B4mth, C_B4yr	D6mth, D6yr	Start month and year of job
No equivalent item	C_B4bmth, C_B4byr	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 pre-tax pay
C13amt, C13hop	C_B13amt, C_B13hop	D21amt, D21hop	Amount of post-tax pay
No equivalent item	C_BP13a through C_B39	DP1a through DP2	Reasons for stopping work

Source: NBS Round 6 and 7

*a. Including current and six-month jobs held in 2018 in Section D*

Jobs mentioned in Section C were defined as held in 2018 if C4yr (year started current job) was earlier than or equal to 2018 and the job held in 2018 was held for longer than one month. We copied each applicable job from Section C into the first blank job slot in Section D (for example, copied into D6mth\_2 if D6mth\_1 already contained data and into D6mth\_3 if both D6mth\_1 and D6mth\_2 already contained data). The variables C\_job\_from\_SecC\_1 through C\_job\_from\_SecC\_5 are included on the Restricted Access File to indicate which jobs from Section C (by job number) were copied into specific Section D job slots.

Non-current jobs within the last six months in Section C\_B were defined as held in 2018 if the job start and end dates overlapped with 2018 by at least one month. We copied each applicable job from Section C\_B into the first blank job slot in Section D. For example, if we had to copy Section C\_B start month (C\_B4mth) into Section D start month (D6mth), but job slots 1 and 2 in Section D (D6mth\_1, D6mth\_2) already contained data, we then copied them into D6mth\_3. The variables C\_job\_from\_SecC\_B\_1 through C\_job\_from\_SecC\_B\_5 are included on the Restricted Access File to indicate which jobs from Section C\_B (by job number) were copied into specific Section D job slots.

*b. Determining main job held in 2018*

In addition to copying job data from Section C and Section C\_B to Section D, we had to determine which job held in 2018 was the main job. Before including the jobs from Section C or Section C\_B, we stored the main job held in 2018 as job 1. Because it was possible that a job reported in Section C or C\_B was the respondent’s main job in 2018, we compared hours worked in 2018 on each job with the first job mentioned in Section D once the jobs from Section C and Section C\_B were incorporated. We considered as the main 2018 job the job with the greatest number of hours per year (numbers of hours per week

multiplied by number of weeks per year).<sup>48</sup> The variable `Main_Job_grid_num` identifies the job number of the main job held in 2018 after this analysis.

We used the main 2018 job to create a series of variables ending with `_m` to represent each job-specific item listed in Table V.10 for the main job held in 2018 (for example `D6mth_m` and `D6yr_m`). It is important to note that, in creating the variables ending with `_m`, we did not delete from the `job_1-job_5` variables any information related to the main job. For example, for a case in Section D listing three jobs (after copying relevant jobs from Section C) where the second job is determined to be the main job, both `D8_m` and `D8_2` provide information related to hours worked on this job. Therefore, `_m` jobs should not be counted as additional jobs. The Public Use File includes only the main job variables (`_m`) for jobs held in 2018.

For purposes of the constructed variables created in this section, we created separate constructs for each job mentioned (job 1, job 2, and so on). We created additional constructs for the main job (`C_MainJob2018SOC`, `C_MainJob2018NAICS`, `C_MainJobHrPay2018`, `C_MainJobMnthPay2018`, `C_MainJobMnthPayTH2018`, and `C_MnthsMain2018Job`) as identified by the variable `Main_Job_grid_num`. As stated above, information in the main job constructs is replicated in one of the other job slots on the Restricted Access File and does not represent an additional job.

## 2. Employment-related services

In Section G, we asked respondents to discuss employment-related services and supports they received in 2018, focusing on five types of services – employment, job training, medical, therapy/counseling, and education.

We substantially modified Section G between Rounds 5 and 6 of the NBS and retained those changes for Round 7. The changes were intended to reduce the administrative complexity of the section, and eliminate questions of limited value in an effort to reduce respondent burden.

For Round 6 and Round 7, we streamlined the instrument by making the following changes:

- We asked only about services received during 2016 (Round 6) or 2018 (Round 7), and not those ever received.
- For each of the five broad service types (employment services, training to learn new skills or to get a new job, medical services to improve the ability to work or live independently, therapy or counseling, and school or classes), we asked whether specific services that fall under the broad headings were received in 2016 (Round 6) or 2018 (Round 7). The specific service questions are now G2 (employment services), G11 (training), G16 (medical services), G20 (therapy/counseling), and G23 (school/classes).

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<sup>48</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 it as missing. If hours per year were missing for all 2018 Section C or `C_B` jobs, we counted job 1 in Section D as the main job in 2018. If no jobs were listed in Section D and hours per year were missing for all 2018 jobs in Section C or `C_B`, we counted the first job listed in Section C that was a 2018 job as the main job in 2018 or the first job listed in Section `C_B` that was a 2018 job as the main job in 2018. If hours per year were missing for job 1 in Section D, we counted the Section C or `C_B` job with most hours per year as the main 2018 job. If there was no 2018 job from Section C or `C_B` or hours per year were missing for all Section C or `C_B` 2018 jobs, we counted job 1 in Section D as the main 2018 job. If hours per year were missing for all 2018 Section C or `C_B` jobs and from job 1 in Section D, we counted job 1 in Section D as the main job in 2018.

- Rather than recording and enumerating the specific providers from which sample members received services (as was done in Round 5), we asked about the types of providers from which the services were received in a check-all-that-apply format.
- We removed questions about service intensity.

Because of the changes to Section G in the Round 6 and 7 instruments, we needed to re-specify all of the constructed variables that are based on Section G questions. For a more detailed description of changes made to section G between the Round 5 and Round 6 instruments, please see the Round 6 User’s Guide for Restricted and Public Use Data Files (Callahan, et al. 2021).

Given the extensive changes between Section G of the Round 6 and 7 NBS and earlier versions of the NBS, we do not recommend making any comparisons between the 2016 and 2018 Section G variables (or constructed variables) to the earlier rounds of the NBS. We have revised the name of the constructed variables to include “\_rev” to indicate the revisions and to discourage such comparisons.

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## VI. WEIGHTS

We determined the final analysis weights for the RBS, the cross-sectional SWS, and the longitudinal SWS via a three-step process:

1. Calculate the base weights
  - a. Calculate the initial probability weights
  - b. Calculate base weights (weights adjusted for two-phase design [RBS] or dual sample design [SWS])
2. Adjust the base weights for two phases of nonresponse (location and cooperation)
3. Trim the weights to reduce the variance and the risk associated with outlier weights, and conduct post-survey calibration using raking to ensure weighted marginal totals match frame totals for selected key variables

The initial probability weights are the inverse of the probability of selection and release; the base weights account for peculiarities of the sample design, including the two-phase sampling for the RBS and the dual sampling design for the cross-sectional SWS. In Section A, we summarize the procedures used to compute and adjust the sampling weights. In Sections B, C, and D, respectively, we describe the procedures for computing the weights for the three samples in more detail.

### A. Computing and adjusting the weights: A summary

#### 1. RBS

The sampling weights for any survey are computed from the inverse selection probability that incorporates the stages of sampling in the survey. We selected the RBS in two stages by (1) selecting primary sampling units (PSUs) and (2) selecting the individuals within the PSUs from a current database of beneficiaries.<sup>49</sup> We selected a larger sample than needed, called an augmented sample, to ensure that the number of completed interviews in each stratum-PSU combination were close to the initial targets. Details about the sample design for the RBS are given in Chapter II.

We computed the initial sampling weights for the RBS based on the inverse of the selection probability for the augmented sample. Given that we released only a subset of the augmented sample, we then adjusted the initial sampling weights for the actual number of cases that were released for data collection. The release-adjusted weights were post-stratified to population totals that were obtained from SSA.<sup>50</sup> In this report, these release-adjusted sampling weights are referred to as the base weights.

As indicated in Chapter II, we used a two-phase sampling procedure for the first time in the Round 7 RBS to increase the proportion of cases completed by phone relative to those completed using field efforts. We used data from Round 6 to project the yield rate among cases sent to the field in the first release. Using this assumed yield rate from Round 6, as well as the phone yield rate in the first release of Round 7, we determined what proportion of second-phase eligible cases (phone nonrespondents) should be randomly

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<sup>49</sup> In the two largest PSUs, we used an intermediate stage for sampling: secondary sampling units (SSUs). For the sake of simplicity, these SSUs are generally equivalent to PSUs in this description.

<sup>50</sup> The totals were obtained from a frame file provided by SSA that contained basic demographics for all SSI and SSDI beneficiaries.

selected for the second phase. In the second release, the proportion randomly selected was determined by ensuring that we obtained 4,000 completes. We adjusted the sampling weights of the phone nonrespondents who were selected for the second phase to account for the phone nonrespondents who were not selected to create the final base weights for the RBS.

We then needed to adjust the base weights for nonresponse. A commonly used method for computing weight adjustments is to form classes of sample members with similar characteristics and then use the inverse of the class response rate as the adjustment factor in that class. The adjusted weight is the product of the base weight and the adjustment factor. One would form the “weighting classes” to ensure that there would be sufficient counts in each class to make the adjustment more stable (that is, to ensure smaller variance). The natural extension to the weighting class procedure is to perform logistic regression with the weighting class definitions used as covariates, provided that each level of the model covariates has a sufficient number of sample members to ensure a stable adjustment. The inverse of the propensity score is then the adjustment factor. The logistic regression approach also has the ability to include both continuous and categorical variables; standard statistical tests are available to evaluate the selection of variables for the model. For the nonresponse weight adjustments (at both the location and cooperation stages), we used logistic regression models to estimate the propensity for a sample member to respond, and use the inverse of that score as the adjustment factor. The adjusted weight for each sample case is the product of the base weight and the adjustment factor.

We calculated the adjustment factor in two stages by: (1) estimating a propensity score for locating a sample member and (2) estimating a propensity score for response among these located sample members. In our experience with the NBS, factors associated with the inability to locate a person tend to differ from factors associated with cooperation. The unlocated person generally does not deliberately avoid or otherwise refuse to cooperate. For instance, that person may have chosen not to list their phone number or may frequently move from one address to another, but there is no evidence to suggest that—once located—they would show a specific unwillingness to cooperate with the survey. Located nonrespondents, on the other hand, may deliberately avoid the interviewer or express displeasure or hostility toward surveys in general or toward SSA in particular.

To develop the logistic propensity models for this round, we used as covariates information from the SSA data files as well as geographic information (such as urban or rural region). We obtained much of the geographic information from the Area Health Resource File (2018–2019), a file with county-level information on population, health, and economic-related matters for every county in the United States. By using a liberal level of statistical significance (0.3) in forward and backward stepwise logistic regression models (using the STEPWISE option of the SAS LOGISTIC procedure with weights<sup>51</sup> normalized to the sample size), we made an initial attempt to reduce the pool of covariates and interactions. We used a higher significance level because each model’s purpose was to improve the estimation of the propensity score, not to identify statistically significant factors related to response. In addition, the information sometimes reflected proxy variables for some underlying variable that was both unknown and unmeasured. We excluded from the pool of variables any covariate or interaction that was clearly unrelated to locating the respondent or to response propensity. We then pooled the variables resulting from the forward and backward procedures as our starting point for the next stage of model fitting.

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<sup>51</sup> For the location model, this refers to the probability weight. For the cooperation model, this refers to the location-adjusted probability weight.

The next step called for carefully evaluating a series of models by comparing the following measures of predictive ability and goodness of fit: the R-squared statistic, the percentage of concordant and discordant pairs, and the Hosmer-Lemeshow (H-L) goodness-of-fit test.<sup>52</sup> Model-fitting also involved reviewing the statistical significance of the coefficients of the covariates in the model and avoiding any unusually large adjustment factors. In addition, we manipulated the set of variables to avoid data warnings in SUDAAN.<sup>53</sup> We then used the specific covariate values for each located person to estimate the propensity score, and used the inverse of the propensity score to determine the adjustment factor. When computing the adjustment factors, we reviewed their distribution to identify and address any adjustment factors that were outliers (very large or very small relative to other adjustment factors). The location-adjusted weight is the product of the released-adjusted probability weight and the location adjustment. The nonresponse-adjusted weight is the product of the location-adjusted weight and the inverse of the cooperation propensity score, calculated in the same manner as the location propensity score. Given that the stepwise logistic regression procedures in SAS do not fully account for the complex survey design, we developed the final weighted models by using software that does account for the complex sample design (the RLOGIST procedure in SUDAAN and the SURVEYLOGISTIC procedure in SAS).

Once we made the adjustments, we assessed the distribution of the adjusted weights for unusually high values, which could make the survey estimates less precise. We used the design effect attributed to the variation in the sampling weights as a statistical measure to determine both the need for and amount of trimming. The design effect attributed to weighting is a measure of the potential loss in precision caused by the variation in the sampling weights relative to a sample of the same size with equal weights. We also wanted to minimize the extent of trimming to avoid the potential for bias in the survey estimates. Therefore, the decision to trim requires us to balance increasing bias and decreasing variance. Given our use of the two-phase sample, there was potentially a greater advantage for using trimming to ameliorate the expected increase in the unequal weighting effect. For the RBS, we checked the design effect attributable to unequal weighting within the age-related sampling strata and determined that 64 weights required trimming. The maximum design effect due to weighting among all age strata in the RBS occurred in the age 30 to 39 stratum, and in the RBS, the effect was reduced by trimming from 1.98 to 1.91.

The final step is a series of post-stratification adjustments through which the weights sum to known totals obtained from SSA on various dimensions—specifically, gender, age grouping, program title,<sup>54</sup> and five

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<sup>52</sup> In Rounds 1 through 5, we also used Akaike's Information Criterion, or AIC, as a model diagnostic (discussed in Akaike 1974). We obtained the AIC from SAS output of the LOGISTIC procedure, since it is not available in SUDAAN. However, in Rounds 6 and 7, we used the SURVEYLOGISTIC procedure in SAS, which does account for the survey design, and the AIC in these procedures was not helpful as a model diagnostic.

<sup>53</sup> SUDAAN data warnings usually included one or more of the following: (1) an indication of a response cell with a zero count; (2) one or more parameters approaching infinity, which may not be readily observable with the parameter estimates themselves; and (3) degrees of freedom for overall contrast that were less than the maximum number of estimable parameters. We tried to avoid all of these warnings, although avoiding the first two was the highest priority. The warnings usually were caused by a response cell with a count that was too small, which required dropping covariates or collapsing categories in covariates.

<sup>54</sup> Disability payments were made in the form of SSI or SSDI or both.

categories of annual earnings from the Disability Control Files (DCF) of 2017 and 2018.<sup>55</sup> After post-stratification, we checked the survey weights again to determine whether more trimming was needed. In this round, trimming was not needed after post-stratification in the RBS.

## 2. Cross-sectional SWS

We defined successful workers in Section II.B as Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI) beneficiaries who were (1) active or in suspense on June 30, 2018, (2) with earnings above SSA's non-blind substantial gainful activity (SGA)<sup>56</sup> earnings level for a minimum of three consecutive calendar months at any time between August 1, 2018 and July 31, 2019, and (3) were less than 62 years old on June 30, 2018. The earnings for each successful worker had to have been revealed in the DCF at the time of data extraction—removing from the population eligible for sampling in that extract any successful workers who had a long delay in having their earnings recorded on the DCF.

We computed the initial sampling weights for the SWS (both the clustered and unclustered samples) on the basis of the inverse of the selection probability for the successful worker within each extract. As with the RBS, we computed the weights for the augmented sample and then adjusted them for the number of sample members released into the final sample. (In the case of the SWS, we did not release any additional sample cases after the initial release for each extract.) To calculate the base weights for the SWS, it was necessary for us to create composite weights that combined the sampling weights from the clustered and unclustered components.<sup>57</sup> The procedure for calculating the SWS composite weights is discussed later, in Section C.

We adjusted these base weights for located sample members and then for response among such members. We used logistic propensity models to calculate the location adjustment for all successful workers and the response adjustments for located successful workers. The modeling procedures were similar to those used with the RBS, discussed in Section A.1 of this chapter.

For the sake of efficiency, we combined the seven extract samples into a single sample when calculating the nonresponse adjustments. Within each stratum, we trimmed the weights to ensure that the design

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<sup>55</sup> This was an attempt to address small negative bias in annual earnings, which was observed in Rounds 1 through 4. We arrived at the five earnings categories used in Round 5 after a lengthy investigation using both (annual) IRS and (monthly) DCF earnings. Using data from the 2014 sampling frame, we calculated the percentage with positive IRS earnings in 2014 (considered as “working”), as well as the mean and median IRS 2014 earnings, both overall and among those who were working. We compared these values to several sets of poststratified weights, where the post-stratification was based on a variety of earnings categorical variables, each with different cutpoints, some with IRS earnings and some with DCF earnings. We determined that, although the IRS earnings are more accurate than DCF earnings, IRS earnings are only available annually, which raises timing issues, and dilutes the advantage of accuracy. It was also more difficult to use IRS earnings, since they could only be accessed by staff at SSA. We arrived at the cutpoints given above because these cutpoints resulted in a poststratified weights that yielded estimated annual earnings that were closest to the IRS values. The 2013 data were used because of a lag in identifying earnings in the 2014 data, which did not have complete information on the amount of earnings that beneficiaries received in that year. For Round 7, we determined five earnings categories using earnings data from the 2017 and 2018 DCF files.

<sup>56</sup> This threshold was \$1,170 in 2017 and \$1,180 in 2018.

<sup>57</sup> This is referring to the creation of weights that combine the unclustered and clustered samples from the SWS. In the next section, we discuss the creation of composite weights that are used to combine the weights from the RBS and SWS. These two sets of composite weights are distinct and should not be confused.

effect was not adversely affected by outlier weights. (In Section C, we provide more detail on the trimming of successful workers' weights and the design effects attributable to unequal weighting before and after trimming.) We also conducted a single provisional post-stratification across the seven extract samples.<sup>58</sup> In this process, we adjusted the weights so that the marginal totals matched the frame totals within subgroups defined by five earnings categories,<sup>59</sup> the four age categories, program title,<sup>60</sup> and the extract totals. After post-stratification, we checked the survey again to determine the need for more trimming. Even though the Round 7 weights required trimming before post-stratification in the SWS, they required no further trimming after post-stratification.

### 3. Longitudinal SWS

As indicated in Section II.A.3, the Round 7 longitudinal SWS consisted of follow-up interviews with a subset of the respondents to the Round 6 cross-sectional SWS. We limited the Round 7 longitudinal sample members to those who, in Round 6, responded affirmatively to question B24 (“Are you currently working at a job or business for pay or profit?”). This restriction removes people who had been working within six months of the Round 6 interview but were not working at the time of the Round 6 interview. The nonresponse-adjusted weights for the Round 6 cross-sectional SWS were used as the “initial probability weights” for the Round 7 longitudinal SWS. As with the Round 7 cross-sectional SWS weights that we summarized in Section A.2, we created Round 7 longitudinal SWS base weights by adjusting the initial probability weights to account for the different follow-up rules for the clustered and unclustered samples in Round 7. This is discussed in Section D of this chapter.

When calculating the nonresponse adjustments, we divided the Round 7 longitudinal sample into two groups, depending on whether the sample members were still SSI or SSDI beneficiaries as of June 30, 2018, and were therefore in the Round 7 beneficiary frame. For both groups, we adjusted for location of the sample members and then for cooperation (response to the survey) among such members. For the group in the Round 7 beneficiary frame—constituting the vast majority of longitudinal sample members—we used logistic propensity models to calculate (1) the location adjustment for all successful workers in the longitudinal sample and (2) the cooperation adjustments for located successful workers in the sample who were current beneficiaries. However, for those who were not in the Round 7 beneficiary frame, we calculated the adjustments using simple weighting classes due to the small number of these sample members. We created the final weights by trimming and post-stratifying to marginal totals within strata (as the strata were defined when longitudinal SWS cases were originally selected in Round 6), together across the two groups. As noted in Section II.B, we will need to recalculate the longitudinal weights to accommodate the new population total based upon an updated extract, and the fact that a small proportion of the completed cases from Round 6 actually did not meet the criteria for successful work in this updated extract.

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<sup>58</sup> We call it provisional because we will conduct another final post-stratification to accommodate successful workers whose earnings took a long while to be uploaded to the DCF.

<sup>59</sup> The five earnings categories used for post-stratification in the SWS differed from those used for the RBS. In the RBS, most sample members did not have earnings. However, by definition, nearly everyone in the SWS had earnings in 2017 and 2018, so the categories were reconfigured to accommodate this.

<sup>60</sup> Disability payments were made in the form of SSI or SSDI or both.

#### 4. Composite weights for combining the RBS and cross-sectional SWS

Although the successful worker population constitutes a small subset of the beneficiary population, some analyses required a sample with a substantial number of individuals both within and outside the successful worker population. Such a sample simply represents a combination of the cross-sectional successful worker and beneficiary samples, requiring the use of another type of composite weights to account for the combined sample. When conducting analyses representing the beneficiary population, we used the combined sample weights to make estimates comparing successful workers to others within the beneficiary population. We did not create composite weights that combined sample cases from the longitudinal SWS with any other sample: only the weights from the cross-sectional SWS were used for the composite weights for a combined sample. Sample members in the longitudinal sample were selected based on their work activity at Round 6 and so they cannot be meaningfully combined with any of the Round 7 samples.

In Round 1, some analyses required a combination of data from the RBS and the Ticket Participant Sample, similar to the RBS-SWS combined sample described above. To create the composite weights for that combined sample, we used a sophisticated procedure—similar to that used to combine the clustered and unclustered samples in the SWS—in order to minimize the variance of survey estimates. The procedure allowed weights to be applied to observations duplicated across the two samples.<sup>61</sup> However, given that the Ticket participants were such a small fraction of the beneficiary sample frame, we used a simpler alternative method in Rounds 2 through 4.

In Rounds 6 and 7, we used this simpler alternative again when creating RBS-SWS composite weights. We replaced the original RBS weights with a value of zero among the 45 sample members who happened to be successful workers but were not necessarily sampled in the cross-sectional SWS. To ensure representation of the successful worker population, these 45 members of the RBS were represented by the 3,016 members of the SWS who had completed an interview (or had ineligible dispositions after sample selection). The sum of the weights for the 45 successful workers in the RBS is an unbiased estimate of the number of successful workers in the sampling frame. However, given the relatively small number of successful workers in the RBS, the estimate did not equal the known total in the sampling frame. For the combined weight, we zeroed out the weights for the RBS cases that were also in the SWS frame. We then used a poststratification adjustment so that the weights for the 3,016 responding cases in the SWS added up to the total number of people in the successful worker population, and the weights for the 3,963 non-SWS cases (4,008 – 45) in the RBS added up to the total nonsuccessful worker population.

#### 5. Quality assurance

To ensure that the methods used to compute the weights at each step were sound, a senior statistician conducted a final quality assurance check of the weights from the RBS, cross-sectional SWS, longitudinal SWS, and various combinations. For the sake of objectivity, we chose a statistician who was not directly involved in the project.

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<sup>61</sup> A complex procedure also combined the clustered and unclustered samples of the SWS (described in Section C of this chapter).

## B. Computing weights for the RBS

### 1. Base sampling weights

#### a. Initial probability weights

We computed the initial probability weights by using the inverse of the probability of selection. For the RBS, we selected samples independently in each of four age strata in each PSU. We determined the number of sample members selected in each stratum and PSU for the augmented sample by independently allocating four times the target sample size across the 83 PSUs for each stratum,<sup>62</sup> thereby ensuring the availability of ample reserve sample units in case response or eligibility rates were lower than expected.

The augmented sample size for the two youngest age strata (18- to 29-year-olds and 30- to 39-year-olds) was 4,500 sample members, and for the middle age stratum (40- to 49-year-olds) the sample size was 4,400. The average across these three age groups was roughly four times the target sample size of 1,111, with slightly more cases available in the two youngest age groups, given their historically lower response rates. For beneficiaries age 50 and older, the augmented sample size was 2,600 (again, just under four times the target sample size of 667). By using the composite size measure already described, we calculated the initial weights for the full augmented sample of 16,000 sample members by taking the inverse of the augmented sampling rate ( $F_j$ ) for each stratum. In Table VI.1, we provide the augmented sampling rates and initial weights, as well as the sizes of the population, augmented sample, and released sample.

**Table VI.1. Study population (as of June 30, 2018), initial augmented sample sizes, and initial weights by sampling strata in the National Beneficiary Survey**

Sampling strata (ages as of June 30, 2018)	Study population	Augmented sample size	Augmented sampling rate ( $F_j$ )	Initial sample weights	Released sample
Beneficiaries age 18 to 29	1,346,582	4,500	0.003342	292.4	3,237
Beneficiaries age 30 to 39	1,457,496	4,500	0.003087	323.89	3,291
Beneficiaries age 40 to 49	2,084,746	4,400	0.002111	473.81	3,060
Beneficiaries age 50 to FRA	8,781,834	2,600	0.000296	3,377.63	1,711
<b>Total</b>	<b>13,670,658</b>	<b>16,000</b>			<b>11,299</b>

Source: Study population counts are from SSA administrative CERs and DBADs files, extracted for NBS Round 7. SSA determined the number of complete interviews based upon recommendations from Mathematica.

FRA = full retirement age.

As described previously, we randomly partitioned the full sample into subsamples called “waves” that mirrored the characteristics of the full sample. The waves were formed in each of the four sampling strata in the 83 PSUs (a total of 332 combinations of PSUs and sampling strata). At the start of data collection, we assigned a preliminary sample to the data collection effort and then assigned additional waves as needed, based on experience with eligibility and response rates. In Round 7, we released one group of

<sup>62</sup> We selected an augmented sample that was four times as large as needed in order to allow for both an adequate supplemental sample in all PSUs and sampling strata within the PSUs and to account for expected variation in the response and eligibility rates across PSUs and sampling strata.

waves after the initial release, for a total of two releases. Within the 332 combinations of PSUs and sampling strata, we adjusted the initial weights to account for the number of waves released to data collection. The final sample size for the RBS totaled 11,299 beneficiaries, as shown in Table VI.1.

*b. Base weights incorporating two-phase sample design*

As described previously, we used a two-phase sample design in the RBS to reduce data collection costs, while maintaining 4,000 completed interviews as we have done in past rounds. We accomplished this by reducing the proportion of completed interviews conducted in the field. Most completed interviews were done in the first phase and were thus conducted by phone, without the need for field follow-up; the second phase involved interviews resulting from field operations.

We defined the first phase of data collection using the typical full set of protocols followed by the central office before we sent a case to the field. According to those protocols, a sample case could be resolved in the first phase if it received a final disposition (such as complete, ineligible, or adamant refusal) without going to the field. Once the protocols for the first phase were exhausted, unresolved cases were eligible for the second phase.

We randomly selected a share of the second-phase eligible cases for further data collection in the field. The decision about how many cases to send to the field was based on a balance between two competing priorities: (1) cost considerations, necessitating fewer cases going to the field, and (2) precision considerations (achieving the targeted number of completed interviews), necessitating more cases going to the field.

Before collecting data, we assigned a random number between 0 and 1 to each sample case; we used this number in the second phase for any cases that could not be resolved in the first phase. For each of the two sample releases, we set a constant between 0 and 1 and compared it to each second-phase-eligible member's random number to determine whether to send the case to the field. We used data from Round 6 to project the yield rate among cases sent to the field in the first release. Using this yield rate from Round 6, along with the phone yield rate in the first release of Round 7, we determined that 24.4 percent of the phone nonrespondents would be selected for field follow-up in the first release.

If we could not locate and contact a sample member by telephone, we compared their random number to the 0.244 value. For sample members with a random number less than 0.244, we deployed a field locator to make contact in person. Otherwise, we stopped data collection for the case. We used the same procedure for sample members from the second release: the percentage of phone nonrespondents to be randomly selected for field follow-up in this release was 6.0 percent.<sup>63</sup>

Of the 11,299 released cases, 5,030 were resolved in the first phase. For most of these (3,701), the resolved case was a completed interview; however, some cases had other dispositions, such as a final ineligible or adamant refusal, which would have rendered field operations unnecessary. The remaining 6,269 cases were eligible for the second phase, but only 1,128 were selected; of those, only 307 were completed interviews. Therefore, the total number of completed interviews was  $3,701 + 307 = 4,008$ , which is the total observed in Table II.3. We weighted up the 1,128 selected second-phase cases to account for all second-phase eligible cases. For the nonselected second-phase cases, we set the base

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<sup>63</sup> This small proportion was chosen so that we did not overshoot our desired number of 4,000 completes. However, this created a higher unequal weighting effect than we would have had with a proportion of fielded cases closer to that of the first release.

weights to zero, as they were being represented by the selected cases. Therefore, only 6,158 sample cases (5,030 + 1,128) of the original 11,299 had a positive base weight.<sup>64</sup>

## 2. Response rates and nonresponse adjustments to the weights

As in virtually all surveys, we had to adjust the base weights to compensate for sample members who could not be located or who, once located, refused to respond. First, we fitted weighted logistic regression models where the binary response was whether the sample member could be located. Using variables obtained from SSA databases, we selected, through stepwise regression, a pool of covariates from which to construct a final location model. The pool included both main effects and interactions. From the pool of covariates, we used various measures of goodness of fit and predictive ability to compare candidate models while avoiding large adjustments. We repeated the process for interviewed respondents among the located sample members and fitted another weighted logistic regression model. The two levels in the binary response for this cooperation model were respondent or nonrespondent. For the RBS, a sample member was classified as a cooperating respondent if the sample member or the person responding for the sample member completed the interview (that is, an eligible respondent) or if the sample member was deemed ineligible after sample selection (an ineligible respondent). Ineligible sample members included people who were never SSA beneficiaries, were in the military at the time of the survey, were incarcerated, had moved outside the United States, or were deceased at the time of the survey. After adjusting the sampling weight by taking the product of the base weight, the location adjustment, and the cooperation adjustment, we checked the distribution of the adjusted weights within each age category and trimmed the weights to remove outliers from the distribution, reallocating the trimmed portion of the outlier weights to other weights within the same age category.

Based on the above procedures, the main factors or attributes affecting our ability to locate and interview a sample member included (1) the sample member's personal characteristics (race, ethnicity, gender, and age); (2) the identity of the payee with respect to the beneficiary; (3) whether the beneficiary and the applicant for benefits lived in the same location; (4) the number of addresses or phone numbers in the SSA files for the beneficiary; (5) the program(s) through which the beneficiary received benefits (SSI, SSDI, or both);, and (6) geographic characteristics, including attributes of the county where the beneficiary lived. The following sections detail the steps involved in calculating response rates and adjusting weights for nonresponse.

### a. Coding of survey dispositions

The Mathematica Sample Management System maintained the status of each sample member during the survey, with a final status code assigned after the completion of all locating and interviewing efforts on a given sample member or at the conclusion of data collection. For the nonresponse adjustments, we classified the final status codes into four categories:

#### 1. Eligible respondents

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<sup>64</sup> In Rounds 5 and 6, we selected about 8,000 cases to obtain about 4,000 completes. In Round 7, we needed to select 11,299 cases to obtain 4,000 completes because we would not pursue many of the second-phase-eligible cases in the field, resulting in a lower raw (naïve) yield rate. However, because the second-phase completes have larger base weight, the weighted response rate is the same regardless of the proportion of second-phase eligible cases selected for Phase 2.

2. Ineligible respondents (sample members ineligible after sample selection, including deceased sample members, sample members who were in the military or incarcerated, sample members living outside the United States, and other ineligibles)
3. Located nonrespondents (including active or passive refusals and language barrier situations)<sup>65</sup>
4. Unlocated sample members (sample members who could not be located through either central office tracing procedures or in-field searches)

This classification of the final status code allowed us to measure the location rate among all sample members, the cooperation rate among located sample members, and the overall response rate.

*b. Response Rates*

The 54.7 percent response rate for the RBS (Table VI.2) is the weighted<sup>66</sup> count of sample members who completed an interview or were deemed ineligible divided by the weighted sample count of all sample members.<sup>67</sup> It can be approximated by taking the product of the weighted location rate and the weighted cooperation rate among located sample members.<sup>68</sup>

The weighted location rate is the ratio of the weighted sample count for located sample members to the weighted count of all sample members, which was 93 percent (Table VI.2). The weighted cooperation rate (that is, the weighted cooperation rate among located sample members) of 58 percent (Table VI.2) is the weighted count of sample members who completed an interview or were deemed ineligible divided by the weighted sample count of all located sample members.<sup>69</sup> Weighted cooperation rates reflect the rate at which completed interviews are obtained from repeated contact efforts among located persons.

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<sup>65</sup> Passive refusals include cases in which the sample member or proxy: (1) scheduled an appointment to be interviewed, but were not available during the appointment time(s); or (2) were located (e.g., we confirmed their telephone number or address through a gatekeeper, family member or friend, or the sample member's voicemail message), but evaded the interview by never responding to calls, letters, or in-person visits.

<sup>66</sup> This response rate is calculated using the base weight, also referred to as the release- and two-phase-adjusted sampling weight.

<sup>67</sup> The response rate is calculated as the weighted count of sample members who completed an interview or were deemed ineligible divided by the weighted sample count of all sample members: (number of completed interviews + number of partially completed interviews + number of ineligibles)/(number of cases in the sample). The response rate is very close in value to the American Association of Public Opinion Research (AAPOR) standard response rate calculation:  $RR_{AAPOR} = \text{number of completed interviews} / (\text{number of cases in the sample} - \text{estimated number of ineligible cases})$ . Ineligible cases are included in the numerator and denominator for two reasons: (1) the cases classified as ineligible are part of the original sampling frame (and hence the study population) and we obtained complete information for fully classifying these cases (that is, their responses to the eligibility questions in the questionnaire are complete) such that we may classify them as respondents; and (2) incorporating the ineligibles into the numerator and denominator of the response rate is equivalent to the definition of a more conventional response rate, when all nonrespondents have unknown eligibility status. In our case, the vast majority of nonrespondents have unknown eligibility status.

<sup>68</sup> This product is not exactly equal to the weighted response rate, since the location rate is calculated using the base weight, and the cooperation rate among located cases is calculated using the location-adjusted base weight.

<sup>69</sup> The counts provided in Table VI.2 are unweighted, and the rates (percentages) are weighted by the original sampling weight for the location rate, and the location-adjusted weight for the cooperation rate. The final response rate is weighted using the original sampling weight.

**Table VI.2. Weighted location, cooperation, and response rates for Representative Beneficiary Sample, by selected characteristics**

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Weighted location rate	Count	Weighted cooperation rate	Weighted Response rate
<b>All</b>	6,158	6,004	93.4	4,269	58.4	54.7
<b>SSI only, SSDI only, or both SSI and SSDI</b>						
SSI only	2,492	2,417	91.6	1,700	55.0	50.4
SSDI only	2,556	2,500	93.9	1,782	60.0	56.5
Both SSI and SSDI	1,110	1,087	95.5	787	59.2	56.5
<b>Constructed disability category</b>						
Deaf	35	34	95.2	27	67.7	64.0
Cognitive disability	1,187	1,152	91.6	819	59.7	54.9
Mental illness	2,268	2,208	93.0	1,523	56.2	52.4
Physical disability	2,552	2,500	93.9	1,822	59.0	55.5
Unknown	116	110	93.7	78	63.9	60.7
<b>Beneficiary's age</b>						
18 to 29	1,695	1,652	92.8	1,191	56.0	51.9
30 to 39	1,661	1,613	91.8	1,129	55.5	51.0
40 to 49	1,709	1,664	91.9	1,188	55.2	50.7
50 and older	1,093	1,075	94.1	761	60.0	56.6
<b>Sex</b>						
Male	3,225	3,149	92.6	2,130	56.5	52.4
Female	2,933	2,855	94.2	2,139	60.4	57.0
<b>Ethnicity</b>						
Hispanic	222	213	93.4	155	68.1	63.8
Non-Hispanic	5,936	5,791	93.4	4,114	58.1	54.4
<b>Race</b>						
White	3,133	3,061	92.2	2,184	59.1	54.7
Black	1,148	1,116	94.4	805	58.5	55.3
Hispanic	222	213	93.4	155	68.1	63.8
Asian American, Pacific Island American	60	60	100.0	33	45.1	45.0
American Indian, or Alaska Native	16	13	66.9	6	33.9	23.5
Unknown	1,579	1,541	96.1	1,086	55.2	53.0
<b>Living situation</b>						
Living alone	3,130	3,045	92.7	2,146	56.0	51.9
Living with others	268	263	95.3	203	64.7	61.5
Living with parents	112	108	91.6	76	49.3	45.3
In institution or unknown	52	52	100.0	35	70.8	71.1

**Table VI.2** (continued)

	Sample	Located sample		Response among located sample	Overall respondents
	Count	Count	Weighted location rate	Count	Weighted Response rate
Unknown	2,596	2,536	93.8	1,809	56.3
<b>Did the applicant for benefits live in the same ZIP code as the beneficiary?</b>					
No	483	467	92.2	312	51.6
Yes	2,943	2,868	92.9	2,062	52.6
No information	2,732	2,669	93.9	1,895	56.3
<b>Identity of the payee with respect to the beneficiary</b>					
Beneficiary received payments directly	246	237	95.2	174	59.4
Payee is a family member	2,041	2,003	94.6	1,423	55.5
Payee is an institution	253	247	91.4	154	52.4
Other	116	113	97.6	74	43.6
No information	3,502	3,404	93.1	2,444	54.7
<b>Number of phone numbers in file</b>					
One	1,399	1,363	92.8	970	53.5
Two	1,855	1,810	91.5	1,282	55.2
Three	1,471	1,437	96.2	997	54.3
Four	936	916	95.5	670	60.9
Five or more	415	402	90.1	299	47.9
Zero, or no information	82	76	74.8	51	25.0
<b>Number of addresses in file</b>					
One	1,399	1,363	92.8	970	53.5
Two	1,855	1,810	91.5	1,282	55.2
Three	1,471	1,437	96.2	997	54.3
Four	936	916	95.5	670	60.9
Five or more	415	402	90.1	299	47.9
Zero, or no information	82	76	74.8	51	25.0
<b>Census region</b>					
Midwest	1,337	1,309	93.7	953	55.9
Northeast	1,121	1,095	91.2	757	51.3
South	2,516	2,447	94.2	1,779	57.9
West	1,184	1,153	93.5	780	48.9
<b>Census division</b>					
East North Central	926	908	93.6	670	57.3
East South Central	573	562	96.1	413	61.3
Middle Atlantic	813	790	89.3	539	50.1
Mountain	407	398	93.2	284	54.9
New England	308	305	96.3	218	54.3
Pacific	777	755	93.6	496	45.8

Table VI.2 (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Weighted location rate	Count	Weighted cooperation rate	Weighted Response rate
South Atlantic	1,196	1,163	93.4	826	59.2	55.4
West North Central	411	401	93.9	283	55.6	52.5
West South Central	747	722	94.0	540	63.0	59.1
<b>Metropolitan status of county</b>						
Metropolitan areas with population of 1 million or more	2,778	2,702	93.1	1,854	55.8	52.1
Metropolitan areas with population of 250,000 to 999,999	1,676	1,637	94.9	1,188	55.4	52.7
Metropolitan areas with population of fewer than 250,000	741	727	93.7	529	61.4	57.7
Nonmetropolitan areas adjacent to large metropolitan areas	224	218	87.9	175	79.5	69.9
Nonmetropolitan areas adjacent to medium or small metropolitan areas	529	520	94.2	372	65.8	62.2
Nonmetropolitan areas not adjacent to metropolitan areas	210	200	87.4	151	63.6	55.3
<b>County with low education level</b>						
Yes	757	742	97.3	512	58.5	57.0
No	5,401	5,262	92.9	3,757	58.4	54.4
<b>County with recreation-based economy</b>						
Yes	558	538	91.0	370	64.0	58.7
No	5,600	5,466	93.6	3,899	57.9	54.3
<b>County with population loss</b>						
Yes	220	212	91.2	154	68.9	62.9
No	5,938	5,792	93.5	4,115	58.0	54.4
<b>Retirement destination county</b>						
Yes	902	877	96.5	611	59.9	57.8
No	5,256	5,127	92.9	3,658	62.8	54.1
<b>County with manufacturing-dependent economy</b>						
Yes	537	525	88.8	374	64.8	57.9
No	5,621	5,479	93.9	3,895	57.8	54.4
<b>County with nonspecialized-dependent economy</b>						
Yes	4,156	4,058	94.3	2,887	57.2	53.9
No	2,002	1,946	91.6	1,382	61.1	56.3
<b>County with government-dependent economy</b>						
Yes	642	626	92.9	449	56.7	52.9
No	5,516	5,378	93.5	3,820	58.6	54.9
<b>High poverty county</b>						
Yes	711	691	93.9	508	60.5	56.9
No	5,447	5,313	93.3	3,761	58.1	54.4

**Table VI.2** (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Weighted location rate	Count	Weighted cooperation rate	Weighted Response rate
<b>High child poverty county</b>						
Yes	931	899	94.7	663	66.4	63.1
No	5,227	5,105	93.2	3,606	57.0	53.2
<b>County racial/ethnic profile<sup>a</sup></b>						
At least 90 percent non-Hispanic White	530	519	90.4	386	61.6	55.5
Plurality or majority Hispanic	519	500	94.5	339	53.4	50.4
Majority but less than 90 percent non-Hispanic White	2,915	2,844	92.7	1,997	57.5	53.5
Racially/ethnically mixed, no majority group	1,981	1,938	95.1	1,397	59.3	56.4
Plurality or majority non-Hispanic Black	213	203	91.0	150	64.7	59.6
<b>DCF earnings category<sup>b</sup></b>						
Monthly DCF earnings above SGA <sup>c</sup> for three consecutive months in 2017 or 2018	313	305	92.0	196	43.7	41.2
Gross annual DCF earnings above three times SGA in 2017 or 2018	281	274	91.8	200	64.1	58.7
Gross annual DCF earnings above \$0 in 2017 or 2018	408	394	93.6	299	64.3	60.3
No annual DCF earnings in 2017 or 2018	5,156	5,031	93.5	3,574	58.6	54.9

Source: NBS Round 7

<sup>a</sup>No beneficiaries were sampled in the sixth county type, that of counties where at least 20 percent of the population was American Indian

<sup>b</sup>The DCF earnings categories are subdivided sequentially. In other words, the second category excludes those who were in the first category; the third excludes those who were in the first or second category, and so on.

<sup>c</sup>Non-blind substantial gainful activity, or \$1,170 in 2017, \$1,180 in 2018, and \$1,220 in 2019.

DCF=Disability Control File

The sample count in Table VI.2 excludes second-phase-eligible cases that were not selected for the second phase, as these cases have zero weight. We used the weighted rates because (1) with two-phase sampling, the unweighted rates are not meaningful;<sup>70</sup> (2) the sampling rates—and thus the sampling weights—vary substantially across the sampling strata (as seen in Table VI.1); and (3) the weighted rates better reflect the potential for nonresponse bias. The weighted rates represent the percentage of the full

<sup>70</sup> If we included the second-phase-eligible cases that were not selected for the second phase, the unweighted response rate would be too low, and it would not reflect the fact that the cases’ base weights were transferred to other sample members. If we excluded these cases, the unweighted response rate would be too high, and it would not reflect the unsuccessful effort to get a response from these cases in the first phase.

survey population for which we were able to obtain information sufficient for use in the data analysis or in determining ineligibility for the analysis.

*c. Factors related to location and cooperation*

In addition to overall response rate information, Table VI.2 provides information for factors that were considered for use in the location and cooperation models. The table displays the unweighted counts of all sample members, counts of located sample members, and counts of sample members who completed an interview or who were deemed ineligible. It also includes the weighted location rate (using the original base weight), the weighted cooperation rate among located sample members (using the location-adjusted base weight), and the weighted overall response rate (using the original base weight) for these factors, which helped inform the decision about the final set of variables to be used in the nonresponse adjustment models.

*d. Propensity models for weight adjustments*

Using the main effects already described, we developed response propensity models to determine the nonresponse adjustments. To identify candidate interactions from the main effects for the modeling, we first ran a chi-squared automatic interaction detector (CHAID) analysis in SPSS to find possible significant interactions.<sup>71</sup> The CHAID procedure iteratively segments a data set into mutually exclusive subgroups that share similar characteristics based on their effects on nominal or ordinal dependent variables. It automatically checks all variables in the data set and creates a hierarchy showing all statistically significant subgroups. The algorithm identifies splits in the population, which are as different as possible based on a chi-squared statistic. The forward stepwise procedure finds the most diverse subgroupings and then splits each subgroup further into more diverse sub-subgroups. Sample size limitations are set to avoid cells with small counts. The procedure stops when splits are no longer significant; that is, a group is homogeneous with respect to variables not yet used or the cells contain too few cases. The CHAID procedure produces a tree that identifies the set of variables and interactions among the variables that are associated with the ability to locate a sample member (and a located sample member's propensity either to respond to or to be deemed ineligible for the NBS). We first ran CHAID with all covariates and then reran it a few times with the top variable in the tree removed to ensure the retention of all potentially important interactions for additional consideration. We further reduced the resulting pool of covariates by evaluating tabulations of all the main effects and the interactions identified by CHAID. At a particular level of a given covariate or interaction, if all respondents were either located or unlocated (for the location models), complete or not complete (for the cooperation models), or the total number of sample members at that level was fewer than 20, the levels were collapsed if collapsing was possible. If collapsing was not possible, then we excluded the covariate or interaction from the pool.<sup>72</sup>

To further refine the candidate variables and interaction terms, we processed all of the resulting candidate main effects and the interactions identified by CHAID using forward and backward stepwise regression (using the STEPWISE option of the SAS LOGISTIC procedure with weights normalized to the sample

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<sup>71</sup> CHAID is normally attributed to Kass (1980) and Biggs et al. (1991). Its application in SPSS is described in Magidson (1993).

<sup>72</sup> Deafness historically has been shown to be an important indicator both of locating a sample member and determining whether the sample member completed the interview. For that reason, deafness remained in the covariate pool even though the number of deaf cases was sometimes as few as 18.

size).<sup>73</sup> After identifying a smaller pool of main effects and interactions for potential inclusion in the final model, we carefully evaluated a set of models to determine the final model. We relied on the logistic regression procedures in software that accounted for the sample design to make the final selection of covariates (SURVEYLOGISTIC in SAS and RLOGIST in SUDAAN).

For selecting variables or interactions in the stepwise procedures, we included variables or interactions with a statistical significance level (alpha level) of 0.30 or lower (instead of the commonly used 0.05).<sup>74</sup> Once we determined the candidate list of main effects and interactions, we used a thorough model-fitting process to determine a parsimonious model with few very small propensities. (In Section A of this chapter, we described the model selection criteria.) Once we decided which interactions to include in each final model, the main effects corresponding to each interaction were also included in the final model, regardless of the significance level of those main effects. For example, suppose the age-by-gender interaction was significant in the location model. In that case, the significance levels for the age and gender main effects were not important, because the nature of the relationship between location, age, and gender is contained in the interaction. In Table VI.3, we summarize the variables used in the model as main effects and interactions for locating a sample member. In Table VI.4, we summarize the variables used in the model for cooperation among located sample members.

**Table VI.3. Location logistic propensity model: RBS**

Factors in location model
Main effects
AGECAT (AGE CATEGORY)
RACE
SSI_SSDI (BENEFICIARY TITLE: RECIPIENT OF SSI AND/OR SSDI)
PHONE (CATEGORIZED COUNT OF PHONE NUMBERS IN SSA FILES)
DIVISION (CENSUS DIVISION)
REPREPAYEE (IDENTITY OF PAYEE WITH RESPECT TO BENEFICIARY)
CNTYRET (COUNTY WITH AN INCREASING PROPORTION OF RETIREES)
Two-Factor Interactions
(NONE)

Source: NBS Round 7.

<sup>73</sup> SUDAAN offers no automated stepwise procedures; the stepwise procedures described here were performed by using SAS.

<sup>74</sup> As stated, we used a higher significance level because the model’s purpose was to improve the estimation of the propensity score rather than to identify statistically significant factors related to response. In addition, the information sometimes reflected proxy variables for some underlying variable that was both unknown and unmeasured.

**Table VI.4. Cooperation logistic propensity model: RBS**

Factors in cooperation model
<b>Main effects</b>
AGECAT (AGE CATEGORY)
MOVE (CATEGORIZED COUNT OF ADDRESSES IN SSA FILES)
ETHNICITY (HISPANIC OR NOT)
EARNINGS CATEGORY
METRO (METROPOLITAN STATUS OF COUNTY)
GENDER
REPREPAYEE (IDENTITY OF PAYEE WITH RESPECT TO BENEFICIARY)
CNTYPERSPOV (COUNTY WITH PERSISTENT HIGH LEVELS OF POVERTY)
CNTYCHPOV (COUNTY WITH PERSISTENT CHILD POVERTY)
CNTYREC (COUNTY WITH RECREATION-BASED ECONOMY)
<b>Two-factor Interactions</b>
CNTYPERSPOV * AGECAT

Source: NBS Round 7.

The Cox-Snell R-squared is 0.028 (0.074 when rescaled to have a maximum of 1) for the location model and 0.035 (0.048 when rescaled) for the cooperation model.<sup>75</sup> These values are similar to those observed for other response propensity modeling efforts that use logistic regression with design-based sampling weights. For the location model, 53.5 percent of pairs are concordant, 43.7 percent of pairs are discordant,<sup>76</sup> and the p-value for the chi-square statistic from the H-L goodness-of-fit test is 0.894.<sup>77</sup> Although the percentages that are concordant and discordant are slightly less favorable than in prior rounds, the other diagnostic values indicate a reasonably good fit of the model to the data. The location adjustments from the model, calculated as the inverse of the location propensity scores, ranged from 1.00 to 1.79. For the cooperation model, 54.1 percent of pairs are concordant and 44.5 percent of pairs are discordant. The p-value for the chi-squared statistic for the H-L goodness-of-fit test is 0.744 for the model. The cooperation adjustments from the model, which are calculated as the inverse of the

<sup>75</sup> The Generalized Coefficient of Determination (Cox and Snell 1989) is a measure of the adequacy of the model, in which higher numbers indicate a greater difference between the likelihood of the model in question and the null model. The Max Rescaled R-Square scales this value to have a maximum of 1.

<sup>76</sup> A pair of observations is concordant if a responding subject has a higher predicted value than a nonresponding subject, discordant if not, and tied if both members of the pair are respondents, nonrespondents, or have the same predicted values. It is desirable to have as many concordant pairs and as few discordant pairs as possible (Agresti 1996).

<sup>77</sup> The H-L Goodness-of-Fit Test is a test for goodness of fit of logistic regression models. Unlike the Pearson and deviance goodness-of-fit tests, it may be used to test goodness of fit even when some covariates are continuous (Hosmer and Lemeshow 1989). SUDAAN provides three options for calculating this test; we used the Satterthwaite option. See the SUDAAN User’s Manual for details. A hard copy manual is available for Version 9.0 (Research Triangle Institute, 2004), and an online version is available for Version 11.0 (see [www.rti.org/sudaan](http://www.rti.org/sudaan)).

cooperation propensity score, ranged from 1.14 to 4.78. The overall nonresponse adjustment (the product of the location adjustment and the cooperation adjustment) ranged from 1.16 to 5.57.<sup>78</sup>

Among the variables used in the location and cooperation models shown in Tables VI.3 and VI.4, the number of levels used in the models is often fewer than the number of levels in Table VI.2; the levels collapsed for the models are described following the tables. The factors used in the location model included the following:

- **PHONE.** Count of phone numbers in SSA files. There are five levels: Levels 1 through 4 indicate one, two, three, or four phone numbers on file, respectively, and Level 5 indicates no phone numbers or five or more phone numbers on file.
- **DIVISION.** Geographic region of beneficiary's place of residence based on U.S. Census divisions, with two levels: (1) Middle Atlantic division and (2) all other census divisions in the United States.
- **RACE.** Race of beneficiary. There are three levels: (1) non-Hispanic White; (2) non-Hispanic Black; and (3) neither non-Hispanic White nor non-Hispanic Black, or race not known.
- **REPPEAYEE.** The identity of the payee with respect to the beneficiary. There are two levels: (1) a family member received benefits on behalf of the beneficiary, and (2) the beneficiary received payments himself or herself, an institution received payments on behalf of the beneficiary, or the payee's identity is not known.
- **AGECAT.** Beneficiary's age category. There are three levels: (1) age 18 to 29, (2) age 30 to 39, and (3) age 40 or older.
- **GENDER.** Beneficiary's sex. There are two levels: (1) male and (2) female.
- **SSI\_SSDI.** Beneficiary title. There are two levels: (1) recipient of SSI only and (2) recipient of SSDI, either with SSI (concurrent) or SSDI only.
- **CNTYRET.** Retirement destination county. There are two levels: (1) Number of residents age 60 and older grew by 15 percent or more between 2000 and 2010 censuses due to net migration; and (2) the county does not have this attribute.

Although we attempted to fit interactions in the model, the final selected model did not have any interactions for locating sample members. In Table VI.3, we provide the main effects using the variable names listed above. In Appendix J, we provide parameter estimates and their standard errors. The factors used in the cooperation model included the following:

- **AGECAT.** Beneficiary's age category. There are four levels: (1) age 18 to 29, (2) age 30 to 39, (3) age 40 to 49, and (4) age 50 or older.
- **MOVE.** Count of addresses in SSA files. There are five levels: Levels 1 through 4 indicate one, two, three, or four addresses on file, respectively, and Level 5 indicates no addresses or five or more addresses on file.
- **ETHNICITY.** Ethnicity of beneficiary. There are two levels: (1) Hispanic and (2) not Hispanic.
- **METRO.** Metropolitan status of beneficiary's county of residence. There are three levels: (1) beneficiary lived in metropolitan area with population of 250,000 or more; (2) beneficiary lived in

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<sup>78</sup> Recognizing that the Akaike's Information Criterion is a relative number and has no meaning on its own, we do not provide values for it here.

metropolitan area with population of fewer than 250,000; and (3) beneficiary lived in nonmetropolitan area.

- **GENDER.** Beneficiary’s sex. There are two levels: (1) male and (2) female.
- **EARNCAT.** Earnings category from 2017 to 2018. There are four mutually exclusive levels: (1) gross annual earnings exceed SGA for three consecutive months at least once in 2017 or 2018; (2) not in Group 1, but gross annual earnings exceed three times SGA in 2017 or 2018; (3) not in Groups 1 or 2, but gross annual earnings exceed zero in 2017 or 2018; and (4) gross annual earnings are zero in both 2017 and 2018.
- **CNTYREC.** County with recreation-dependent economy. There are two levels. Level 1 indicates that the county’s economy depends on recreation, with the indication determined using three data sources: (1) percentage of wage and salary employment in entertainment and recreation, accommodations, eating and drinking places, and real estate as a percentage of all employment reported by the Bureau of Economic Analysis; (2) percentage of total personal income reported for these same categories by the Bureau of Economic Analysis; and (3) percentage of vacant housing units intended for seasonal or occasional use as reported in the 2010 census. Level 2 indicates that either the county’s economy does not depend on recreation or there is no information.<sup>79</sup>
- **CNTYCPOV.** County with persistent high levels of child poverty. There are two levels. Level 1 indicates a county where 20 percent or more of children in the county under 18 were poor, measured in the 1980, 1990, 2000 censuses, and the American Community Survey 5-year average data for 2007-11. Level 2 indicates a county without this attribute.
- **CNTYHPOV.** County with persistent high levels of child poverty. There are two levels. Level 1 indicates that 20 percent or more of county-related children under 18 were poor, as measured in the 1980, 1990, and 2000 censuses and the American Community Survey’s five-year average data for 2007–11. Level 2 indicates a county without this attribute.

The model also included a single interaction, that of CNTYCHPOV by AGE CAT. In Table VI.4, we provide the main effects using the variable names. In Appendix J, we provide an expanded form of Table VI.4, with parameter estimates and their standard errors.

### 3. Post-stratification and trimming

After we applied adjustments to the base weights, we reviewed the distribution of weights to determine the need for further weight trimming. With the two-phase design, we expected that trimming (within age group) would be needed to ameliorate the increased unequal weighting effect. We trimmed 64 weights to reduce the maximum design effect attributable to unequal weighting from 1.98 to 1.91, which we observed with the second-youngest age stratum.

Post-stratification is the procedure that aligns the weighted sums of the response-adjusted weights to known totals external to the survey. The process offers face validity for reporting population counts and has some statistical benefits. For the RBS, we post-stratified to the marginal population totals for four variables obtained from SSA. In particular, the totals were the total number of SSI and SSDI beneficiaries by age (four categories); gender; beneficiary title, or recipient status (SSI only, SSDI only, and both); and

<sup>79</sup> The Area Health Resource File documentation does not specify the percentage for these three items that would indicate that the county has a recreation-dependent economy.

DCF earnings (five categories derived from DCF earnings in 2017 and 2018—the same categories that were used for the RBS nonresponse models). We conducted no trimming after post-stratification.

### C. Cross-sectional SWS

As noted earlier, we selected the cross-sectional SWS from the Round 7 provisional population of successful workers, a subset of all SSI/SSDI beneficiaries. The sample was selected from seven successive frames, depending upon when the successful worker was identified. In each successive frame, we allocated the sample within two strata defined by beneficiary type (SSDI only, and SSI, which included both SSI only and concurrent beneficiaries). The total number of successful workers identified across the seven frames was 101,698, and the size of each extract ranged from 8,572 (final extract) to 19,852 (first extract). Due to concerns about the number of successful workers in each extract and their distribution across PSUs, we decided to use a dual sample design for all strata. As a result, we supplemented the clustered sample in each extract with a random sample of successful workers from the entire population of successful workers in the same extract.

We selected all respondents in the clustered sample from PSUs, whereas the unclustered sample included successful workers that may or may not have been in the selected PSUs. We therefore organized the unclustered sample into two strata: in the PSU or not in the PSU. In most cases, respondents selected for the in-PSU stratum of the unclustered sample were also in the clustered sample. The weights for such duplicate cases had to be adjusted appropriately to account for a single respondent's appearance in two independent samples. (In the next subsection, we discuss the compositing scheme used to make the needed adjustments.) In addition, if the central office<sup>80</sup> could not resolve the final status of sample members, it treated them differently in the clustered and unclustered samples. For the clustered sample, the central office sent sample cases that they could not resolve by telephone to the field for further follow-up for attempted personal interviews. In the unclustered sample, interviewers made no further attempt to resolve the status of sample members who could not be resolved in the central office. This process is analogous to the accepted practice of subsampling nonrespondents for more intensive effort—in this case, we sent unresolved cases from the clustered sample for field follow-up, but did not follow up unresolved cases in the unclustered sample. When creating composite weights (described in the next section), we zeroed out the weights for the cases in the unclustered sample that would have gone to the field had they been in the clustered sample as they were already represented by those in the clustered sample.<sup>81</sup> In Table VI.5, we present the final sample sizes for the SWS. This table shows a final released sample of 6,022 cases in the clustered sample and 2,568 in the unclustered sample, for a total of 8,590 sample cases, of which 152 were selected for both the clustered and unclustered samples, and were therefore duplicated across the two samples.

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<sup>80</sup> The central office is the Mathematica Survey Operations Center.

<sup>81</sup> If a sample member was selected as part of both the clustered and unclustered samples, and the case was sent to the field for further follow-up and was then resolved in the field, the response had to be treated differently between the two samples. For the sample respondent, the value in the clustered sample was recorded according to its final status in the field, whereas the value in the unclustered sample was recorded as “not selected for field follow-up.”

**Table VI.5. Survey population and initial augmented and final sample sizes, by sampling extracts and strata in the cross-sectional Successful Worker Sample**

Data extraction date	Stratum	Population count	Augmented clustered sample	Augmented sample, unclustered	Released clustered sample	Released unclustered sample
12/1/18	SSDI only, in PSUs	1,816	773	72	588	48
12/1/18	SSDI only, not in PSUs	7,362		295		197
12/1/18	All SSI, in PSUs	2,498	927	80	697	53
12/1/18	All SSI, not in PSUs	8,176		261		174
1/15/19	SSDI only, in PSUs	1,688	641	83	488	55
1/15/19	SSDI only, not in PSUs	6,259		306		204
1/15/19	All SSI, in PSUs	2,018	805	31	607	21
1/15/19	All SSI, not in PSUs	6,222		94		63
3/1/19	SSDI only, in PSUs	1,581	664	28	517	18
3/1/19	SSDI only, not in PSUs	6,300		109		74
3/1/19	All SSI, in PSUs	2,074	774	49	582	33
3/1/19	All SSI, not in PSUs	6,510		155		103
4/15/19	SSDI only, in PSUs	1,434	543	40	411	27
4/15/19	SSDI only, not in PSUs	5,736		160		107
4/15/19	All SSI, in PSUs	1,157	212	120	147	80
4/15/19	All SSI, not in PSUs	3,908		407		271
6/1/19	SSDI only, in PSUs	2,008	752	51	562	35
6/1/19	SSDI only, not in PSUs	7,849		202		135
6/1/19	All SSI, in PSUs	1,738	644	83	482	55
6/1/19	All SSI, not in PSUs	5,695		272		181
7/15/19	SSDI only, in PSUs	1,261	476	34	356	22
7/15/19	SSDI only, not in PSUs	5,048		135		90
7/15/19	All SSI, in PSUs	1,076	400	80	292	53
7/15/19	All SSI, not in PSUs	3,712		277		185
9/1/19	SSDI only, in PSUs	1,001	247	32	178	22
9/1/19	SSDI only, not in PSUs	4,079		131		87
9/1/19	All SSI, in PSUs	783	160	59	115	39
9/1/19	All SSI, not in PSUs	2,709		204		136
Total	SSDI only, in PSUs	10,789	3,922	340	3,100	227
Total	SSDI only, not in PSUs	42,633		1,338		894
Total	All SSI, in PSUs	11,344	4,096	502	2,922	334
Total	All SSI, not in PSUs	36,930		1,670		1,113
<b>Overall total</b>		<b>101,698</b>	<b>8,018</b>	<b>3,850</b>	<b>6,022</b>	<b>2,568</b>

As indicated, for the clustered samples within each extract, we allocated the sample across the 79 PSUs, with the Los Angeles PSU receiving a double allocation because it had two selections. Given the smaller population sizes for successful workers when compared to the broader beneficiary population, we used

only the full PSUs; we did not use the SSUs in the Los Angeles PSU (four SSUs) or the Cook County (Chicago) PSU (two SSUs), which were used for the RBS.

### 1. Initial probability weights

We computed the initial weights for the cross-sectional SWS clustered sample based on the probability of selection within the PSU of the augmented sample within the two strata of each extract (SSDI only or SSI) and the probability of selection for the PSU. For the corresponding unclustered sample, we computed the initial weights based on the selection probability within the four sampling strata of each extract (SSDI only in PSUs, SSDI only not in any PSU, SSI in PSUs, or SSI not in any PSU). With only a portion of the augmented sample released for use, we then adjusted the initial weights for the sample released for the survey. Therefore, we ended up with two sets of initial probability weights, one each for the clustered and unclustered samples. These sets of weights both summed to the number of successful workers in the population at Round 7: 101,698.

### 2. Dual-frame estimation

To obtain estimates from the cross-sectional SWS, we had to use a “dual sample design” that combined the clustered and unclustered samples while accounting for different follow-up rules. The design required the creation of composite weights for application to the combined samples. As noted, if the central office could not resolve the final status of a sample member by phone in the unclustered sample, the office determined that the individual was “not selected for field follow-up” and thus undertook no further efforts to resolve the case. However, if the central office could not resolve the status of a sample member by phone in the clustered sample, the case went to the field for additional data collection efforts (field follow-up). Because the two samples represent the same population, we form a composite weight when combining them, multiplying the weights for one sample by  $\lambda$  and the weights for the other sample by  $1 - \lambda$ , where  $\lambda$  is between 0 and 1. The following section describes this in more detail.

#### a. Conceptual framework for composite weights

Consider a survey estimate,  $Est(Y)$ , such as the proportion of the sample who are currently working, that is computed using information from two independent samples from the same population, such as the clustered and unclustered samples described above. To compute this estimate, the two samples may not be combined without first adjusting the weights because the clustered and unclustered samples in the SWS represent the same target population among successful workers. Separate estimates may be computed from each sample, within each stratum and extract, and then combined by using the following equation:

$$(1) \quad Est(Y) = \lambda Y_c + (1 - \lambda) Y_u$$

where  $Y_c$  is the survey estimate from the clustered sample,  $Y_u$  is the survey estimate from the unclustered sample, and  $\lambda$  is an arbitrary constant between 0 and 1. For example, for successful workers in the first extract in the SSDI only stratum of the Round 7 data, the clustered sample accounted for 252 respondents and the unclustered sample for 76 respondents. The estimates to be combined are the proportion of the 252 in the clustered sample who are currently working and the proportion of the 76 in the unclustered sample who are currently working. In practice, the calculation is more complicated because we need to account for the different rules used in the two samples for following up with nonrespondents or unlocated

sample members (discussed later). For the sampling variance,  $V(Y)$ , the estimate is computed with the following equation:

$$(2) \quad V(Y) = \lambda^2 V(Y_c) + (1 - \lambda)^2 V(Y_u)$$

where  $V(Y_c)$  is the sampling variance for the estimate from the clustered sample, and  $V(Y_u)$  is the sampling variance for the estimate from the unclustered sample. Any value of  $\lambda$  will result in an unbiased estimate of the survey estimate, but not necessarily an estimate with the minimum sampling variance. To compute the combined-sample estimate with minimum variance, we derive survey estimates by first computing the estimates for each sample, computing a value of  $\lambda$  for each pair of estimates, and then combining the point and variance estimates. While this process produces minimum variance estimates, it is computer-intensive and results in some inconsistencies among estimates for percentages and proportions because of different values of  $\lambda$  among levels of categorical variables. Therefore, since Round 2, we have used an approach that identifies a single lambda calculated by using sample sizes and design effects attributable to unequal weighting for the two samples. In particular,  $\lambda$  acts as a weighting factor, with more weight given to the larger sample. The formula for  $\lambda$  includes sample sizes adjusted for the design effect attributable to unequal weighting. The formula for  $\lambda$  follows:

$$(3) \quad \lambda = \frac{n_c / deff_c}{n_c / deff_c + n_u / deff_u}$$

where  $n_c$  and  $n_u$  are the sample sizes of the clustered and unclustered central office-located samples, respectively, and  $deff_c$  and  $deff_u$  are the design effects attributable to unequal weighting for the clustered and unclustered central office-located samples, respectively.

A  $\lambda$  value producing a sampling variance at its minimum value results in the shortest confidence interval and, by implication, the most precise point estimate. A value of lambda that minimizes the variance may be calculated as:

$$(4) \quad \lambda = V(Y_u) / [V(Y_c) + V(Y_u)]$$

In this case, the minimum variance is:

$$(5) \quad V(Y) = [V(Y_c) * V(Y_u)] / [V(Y_c) + V(Y_u)]$$

#### *b. Application of composite weights to the cross-sectional SWS*

The population of successful workers may be separated into two parts: the portion requiring field follow-up and the portion not requiring field follow-up. For the latter portion (that is, those whose status was resolved through the central office's data collection efforts), both the clustered and unclustered samples are independent samples that can provide unbiased estimates for this subpopulation. However, for the portion of the target population requiring field follow-up (that is, those whose status was not resolved through the central office's data collection efforts), only the clustered sample can provide unbiased estimates for this subpopulation because unclustered sample cases were not eligible for field follow-up, as it was not selected to be in the clustered sample.

For the subpopulation for which the final status was resolved by the central office, the clustered and unclustered samples may be combined by using the compositing method. The following equation computes the composite weight for each sample member in the clustered central office–resolved sample:

$$(6) \quad WT = \lambda \text{ } WT \text{ (clustered central office-resolved sample weight)}$$

For units in the unclustered central office–resolved sample, the following equation computes the composite weight for each sample member in the unclustered central office–resolved sample:

$$(7) \quad WT = (1 - \lambda) \text{ } WT \text{ (unclustered central office-resolved sample weight)}$$

Conversely, for the subpopulation of persons whose final status could not be resolved through the central office's data collection efforts, only the clustered sample may be used. In this case, no combining is required, and we used the clustered weight directly as follows:

$$(8) \quad WT = 1 * \text{ } WT \text{ (clustered field-resolved sample weight)}$$

For unclustered cases that were part of the field-resolved population, the value of the weight is zero. We adjusted the sum of weights among field-resolved cases in the clustered sample so that the total sum matched the original total sum. Given that the weights for each subpopulation (the field-resolved population and the central office-resolved subpopulation) sum to the total number of individuals in each subpopulation, the two subpopulations may simply be combined to form the entire target population.

### 3. Nonresponse adjustment

As with the Representative Beneficiary Survey, we adjusted the base weights in two stages for: (1) sample members who could not be located and (2) sample members who were located and refused to respond. For the SWS, we calculated the nonresponse adjustments (including both the location and cooperation adjustments) by using weighted logistic propensity models, then using the inverse of the propensity score as the weighting adjustment. We treated the extracts (in addition to beneficiary title) as strata in weighting,<sup>82</sup> and calculated the nonresponse adjustments across extracts. We applied the nonresponse adjustments to the composite weights for the clustered and unclustered samples. The result was two weight adjustments, including a location adjustment and a cooperation adjustment, by using logistic propensity models. The models were fitted in the same way as the adjustment models for the RBS (Section B.2 of this chapter).

The main factors or attributes that affected our ability to locate and interview successful worker sample members included similar factors as those used to locate and interview RBS members: personal characteristics of the sample member (race, ethnicity, gender, and age), identity of the payee with respect to the beneficiary, whether the beneficiary and the applicant for benefits lived in the same location, the number of addresses or phone numbers in the SSA files for the beneficiary, beneficiary's living situation, the beneficiary's "title" (SSI only, SSDI only, or concurrent), the beneficiary's primary disability, and

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<sup>82</sup> In the software that accounted for the sample design, the strata must be identified. The variable that did this was defined according to beneficiary title (SSDI only and SSI) and extract.

geographic characteristics, including attributes of the county where the beneficiary resides. Unique to the SWS, extract was also a key factor. In subsequent sections, we describe how the specific covariates for each of the weight adjustments varied.

*a. Coding of survey dispositions*

The scheme used to code respondents included the four general categories described in Section B.2: eligible respondents, ineligible respondents, located nonrespondents, and unlocated sample members.

*b. Response rates*

The 41.0 percent response rate for the cross-sectional SWS is the product of the weighted location rate and weighted completion rate among located sample members. The weighted location rate is 87.9 percent, and the weighted cooperation rate (the weighted completion rate among located sample members) is 46.4 percent. Analogous to the RBS, we used the weighted rates because the sampling weights vary substantially across the sampling strata, and the weighted rates better reflect the potential for nonresponse bias.

*c. Factors related to location, cooperation, and response*

In Table VI.6, we provide information on selected factors associated with locating a sample member and the factors associated with the response among located sample members. The table includes unweighted counts of all sample members, counts of located sample members, and counts of sample members from whom we obtained a completed interview or whom we deemed ineligible. The table also includes the weighted location rate (base weight), weighted cooperation rate among located sample members (location-adjusted base weight), and weighted overall response rate for these factors (base weight).

**Table VI.6. Weighted location, cooperation, and response rates for Successful Worker Sample, by selected characteristics**

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>All</b>	<b>8,590</b>	<b>6,486</b>	<b>87.9</b>	<b>3,327</b>	<b>46.4</b>	<b>41.0</b>
<b>Extract</b>						
Extract 1	1,757	1,391	92.9	796	52.7	48.9
Extract 2	1,438	1,158	90.9	647	52.2	47.5
Extract 3	1,327	1,038	85.0	483	44.8	38.2
Extract 4	1,043	711	88.1	381	44.3	39.2
Extract 5	1,450	1,055	83.6	473	40.1	33.7
Extract 6	998	712	85.5	351	44.7	38.3
Extract 7	577	421	88.0	196	42.1	37.1
<b>SSI only, SSDI only, or both SSI and SSDI</b>						
SSI only	2,397	1,817	89.2	937	47.2	42.3
SSDI only	4,221	3,192	86.6	1,644	46.5	40.5
Both SSI and SSDI	1,972	1,477	89.6	746	45.5	40.9
<b>Constructed disability category</b>						
Deaf	181	122	86.9	50	34.4	30.1
Cognitive disability	1,251	914	87.3	427	43.9	38.4
Mental illness	3,106	2,348	88.5	1,184	45.5	40.5
Physical disability	3,966	3,039	87.8	1,633	48.4	42.7
Unknown	86	63	84.6	33	46.6	39.1
<b>Beneficiary's age (four categories)</b>						
18 to 29	2,078	1,514	86.5	695	41.4	36.1
30 to 39	2,075	1,545	87.8	751	43.8	38.7
40 to 49	1,864	1,386	87.7	717	46.7	41.1
50 and older	2,573	2,041	89.2	1,164	52.0	46.6
<b>Sex</b>						
Male	4,694	3,535	87.7	1,750	44.3	39.1
Female	3,896	2,951	88.2	1,577	49.1	43.5
<b>Ethnicity (Hispanic or not)</b>						
Hispanic	349	254	88.1	109	38.0	33.8
Non-Hispanic or unknown	8,241	6,232	87.9	3,218	46.7	41.3
<b>Race</b>						
Non-Hispanic White	3,747	2,785	87.0	1,410	45.6	39.8
Non-Hispanic Black	2,490	1,940	90.0	1,040	49.6	44.7
Hispanic	349	254	88.1	109	38.0	33.8

**Table VI.6** (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
Asian American, Pacific Island American	73	52	80.0	22	38.3	30.9
American Indian, or Alaska Native	20	12	87.5	8	57.4	52.8
Other or unknown	1,911	1,443	87.5	738	45.8	40.3
<b>Living situation</b>						
Living alone	4,096	3,096	89.8	1,580	46.6	42.0
Living with others	237	173	84.6	93	45.5	38.5
Living with parents	28	17	70.3	6	26.4	19.3
In institution or unknown	4,229	3,200	86.6	1,648	46.5	40.5
<b>Did the applicant for benefits live in the same ZIP code as the beneficiary?</b>						
No	535	412	89.6	192	41.1	37.0
Yes	3,765	2,837	89.7	1,470	47.3	42.6
No information	4,290	3,237	86.4	1,665	46.4	40.3
<b>Identity of the payee with respect to the beneficiary</b>						
Beneficiary received payments directly	537	419	89.7	228	50.8	45.5
Payee is a family member	1,606	1,206	87.8	565	43.3	38.3
Payee is an institution	129	100	93.0	42	33.9	32.4
Other	117	82	87.7	32	36.0	32.2
Unknown	6,201	4,679	87.7	2,460	47.3	41.7
<b>Number of phone numbers in file</b>						
Zero	553	435	88.4	250	52.3	46.8
One	1,271	921	83.2	485	48.0	40.2
Two	2,160	1,597	86.5	793	45.1	39.2
Three	2,178	1,674	90.3	875	47.4	42.9
Four	1,742	1,327	89.0	661	43.9	39.3
Five or more	806	602	90.8	294	44.1	40.1
<b>Number of addresses in file</b>						
Zero	547	435	89.3	249	52.2	47.1
One	1,530	1,156	87.8	599	48.0	42.5
Two	1,824	1,389	87.4	682	43.4	38.0
Three	2,227	1,678	87.3	853	45.9	40.3
Four	1,656	1,226	87.6	650	48.5	42.5
Five or more	806	602	90.8	294	44.1	40.1
<b>Census region</b>						
Midwest	1,840	1,356	87.8	753	49.5	43.8
Northeast	2,034	1,552	88.0	750	44.4	39.2
South	2,719	2,048	89.0	1,088	48.5	43.2
West	1,997	1,530	86.4	736	42.3	36.9

**Table VI.6** (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>Census division</b>						
East North Central	1,320	971	87.5	535	50.5	44.5
East South Central	535	416	90.9	228	49.4	45.2
Middle Atlantic	1,404	1,073	87.5	511	43.7	38.4
Mountain	442	333	85.6	180	44.5	38.2
New England	630	479	89.1	239	46.0	41.1
Pacific	1,555	1,197	86.8	556	41.5	36.4
South Atlantic	1,306	977	89.3	509	47.4	42.3
West North Central	520	385	88.6	218	47.4	42.3
West South Central	878	655	87.3	351	49.4	43.2
<b>Metropolitan status of county</b>						
Metropolitan areas with population of 1 million or more	5,123	3,938	87.6	1,980	46.0	40.6
Metropolitan areas with population of 250,000 to 999,999	2,037	1,570	89.0	813	46.6	41.6
Metropolitan areas with population of fewer than 250,000	719	506	84.7	281	49.7	42.3
Nonmetropolitan areas adjacent to large metropolitan areas	207	154	90.3	84	45.1	41.0
Nonmetropolitan areas adjacent to medium or small metropolitan areas	320	213	92.4	115	46.5	43.0
Nonmetropolitan areas not adjacent to metropolitan areas	184	105	87.5	54	40.4	35.6
<b>County with low education</b>						
Yes	1,144	873	87.4	433	45.5	39.9
No	7,446	5,613	88.0	2,894	46.6	41.2
<b>County with recreation-based economy</b>						
Yes	668	480	85.2	222	39.6	33.6
No	7,922	6,006	88.2	3,105	47.1	41.8
<b>Population loss county</b>						
Yes	397	244	86.1	153	58.2	50.5
No	8,193	6,242	88.0	3,174	45.9	40.6
<b>Retirement destination county</b>						
Yes	1,046	783	85.9	403	46.7	39.9
No	7,544	5,703	88.2	2,924	46.4	41.2
<b>County with manufacturing-dependent economy</b>						
Yes	640	463	85.7	247	48.4	41.9
No	7,950	6,023	88.1	3,080	46.3	41.0

**Table VI.6** (continued)

	Sample		Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate	
<b>County with nonspecialized-dependent economy</b>							
Yes	6,021	4,606	88.5	2,366	47.0	41.8	
No	2,569	1,880	86.7	961	45.4	39.6	
<b>County with government-dependent economy</b>							
Yes	1,004	750	89.1	401	48.0	42.9	
No	7,586	5,736	87.8	2,926	46.2	40.8	
<b>High poverty county</b>							
Yes	1,007	732	89.3	400	51.9	46.6	
No	7,583	5,754	87.8	2,927	45.8	40.4	
<b>County with high level of child poverty</b>							
Yes	1,204	900	89.2	488	50.6	45.3	
No	7,386	5,586	87.7	2,839	45.9	40.4	
<b>Percentage of dwellings that are owner-occupied in county</b>							
Less than 60.8 percent owner-occupied	2,805	2,145	88.5	1,080	46.1	41.0	
Percent owner-occupied between 60.8 percent and 66.2 percent	2,480	1,960	88.5	1,037	48.1	42.9	
Percent owner-occupied exceeds 66.2 percent	3,305	2,381	87.2	1,210	45.6	39.9	
<b>County racial/ethnic profile</b>							
At least 20 percent American Indian	11	5	100.0 <sup>a</sup>	3	57.9		
County with at least 90% non-Hispanic white population	560	361	86.5	203	47.8	41.4	
County with plurality or majority Hispanic population	849	629	87.1	307	44.0	38.6	
County with majority but fewer than 90% non-Hispanic white population	3,511	2,694	88.0	1,346	44.6	39.6	
County with a racially/ethnically mixed population, no majority group	3,291	2,520	88.1	1,321	48.7	43.0	
County with plurality or majority non-Hispanic black population	368	277	89.8	147	50.8	45.8	
<b>DCF earnings category, first breakdown<sup>b</sup></b>							
Gross annual DCF earnings above \$30,000 in 2017 or 2018	1,966	1,469	87.4	673	40.4	35.6	
Gross annual DCF earnings above \$20,000 in 2017 or 2018	2,063	1,529	86.9	774	46.5	40.7	
Gross annual DCF earnings above \$15,000 in 2017 or 2018	1,643	1,272	89.0	685	49.1	43.8	

**Table VI.6** (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
Gross annual DCF earnings above \$7,000 in 2017 or 2018	1,849	1,416	89.9	750	48.0	43.4
Beneficiary with gross annual DCF earnings below \$7,000 in 2017 and 2018	1,069	800	85.9	445	50.2	43.1
<b>DCF earnings category, second breakdown<sup>b</sup></b>						
Monthly DCF earnings above SGA <sup>c</sup> for three consecutive months in 2017 or 2018	7,355	5,563	88.1	2,845	46.3	41.0
Gross annual DCF earnings above three times SGA in 2017 or 2018	611	465	89.0	233	46.1	41.2
Gross annual DCF earnings above \$0 in 2017 or 2018	301	215	82.6	128	53.5	44.1
No annual DCF earnings in 2017 or 2018	323	243	87.3	121	43.9	38.2

Source: NBS Round 7

<sup>a</sup>All six non-complete cases had zero weight.

<sup>b</sup>The DCF earnings categories are subdivided sequentially. In other words, the second category excludes those who were in the first category; the third excludes those that are in the first or second category, and so on.

<sup>c</sup>Non-blind substantial gainful activity, or \$1,170 in 2017, \$1,180 in 2018, and \$1,220 in 2019.

DCF = Disability Control File.

*d. Propensity models for weight adjustments*

The weight adjustments used in the cross-sectional SWS were based on predicted propensities from a logistic regression model. The model-fitting process was similar to that used in the RBS. We identified candidate interactions using CHAID, identified variables to investigate further using the STEPWISE procedure in SAS, then proceeded to create parsimonious models using SURVEYLOGISTIC in SAS, and the RLOGIST procedure in SUDAAN. As indicated earlier, we calculated the adjustments by taking the inverse of the predicted location and cooperation propensities. The adjusted weight for each sample case is the product of the initial sampling weight and the adjustment factor, trimmed to ensure that the impact of outlier weights is minimized.

Tables VI.7 and VI.8 provide a summary of the variables that were included in the final location and cooperation propensity models. (Appendix J details how the levels were collapsed for each model.)

**Table VI.7. Location logistic propensity model: Cross-sectional Successful Worker Sample**

Factors in Location Model
<b>Main Effects</b>
EXTRACT
AGECAT (AGE CATEGORY)
BENEFICIARY TITLE (BENEFICIARY OF SSDI, SSI, OR BOTH)
LIVING SITUATION
MOVE (CATEGORIZED COUNT OF ADDRESSES IN SSA FILES)
PHONE (CATEGORIZED COUNT OF PHONE NUMBERS IN SSA FILES)
PDZIPSAME (WHETHER APPLICANT FOR BENEFITS LIVES IN SAME ZIP CODE AS BENEFICIARY)
RACE
CNTYNONSP (NONSPECIFIC-DEPENDENT ECONOMY, COUNTY)
CNTYGOV (GOVERNMENT DEPENDENT ECONOMY, COUNTY)
METRO (METROPOLITAN STATUS OF COUNTY)
EARNINGS CATEGORY
<b>Two-Factor Interactions</b>
LIVING SITUATION * MOVE
RACE * MOVE

**Table VI.8. Cooperation logistic propensity model: Successful Worker Sample**

Factors in Cooperation Model
<b>Main Effects</b>
EXTRACT
AGECAT (AGE CATEGORY)
DISABILITY (DISABILITY CATEGORY)
EARNINGS CATEGORY
PDZIPSAME (WHETHER APPLICANT FOR BENEFITS LIVES IN SAME ZIP CODE AS BENEFICIARY)
REPREPAYEE (IDENTITY OF PAYEE WITH RESPECT TO BENEFICIARY)
CNTYHPOV (COUNTY WITH HIGH LEVELS OF POVERTY)
ETHNICITY (HISPANIC OR NOT)
<b>Two-Factor Interactions</b>
EXTRACT * AGECAT

Source: NBS Round 7

The Cox-Snell R-squared is 0.033 (0.064 when rescaled to have a maximum of 1) for the location model and 0.025 (0.033 when rescaled) for the cooperation model.<sup>83</sup> These values are similar to those observed for other response propensity modeling efforts that use logistic regression with design-based sampling weights. For the location model, 64.8 percent of pairs are concordant, 34.1 percent of pairs are discordant,<sup>84</sup> and the p-value for the chi-square statistic from the Hosmer-Lemeshow (H-L) goodness-of-fit test is 0.931.<sup>85</sup> These values indicate a reasonably good fit of the model to the data. The location adjustment from the model, calculated as the inverse of the location propensity score, ranged from 1.02 to 3.57. For the cooperation model, 57.6 percent of pairs are concordant and 40.5 percent of pairs are discordant. The p-value for the chi-squared statistic for the H-L goodness-of-fit test is 0.389 for the model. The cooperation adjustment from the model, which is calculated as the inverse of the cooperation propensity score, ranged from 1.34 to 5.81. The overall nonresponse adjustment (the product of the location adjustment and the cooperation adjustment) ranged from 1.52 to 6.54.

Among the variables used in the location and cooperation models shown in Tables VI.7 and VI.8, the number of levels used in the models is often fewer than the number of levels in Table VI.6; the levels collapsed for the models are described following the tables. The factors used in the location model included the following:

- **EXTRACT.** There are seven levels: (1)-(7) extract number.
- **MOVE.** Count of addresses in SSA files. There are three levels: (1) one address on file; (2) two addresses on file; (3) no addresses or three or more addresses on file.
- **PHONE.** Count of phone numbers in SSA files. There are five levels: Levels 1 through 4 indicate one, two, three, or four phone numbers on file, respectively, and Level 5 indicates no phone numbers or five or more phone numbers on file.
- **AGECAT.** Beneficiary's age category. There are two levels: (1) age 18 to 29, (2) age 30 or older.
- **SSI\_SSDI.** Beneficiary title. There are two levels: (1) recipient of SSDI only, (2) recipient of SSI only or both SSI and SSDI.
- **LIVING.** Beneficiary's living situation. There are two levels: (1) beneficiary lives alone; (2) beneficiary lives with others with parents, or in an institution or the information is unknown
- **PDZIPSAME.** Whether the SSI beneficiary and the SSI applicant for benefits lived in the same zip code. There are three levels: (1) beneficiary and applicant lived in the same zip code, (2) beneficiary

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<sup>83</sup> The Generalized Coefficient of Determination (Cox and Snell 1989) is a measure of the adequacy of the model, in which higher numbers indicate a greater difference between the likelihood of the model in question and the null model. The Max Rescaled R-Square scales this value to have a maximum of 1.

<sup>84</sup> A pair of observations is concordant if a responding subject has a higher predicted value than a nonresponding subject, discordant if not, and tied if both members of the pair are respondents, nonrespondents, or have the same predicted values. It is desirable to have as many concordant pairs and as few discordant pairs as possible (Agresti 1996).

<sup>85</sup> The Hosmer-Lemeshow Goodness-of-Fit Test is a test for goodness of fit of logistic regression models. Unlike the Pearson and deviance goodness-of-fit tests, it may be used to test goodness of fit even when some covariates are continuous (Hosmer and Lemeshow 1989). SUDAAN provides three options for calculating this test; we used the Satterthwaite option. See the SUDAAN User's Manual for details. A hard copy manual is available for Version 9.0 (Research Triangle Institute, 2004), and an online version is available for Version 11.0 (see [www.rti.org/sudaan](http://www.rti.org/sudaan)).

and applicant lived in different zip codes, or (3) beneficiary was a recipient of SSDI only or the information is unknown.

- **RACE.** Race of beneficiary. There are two levels: (1) non-Hispanic Black and (2) not non-Hispanic Black or race is unknown.
- **METRO.** Metropolitan status of beneficiary's county of residence. There are four levels: (1) beneficiary lived in a metropolitan area with a population of 250,000 or more; (2) beneficiary lived in a metropolitan area with a population of fewer than 250,000; (3) beneficiary lived in a nonmetropolitan area adjacent to a metropolitan area of 1 million people or more; and (4) beneficiary lived in a nonmetropolitan area adjacent to a metropolitan area of fewer than 1 million people, or beneficiary lived in a nonmetropolitan area not adjacent to a metropolitan area.
- **EARNCAT.** Earnings category from 2017 to 2018. There are four mutually exclusive levels: (1) gross annual earnings exceed SGA for three consecutive months at least once in 2017 or 2018; (2) not in Group 1, but gross annual earnings exceed three times SGA in 2017 or 2018; (3) not in Groups 1 or 2, but gross annual earnings exceed zero in 2017 or 2018; and (4) gross annual earnings are zero in both 2017 and 2018.
- **CNTYGOV.** County with government-dependent economy. There are two levels: (1) a county where 14 percent or more of average annual labor and proprietors' earnings were derived from federal and state government, or 9 percent or more jobs were in federal or state government during 2010–2012, and (2) a county without this attribute.
- **CNTYNONSP.** County with nonspecialized-dependent economy. There are two levels: (1) the county's economy is not dependent upon farming, mining, manufacturing, government, or services; and (2) the county's economy is dependent upon farming, mining, manufacturing, government, or services, or there is no information.

The final selected model also included two interactions involving the above variables for locating sample members. In Table VI.7, we provide the main effects using the variable names listed above. In Appendix J, we provide parameter estimates and their standard errors. The factors used in the cooperation model included the following:

- **EXTRACT.** There are seven levels: (1)-(7) extract number.
- **AGECAT.** Beneficiary's age category. There are four levels: (1) age 18 to 29, (2) age 30 to 39, (3) age 40 to 49, or (4) age 50 or older.
- **ETHNICITY.** Ethnicity of beneficiary. There are two levels: (1) Hispanic and (2) not Hispanic
- **DISABILITY.** Beneficiary's disability category. There are two levels: (1) deafness, (2) hearing with other disability, or disability unknown.
- **REPPEYEE.** The identity of the payee with respect to the beneficiary. There are two levels: (1) the beneficiary received payments himself or herself; (2) either a family member received benefits on behalf of the beneficiary, an institution received payments on behalf of the beneficiary, or identity of payee not known
- **PDZIPSAME.** Whether the SSI beneficiary and the SSI applicant for benefits lived in the same zip code. There are two levels: (1) beneficiary and applicant lived in the same zip code; (2) beneficiary and applicant lived in different zip codes, beneficiary received SSDI only, or the information is unknown.

- **EARNCAT.** Earnings category from 2017 to 2018. There are four mutually exclusive levels: (1) gross annual earnings exceed SGA for three consecutive months at least once in 2017 or 2018; (2) not in Group 1, but gross annual earnings exceed three times SGA in 2017 or 2018; (3) not in Groups 1 or 2, but gross annual earnings exceed zero in 2017 or 2018; and (4) gross annual earnings are zero in both 2017 and 2018.
- **CNTYHPOV.** County with high levels of poverty. There are two levels: (1) county where 20 percent or more of its residents were poor, based on the American Community Survey’s five-year estimates for 2008 to 2012, and (2) county does not have this attribute.

The model also included a single interaction among two of these variables for responding sample members, as noted in Table VI.8. In Table VI.8, we provide the main effects using the variable names. In Appendix J, we provide an expanded form of Table VI.8, with parameter estimates and their standard errors.

#### 4. Post-stratification and trimming

We defined 14 trimming classes for each model based on beneficiary title (SSDI only and SSI) and the seven extracts. We trimmed seven weights within these 14 trimming classes. In Table VI.9, we present the number of weights trimmed as well as the design effects attributable to unequal weighting before and after trimming for each trimming class, before post-stratification.

**Table VI.9. Design effects attributable to unequal weights before and after trimming, within trimming classes in the cross-sectional SWS**

Extract	Sampling stratum	Number of cases trimmed	Design effect attributable to unequal weights	
			Before trimming	After trimming
1	SSDI only	1	1.19	1.19
1	SSI	2	1.24	1.23
			1.25	1.25 (maximum)
2	SSDI only	0	1.19	1.19
2	SSI	0	1.24	1.24
3	SSDI only	0	1.24	1.24
3	SSI	0	1.41 (maximum)	1.34
4	SSDI only	3	1.17 (maximum)	1.17
4	SSI	0	1.25	1.25
5	SSDI only	0	1.15	1.15
5	SSI	0	1.37	1.37 (maximum)
6	SSDI only	0	1.16	1.16
6	SSI	0	1.34	1.16
7	SSDI only	1	1.19	1.19
7	SSI	0		

$$\text{Design effect attributable to unequal weights} = n \sum w^2 / (\sum w)^2$$

After the nonresponse adjustment and trimming, we post-stratified the weights to the population totals for four variables (1) extract; (2) beneficiary title (SSI only, SSDI only, and both SSI and SSDI); (3) four age

categories (18 to 29, 30 to 39, 40 to 49, and 50 or over); and DCF earnings (five categories derived from DCF earnings in 2017 and 2018—the categorization of earnings listed under “first breakdown” in Table VI.6). We found no extreme weights after post-stratification.

As noted earlier, this post-stratification was provisional; the weights were post-stratified to totals in the provisional population from which the sample was drawn. We will conduct another final post-stratification after a period of time where most of the earnings will be recorded in the DCF.

#### D. Longitudinal SWS

The Round 7 longitudinal sample consists of the Round 6 cross-sectional SWS respondents who indicated that they were working at the time of the Round 6 interview. Table VI.10 presents the final sample sizes for the longitudinal SWS. This table shows a final sample of 2,404 cases from the Round 6 clustered sample and 1,308 from the Round 6 unclustered sample, for a total of 3,712 sample cases, of which 108 were selected for both the clustered and unclustered samples in Round 6 (for a total of 216 records). We do not know what proportion of the 81,622 estimated eligible successful workers in the Round 6 provisional sample frame were working at the time of the Round 6 interview, but we have an estimate based on our responding sample, which is shown in Table VI.10 (65,870.8).<sup>86</sup> For the sake of brevity, Table VI.10 does not break out results by Round 6 extract or by whether the unclustered case was in a PSU in Round 6, as these stratification variables are not analytically useful. Moreover, data collection for all Round 6 extraction dates occurred simultaneously in Round 7. Theoretically, the same follow-up rules for the clustered and unclustered samples were used in Round 7 as were used in Round 6;<sup>87</sup> however, we followed up clustered cases in the field if they also happened to be sampled for the Round 7 RBS or were in the clustered sample for the Round 7 cross-sectional SWS.

**Table VI.10. Estimated survey population and sample sizes, by beneficiary title strata in the longitudinal SWS**

Stratum <sup>a</sup>	Weighted total	Clustered sample in Round 6	Unclustered sample in Round 6	Total sample in Round 6
SSDI only	33,675.7	1,180	683	1,863
All SSI	32,195.1	1,224	625	1,849
Total	65,870.8	2,404	1,308	3,712

Source: NBS Round 7.

<sup>a</sup>These stratification variables are defined based on the sample member’s situation on June 30, 2016. For some longitudinal sample members who were still SSI or SSDI beneficiaries on June 30, 2018, their beneficiary title had changed.

<sup>86</sup> After we conducted a final extract of Round 6 earnings data in November 2020, we determined that the estimated number of eligible successful workers in Round 6 was actually 265,514; the discrepancy was due to a lag in recording earnings for many successful workers. We will need to redo the longitudinal weights to account for this new total and obtain a new estimate of successful workers who were eligible for the longitudinal population.

<sup>87</sup> In practice, to save resources, longitudinal SWS cases that should have been sent to the field in Round 7 (clustered in Round 6) were often not.

## 1. Base sampling weights

### a. Initial probability weights

We used the final weights for the Round 6 SWS as the “initial probability weights” for the Round 7 longitudinal SWS. The 3,712 cases in the longitudinal sample with positive weights included 108 duplicates (216 sample cases) across the clustered and unclustered samples. For an additional 20 duplicates (40 sample cases), the Round 6 completed interviews in the clustered sample were obtained due to field efforts. Therefore, the 20 cases in the unclustered sample were represented by the clustered sample, and their Round 6 cross-sectional unclustered sample weight set to zero. For this reason, these 20 cases were not included among the 3,712 longitudinal sample cases.

## 2. Base weights incorporating dual sample design

The Round 6 cross-sectional final weights already accounted for the dual sample design, so it was not necessary to recreate the composite weights. However, because of different data collection dispositions in Round 7 than in Round 6, we needed to account for the different field follow-up rules between the clustered and unclustered samples (rules that were supposed to be consistent between the two rounds).<sup>88</sup>

In particular, for sample members the population that did not need field operations to resolve in Round 7 (cases completed by phone), we used the weights as they were, regardless of clustered or unclustered status, and regardless of whether completed by phone or field in Round 6 for clustered. However, if sample members came from the population that needed field operations in Round 7 to resolve (cases not completed by phone), we estimated the size of this population by summing the weights of the Round 7 field-resolution cases (cases not able to be completed by phone). We then set the weights of the Round 6 unclustered sample in this population to zero, and we ratio-adjusted the weight of the clustered sample to match this estimated total. There were 42 such unclustered sample cases with weights set to zero. Therefore, the number of longitudinal SWS sample members with nonzero base weights was 3,670 (3,712 – 42).

## 3. Nonresponse adjustment

As indicated earlier, when calculating the nonresponse adjustments, we separated the Round 7 longitudinal SWS into two groups, depending on whether the sample member was still an SSI or SSDI beneficiary as of June 30, 2018. We did this for two reasons: (1) there are likely important differences between the longitudinal sample members who were or were not part of the Round 7 beneficiary frame, and (2) for members who were part of the Round 7 beneficiary frame, we could use auxiliary variables from that frame. However, for sample members who were not part of that frame, we could only use Round 7 geographically based information. All other covariates had to come from the Round 6 frame.

For both groups, we adjusted the base weights in two stages for (1) sample members who could not be located and (2) sample members who were located but refused to respond. The group in the Round 7 beneficiary frame consisted of 3,182 of 3,712 longitudinal sample members (or 3,147 of 3,670 with positive base weights). We used weighted logistic propensity models to calculate the location adjustment

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<sup>88</sup> We assumed that all clustered longitudinal cases would use the same field follow-up rules in Round 7, even though in practice (in all but three cases) we did not use field follow-up for clustered cases if they were not also sampled in Round 7 as part of the RBS or the clustered cross-sectional SWS.

for all members of this group and the cooperation adjustments for located members of this group. But for those who were not in the Round 7 beneficiary frame (530 of 3,712 sample members, or 523 with positive base weights), we calculated the adjustments using simple weighting classes due to the small sample size and more limited information available.

For the 3,147 longitudinal sample cases with positive base weights that were part of the Round 7 beneficiary frame, we fit the models in the same way as the adjustment models for the RBS (Section B.2 of this chapter) and cross-sectional SWS (Section C.2 of this chapter). For the remaining 523 longitudinal cases with positive base weights that were not part of the Round 7 beneficiary frame, we fit cross-tabulations and stepwise logistic regression models to identify factors to use in the weighting classes.

The main factors or attributes that affected our ability to locate and interview longitudinal SWS members of both types included similar factors to those used to locate and interview RBS and cross-sectional SWS members: personal characteristics of the sample member (race and age); whether the beneficiary and applicant for benefits lived in the same location; the number of addresses or phone numbers in the beneficiary's SSA files; the beneficiary's living situation; the beneficiary's "title" (SSI only, SSDI only, or concurrent); the beneficiary's primary disability; and geographic characteristics, including attributes of the county where the beneficiary lives. As with the cross-sectional SWS, extract was also a key factor. For the longitudinal successful workers who were not part of the Round 7 beneficiary frame, variables that were only available from the Round 7 frame had to come from the Round 6 frame. In Section D.2.d, we describe how the specific covariates for each set of weight adjustment varied.

*a. Coding of survey dispositions*

The scheme used to code respondents included the four general categories described in Sections B.2 and C.2: eligible respondents, ineligible respondents, located nonrespondents, and unlocated sample members.

*b. Response rates*

The 54.5 percent response rate for the longitudinal SWS is the product of the weighted location rate and weighted cooperation rate among located sample members.<sup>89</sup> The weighted location rate is 89.1 percent, and the weighted cooperation rate (the weighted completion rate among located members) is 60.1 percent. Analogous to the RBS and cross-sectional SWS, we used the weighted rates because the base weights vary greatly across the sampling strata, and the weighted rates better reflect the potential for nonresponse bias.

*c. Factors related to location and cooperation*

Table VI.11 shows selected factors associated with locating a sample member and the factors associated with the response among located sample members for those who were part of the Round 7 frame. Table VI.12 shows these factors for sample members who were not part of the frame. The tables include unweighted counts of all sample members, counts of located sample members, and counts of sample members who had a completed interview or were deemed ineligible. The tables also include the weighted location rate (base weight), weighted cooperation rate among located sample members (location-adjusted

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<sup>89</sup> It is possible that this weighted response rate will change slightly once we redo the longitudinal weights to accommodate the final post-stratification of the Round 6 cross-sectional weight.

base weight), and weighted overall response rate for these factors (base weight). In both tables, the first row provides the overall counts and response rates for reference.

**Table VI.11. Weighted location, cooperation, and response rates for longitudinal SWS, by selected characteristics, among those in Round 7 beneficiary frame**

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>All longitudinal successful workers</b>	3,670	3,313	89.1	2,114	60.9	54.5
<b>Longitudinal successful workers in Round 7 beneficiary frame</b>	3,147	2,859	89.9	1,868	62.3	56.2
<b>Extract</b>						
Extract 1	675	612	89.0	428	66.8	59.4
Extract 2	502	462	90.6	298	62.2	56.5
Extract 3	514	457	88.4	266	54.9	48.9
Extract 4	412	368	86.9	225	58.5	50.8
Extract 5	409	377	91.6	249	63.1	57.8
Extract 6	301	276	91.9	183	64.2	58.9
Extract 7	334	307	92.9	219	70.4	65.5
<b>SSI only, SSDI only, or both SSI and SSDI</b>						
SSI only	1,053	960	90.7	622	61.7	56.2
SSDI only	1,563	1,415	89.2	949	64.8	57.8
Both SSI and SSDI	531	484	90.5	297	56.3	51.5
<b>Constructed disability category</b>						
Deaf	53	48	86.1	20	48.0	40.9
Cognitive disability	387	355	89.0	214	56.9	50.9
Mental illness	1,084	981	90.8	628	61.8	56.4
Physical disability	1,573	1,432	89.9	974	64.8	58.3
Unknown	50	43	84.6	32	67.0	57.4
<b>Beneficiary's age</b>						
18 to 29	726	659	90.2	389	55.7	50.4
30 to 39	652	585	89.2	352	56.3	50.6
40 to 49	673	604	89.9	400	65.7	59.0
50 and older	1,096	1,011	90.3	727	70.4	63.6
<b>Sex</b>						
Male	1,608	1,470	90.0	943	60.2	54.5
Female	1,539	1,389	89.8	925	64.8	58.2
<b>Ethnicity</b>						
Hispanic	168	154	91.2	94	59.9	55.4
Non-Hispanic	2,979	2,705	89.9	1,774	62.4	56.2

**Table VI.11.** (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>Race</b>						
Non-Hispanic White	1,293	1,170	89.1	761	62.4	55.6
Non-Hispanic Black	811	753	92.7	529	67.7	62.8
Hispanic	168	154	91.2	94	59.9	55.4
Asian American or Pacific Island American	34	30	93.0	20	58.2	53.9
American Indian or Alaska Native	6	6	100.0	4	72.2	71.3
Other or unknown	835	746	88.5	460	57.7	51.2
<b>Living situation</b>						
Living alone	1,503	1,369	90.4	879	60.6	55.0
Living with others	67	63	95.8	33	46.0	45.6
Living with parents	8	6	76.0	4	61.5	47.7
In institution or unknown	1,569	1,421	89.3	952	64.7	57.7
<b>Did the applicant for benefits live in the same zip code as the beneficiary?</b>						
No	147	135	95.1	82	60.1	57.2
Yes	1,409	1,282	89.9	821	59.8	54.2
No information	1,591	1,442	89.4	965	64.6	57.7
<b>Identity of the payee with respect to the beneficiary</b>						
Beneficiary received payments directly	153	141	91.0	81	49.7	45.2
Payee is a family member	494	447	90.4	278	59.4	53.7
Payee is an institution	40	39	97.1	23	59.2	57.5
Other	39	38	77.9	23	62.1	48.4
Unknown	2,421	2,194	89.9	1,463	64.2	57.7
<b>Number of phone numbers in file</b>						
Zero	530	502	95.0	358	68.0	64.7
One	393	362	91.8	226	61.4	56.4
Two	740	672	90.0	434	60.3	54.5
Three	718	631	86.3	420	62.5	54.2
Four	543	490	88.5	306	60.2	53.4
Five or more	223	202	89.7	124	61.1	54.4
<b>Number of addresses in file</b>						
Zero	192	187	96.5	135	69.2	66.7
One	640	577	89.2	397	65.3	59.4
Two	696	639	90.6	400	58.0	52.9
Three	838	745	87.5	468	60.0	52.7
Four	538	488	89.9	320	64.7	58.1
Five or more	243	223	91.7	148	62.7	57.2

**Table VI.11.** (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>Census region</b>						
Midwest	674	612	89.3	415	64.5	57.9
Northeast	826	772	93.3	488	58.3	54.4
South	923	817	87.8	533	62.5	55.0
West	724	658	89.9	432	64.1	57.8
<b>Census division</b>						
East North Central	475	435	91.3	302	66.3	60.8
East South Central	161	151	91.8	100	61.4	56.6
Middle Atlantic	561	520	92.1	336	58.8	54.2
Mountain	157	146	91.1	96	63.4	58.0
New England	265	252	96.3	152	57.0	54.9
Pacific	567	512	89.5	336	64.4	57.7
South Atlantic	482	422	87.1	272	62.9	55.1
West North Central	199	177	85.1	113	60.7	52.1
West South Central	280	244	86.3	161	62.4	54.0
<b>Metropolitan status of county</b>						
Metropolitan area with population of 1 million or more	1,934	1,770	91.2	1,154	62.7	57.3
Metropolitan area with population of 250,000 to 999,999	730	658	89.5	432	63.2	56.6
Metropolitan area with population of fewer than 250,000	218	188	82.2	123	60.4	50.0
Nonmetropolitan area adjacent to large metropolitan areas	69	59	88.7	32	50.1	44.3
Nonmetropolitan area adjacent to medium or small metropolitan areas	109	102	95.0	75	66.4	63.1
Nonmetropolitan area not adjacent to metropolitan areas	87	82	91.6	52	59.8	54.3
<b>County with low education level</b>						
Yes	442	395	88.1	255	63.7	56.3
No	2,705	2,464	90.2	1,613	62.1	56.2
<b>County with recreation-based economy</b>						
Yes	215	192	89.5	118	59.9	53.7
No	2,932	2,667	90.0	1,750	62.5	56.4
<b>County with population loss</b>						
Yes	137	127	92.1	83	62.3	57.5
No	3,010	2,732	89.8	1,785	62.3	56.1

Table VI.11. (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>Retirement destination county</b>						
Yes	323	284	87.5	169	55.7	48.9
No	2,824	2,575	90.3	1,699	63.2	57.2
<b>County with manufacturing-dependent economy</b>						
Yes	187	168	85.4	115	65.1	55.8
No	2,960	2,691	90.4	1,753	62.0	56.2
<b>County with nonspecialized-dependent economy</b>						
Yes	2,275	2,073	90.7	1,350	61.8	56.2
No	872	786	88.4	518	63.2	56.1
<b>County with government-dependent economy</b>						
Yes	374	337	88.5	223	62.5	55.7
No	2,773	2,522	90.2	1,645	62.3	56.2
<b>High-poverty county</b>						
Yes	395	363	91.1	245	66.6	60.6
No	2,752	2,496	89.8	1,623	61.7	55.6
<b>County with high level of child poverty</b>						
Yes	461	424	90.1	288	65.7	59.2
No	2,686	2,435	89.9	1,580	61.8	55.7
<b>Percentage of dwellings that are owner occupied in county</b>						
Less than 60.8 percent	1,112	1,010	90.3	666	63.7	57.7
60.8 percent to 66.2 percent	934	850	89.1	549	61.6	55.1
More than 66.2 percent	1,101	999	90.2	653	61.8	55.8
<b>County racial/ethnic profile</b>						
At least 20 percent American Indian	8	8	100.0	6	68.4	68.2
At least 90 percent non-Hispanic White	214	196	90.6	125	58.4	53.2
Plurality or majority Hispanic	317	284	88.5	181	63.6	56.2
Majority but less than 90 percent non-Hispanic White	1,155	1,046	89.4	680	61.8	55.3
Racially/ethnically mixed, no majority group, less than 20 percent American Indian	1,304	1,188	90.5	784	63.4	57.6
Plurality or majority non-Hispanic Black	149	137	91.5	92	63.9	58.5
<b>Beneficiary's DCF earnings category<sup>a</sup></b>						
Gross annual DCF earnings above \$30,000 in 2017 or 2018	646	593	91.6	392	62.8	57.2
Gross annual DCF earnings above \$20,000 in 2017 or 2018	710	638	89.5	413	61.9	55.7

**Table VI.11.** (continued)

	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
Gross annual DCF earnings above \$15,000 in 2017 or 2018	544	499	90.6	339	62.5	56.8
Gross annual DCF earnings above \$7,000 in 2017 or 2018	703	642	91.3	421	63.1	57.9
Gross annual DCF earnings below \$7,000 in 2017 and 2018	544	487	86.2	303	60.9	52.7

Source: NBS Round 7.

<sup>a</sup>The DCF earnings categories are subdivided sequentially. In other words, the second category excludes those who are in the first category, the third excludes those in the first or second category, and so on.

**Table VI.12. Weighted location, cooperation, and response rates for longitudinal SWS, by selected characteristics, among those not in Round 7 beneficiary frame**

	Count	Count	Location rate	Count	Cooperation rate	Response rate
	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>All longitudinal successful workers</b>	3,670	3,313	89.1	2,114	60.9	54.5
<b>Longitudinal successful workers <u>not</u> in Round 7 beneficiary frame</b>	523	454	84.8	246	53.1	45.3
<b>Extract</b>						
Extract 1	123	106	83.0	58	57.0	47.3
Extract 2	79	67	83.4	36	49.9	42.0
Extract 3	83	72	86.2	36	43.6	37.5
Extract 4	61	53	88.4	26	46.4	41.6
Extract 5	57	47	80.8	26	60.3	49.3
Extract 6	44	39	82.4	21	60.1	49.8
Extract 7	76	70	91.9	43	61.7	56.8
<b>SSI only, SSDI only, or both SSI and SSDI in Round 6</b>						
SSI only	73	63	85.5	29	43.1	36.8
SSDI only	396	348	86.4	198	56.5	49.0
Both SSI and SSDI	54	43	71.8	19	40.4	28.9
<b>Constructed disability category in Round 6</b>						
Cognitive disability	35	30	84.9	11	33.1	27.6
Mental illness	184	160	84.1	95	57.5	48.8
Physical disability, including deafness, or unknown	304	264	85.3	140	52.5	45.1
<b>Beneficiary's Round 7 age</b>						
18 to 29	63	55	83.1	23	44.4	36.7
30 to 39	110	89	83.0	39	43.2	36.0
40 to 49	132	114	83.9	60	52.1	44.0
50 and older	218	196	87.3	124	64.1	56.2
<b>Sex</b>						
Male	261	220	82.2	120	54.3	44.7
Female	262	234	87.8	126	51.9	46.0
<b>Race in Round 6</b>						
Non-Hispanic White	255	211	81.5	115	53.5	43.7
Non-Hispanic Black	156	145	93.2	79	52.5	49.4
Hispanic, other races, or unknown	112	98	83.1	52	53.0	44.6

**Table VI.12.** (continued)

	Count	Count	Location rate	Count	Cooperation rate	Response rate
	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
<b>Living situation in Round 6</b>						
Living alone	118	100	80.9	45	41.3	33.4
Living with others, parents, in institution or unknown	405	354	85.9	201	56.5	48.6
<b>Did the applicant for benefits live in the same zip code as the beneficiary in Round 6?</b>						
Yes	109	91	80.0	41	41.4	33.2
No, or no information	414	363	86.0	205	56.1	48.3
<b>Identity of the payee with respect to the beneficiary in Round 6</b>						
Beneficiary received payments directly	33	28	81.2	18	64.2	53.0
Payee is a family member	59	50	83.3	24	48.0	39.9
Payee is an institution, other, or unknown	431	376	85.2	204	53.4	45.6
<b>Number of phone numbers in file in Round 7</b>						
Zero	70	65	94.1	39	61.4	57.7
One	74	66	83.4	34	49.0	41.4
Two	113	96	82.2	51	50.0	41.1
Three	130	109	81.3	56	53.9	43.9
Four	98	86	88.2	50	55.2	49.5
Five or more	38	32	85.0	16	49.8	42.5
<b>Number of addresses in file in Round 7</b>						
One	84	69	77.9	45	60.0	47.4
Two	114	97	82.7	52	48.1	40.0
Three	158	136	85.7	57	46.9	40.0
Four	106	95	86.0	53	55.0	48.0
Five or more	61	57	92.9	39	63.1	58.8
<b>Census region in Round 6</b>						
Midwest	105	89	84.3	52	57.9	49.4
Northeast	114	97	86.0	48	48.9	41.8
South	184	161	85.6	85	47.7	41.3
West	120	107	83.1	61	60.1	50.4
<b>Census division in Round 6</b>						
East North Central	67	58	86.2	36	58.1	50.4
East South Central	38	32	84.0	15	43.1	36.8
Middle Atlantic	77	63	84.3	31	49.7	41.4
Mountain	36	28	71.8	14	57.4	41.0
New England	37	34	89.7	17	47.3	42.8
Pacific	84	79	91.4	47	61.6	57.3

**Table VI.12.** (continued)

	Count	Count	Location rate	Count	Cooperation rate	Response rate
	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
South Atlantic	104	94	85.9	48	42.9	36.9
West North Central	38	31	81.2	16	57.6	47.8
West South Central	42	35	86.9	22	66.2	58.2
<b>Metropolitan status of county</b>						
Metropolitan area with population of 1 million or more	327	285	86.4	151	53.5	46.6
Metropolitan area with population of 250,000 to 999,999	124	110	83.4	62	58.1	48.5
Metropolitan area with population of fewer than 250,000	31	26	85.4	13	46.5	39.5
Nonmetropolitan area	41	33	80.5	20	46.0	37.5
<b>County with low education level</b>						
Yes	61	52	87.4	29	55.7	50.1
No	462	402	84.5	217	52.9	44.8
<b>County with recreation-based economy</b>						
Yes	33	30	87.5	21	72.7	64.1
No	490	424	84.5	225	51.1	43.4
<b>County with population loss</b>						
Yes	23	22	97.1	13	59.7	58.3
No	500	432	84.3	233	52.8	44.8
<b>Retirement destination county</b>						
Yes	74	65	83.5	33	49.9	41.7
No	449	389	85.0	213	53.7	46.0
<b>County with manufacturing-dependent economy</b>						
Yes	25	23	92.0	13	41.0	38.1
No	498	431	84.3	233	54.1	45.8
<b>County with nonspecialized-dependent economy</b>						
Yes	407	352	84.1	190	52.9	44.7
No	116	102	86.6	56	53.8	47.0
<b>County with government-dependent economy</b>						
Yes	44	39	84.8	17	44.9	38.1
No	479	415	84.8	229	54.0	46.1
<b>High-poverty county</b>						
Yes	49	41	85.4	22	42.3	37.3
No	474	413	84.7	224	54.1	46.1
<b>County with high level of child poverty</b>						
Yes	76	67	87.2	33	43.1	38.1

**Table VI.12.** (continued)

	Count	Count	Location rate	Count	Cooperation rate	Response rate
	Sample	Located sample		Response among located sample		Overall respondents
	Count	Count	Location rate	Count	Cooperation rate	Response rate
No	447	387	84.4	213	54.7	46.5
<b>Percentage of dwellings that are owner occupied in county</b>						
Less than 60.8 percent	157	137	86.5	71	52.4	45.9
60.8 percent to 66.2 percent	171	150	83.7	78	55.1	45.9
More than 66.2 percent	195	167	84.5	97	52.2	44.5
<b>County racial/ethnic profile</b>						
Majority non-Hispanic White	258	217	81.9	120	53.6	44.0
Racially/ethnically mixed, no majority group, less than 20 percent American Indian	203	182	87.7	98	51.5	45.7
Other racial mixes	62	55	91.1	28	56.1	51.5
<b>Beneficiary's DCF earnings category<sup>a</sup></b>						
Gross annual DCF earnings above \$30,000 in 2017 or 2018	134	110	79.0	57	51.2	40.7
Gross annual DCF earnings above \$20,000 in 2017 or 2018	141	127	88.0	73	55.5	48.9
Gross annual DCF earnings above \$15,000 in 2017 or 2018	88	82	93.8	43	51.9	48.8
Gross annual DCF earnings above \$7,000 in 2017 or 2018	105	83	75.6	46	53.4	40.7
Gross annual DCF earnings below \$7,000 in 2017 and 2018	55	52	96.3	27	52.1	51.4

Source: NBS Round 7.

<sup>a</sup>The DCF earnings categories are subdivided sequentially. In other words, the second category excludes those who are in the first category, the third excludes those in the first or second category, and so on.

*d. Propensity models for weight adjustments among longitudinal SWS cases in Round 7 beneficiary frame*

The weight adjustments used in the longitudinal SWS among sample cases in the Round 7 beneficiary frame were based on predicted propensities from a logistic regression model. The model-fitting process was similar to that used in the RBS and cross-sectional SWS. We identified candidate interactions using CHAID, identified variables to investigate further using the STEPWISE procedure in SAS, and then created parsimonious models using SURVEYLOGISTIC in SAS and the RLOGIST procedure in SUDAAN. As stated earlier, we calculated the adjustments by taking the inverse of the predicted location and cooperation propensities. Note that we defined these variables in terms of the beneficiary’s status in Round 7. For example, the beneficiary title is based on whether the person was receiving SSI and/or SSDI benefits as of June 30, 2018, not as of June 30, 2016. Thus, their beneficiary title in Round 7 may not be consistent with their stratum assignments in Round 6.

Tables VI.13 and VI.14 summarize the variables included in the final location and cooperation propensity models.<sup>90</sup> (Appendix J describes how we collapsed the levels for each model.)

**Table VI.13. Location logistic propensity model: Longitudinal SWS in Round 7 beneficiary frame**

Factors in location model
Main effects
EXTRACT
AGECAT (AGE CATEGORY)
REGION (CENSUS REGION)
SSI_SSDI (BENEFICIARY TITLE: RECIPIENT OF SSDI, SSI, OR BOTH)
PDZIPSAME (WHETHER APPLICANT FOR BENEFITS LIVES IN SAME ZIP CODE AS BENEFICIARY)
PHONE (CATEGORIZED COUNT OF PHONE NUMBERS IN SSA FILES)
RACE
METRO (METROPOLITAN STATUS OF COUNTY)
CNTYGOV (GOVERNMENT-DEPENDENT ECONOMY, COUNTY)
CNTYNOFUEL (CATEGORIZED PERCENTAGE OF HOUSEHOLDS THAT DO NOT USE FUEL)
Two-factor interactions
AGECAT * CNTYGOV

Source: NBS Round 7.

<sup>90</sup> These models may change slightly once we redo the longitudinal weights to accommodate the final post-stratification of the Round 6 cross-sectional weight

**Table VI.14. Cooperation logistic propensity model: Longitudinal SWS in Round 7 beneficiary frame**

Factors in cooperation model
Main effects
EXTRACT
AGECAT (AGE CATEGORY)
SSI_SSDI (BENEFICIARY TITLE: RECIPIENT OF SSDI, SSI, OR BOTH)
MOVE (CATEGORIZED COUNT OF ADDRESSES IN SSA FILES)
RACE
REGION (CENSUS REGION) or DIVISION (CENSUS DIVISION)
LIVING SITUATION
CNTYRET (COUNTY WITH HIGH PERCENTAGE OF RETIREES)
Two-factor interactions
BENEFICIARY TITLE (BENEFICIARY OF SSDI, SSI, OR BOTH) * EXTRACT
BENEFICIARY TITLE (BENEFICIARY OF SSDI, SSI, OR BOTH) * MOVE (CATEGORIZED COUNT OF ADDRESSES IN SSA FILES)

Source: NBS Round 7.

The Cox-Snell R-squared is 0.036 (0.075 when rescaled to have a maximum of 1) for the location model and 0.046 (0.063 when rescaled) for the cooperation model. These values are similar to those observed for other response propensity modeling efforts that use logistic regression with design-based sampling weights. For the location model, 62.3 percent of pairs are concordant, 36.6 percent of pairs are discordant, and the p-value for the chi-square statistic from the Hosmer-Lemeshow (H-L) goodness-of-fit test is 0.567. These values indicate a reasonably good fit of the model to the data. The location adjustments from the model, calculated as the inverse of the location propensity score, ranged from 1.01 to 2.00. For the cooperation model, 60.6 percent of pairs are concordant and 38.6 percent of pairs are discordant. The p-value for the chi-squared statistic for the H-L goodness-of-fit test is 0.944 for the model. The cooperation adjustments from the model, which is calculated as the inverse of the cooperation propensity score, ranged from 1.16 to 4.35. The overall nonresponse adjustments (the product of the location adjustment and the cooperation adjustment) ranged from 1.18 to 6.17.

Among the variables used in the location and cooperation models shown in Tables VI.13 and VI.14, the number of levels used in the models is often fewer than the number of levels in Table VI.13; the levels collapsed for the models are described following the tables. The factors used in the location model included the following:

- **EXTRACT.** There are three levels: (1) Extract 5, (2) Extract 6, and (3) Extracts 1 through 4 and 7.
- **PHONE.** Count of phone numbers in SSA files. There are six levels: Levels 1 through 5 indicate zero, one, two, three, or four phone numbers on file, respectively, and Level 6 indicates five or more phone numbers on file.
- **REGION.** Geographic region of beneficiary’s place of residence, based on U.S. census regions. There are four levels: (1) West, (2) South, (3) Midwest, and (4) Northeast.
- **AGECAT.** Beneficiary’s age category. There are four levels: (1) ages 18 to 29, (2) ages 30 to 39, (3) ages 40 to 49, and (4) ages 50 or older.

- **RACE.** Race of beneficiary. There are two levels: (1) non-Hispanic Black and (2) not non-Hispanic Black or race not known.
- **SSI\_SSDI.** Beneficiary title. There are two levels: (1) recipient of SSDI only and (2) recipient of SSI only or of both SSI and SSDI.
- **PDZIPSAME.** Whether the SSI beneficiary and the SSI applicant for benefits live in the same zip code. There are two levels: (1) the beneficiary and applicant live in the same zip code and (2) the beneficiary and applicant live in different zip codes, the beneficiary is a recipient of SSDI only, or the information is unknown.
- **METRO.** Metropolitan status of beneficiary's county of residence. There are three levels: (1) the beneficiary lives in a metropolitan area with a population between 250,000 and 1,000,000; (2) the beneficiary lives in a metropolitan area with a population of fewer than 250,000; and (3) the beneficiary lives in a metropolitan area with a population over 1,000,000 or the beneficiary lives in a nonmetropolitan area.
- **CNTYGOV.** County with government-dependent economy. There are two levels: (1) a county where 14 percent or more of average annual labor and proprietors' earnings are derived from the federal and state government, or 9 percent or more jobs are in the federal or state government during 2010–2012, and (2) a county without this attribute.
- **CNTYNOFUEL.** Categorized percentage of occupied housing units in the county that do not use fuel. There are three levels: (1) the county's percentage of housing units that do not use fuel is less than 0.4 percent; (2) the county's percentage of housing units that do not use fuel is between 0.4 and 0.6 percent; and (3) the county's percentage of housing units that do not use fuel exceeds 0.6 percent.

The final selected model also included two interactions involving the above variables for locating sample members. Table VI.13 provides the main effects, using the variable names listed above. Appendix J provides the parameter estimates and their standard errors. The factors used in the cooperation model included the following:

- **EXTRACT.** There are four levels: (1) Extract 1; (2) Extract 3; (3) Extract 7; and (4) Extracts 2, 4, 5, and 6.
- **SSI\_SSDI.** Beneficiary title. There are two levels: (1) recipient of both SSI and SSDI and (2) recipient of SSDI only or SSI only.
- **MOVE.** Count of addresses in SSA files. There are four levels: (1) one address on file, (2)–(3) two or three addresses on file, and (4) four or more addresses on file.
- **AGECAT.** Beneficiary's age category. There are four levels: (1) ages 18 to 29, (2) ages 30 to 39, (3) ages 40 to 49, and (4) ages 50 or older.
- **RACE.** Race of beneficiary. There are two levels: (1) non-Hispanic Black and (2) not non-Hispanic Black or race not known.
- **LIVING.** Beneficiary's living situation. There are two levels: (1) beneficiary lives with others, and (2) beneficiary lives alone, with parents, or in an institution or the information is unknown.
- **REGION or DIVISION.** Geographic region or division of beneficiary's place of residence, based on U.S. census regions or divisions. There are three levels: (1) South, (2) West, (3) East North Central division of Midwest, and (4) West North Central division of Midwest or Northeast.

- **CNTYRET.** Retirement destination county. There are two levels: (1) the number of residents ages 60 and older grew by 15 percent or more between the 2000 and 2010 censuses due to net migration, and (2) the county does not have this attribute.

The model also included a single interaction between two of these variables for responding sample members, as noted in Table VI.14. Table VI.14 describes the main effects using the variable names. Appendix J provides an expanded form of Table VI.14, with parameter estimates and their standard errors.

Because there were only 523 longitudinal cases that were not part of the Round 7 beneficiary frame, and only 246 completed interviews, the options for creating nonresponse adjustments for this group were limited. We used stepwise regression and cross-tabulations to determine which variables were most closely related to location and which were related to cooperation. For the location adjustment, we created four weighting classes based on the strata derived from the beneficiary title, as defined in Round 6 (SSDI only and SSI) and race (non-Hispanic White or not). The adjustments ranged from 1.08 to 1.41. For the cooperation adjustment, we created eight weighting classes based on the same Round 6 strata (SSDI only and SSI) and the four age categories (18 to 29, 30 to 39, 40 to 49, and 50 or over). These adjustments ranged from 1.34 to 3.22, and the total adjustments (the product of the location and cooperation adjustments) ranged from 1.69 to 4.02.

#### 4. Post-stratification and trimming

The adjusted weight for each sample case is the product of the base weight and the adjustment factors, trimmed to ensure that the impact of outlier weights is minimized. We performed the trimming across the two groups (both on and off the Round 7 beneficiary frame) together.

We created 14 trimming classes for each model based on the original strata from Round 6, which were in turn based on (1) the two beneficiary title levels (SSDI only and SSI), and (2) the seven extracts. We trimmed seven weights within these 14 trimming classes. Table VI.15 shows the number of weights trimmed and the design effects attributable to unequal weighting before and after trimming for each class, before poststratification.

**Table VI.15. Design effects attributable to unequal weights before and after trimming, within trimming classes in the longitudinal SWS**

Extract	Sampling stratum	Number of cases trimmed	Design effect attributable to unequal weights	
			Before trimming	After trimming
1	SSDI only	0	1.40	1.40
1	SSI	2	1.56	1.55 (maximum)
2	SSDI only	1	1.60 (maximum)	1.52
2	SSI	0	1.37	1.37
3	SSDI only	0	1.41	1.41
3	SSI	1	1.38	1.38
4	SSDI only	1	1.48	1.43
4	SSI	0	1.27	1.27

**Table VI.9** (continued)

Extract	Sampling stratum	Number of cases trimmed	Design effect attributable to unequal weights	
			Before trimming	After trimming
5	SSDI only	1	1.58	1.48
5	SSI	0	1.30	1.30
6	SSDI only	0	1.36	1.36
6	SSI	0	1.27	1.27
7	SSDI only	0	1.29	1.29
7	SSI	1	1.38	1.35

Source: NBS Round 7.

Note: Design effect attributable to unequal weights =  $n \sum w^2 / (\sum w)^2$

After the nonresponse adjustment and trimming, we post-stratified the weights to marginal population totals for four variables: (1) extract; (2) beneficiary title as defined in Round 6 (SSI only, SSDI only, and both SSI and SSDI); (3) four age categories (18 to 29, 30 to 39, 40 to 49, and 50 or over); and (4) DCF earnings categories in Round 6 (five categories derived from DCF earnings in 2015 and 2016—the same categories used for the SWS nonresponse models in Round 6). The actual population totals were not available, so we used the estimated totals by summing the base weights for each level of these variables. We found no extreme weights after poststratification.

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## VII. Imputations

The data collection instruments for the NBS—General Waves were administered with computer-assisted interviewing technology. The technology allows the use of automated routing to move the respondent to the applicable questions and performs checks of the entered data for consistency and reasonableness. In addition, it does not permit a question to be left blank; therefore, the interviewer may not proceed until an appropriate response has been entered. (“Don’t know” and “refused” are included as response options and used as necessary). These processes substantially reduce the extent of item nonresponse for a complex survey, although some item nonresponse will persist—for example, when a question was mistakenly not asked and when “don’t know” or “refused” were recorded as responses.

For the NBS—General Waves, we used three separate samples (the RBS, the cross-sectional SWS, and the longitudinal SWS), with duplicates occurring across and within samples. For the purpose of imputation processing, we grouped all three samples together as a single set of records requiring imputation, with duplicates removed, resulting in 8,823 records total. Where appropriate, we used the sample that the record belonged to as a covariate in the imputation.

In most cases, we used two methods of imputation to compensate for item nonresponse: (1) deductive (or logical) imputation and (2) unweighted hot-deck imputation. However, for some variables, the data were insufficient to use either method; thus, we needed to employ other methods, such as random draws of imputed values from distributions given by the nonmissing data. Selection of the methods was based on (1) the type of variable (dichotomous, categorical, or continuous); (2) the amount of missing data; and (3) the availability of data for the imputations. For some variables, imputations were processed using a combination of methods.

Deductive imputation is based on a review of the data related to the imputed variable. It assigns a value that may be deduced from other data or for which there is a high degree of certainty that the value is correct.

Hot-deck imputation involves the classification of sample members into mutually exclusive and exhaustive imputation classes (or imputation cells) of respondents who are assumed to be similar relative to the key population variables (such as age, disability status, and SSI recipient status). For each sample member with a missing value (a recipient), a sample member with complete data (a donor) is chosen within the same imputation class to provide a value. Ideally, the imputation class should contain sufficient sample members to avoid the selection of a single donor for several sample members with missing data.

The hot-deck procedure is computationally efficient. A simulation study by the National Center for Education Statistics (U.S. Department of Education 2001) showed that a hot-deck procedure fared well in comparison to more sophisticated imputation procedures, including multiple imputation, Bayesian bootstrap imputation, and ratio imputation. The U.S. Department of Education (USDE) study evaluated imputation methods in terms of bias of the mean, median, and quartile, as well as variance estimates, coverage probability, confidence interval width, and average imputation error.

Although the variance of estimates was a key item used to evaluate methods by the USDE study, we made no attempt in this study to estimate the component of variance attributable to imputation, even though such a component is always positive. Users should be aware that variance estimates that use imputed data will be underestimates, with the amount of bias in the variance estimate directly related to the amount of “missingness” in the variable of interest. For most of the variables requiring imputation, the extent of missingness was low; thus, the component of variance would be very small in most cases.

For the NBS—General Waves, the hot-deck imputation procedure used an unweighted selection process to select a donor, with selections made within imputation classes that were defined by key related variables for each application. In addition to the variables defining the imputation classes, we included a sorting variable that sorted the recipient and all donors within the imputation class together by levels of the variable. Using the sorted data within the imputation class, we randomly selected as the donor with equal probability a case immediately preceding or following a sample member with missing data. Therefore, the hot-deck procedure was unweighted and sequential, with a random component. We allowed with-replacement selection of a donor for each recipient. In other words, a sample member could have been a donor for more than one recipient. Given that the extent of missing values was very low for most variables, we used only a few donors more than once.<sup>91</sup>

Where appropriate, we made imputed values consistent with pre-existing nonmissing variables by excluding donors with potentially inconsistent imputed values. After processing each imputation, we used a variety of quality control procedures to evaluate the imputed values. If the initial imputed value was beyond an acceptable range or inconsistent with other data for that case, we repeated the imputation until the imputed value was in range and consistent with other reported data.

The factors used to form the cells for each imputed variable needed to be appropriate for the population, the data collected, and the purpose of the NBS—General Waves. In addition, the imputation classes needed to possess a sufficient count of donors for each sample member with missing data. We used a variety of methods to form the imputation classes: bivariate cross-tabulations, stepwise regressions, and multivariate procedures such as CHAID.<sup>92</sup> To develop the imputation classes, we used information from both the interview and SSA administrative data files. The classing and sorting variables were closely related to the variable to be imputed (the response variable). The sorting variables were either less closely related to the response variable than were the classing variables or were forms of the classing variables with finer levels. As an example of the latter situation, we sometimes used four age categories as imputation classes: (1) 18- to 29-year-olds, (2) 30- to 39-year-olds, (3) 40- to 49-year-olds, and (4) those who were 50 years old or older. We could then use the actual age as a sorting variable to ensure that donors and recipients were as close together in age as possible.

In the case of missing values in the variables used to define imputation classes, we applied two strategies: (1) matching recipients to donors who were also missing the value for the covariate or (2) employing separate hot decks, depending upon the availability of the variables defining the imputation classes. In the first instance, we treated the level defined as the missing value as a separate level. In other words, if a recipient was missing a value for a variable defining an imputation class, the donor also was missing the value for that variable. We used the first strategy if a large number of donors and recipients were missing the covariate in question. In the second instance, we used a variable for a given recipient to define the imputation class for that recipient only if there was no missing value for that variable. The variables used to define an imputation class for each recipient depended upon what values were not missing among those variables.

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<sup>91</sup> Household income, which was used to determine the federal poverty threshold indicator, was the exception. About 17 percent of respondents gave no household income information at all and about 20 percent gave only general categories of income. Detailed levels of missingness are given for all imputed variables later in this chapter.

<sup>92</sup> Chi-Squared Automatic Interaction Detection software is attributed to Kass (1980) and Biggs et al. (1991). Its application in SPSS is described in Magidson (1993).

The hot-deck software automatically identified situations in which the imputation class contained only recipients and no donors. In such cases, we collapsed imputation classes and once again performed the imputation with the collapsed classes. The strategy for collapsing classes required a ranking of the variables used to define the imputation class with regard to each variable's relationship to the variable requiring imputation. If several covariates aided in imputing a given variable, the covariates less closely related to the variable requiring imputation were more likely than the important covariates in the imputation to have levels that we had to collapse. In addition, variables with a large number of levels also were more likely to have levels that we had to collapse. In general, if more than a very small number of imputation classes required collapsing, we dropped one or more variables from the definition of the imputation class and reran the imputation procedure.

Some variables were constructed from two or more variables. For some of the constructed variables, it was more efficient to impute the component variables and then impose the recoding of the constructed variable on these imputed values, rather than imputing the constructed variable directly. In the tables that follow in this chapter, we do not show the component variables because they were not included in the final data set.

For some imputed variables in the data set, the number of missing responses does not match the number of imputed responses. Often, the variables correspond to questions that follow a filter question. For example, Item I29 asks if the respondent has serious difficulty walking or climbing stairs. If the response is "yes," the follow-up question (Item I30) asks if the respondent is able to walk without assistance at all. To be asked the follow-up question, the respondent must have answered "yes" to the screener question. If the respondent answered "no," the follow-up question was coded a legitimate missing (.L), which was not imputed. However, if the respondent refused to answer the screener question, the follow-up question was also coded a legitimate missing. If the screener variable was then imputed to be "yes," the response to the follow-up question was imputed, causing the count of the actual number of imputed responses to be greater than the number of missing or invalid responses.

## A. NBS Imputations of Specific Variables

In the tables below, we present information on how imputation was applied to selected variables in the NBS—General Waves, including the imputed variable names, a brief description of each variable, the methods of imputation, total number of missing responses, number of respondents eligible for the question, and percentage of imputed responses. We recorded this information in the final file with an imputation flag, identified by the suffix "iflag," which has the following levels: (.L) legitimate missing, (0) self-reported data, (1) logical imputation, (2) administrative data, (3) hot-deck imputed, (4) imputation using the distribution of a variable related to the variable being imputed, (5) imputation based on specialized procedures specific to Section K, (6) constructed from other variables with imputed values, and (7) longitudinal imputation (using data from an earlier round).<sup>93</sup> The distinction between "logical imputation" and "constructed from other variables with imputed values" is somewhat opaque. In general, if we made a logical assignment for variables corresponding directly to items from the questionnaire, we set the flag to 1. For variables constructed from these variables (constructed variables are prefixed with a "C\_"), we set the flag to 6. In this instance, a nonzero or nonmissing flag means we imputed one or more

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<sup>93</sup> A longitudinal imputation is useful if (1) the variable being imputed is one that does not change over time, such as race, and (2) they responded to the question in Rounds 5 or 6 but did not in Round 7.

of the component variables in the constructed variable. All variables that include any imputed values are identified with the suffix “\_i.”

Below, we summarize the imputations that we conducted and provide details for some of the imputation types for each section of the questionnaire.

**1. Section L: Race and ethnicity**

Two items in the questionnaire, item L1 and item L2, gathered information on respondents’ race and ethnicity. The imputations associated with these variables are summarized in Table VII.1. In particular, L1\_i corresponds to the question asking whether the respondent is Hispanic or not; C\_Race\_i corresponds to the question asking about the respondent’s race.

**Table VII.1. Race and ethnicity imputations**

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
L1_i	Hispanic/Latino ethnic origins	5 imputations from SSA’s administrative data, 28 longitudinal imputation, 241 imputations from hot deck	274	8,823	2.73
C_Race_i	Race	282 imputations from SSA’s administrative data, 37 longitudinal imputation, 336 imputations from hot deck	655	8,823	3.81

Source: NBS Round 7

Note: The “number missing” is a count of item nonrespondents, and the “number eligible” includes both item respondents and item nonrespondents. The “percentage imputed” is the “number missing” divided by the “number eligible”, and is unweighted.

In the above table, respondents who did not indicate in the questionnaire whether they were Hispanic were classified as such if the SSA administrative data so indicated. Because this round included a longitudinal component, we expected to use a larger number of longitudinal imputations than in prior rounds. Indeed, there were 28 instances in which a sample member—a unit respondent in Round 7 and in at least one of Rounds 5 or 6—did not respond to L1 in Round 7 but did respond to it in Rounds 5 or 6, so we used his or her latest available response from the prior rounds. For respondents who still had missing data, we imputed the Hispanic indicator by using a hot deck imputation. The variables used to define the imputation classes for the hot deck depended upon the respondent’s surname. We identified those with Hispanic surnames by comparing the respondents’ names to those provided by the North American Association of Central Cancer Registries (NAACCR 2003).<sup>94</sup> For those without Hispanic surnames, we defined imputation classes by the zip code of each sample member, with race as a sorting variable. Not surprisingly, the imputation classes based on zip code commonly required collapsing to ensure that an imputation class had a sufficient number of donors for the recipients in that class. An automated process in SAS performed the needed check. However, to ensure that the zip code imputation classes being collapsed were as similar as possible, we manipulated the software so that the county of the donor zip

<sup>94</sup> This methodology is consistent with the procedure followed in Round 6, which was a change from earlier rounds. In Rounds 1 to 5, we logically assigned “Hispanic” if an individual had a Hispanic surname.

code and county of the recipient zip code had a similar racial and ethnic composition according to data from the Area Health Resource File (2018-2019), a file with demographic, health, and economic-related data for every county in the United States. For those with Hispanic surnames, we defined imputation classes by gender and whether the respondent lived in a county where at least 40 percent of the population identified as Hispanic, fewer than 50 percent identified as non-Hispanic White, and fewer than 20 percent identified as non-Hispanic Black.

Respondents could choose from five race categories—(1) White, (2) Black/African American, (3) Asian, (4) native Hawaiian or other Pacific Islander, and (5) Alaska Native or American Indian—and could select more than one of the categories to identify themselves (as prescribed by the Office of Management and Budget). The final race variable on which imputation was applied included six categories, with a separate category for respondents who reported multiple races. Although the SSA administrative data did not have a category for multiple races, respondents with race information in the SSA files were categorized according to four of the five categories above (native Hawaiian or other Pacific Islanders were included with respondents who reported being Asian). Respondents who did not answer the race question but did have race information in the SSA files were categorized into one of the four categories. This would have resulted in the misclassification of respondents—with SSA administrative data—who did not answer the race question in the survey but who would have identified themselves as multiple race or native Hawaiian or other Pacific Islander. However, we assumed that the number of such respondents would be small and that their misclassification would not be a major problem. There were 37 instances in which a sample member—a unit respondent in Round 7 and in at least one of Rounds 5 and 6—did not respond to L2 in Round 7, but the member did respond to it in Round 5 or 6, so we used his or her latest available response from the prior round. As with the Hispanic indicator, for respondents who still had missing data, we imputed race by using a hot deck with imputation classes that were defined by the zip code of each sample member, with ethnicity (Hispanic or not) as a sorting variable.

## **2. Section B: Disability status variables and work indicator**

Questions about disability status and work were limited to individuals who indicated in Item B1 that they have a “physical or mental condition limiting the kind or amount of work or other daily activities that [they] can do.” If the respondent did not answer Item B1, then we imputed Item B1. In this round, there were 28 such cases, 16 of which were imputed as a “1.”

In Table VII.2, we describe five imputed variables that pertain to the sample member’s disability status and an indicator of whether the respondent was currently working. The imputed variables include three that collapse and recode primary diagnosis codes in three ways: (1) `C_MainConBodyGroup_i`, which corresponds to the collapsing in Table II.2; (2) `C_MainConDiagGrpNew_i`; and (3) `C_MainConColDiagGrp_i`. The “New” suffix on `C_MainConDiagGrpNew_i` is a result of a change in the diagnosis codes that were used in Round 6. Some of the codes do not map exactly to those used in Round 5. See Chapter V of this report for additional information. Additional variables for disability status include age when the disability was first diagnosed (`C_DisAge_i`) and an indicator of childhood or adult onset of the disability (`C_AdultChildOnset_i`), variables which were assigned to all survey respondents (not just those with a value of  $B1 = 1$ ). We also imputed a fourth variable with collapsed primary diagnosis codes, with levels further collapsed from `C_MainConDiagGrp_i`. Table VII.2 does not include this variable (`C_MainConImput_i`) because it was not released to the final file but was used in subsequent imputations as a classing variable. Table VII.2 also omits the imputed version of Item B1 (`B1_i`), as this variable is a supporting variable that was also not released to the final file. All missing values for `C_AdultChildOnset_i` were “logically assigned” by using the imputed values from `C_DisAge_i`, the

variable for age of onset. In addition, Section B contains a question asking whether the respondent was currently working (Item B24\_i), which is a gate question for all of Section C’s variables for work status.

**Table VII.2. Disability status imputations**

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
C_MainConDiagGrpNew_i	Primary diagnosis group	358 hot deck <sup>a</sup>	358	7,144	5.01
C_MainConColDiagGrp_i	Main condition diagnosis group collapsed	358 constructed from imputed variables <sup>a</sup>	358	7,144	5.01
C_MainConBodyGroup_i	Main condition body group	29 hot deck, 329 constructed from imputed variables <sup>a</sup>	358	7,144	5.01
C_DisAge_i	Age at onset of disability	48 longitudinal imputation, 221 hot deck	269	8,823	3.04
C_AdultChildOnset_i	Adult/child onset of disability	26 constructed from imputed variables	26	8,823	0.29
B24_i	Currently working	6 hot deck	6	8,823	5.01

Source: NBS Round 7

Note: The “number missing” and “number eligible” counts exclude those who skipped out of the relevant question(s) based upon computer skip patterns. The “number missing” is a count of item nonrespondents, and the “number eligible” includes both item respondents and item nonrespondents. The “percentage imputed” is the “number missing” divided by the “number eligible”, and is unweighted.

<sup>a</sup>Imputations for diagnosis group variables excluded five cases coded as “don’t know” or “refused” in Item B1, which were imputed in Item B1\_i as not having a condition that limited the kind or amount of work or other daily activity that the respondent could do.

To define imputation classes, all of the variables in Section B used an indicator to specify whether the onset of the disability occurred in childhood or adulthood and to specify age and gender. We also used one of the collapsed condition code variables, C\_MainConInput\_i, as a classing variable for disability age and the work indicator. We used additional classing variables specific to the variable being imputed.

### 3. Section C: Current jobs variables

Several survey questions asked respondents about current employment. Section C asked such questions only of respondents who indicated in Item B24 that they were currently working. If the respondent did not answer Item B24, then we imputed Item B24. In this round, there were six such cases, four of which were imputed as “working.” As identified in Table VII.3, the questions asked about the following:

- Salary (C\_MainCurJobHrPay\_i, C\_MainCurJobMnthPay\_i, and C\_TotCurJobMnthPay\_i)
- Usual hours worked at the job or jobs (C8\_1\_i, C\_TotCurWkHrs\_i, and C\_TotCurHrMnth\_i)
- Number of places the respondent was employed (C1\_i)
- Job description for the place of main employment (C2\_1\_1d\_i)

We imputed values for other variables by using the distribution of a variable related to the variable at hand. For example, if the take-home monthly pay of the respondent's current main job was not missing but the gross monthly pay (`C_MainCurJobMnthPay_i`) for the job was missing, we used the relationship between gross monthly and take-home monthly pay among respondents missing neither variable to determine the appropriate value for gross monthly pay. In particular, a random draw was selected from the observed distribution of relative taxes, where "relative tax" is defined as the proportion of a respondent's pay devoted to taxes. We then used the randomly drawn relative tax to determine an imputed gross monthly pay for four cases with missing data for `C_MainCurJobMnthPay_i`. As noted in Table VII.3, we applied hot-deck imputations to only four of the jobs variables: (1) `C1_i`, (2) `C2_1_1d_i`, (3) `C8_1_i`, and (4) `C_TotCurMnthPay_i`. For these variables, we used the level of education as a classing variable as well as additional classing and sorting variables specific to each variable, including a condition code variable for all but `C_TotCurMnthPay_i`.

Some of the variables in Table VII.3 had missing values that were not directly imputed. Rather, constituent variables not included in the table had missing values that were imputed and then combined to form the variables in the table. For example, we constructed `C_TotCurWkHrs_i` from the number of hours per week usually worked at the current main job plus the number of hours for each of the respondent's other jobs. In most cases, the respondent worked one job, so we set `C_TotCurWkHrs_i` equal to `C8_1_i`. However, if the respondent worked more than one job and the number of hours in secondary jobs was imputed, we constructed `C_TotCurWkHrs_i` from imputed variables.

**Table VII.3. Current jobs imputations**

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
C1_i	Count of current jobs	1 logical, 7 hot deck	8	4,364	0.18
C2_1_1d_i	Main current job SOC code to one digit	15 hot deck <sup>a</sup>	15	4,364	0.34
C8_1_i	Hours per week usually worked at current main job	67 hot deck, <sup>b</sup> 4 imputed by distributional assumptions	71	4,364	1.63
C_TotCurWkHrs_i	Total weekly hours at all current jobs	67 hot deck, <sup>c</sup> 14 constructed from imputed variables	81	4,364	1.86
C_TotCurHrMnth_i	Total hours per month at all current jobs	77 constructed from imputed variables	77	4,364	1.76
C_MainCurJobHrPay_i	Hourly pay at current main job	10 logical, 390 constructed from imputed variables	400	4,364	9.17
C_MainCurJobMnthPay_i	Monthly pay at current main job	36 logical, 26 imputed by distributional assumptions, 364 constructed from imputed variables	426	4,364	9.76
C_TotCurMnthPay_i	Total monthly salary all current jobs	33 logical, 364 hot deck, 44 constructed from imputed variables	441	4,364	10.11

Source: NBS Round 7

Note: The “number missing” and “number eligible” counts exclude those who skipped out of the relevant question(s) based upon computer skip patterns. The “number missing” is a count of item nonrespondents, and the “number eligible” includes both item respondents and item nonrespondents. The “percentage imputed” is the “number missing” divided by the “number eligible”, and is unweighted.

<sup>a</sup>Imputations for current job variables excluded cases coded as “don’t know” or “refused” in Item B24, which were imputed as currently not working in Item B24\_i. Imputations for current job variables include other cases coded as “don’t know or “refused” in Item B24 that were imputed as currently working in item B24\_i.

<sup>b</sup>Imputations for current job variables excluded cases coded as “don’t know” or “refused” in Item B24, which were imputed as currently not working in Item B24\_i. Imputations for current job variables include other cases coded as “don’t know or “refused” in Item B24 that were imputed as currently working in Item B24\_i.

<sup>c</sup>If C8\_1\_i was imputed by hot deck and the respondent had only one job, the flag indicated that C\_TotCurWkHrs\_i was imputed by hot deck, even though the variable was not processed in the hot-deck program.

#### 4. Section I: Health status variables

Section I of the NBS–General Waves accounted for 57 health status variables in which imputations were applied. Tables VII.4 and VII.5 identify the 57 imputed variables and the methods of imputation used for each variable. The items cover a range of topics, from the respondent’s general health to specific questions on instrumental activities of daily living (IADLs), activities of daily living (ADLs), and other

health and coping indicators. A series of questions pertaining to the respondent's use of illicit drugs and alcohol is also included in Section I.

**Table VII.4. Health status imputations, questionnaire variables**

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
I1_i	Health during the past four weeks	24 hot deck	24	8,823	0.27
I9_i	Current health	68 hot deck	68	8,823	0.77
I17b_i	Blind or difficulty seeing, even with glasses	2 logical, 104 hot deck	106	8,823	1.20
I19_i	Uses special equipment because of difficulty seeing	12 hot deck, 89 constructed from imputed variables	101	8,823	1.14
I21_i	Deaf or difficulty hearing	1 logical, 94 hot deck	95	8,823	1.08
I22_i	Able to hear normal conversation at all	32 hot deck, 81 constructed from imputed variables	113	8,823	1.28
I23_i	Uses special equipment because of difficulty hearing	13 hot deck, 81 constructed from imputed variables	94	8,823	1.07
I25_i	Difficulty having speech understood	6 logical, 110 hot deck	116	8,823	1.31
I26_i	Able to have speech understood at all	37 hot deck, 85 constructed from imputed variables	122	8,823	1.38
I27_i	Uses special equipment because of difficulty speaking	19 hot deck, 85 constructed from imputed variables	104	8,823	1.18
I29_i	Difficulty walking or climbing stairs without assistance	3 logical, 98 hot deck	101	8,823	1.14
I30_i	Able to walk without assistance at all	65 hot deck, 48 constructed from imputed variables	113	8,823	1.28
I31_i	Uses special equipment because of difficulty walking	48 hot deck, 48 constructed from imputed variables	96	8,823	1.08
I34_i	Able to climb stairs at all	73 hot deck, 48 constructed from imputed variables	121	8,823	1.37
I35_i	Difficulty lifting and carrying 10 pounds	1 logical, 113 hot deck	114	8,823	1.29
I36_i	Able to lift or carry 10 pounds at all	85 hot deck, 73 constructed from imputed variables	158	8,823	1.79

**Table VII.4** (continued)

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
I37_i	Difficulty using hands or fingers	116 hot deck	116	8,823	1.31
I38_i	Able to use hands or fingers at all	47 hot deck, 86 constructed from imputed variables	133	8,823	1.50
I39_i	Difficulty reaching over head	1 logical, 116 hot deck	117	8,823	1.32
I40_i	Able to reach over head at all	42 hot deck, 86 constructed from imputed variables	128	8,823	1.45
I41_i	Difficulty standing	1 logical, 127 hot deck	128	8,823	1.45
I42_i	Able to stand at all	67 hot deck, 56 constructed from imputed variables	123	8,823	1.39
I43_i	Difficulty stooping	3 logical, 111 hot deck	114	8,823	1.29
I44_i	Able to stoop at all	80 hot deck, 54 constructed from imputed variables	134	8,823	1.52
I45_i	Difficulty getting around inside home	5 logical, 111 hot deck	116	8,823	1.32
I46_i	Needs help to get around inside home	24 hot deck, 93 constructed from imputed variables	117	8,823	1.33
I47_i	Difficulty doing errands alone	3 logical, 115 hot deck	118	8,823	1.33
I48_i	Needs help to get around outside home	85 hot deck, 64 constructed from imputed variables	149	8,823	1.69
I49_i	Difficulty getting into/out of bed	5 logical, 120 hot deck	125	8,823	1.42
I50_i	Needs help getting into/out of bed	35 logical, 91 hot deck, constructed from imputed variables	126	8,823	1.43
I51_i	Difficulty bathing or dressing	6 logical, 125 hot deck	131	8,823	1.49
I52_i	Needs help bathing or dressing	31 hot deck, 97 constructed from imputed variables	128	8,823	1.45
I53_i	Difficulty shopping	18 logical, 111 hot deck	129	8,823	1.46
I54_i	Needs help shopping	41 hot deck, 78 constructed from imputed variables	119	8,823	1.34
I55_i	Difficulty preparing own meals	11 logical, 122 hot deck	133	8,823	1.50

**Table VII.4** (continued)

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
I56_i	Needs help to prepare meals	45 hot deck, 86 constructed from imputed variables	131	8,823	1.48
I57_i	Difficulty eating	1 logical, 116 hot deck	117	8,823	1.32
I58_i	Needs help to eat	17 hot deck, 99 constructed from imputed variables	116	8,823	1.31
I59_i	Trouble concentrating or remembering	148 hot deck	148	8,823	1.68
I60_i	Trouble coping with stress	179 hot deck	179	8,823	2.03
I61_i	Trouble getting along with people	167 hot deck	167	8,823	1.89
CageScore_Indicator_i	CAGE Alcohol Score	125 constructed from imputed variables	125	8,823	1.42
I72_i	Uses drugs in larger amounts than prescribed	150 hot deck	150	8,823	1.70

Source: NBS Round 7

Note: The “number missing” and “number eligible” counts exclude those who skipped out of the relevant question(s) based upon computer skip patterns. The “number missing” is a count of item nonrespondents, and the “number eligible” includes both item respondents and item nonrespondents. The “percentage imputed” is the “number missing” divided by the “number eligible”, and is unweighted.

**Table VII.5. Health status imputations, constructed variables**

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
C_EquipFuncLim_i	Uses equipment/device for functional/sensory limitation	90 constructed from imputed variables	90	8,823	1.02
C_NumSenLim_i	Number of sensory limitations	142 constructed from imputed variables	142	8,823	1.61
C_NumSevSenLim_i	Number of severe sensory limitations	127 constructed from imputed variables	127	8,823	1.44
C_NumPhyLim_i	Number of physical functional limitations	207 constructed from imputed variables	207	8,823	2.35
C_NumSevPhyLim_i	Number of severe physical functional limitations	262 constructed from imputed variables	262	8,823	2.97
C_NumEmotLim_i	Number of emotional/social limitations	255 constructed from imputed variables	255	8,823	2.89
C_NumADLs_i	Number of impaired ADL	173 constructed from imputed variables	173	8,823	1.96
C_NumADLAssist_i	Number of ADL requiring assistance	145 constructed from imputed variables	145	8,823	1.64
C_NumIADLs_i	Number of IADL difficulties	171 constructed from imputed variables	171	8,823	1.94
C_NumIADLAssist_i	Number of IADL requiring assistance	171 constructed from imputed variables	171	8,823	1.94
C_PCS8TOT_i	Physical summary score	237 constructed from imputed variables	237	8,823	2.69
C_MCS8TOT_i	Mental summary score	237 constructed from imputed variables	237	8,823	2.69
C_DrugDep_i	Drug dependence	154 constructed from imputed variables	154	8,823	1.75

Source: NBS Round 7

Note: The “number missing” and “number eligible” counts exclude those who skipped out of the relevant question(s) based upon computer skip patterns. The “number missing” is a count of item nonrespondents, and the “number eligible” includes both item respondents and item nonrespondents. The “percentage imputed” is the “number missing” divided by the “number eligible”, and is unweighted.

The following is an example of a logical assignment in Section I: If respondents did not answer whether they were blind or experienced difficulty seeing even when wearing glasses or contact lenses (Item I17b), but indicated that they required special devices to see because they had difficulty seeing (Item I19), then we logically assigned “yes” to Item I17b\_i.

As in previous sections, “constructed from imputed variables” refers to the fact that we imputed the constituent variables of each constructed variable. The only classing variable common to all imputations was the code variable for the collapsed condition. We also used age and gender in most imputations. The other classing and sorting variables were specific to the variable being imputed.

### 5. Section K: Sources of income other than employment

The imputed variables in Section K are constructed variables that pertain to nonemployment-based income and include workers’ compensation, private disability claims, unemployment, and other sources of regular income, as described in Table VII.6

**Table VII.6. Imputations on sources of income other than employment**

Variable name	Description	Imputation method	Number missing	Number eligible	Percentage imputed
C_AmtPrivDis_i	Amount received from private disability last month	231 constructed from imputed variables, 24 imputed by descriptive statistics using specialized procedures	255	8,823	2.91
C_AmtWorkComp_i	Amount received from workers’ compensation last month	154 constructed from imputed variables, 7 imputed by descriptive statistics using specialized procedures	161	8,823	1.83
C_AmtVetBen_i	Amount received from veterans’ benefits last month	144 constructed from imputed variables, 20 imputed by descriptive statistics using specialized procedures	164	8,823	1.86
C_AmtPubAssis_i	Amount received from public assistance last month	151 constructed from imputed variables, 18 imputed by descriptive statistics using specialized procedures	169	8,823	1.91
C_AmtUnemply_i	Amount received from unemployment benefits last month	142 constructed from imputed variables, 3 imputed by descriptive statistics using specialized procedures	145	8,823	1.64
C_AmtPrivPen_i	Amount received from private pension last month	146 constructed from imputed variables, 15 imputed by descriptive statistics using specialized procedures	161	8,823	1.82

Source: NBS Round 7

Note: The “number missing” and “number eligible” counts exclude those who skipped out of the relevant question(s) based upon computer skip patterns. The “number missing” is a count of item nonrespondents, and the “number eligible” includes both item respondents and item nonrespondents. The “percentage imputed” is the “number missing” divided by the “number eligible”, and is unweighted.

Items in Section K first asked respondents if they received money from a specific source and then asked for the specific amount received from that source. If a respondent could not provide a specific value, he or she answered a series of questions about whether the amount was above or below specific values. Respondents also had the option of providing a range of values, in which the options depended upon responses to a series of questions. After we classified the response according to a range of values provided by the respondent, we assigned the respondent the median of the specific values provided by others who gave responses within the same range. If a respondent could not say whether the actual value

was above or below a specific threshold, we first imputed the range (using random assignment), then assigned the median of the values provided by respondents who listed specific values within that range. If the respondent did not know if he or she received funds from a source, we used hot-deck imputation to determine whether such was the case and then proceeded as above.

The logical assignments in Section K derive from imputed values in the constituent questions. For example, Item K6 in the questionnaire asks whether the respondent received income from a variety of sources, and Item K7 asks the amount from each source for which a “yes” response was given. The first source listed (Item K6a) is private disability insurance. If the respondent was imputed not to have received private disability insurance (K6a\_i), then the constructed variable C\_AmtPrivDis\_i (based on Item K7) was logically assigned “no.” Otherwise, if any income was derived from private disability insurance but an imputation was required at some point in the sequence (either everything or just the individual’s income was imputed), then the imputation flag indicated imputation by “special procedures.”

For variables requiring hot-deck imputation, the classing variables were the same for all variables: an indicator of whether the respondent was a recipient of SSI, SSDI, or both; living situation; and education. Table VII.6 lists none of the variables requiring hot-deck imputation because they were just component variables for the delivered variables listed in the table.

## **6. Section L: Personal and household characteristics**

We discussed race and ethnicity, derived from items L1 and L2 in the questionnaire, in Section 1 of this chapter. Other imputed variables that are personal and household characteristics also come from Section L. The questions from which the imputed variables were derived ask about education (L3\_i), marital status (L8\_i), cohabitation status (C\_Cohab\_i), number of children in household (C\_NumChildHH\_i), household size (C\_Hhsize\_i), and weight and height, which were used to derive body mass index (C\_BMI\_cat\_i). Most of these variables were imputed early in imputation processing and were used in the imputation of variables imputed later in processing. Household income questions are also asked in Section L, which, in combination with C\_Hhsize\_i and C\_NumChildHH\_i, we use to derive the federal poverty level variable.

The level of missingness for C\_Cohab was considerably higher in Round 6 than in any prior rounds or in Round 7, due to a programming error in the software that assigned skip logic in the questionnaire. In particular, all sample members who indicated that they were divorced in question L8 were skipped out of L10, the source variable for C\_Cohab. The programming error was corrected in Round 7, so that the missingness in the C\_Cohab variable in Round 7 (1.80 percent) was more in line with what had been observed in Rounds 1 to 5.

The imputation of poverty level required the imputation of annual income and household size. The annual income question was another case that required a specific value. If the respondent could not provide a specific value, he or she was asked if annual income fell within certain ranges. Some respondents provided a specific value, some provided a range of values, and some refused to provide any information. Although annual income was a key variable used in the imputation of poverty level, it was not included in Table VII.7 because it was not released in the final file. All missing values in C\_FedPovertyLevel\_cat1<sup>95</sup>

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<sup>95</sup> The name of this variable reflects the fact that the final variable was a categorical (as opposed to a continuous) measure of poverty level.

were derived from the imputed annual incomes; hence, all missing values are “constructed from imputed variables.” In Table VII.7, we identify the imputed variables in Section L.

Logical assignments in Section L are based on related variables also in Section L. For example, a logical assignment for L11\_i (living situation of beneficiary) would occur if the respondent did not answer Item L11 but indicated in Item L16 (number of adults in household) that only one adult lived in the household and indicated in Item L17 (number in household under 18 years old) the number of children living in the household. In this case, the value for L11\_i would be logically assigned to 1 (lives alone) or 2 (lives with parent, spouse, or children), depending upon the response to Item L17.

Each of the classing and sorting variables were specific to the variable being imputed.

**Table VII.7. Imputations of personal and household characteristics**

Variable Name	Description	Imputation Method	Number Missing	Number Eligible	Percentage Imputed
C_BMI_cat_i	Body mass index categories	432 hot deck	432	8,823	4.90
L3_i	Highest year/grade completed in school	198 hot deck	198	8,823	2.24
L8_i	Marital status	179 hot deck	179	8,823	2.03
L11_i	Living arrangements	7 logical, 165 hot deck	172	8,823	1.95
C_NumChildHH_i	Number of children living in household	18 logical, 156 hot deck, 42 constructed from imputed variables	216	8,823	2.45
C_HHsize_i	Household size	1 logical, 179 hot deck, 31 constructed from imputed variables	211	8,823	2.39
C_Cohab_i	Cohabitation status	6 logical, 153 hot deck	159	8,823	1.80
C_FedPovertyLevel_cat	2018 Federal poverty level	3,322 constructed from imputed variables	3,322	8,823	37.65

Source: NBS Round 7

Note: The “number missing” and “number eligible” counts exclude those who skipped out of the relevant question(s) based upon computer skip patterns. The “number missing” is a count of item nonrespondents, and the “number eligible” includes both item respondents and item nonrespondents. The “percentage imputed” is the “number missing” divided by the “number eligible”, and is unweighted.

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## VIII. USING THE NBS RESTRICTED ACCESS AND PUBLIC USE FILES

### A. File Content and Technical Specifications

The NBS-General Waves Round 7 Restricted Access File contains 9,093 records and 2,353 variables. Variables on the data file are preceded by an R7 to identify them as Round 7 variables. Variables are positioned on the file in the following order:

1. **Survey administration variables.** These variables are related to survey administration, including respondent type identifiers and other variables associated with conduct of the survey.
2. **Sampling variables and weights.** These variables include administrative variables used for sampling purposes and administrative data that provide additional descriptive information about the sample.
3. **Variables from Sections A through M of the NBS questionnaire.** These variables are ordered within each section by related questionnaire item number. Constructed variables created from source variables within a section are ordered at the end of each section. Two constructed variables contain information from SSA administrative data.
4. **SSA administrative data.** These variables include a select set of data from SSA administrative records.

The Restricted Access File is available in a SAS “sas7bdat” format database. The Restricted Access File has the following technical specifications:

- Data set name: R7NBSRAF
- Number of observations: 9,092
- Number of variables: 2,412
- Date last created: October 20, 2021

The Public Use File has the following technical specifications:

- Data set name: R7NBSPUF
- Number of observations: 9,092
- Number of variables: 1,042
- Date last created: October 20, 2021

### B. Choosing a Sample and Weight Variable

As discussed in Chapter II, weights were created for the National Representative Beneficiary Sample to allow estimates of the national beneficiary population. The weights should be used when performing any analysis. Due to the design of the NBS and the variation of weights within sampling strata, the use of unweighted rather than weighted data in the analysis will provide incorrect results. The weight variable for the RBS is named R7\_WTR7\_BEN; for the cross-sectional SWS the weight variable is named R7\_WTR7\_CSSWS; and for the longitudinal SWS the weight variable is R7\_WTR7\_LNGSWS. Analysts wanting to incorporate sample data from both the RBS and cross-sectional SWS together can use

R7\_WTR7\_COM.<sup>96</sup> The weights account for the sampling method, data collection method, and the survey's target population.

### C. Estimating Sampling Variance for NBS

The sampling variance of an estimate derived from survey data for a statistic (such as a total, a mean or proportion, or a regression coefficient) is a measure of the random variation among estimates of the same statistic computed over repeated implementation of the same sample design with the same sample size on the same population. The sampling variance is a function of the population characteristics, the form of the statistic, and the nature of the sampling design. The two general forms of statistics are linear combinations of the survey data (for example, a total) and nonlinear combinations. The latter include the ratio of two estimates (for example, a mean or proportion in which both the numerator and denominator are estimated) and more complex combinations, such as regression coefficients. For linear estimates with simple sample designs (such as a stratified or unstratified simple random sample) or complex designs (such as stratified multistage designs), explicit equations are available to compute the sampling variance. For the more common nonlinear estimates with simple or complex sample designs, explicit equations generally are not available, and various approximations or computational algorithms provide an essentially unbiased estimate of the sampling variance.

The NBS—General Waves sample design involves stratification and unequal probabilities of selection. Variance estimates calculated from NBS—General Waves data must incorporate the sample design features to obtain the correct estimate. Most procedures in standard statistical packages, such as SAS, STATA, and SPSS, are not appropriate for analyzing data from complex survey designs, such as the NBS—General Waves design. These procedures assume independent, identically distributed observations or simple random sampling with replacement. Although the simple random sample variance may approximate the true sampling variance for some surveys, it likely underestimates substantially the sampling variance with a design as complex as that used for the NBS—General Waves. Complex sample designs have led to the development of a variety of software options that require the user to identify essential design variables such as strata, clusters, and weights.<sup>97</sup>

The most appropriate sampling variance estimators for complex sample designs such as the NBS—General Waves are the procedures based on the Taylor series linearization of the nonlinear estimator that use explicit sampling variance equations and procedures based on forming pseudo-replications<sup>98</sup> of the sample. The Taylor series linearization procedure is based on a classic statistical method in which a nonlinear statistic may be approximated by a linear combination of the components within the statistic.

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<sup>96</sup> The composite weight for the combined sample does not incorporate cases from the longitudinal SWS; analyses that use R7\_WTR7\_COM will exclude the longitudinal population of successful workers.

<sup>97</sup> A web site that reviews software for variance estimation from complex surveys, created with the encouragement of the Section on Survey Research Methods of the American Statistical Association, is available at <https://www.hcp.med.harvard.edu/statistics/survey-soft/>. The site lists software packages available for personal computers and provides direct links to the home pages of the packages. The site also contains articles and links to articles that provide general information about variance estimation as well as links to articles that compare features of the software packages.

<sup>98</sup> Pseudo-replications of a specific survey sample, as opposed to true replications of the sampling design, involve the selection of several independent subsamples from the original sample data with the same sampling design. The subsamples may be random (as in a bootstrap) or restricted (as in balanced repeated replication).

The accuracy of the approximation depends upon the sample size and the complexity of the statistic. For most commonly used nonlinear statistics (such as ratios, means, proportions, and regression coefficients), the linearized form has been developed and has good statistical properties. Once a linearized form of an estimate is developed, the explicit equations for linear estimates may be used to estimate the sampling variance. The sampling variance may be estimated by using many features of the sampling design (for example, finite population corrections, stratification, multiple stages of selection, and unequal selection rates within strata). This is the basic variance estimation procedure used in all SUDAAN procedures as well as in the survey procedures in SAS, STATA, and other software packages that accommodate simple and complex sampling designs. To calculate the variance, sample design information (such as stratum, analysis weight, and so on) is needed for each sample unit.

Currently, several survey data analysis software packages use the Taylor series linearization procedure and explicit sampling variance equations. Therefore, we developed the variance estimation specifications needed for the Taylor series linearization (PseudoStrata and PseudoPSU). Appendix K provides example code for the procedure with SAS and the survey data analysis software SUDAAN.<sup>99</sup> Details about SAS syntax are available from the SAS Institute (2015). Details about SUDAAN syntax are available from RTI International (Research Triangle Institute 2014).

#### D. Codebook

To aid the user, Mathematica developed a codebook for the Restricted Access File: “The National Beneficiary Survey--General Waves: Round 7 Restricted Access File Codebook” (McDonald et al. 2021). This codebook is available from SSA to Restricted Access file users. The Public Use File codebook will be available on SSA’s website (<https://www.ssa.gov/disabilityresearch/publicusefiles.html>).

The codebooks provide extensive documentation for each variable on 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. The codebooks include frequency distributions and means as appropriate.

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<sup>99</sup> The example code provided in Appendix K is for simple descriptive statistics using the procedures DESCRIP in SUDAAN and SURVEYMEANS in SAS. Other procedures in SAS (SURVEYREG, SURVEYFREQ, and SURVEYLOGISTIC) and in SUDAAN (CROSSTAB, REGRESS, LOGISTIC, MULTILog, LOGLINK, and SURVIVAL) are available for complex analyses. Given that SUDAAN was created specifically for survey data, the range of analyses that may be performed with these data in SUDAAN is much wider than that in SAS.

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## **Appendix A**

### **Total Survey Error and the National Beneficiary Survey—General Waves**

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## I. Introduction

Total Survey Error (TSE) is a framework for systematically considering the accumulation of error across different phases of the survey process, including survey design, administration, data processing, and data analysis (Biemer 2010). At each phase, errors in coverage, specification, nonresponse, measurement, and data processing can negatively impact data quality and increase the bias and variance of population estimates, resulting in questionable findings. We designed the National Beneficiary Survey—General Waves data collection to minimize the size of these errors within the cost constraints of the survey. In doing so, we identified the sources of error most likely to affect estimates for this population and survey and focused on design features that would mitigate these errors, keeping in mind that tradeoffs often occur in the process of error reduction. For example, increasing efforts to persuade reluctant sample members can result in larger measurement error and increase bias in estimates.

We focus this discussion on nonsampling error, which is not related to sampling or coverage error (error that occurs when the sampling frame does not represent the target population). In Table A.1, we provide a brief description of the different types of nonsampling error, as described by Biemer (2010). We did not discuss errors related to sampling because we assume this type of error is minimal in the NBS.

**Table A.1. Sources of error**

Sources of error	Description
Specification	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.
Unit nonresponse	Error that occurs when the selected sample member is unwilling or unable to participate (failure to interview). Can result in increased variance and potential for bias in estimates if nonresponders have different characteristics than responders.
Item nonresponse	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). Can result in increased variance and potential bias in estimates if nonresponders have different characteristics than responders.
Measurement error	Errors that occur as a result of the respondent or interviewer providing incorrect information (either intentionally or unintentionally). May result from inherent differences in interview mode.
Data processing errors	Errors in data entry, coding, weighting, and/or analyses.

In the case of the NBS, we made efforts to reduce errors stemming from all of these sources, but placed particular importance on reducing unit nonresponse and measurement error. We did this largely because persons with disabilities, particularly those receiving SSI, are often hard to reach and interview. Additionally, sample members had a wide range of disabilities, including physical and cognitive impairments. We were keenly aware of the need to design the survey in a way that would minimize errors in reporting. For example, a respondent with a cognitive impairment may inaccurately report information because he or she is unable to remember specific dates, times, or the amount of money received from different sources, thus introducing the potential for measurement error. Similarly, an individual with a physical limitation that causes fatigue may become tired during the survey effort and misreport information. Alternatively, someone answering the survey on behalf of the sample person may provide different responses than the individual would have given. Thus, we designed the survey with accessibility in mind and weighed the cost and benefits of approaches to foster inclusion and adequate representation

of this population. We paid special attention to the instrument design, reducing barriers to survey response, and interviewing procedures. In Table A.2, we summarize the key sources of error identified on the NBS, our procedures for mitigating each error, and our assessment of its relative impact on data quality. We follow with a detailed discussion of each source of error and the efforts taken to minimize impact on the survey data.

**Table A.2. Key sources of error and relative impact on data quality**

Potential source of error	Mitigation	Assessment of relative impact on NBS data quality and priority <sup>100</sup>
Unit nonresponse	Assurances of confidentiality \$30 incentive Dual mode Intensive locating effort before and during field period Refusal avoidance Use of proxy and accommodations Computed adjusted weights	Medium
Item nonresponse	Assurances of confidentiality Offering ranges rather than mandating a numeric response Allowing interviewer to assist with arithmetic Include definitions and probes	Low
Specification error	Cognitive testing of items and pretesting Interviewing debriefing and revisions between rounds Use of validated questions	Low

<sup>100</sup> We based prioritization on the extent to which we were able to mitigate each potential source of error prior to the initiation of data collection. We could typically observe sources of error having a low impact on data quality and were able to remedy the situation. We believe these sources of error have had minimal effects on data quality. We also believe medium impact items may have had some impact on data quality, despite the mitigation strategies employed. In some cases, these sources of error are difficult to identify proactively.

Table A.2 (continued)

Potential source of error	Mitigation	Assessment of relative impact on NBS data quality and priority <sup>100</sup>
Measurement error	<p><b>Respondent based</b></p> <ul style="list-style-type: none"> <li>Instrument design</li> <li>Use of assistant or proxy</li> <li>Interviewer encouragement and check-ins</li> <li>Use of hard and soft edits</li> <li>Assurances of confidentiality</li> </ul> <p><b>Interviewer based</b></p> <ul style="list-style-type: none"> <li>Interviewer recruitment, hiring, and training</li> <li>Intensive interviewer monitoring (CATI)</li> <li>Interviewer debriefing and re-training, as necessary</li> </ul> <p><b>Instrument related</b></p> <ul style="list-style-type: none"> <li>Cognitive testing and pretesting</li> <li>Early frequency review</li> <li>Instrument testing</li> <li>Instrument identical in each mode</li> </ul> <p><b>Environment related</b></p> <ul style="list-style-type: none"> <li>Reduction of noise distractions</li> <li>Working with respondent availability</li> </ul>	Medium

## II. Sources of Error

### A. Unit nonresponse

Unit nonresponse occurs when a sample member does not participate in the survey. This may occur because the sample member does not want to participate (refuses), has an impairment that precludes participation, or simply cannot be located. When unit nonresponse is high, there is potential for bias if responders have different characteristics than nonresponders. For example, if unit nonresponse is high among individuals with more severe disabilities, the results about employment may be biased.

#### **Minimizing unit nonresponse on the NBS**

- The NBS was designed as a dual-mode survey to provide varied opportunities to find, contact, and interview beneficiaries. Mathematica made all initial attempts by telephone using Computer-Assisted Telephone Interviewing (CATI). If we could not locate and contact a sample person by telephone, a field locator was deployed to make contact in person. Once located, the field locator attempted to facilitate an interview with the sample person via CATI, using a staff cell phone to call into the data collection center. If a sample member could not complete the interview by telephone in this manner due to his or her disability, trained field staff could conduct the interview in person using Computer-Assisted Personal Interviewing (CAPI) (for clustered SWS cases and RBS cases). We reserved the CAPI mode for situations in which respondents were unable to complete the interview by telephone. In Round 7, no respondents requested the use of CAPI. Using field locators and interviewers only as a follow-up for nonresponders offered significant cost savings and provided a balance between cost and maximizing response.
- Interviewers were trained extensively in refusal avoidance techniques. This included reviewing frequently asked questions as well as role-playing refusal avoidance. During CATI interviewing, monitors provided interviewers with real-time feedback and suggestions related to refusal avoidance. In addition, field managers maintained regular contact with field locators and interviewers and provided recommendations for gaining the sample members' cooperation. In our refusal conversion effort, we mailed refusal conversion letters to sample members who declined being interviewed.
- We conducted extensive locating efforts in advance of and throughout the data collection period. This included LexisNexis/Accurint searches prior to and during the data collection period, reverse directory look-ups, and intensive case-by-case efforts by in-house locating staff. If a telephone number could still not be located, we sent the case to a field interviewer for in-person locating. On average, we spent an hour of effort on cases that required locating.
- An advance letter mailed to all sample members prior to data collection promised a \$30 monetary incentive to help reduce nonresponse. In each correspondence, we assured sample persons that their individual responses would be kept confidential. We reiterated this at the start of the interview and as needed throughout.

We attempted to reduce barriers to participation in the survey by providing options to conduct the survey using Telecommunications Relay Service (TRS) or interviewing the sample individual in person.

- If a sample member could not respond to the survey due to a severe cognitive impairment, we permitted an assisted or proxy interview. We determined the need for such an interview using an innovative cognitive screener administered to all sample members prior to the start of the survey.<sup>101</sup>
- We computed adjusted weights for two phases of nonresponse (location and completion). In our experience with the NBS, factors associated with the inability to locate a person tend to differ from factors associated with cooperation. The unlocated person generally does not deliberately avoid or otherwise refuse to cooperate. For instance, that person may have chosen not to list his or her phone number or may frequently move from one address to another, even though there is no evidence to suggest that, once located, he or she would show a specific unwillingness to cooperate with the survey. Located nonrespondents, on the other hand, may deliberately avoid the interviewer or express displeasure or hostility toward surveys in general, or SSA in particular. Thus we calculated the adjustment factor in two stages: (1) by estimating a propensity score for locating a sample member and (2) by estimating a propensity score for response among these located sample members. We have made available a full discussion of the impact of nonresponse bias and adequacy of the nonresponse adjustments in the National Beneficiary Survey Round 7: Nonresponse Bias Analysis (Grau et al. 2021).

## B. Item nonresponse

Item nonresponse occurs when a respondent indicates that he or she does not know the answer to a question or refuses to provide an answer to the question. High levels of nonresponse on a particular survey item can result in increased variance of the estimate for that item and, when nonresponse is sufficiently high, the end user can render the survey item useless.

Item nonresponse occurs for a myriad of reasons including, but not limited to, a true lack of knowledge, lack of desire to answer items perceived as “too personal,” inability to comprehend the question, inability to recall specific information, difficulty providing responses within the prescribed response categories, or disinterest in the survey item.

### Approaches to minimizing item nonresponse on the NBS

- Although few items in the NBS were sensitive, items were included that asked respondents to report on alcohol and drug use and on earnings. To alleviate concerns about sharing sensitive information with SSA or other external parties, we assured respondents at the beginning of the interview that all the information they provided would be kept confidential, and interviewers reiterated this as necessary during the interview.
- If respondents refused to answer, or responded “don’t know” to questions about earnings, we probed with a follow-up question asking respondents to identify in which range their income fell.
- Within the survey instrument, we made probes and definitions available to the interviewer to read, as necessary. For example, sample members are often unclear about whether they have Medicare or Medicaid insurance and may require additional information to help them answer the question.

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<sup>101</sup> At the beginning of the survey, we asked sample members three questions focused on the topics of the survey and the concepts of confidentiality and voluntary participation. We then asked them to restate the information, in their own words. If the sample member fails to accurately restate the information for one or more items, we obtained a proxy.

- We allowed sample members to receive assistance with survey questions if they lacked the information necessary to answer the question. For example, a sample member may not know what month and year he or she started a particular program. If a knowledgeable person was available at the interview, we allowed the sample member to ask the person for help answering the item.
- We administered the NBS data collection instruments with computer-assisted interviewing (CAI) technology, which allowed the use of automated routing to move to the applicable questions and perform checks of the entered data for consistency and reasonableness during the interview. In addition, because CAI does not permit a question to be left blank, the interviewer could not proceed until an appropriate response was entered. (We included “don’t know” and “refused” as response options and used as necessary.) These processes substantially reduced the extent of item nonresponse for this survey, although some nonresponse persisted when, for example, the interviewer recorded a “don’t know” or “refused” as a response. For key items that we identified in advance as critical to analyses, we imputed missing data primarily using two methods of imputation to compensate for item nonresponse: deductive (or logical) imputation and unweighted hot-deck imputation.

We would like to note that we did not ask proxy respondents certain subjective questions that pertained to satisfaction with services and what respondents knew and did not know about specific programs. We did this to minimize bias resulting from measurement error because proxies would not be able to report accurately on such items. However, doing so resulted in higher nonresponse for these items. Additionally, it is possible that more impaired respondents (those who required a proxy) would have systematically reported more or less satisfaction with or knowledge of services than those who responded to these items. We are not certain if this bias occurred and, if so, in what direction.

### C. Specification error

Specification error occurs when the intended concept of a question is not what the respondent actually considers when formulating a response. This can result in data that lack internal validity; that is, we did not measure what was intended to be measured.

#### **Approaches to minimizing specification error on the NBS**

- Developers of the initial NBS included cognitive and pretest testing to determine how respondents interpreted key questions before responding.<sup>102</sup> We made modifications to the questionnaire based on these initial findings. We made additional modifications prior to Round 6 of the General Waves to accommodate changes in reference periods and in federal programs.
- Whenever possible, we used existing and well-validated items making minor modifications as needed to suit the population and topic. We took many questions from SSA surveys or from other federal agency-conducted surveys. We obtained others, such as the SF-8<sup>TM</sup> scale, with licensing agreements.
- In the early stages of NBS interviewing, both CATI and CAPI interviewers participated in a series of debriefings designed to provide the research team with more information about what was working well with the survey and whether there were still items that were difficult or confusing for the respondent to answer. Based on these discussions, we added probes and definitions to clarify questions, if needed.

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<sup>102</sup> Westat conducted cognitive testing under a separate contract.

- We translated the NBS into Spanish and trained and certified bilingual interviewers to administer the instrument to minimize language comprehension problems for Spanish-speaking respondents. In 117 cases across the RBS and SWS, the potential respondent could not complete the language in either English or Spanish. Because there were so few cases, we did not attempt to conduct interviews with these respondents. Bias may result from excluding these sample members; however, we believe error resulting from this source is negligible, given the low occurrence.

## D. Measurement error

Measurement error occurs when the response provided differs from the real value. Such error can be the result of characteristics or actions of the respondent or interviewer or characteristics of the survey instrument or the environment. In this section, we discuss each source (respondent, interviewer, instrumentation, and environment) and follow with a description of efforts taken to minimize their impact in the NBS.

### 1. Respondent-based measurement error

Respondents may contribute to TSE by providing, knowingly or unknowingly, inaccurate responses to survey questions. This can occur for many reasons, including challenges associated with recall, a desire to please the interviewer, or a lack of interest in the survey. Our particular focus with this survey was on reducing respondent-based measurement error because many NBS sample members had mental and physical impairments that could make processing of information and providing a response difficult. Such impairments included brain injuries, intellectual disabilities, autism, psychiatric disorders, and hearing and speech impairments. Our challenge was to collect detailed, accurate information during a lengthy interview from individuals with a variety of health conditions and impairments. We identified several barriers to successful interviewing, including cognitive and stamina issues, and identified methods to overcome them.

#### Approaches to minimizing respondent-based measurement error on the NBS

- An important component of offsetting cognitive and stamina barriers was careful attention to instrument design, including the use of structured probes, simplifying questionnaire wording, and adding suggested stopping points. We also conducted specialized interviewer training designed to sensitize interviewers to common challenges associated with telephone interviews of persons with disabilities. In addition, as mentioned above, we trained interviewers to identify and use appropriate accommodations such as TRS and amplifiers to minimize challenges associated with interviewing persons with speech or hearing impairments.
- When necessary, we allowed respondents to receive assistance from someone knowledgeable (such as a parent or other family member) for items that were particularly challenging, such as providing names of services received, amount of earnings, insurance type, and so on. For some items, we allowed the interviewer to assist the respondent with mathematical calculations. For example, we allowed the interviewer to sum values the respondent provided to generate the single monetary amount to enter as the response.
- If a respondent's cognitive barrier was such that we had reason to doubt his or her ability to comprehend the nature of the survey, we sought a proxy respondent. We determined this through the administration of a cognitive screener (administered to all respondents) or through information gathered by a knowledgeable gatekeeper. We wish to note that the cognitive screener we used for the

NBS has not been formally validated against another comparable measure. Thus, although the purpose of the screener was to standardize interview assessments of respondents' cognitive abilities, we do not know how many false positives (screening people out who could have completed the survey) and false negatives (screening people who may not have understood the survey question) we obtained. We do not know the extent to which this may have contributed to measurement error. Bias may have been introduced by proxies who provided information that was not as accurate as what the sample person could have provided on his or her own. Conversely, a sample member may have provided erroneous answers if they participated when he or she did not comprehend the questions.

- Respondents, particularly those with severe health impairments, may become fatigued or disinterested during the survey. As a result, they may not fully process each question, but rather simply provide the same response to a series of like items, regardless of the accuracy of their responses. We trained interviewers to recognize the signs and to “check in” with the respondent to see if a rest break was needed or to encourage participation to complete the survey, if nearing the end of the survey. We also trained interviewers to set call-back appointments for times in which the respondent would be most alert, and to break the interview into segments, rather than completing it in one session, when necessary.
- We included items in the NBS that asked respondents about events that had occurred in the prior year. We employed several techniques to aid respondent recall, including pre-filling state agency names, dates, state Medicaid names, and names of providers from which the respondent received services. In addition, we assured respondents that their best estimates were fine when they were asked to provide earnings or income information and we allowed them to report in whatever unit was easiest for them (for example, hourly, weekly, biweekly, monthly, or annual income).
- We incorporated hard and soft edits into the survey instrument to identify potential errors in respondent reporting as well as potential error in interviewer data entry. If a respondent reported discrepant information or an out-of-range value, a soft or hard edit would appear, instructing the interviewer to further question the respondent to gather the current information (or to note an exception explaining the reported information).
- Finally, to reduce beneficiaries' concerns that we will share individual responses with SSA or others beyond the project team, we sent an advance letter to all sample persons assuring beneficiaries that their individual responses would be kept confidential. Interviewers reiterated this at the start of the interview and as needed throughout.

## **2. Interviewer-based measurement error**

Interviewers can also negatively impact data quality. Simple examples of this are when an interviewer does not read an optional probe that could be useful to the respondent, and when no probe is available and the interviewer decides to explain, in his or her own words, the meaning of the question. In both instances, the respondent's ability to answer accurately is jeopardized because, in the former case, there is a lack of clarifying information and, in the latter case, a respondent could potentially give the wrong information. Only through careful interviewer recruitment, hiring, training, supervision, monitoring, and feedback can interviewer error be minimized.

### **Approaches to minimizing interviewer-based measurement error on the NBS**

In a first step towards reducing interview-based error, we recruited and hired high-quality interviewers. The vast majority of CATI and CAPI interviewers had experience interviewing on previous rounds of the

NBS or had worked on other disability-related projects at Mathematica. We selected interviewers on the basis of their performance on comparable studies, expertise in locating and gaining cooperation from sample members, demonstrated reliability, skills in communication and accurate reading and recording, and an aptitude for the administrative and reporting requirements of survey work. We made certain that all interviewers went through criminal background checks and received security clearance from SSA.

- Interviewer training was intensive and thorough. When first hired, Mathematica provides interviewers with an eight-hour training in the best practices of standardized interviewing. In addition to basic interviewing techniques, interviewers practice how to engage respondents by stating the purpose and the importance of the survey and by stressing confidentiality. Interviewers also develop the skills needed to collect accurate and complete data: reaching the correct respondent and recording answers carefully and completely. Training also covers recording the results of each contact attempt into the CATI system and using this information effectively in a subsequent contact attempt. In addition, Mathematica provided telephone interviewers with a two-day training, and in-person interviewers received a two-day, project-specific training. In training, we covered the following: a general project overview, a description of data collection and the sample, sensitivity awareness related to interviewing persons with a disability, frequently asked questions and refusal avoidance, conducting assisted and proxy interviews, probing for medical condition, probing for occupation, and a question-by-question walkthrough of the instrument. We provided in-person locators and interviewers with additional training on field-related activities, such locating and tablet management. We also required interviewers were required to pass a certification process before they were qualified to conduct interviews.
- During data collection, the Survey Operations Center supervisors and members of the research team continuously monitored the telephone interviewers. They monitored a minimum of 10 percent of all calls each telephone interviewer made by listening to live and recorded interviews, and viewing CATI screen movement. They recorded information about communication with the sample member or proxy (verbal clarity, ease of dialogue), data entry accuracy, and any problems that they observed or heard, and provided feedback to interviewers immediately at the end of the interview.
- We did not monitor in-person field interviewers live. Because in-field monitoring is costly (involving sending a second interviewer on visits or special equipment), we instead required all interviewers to be certified before interviewing began and validated all of the field interviews. During the certification process, we required interviewers to practice several mock interviews with a trainer (including activities that should occur before and after interviewing, per the interviewing protocol). Once judged proficient by an interviewing supervisor, the supervisor deemed the interviewer certified. Validation of interviews involved contacting respondents (by mail and phone) and asking questions about the length of the interview, the types of questions asked, and whether a computer was used. If a respondent reported information that raised concerns; for example, interview took 10 minutes or no computer was used, the interviewer's field manager contacted the interviewer for an explanation. Field managers found no interviews to be fraudulent.

### **3. Instrument-related measurement error**

A poorly designed instrument can increase measurement error. Questions lacking clarity, confusing instructions, and terms that are easily misunderstood can result in respondents reporting erroneous information or interviewers providing unclear instructions. Further, because NBS was administered via

both CATI and CAPI, programming errors and mode effects could have contributed to overall survey error.

#### **Approaches to minimizing instrument-related measurement error on the NBS**

- As mentioned previously, in prior rounds, we put the survey through extensive cognitive testing and pretesting prior to fielding. Pretesting allowed a full review of the interviewing process, including the introduction, screening respondents, and conducting the full interview.
- Mode of data collection, telephone versus in person, may result in differences in the quality of data collected. To minimize mode effects for this survey, the questionnaire was identical in each mode. Because both modalities involved an interviewer and few items were sensitive, we expected mode effects to be minimal.
- We conducted intensive testing of both the CATI and CAPI instruments prior to the start of data collection to minimize errors associated with programming. In Round 5 testing, we focused on changes made to the instrument since the previous data collection round. We gave testers testing scenarios and asked them to note issues regarding skip patterns, prefill information, question wording, and answer options. Once testing was completed, programmers made modifications and we conducted a final review.
- We conducted a frequency review of the first 293 completed cases, which focused on identifying both potential skip-pattern and data-entry issues. We addressed problems through programming changes or interviewer retraining. We conducted additional frequency reviews throughout the data collection period.

#### **4. Environment-related measurement error**

In some cases, the environment may impact the respondent's ability to be attentive and provide accurate responses or the interviewer's ability to conduct the interview in a smooth, coherent fashion. For example, a respondent holding a crying baby during the interview will likely distract both the respondent and the interviewer and can make questions difficult to hear, process, and answer. The result could be high levels of item nonresponse or the provision of erroneous information by the respondent.

#### **Approaches to minimizing environmental-related measurement error on the NBS**

- We trained interviewers to assess the environment before and during the interview to determine whether a noise distraction such as other individuals in the area or a television was interfering with the interview process. If the interviewer determined that such a distraction existed, interviewers made every attempt to change the environment through polite suggestions, such as relocating to another available space or asking if the distraction could be minimized for the duration of the interview.
- We also trained interviewers to conduct the interview at a convenient time for the sample member and to suggest a call-back if respondents did not want to participate when called or needed to stop the interview before finishing.
- Ensuring respondents' privacy during the interview was essential to gathering accurate answers. We trained interviewers to be aware of cues that the respondent was concerned that others could hear their responses. If such instances occurred, interviewers suggested changing the conditions of the interview, such as relocating to a different part of the house or turning away from an area.

## 5. Data processing error

Errors in data processing can occur as a result of errors in data entry, coding, or weighting or analysis activities.

### Approaches to minimizing data processing errors on the NBS

- We incorporated a number of hard and soft edits into the CAI program to minimize data entry errors during the interview. For example, if the interviewer entered a date in the future, a hard edit appeared that prompted him or her to correct the mistake. If a respondent reported a large discrepancy between pre- and post-tax pay, a soft edit appeared prompting the interviewer to confirm what he or she had entered.
- Several questions in the NBS required coding of verbatim response, including items about disabling conditions, occupation and industry, and items allowing an “other” response. To ensure consistent coding of verbatim responses, we conducted a comprehensive coder training. Research staff or an operations supervisor reviewed a minimum of 10 percent of all coded items. Coders referred all questions to a supervisor and then logged coding decisions for future reference. Details of the coding procedures can be found in the National Beneficiary Survey Round 7: Editing, Coding, Imputation, and Weighting Procedures (Grau et al. 2021).
- Although developers programmed (in Blaise) the questionnaire to delete all responses that go off-path if an interviewer backs up and changes a response, we wanted to ensure that all such data were cleared from the instrument. Consequently, we conducted an intensive review of the survey data, including running several edit checks to identify consistency or skip-pattern problems. We edited improbable or out-of-range responses and imputed missing data on key items. If we identified systematic errors, we revised items in subsequent rounds.
- As part of a quality-assurance process, a senior statistician reviewed code used to create participant, beneficiary, and combined weights, as well as imputation code. In some cases, the review resulted in revising the code and recreating weights or imputed values, while others required further explanation by the project statistician.

### III. The Impact of TSE on Data Quality for the NBS

The cumulative impact of TSE is difficult to measure. To evaluate the impact of TSE on NBS estimates, we examined various indicators of data quality where we reasonably could, namely for the purposes of assessing the impact of unit nonresponse, item nonresponse, and measurement error.

#### A. Unit nonresponse

Because we obtained fewer than the targeted number of completes in most sampling strata at Round 7 and achieved low response rates relative to Rounds 1 through 4, we were particularly concerned about unit nonresponse error and bias. We conducted nonresponse bias analyses at the conclusion of data collection for both the RBS and SWS, using all 11,299 sample cases in the RBS, all 8,590 sample cases in the cross-sectional SWS, and 3,712 sample cases in the longitudinal SWS, to determine if there were systematic differences between respondents and nonrespondents that could result in nonresponse bias (Grau et al. 2021). In sum, our analysis indicates that differences did exist between responders and nonresponders among variables that were not controlled for in the sample design. However, the nonresponse adjustments to the weights alleviated all known differences observed in the samples. Some estimates from respondents using nonresponse-adjusted weights differed from the values in the sampling frame, but these mirrored differences that existed between the sampling frame and the entire sample using the initial sampling weights.

#### B. Item nonresponse

As we expected, item nonresponse was not substantial. It was less than 5 percent for all items, with the exception of those asking for wages and household income. (Household income was the highest with 37 percent missing data.) We imputed missing data for key items that had been identified in advance as critical to analyses.

#### C. Measurement error

We have little ability to evaluate the impact of measurement error on the NBS. The best test would be to compare survey responses to an external data source such as SSA administrative data. However, few items are available for this type of analysis (namely insurance type and participation in SSA programs).

In Round 4 of the NBS, we conducted an experiment to compare data collected via CATI and CAPI as a means to assess the impact of interview mode on quality.<sup>103</sup> Evidence from this study suggests that mode of interview had a modest impact on data quality for this population.

In Round 7, no respondents requested a CAPI interview. This eliminated mode effects because all interviews were completed by telephone.

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<sup>103</sup> Mathematica, in a separate contract with the National Institute on Disability and Rehabilitation Research, now known as the National Institute on Disability, Independent Living, and Rehabilitation Research, funded this experiment.

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## **Appendix B**

### **Availability of NBS Variables on The Restricted Access and Public Use Data Files**

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**Table B.1. Availability of NBS variables on the restricted access and public use data files**

Variable Name	Variable Label	Restricted Access	Public Use
R7_SID	Study ID	X	X
R7_PIN	PIN	X	
R7_caseid_pub	Case ID	X	X
R7_FINAL	Final Status Code	X	
R7_LASTDATE	Interview Date	X	
R7_C_INTDAY	Day of Interview	X	
R7_C_INTMNTH	Month of Interview	X	
R7_C_INTYEAR	Year of Interview	X	
R7_C_RTYPE	SM or Proxy interview	X	X
R7_C_RESPTYPE	Assistance Required by SM or Proxy	X	X
R7_PROXY_FLAG	Proxy Flag	X	
R7_C_INTMODE	CATI or CAPI Interview Mode	X	
R7_INTERVIEWLANGUAGE	Interview Language	X	
R7_C_INTAGE	Age at Interview	X	
R7_C_INTAGE_PUB	Age at Interview (Public)	X	X
R7_ORGSAMPINFO_DOB	Sample Date of Birth from SSA administrative records	X	
R7_ORGSAMPINFO_SDATE	Date Sample Frame Pulled	X	
R7_ORGSAMPINFO_SSIage	Sample Age First Received SSI Benefits	X	
R7_ORGSAMPINFO_PSU	Sample PSU	X	
R7_ORGSAMPINFO_EXTRACT	SWS Sample Extract	X	
R7_ORGSAMPINFO_RELEASE	Sample Release Number	X	
R7_ORGSAMPINFO_BSTATUS	Sample Benefit Type	X	X
R7_ORGSAMPINFO_AGE	Sample Age	X	
R7_OrgSamplInfo_PrimDiagT16	PRIMARY DIAGNOSIS-T16	X	
R7_OrgSamplInfo_PrimDiagT2	PRIMARY DIAGNOSIS-T2	X	
R7_OrgSamplInfo_SecDiagT16	SECONDARY DIAGNOSIS-T16	X	
R7_OrgSamplInfo_SecDiagT2	SECONDARY DIAGNOSIS-T2	X	
R7_ORGSAMPINFO_HISPANIC	Sample Hispanic or Non-Hispanic	X	X
R7_ORGSAMPINFO_RACE	Sample Race	X	
R7_ORGSAMPINFO_SEX	Sample Sex	X	X
R7_ORGSAMPINFO_SWS_SAM PLE	Cross-Sectional SWS sample (=1) or not (=0)	X	X
R7_ORGSAMPINFO_SWSFRAM E	SWS Frame	X	
R7_ORGSAMPINFO_LONGSAM P	R7 longitudinal SWS sample (=1) or not (=0)	X	X
R7_ORGSAMPINFO_STATUS6L EVEL	Disposition code	X	
R7_C_COHORT	Beneficiary Age Cohort	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_A_STRATA	Stratum for SUDAAN	X	X
R7_A_PSU	PSU identifier (after a_strata in NEST statement in SUDAAN)	X	
R7_A_PSU_Pub	Analytical PSU scrambled (Public)	X	X
R7_WTR7_BEN	R7 beneficiary weight	X	X
R7_WTR7_CSSWS	R7 cross sectional SWS weight	X	X
R7_WTR7_LNGSWS	R7 longitudinal SWS weight	X	X
R7_WTR7_COM	R7 combined weight	X	X
R7_A68	Reported Month of Birth	X	
R7_A68a	Reported Day of Birth	X	
R7_A68b	Reported Year of Birth	X	
R7_A69	Reported Age	X	
R7_A73	Respondent and Interview Type	X	
R7_A73A	Currently Working	X	
R7_A73B	Worked for Pay or Profit in Last 6 Months	X	
R7_A74	Resp Lists Topics of Survey (First Time)	X	
R7_A76	Resp Lists Topics of Survey (Second Time)	X	
R7_A77	Resp Understands Voluntary (First Time)	X	
R7_A77a	Resp Understands Voluntary (Second Time)	X	
R7_A78	Resp Understands Confidential (First Time)	X	
R7_A78a	Resp Understands Confidential (Second Time)	X	
R7_A86	New Proxy Lists Topics of Survey (First Time)	X	
R7_A88	New Proxy Lists Topics of Survey (Second Time)	X	
R7_A89	New Proxy Understands Voluntary (First Time)	X	
R7_A89a	New Proxy Understands Voluntary (Second Time)	X	
R7_A90	New Proxy Understands Confidential (First Time)	X	
R7_A90a	New Proxy Understands Confidential (Second Time)	X	
R7_A92	Proxy Failed Cognitive Test	X	
R7_B1	Limited b/c of Phys/Mental Condition	X	X
R7_B3	Limited by Other Phys/Mental Conditions	X	X
R7_B5	Currently Receiving Benefits	X	
R7_B7	Eligible for Other Reasons	X	
R7_B9	Received Benefits In Last 5 Yrs	X	X
R7_B11	Still Have Conditions That Made Elig	X	
R7_B13	Previously Eligible for Other Reasons	X	
R7_B16	Limited by Other Conds When First Received Benefits	X	
R7_B18_age	Age First Became Limited	X	
R7_B18_year	Year First Became Limited	X	
R7_B19	Limited Before 19	X	
R7_B22	Working For Pay When First Limited	X	X
R7_BP1	Able to do Same Kind of Work as Before Benefits	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_BP1b_1	Not Able to do Work b/c Health Condition	X	X
R7_BP1b_2	Not Able to do Work b/c Lacks Energy/Strength/Stamina	X	X
R7_BP1b_3	Not Able to do Work b/c Pain Interferes with Job or Work Sched. Stressful	X	X
R7_BP1b_4	Not Able to do Work b/c Job is Too Stressful	X	X
R7_BP1b_5	Not Able to do Work b/c Medical Apps. Interfere with Work	X	X
R7_BP1b_6	Not Able to do Work b/c Personal Care Interferes with Work	X	X
R7_BP1b_7	Not Able to do Work b/c Health is Unpredictable	X	X
R7_BP1b_8	Not Able to do Work b/c Unable to Get Needed Medical Treatment	X	X
R7_BP1b_9	Not Able to do Work b/c Unable to Get Medical Device	X	X
R7_BP1b_10	Other Reasons Not Able to do Work	X	X
R7_B23	Job Before Receiving Benefits Require Comp Use	X	X
R7_B24	Currently Working	X	
R7_B24_I	Currently Working, Imputed	X	X
R7_B24_IFLAG	Currently Working, Imputation Flag	X	
R7_B24b	Worked for Pay or Profit in Last 6 Months	X	X
R7_B24C	Interviewing Only People Working or who Worked in past 6 Months	X	
R7_B28	Looked for Work in Last 4 Weeks	X	X
R7_B28a	Looking for Part or Full Time Work	X	X
R7_B28b	Hours per Week Would Like to Work	X	
R7_B29_a	Contacted Unemployed Office to Look For Work	X	X
R7_B29_b	Contacted Friends/Relatives to Look For Work	X	X
R7_B29_c	Looked at Ads to Look For Work	X	X
R7_B29_d	Contacted State VR to Look For Work	X	X
R7_B29_e	Contacted Indep Living Center to Look For Work	X	X
R7_B29_f	Contacted Employ Agency to Look For Work	X	X
R7_B29_f1	Contacted Former Employer in Person, by Mail or Email, or by Phone to Look For Work	X	X
R7_B29_g	Contacted Employers to Look For Work	X	X
R7_B29_h	Did Something Else to Look For Work	X	X
R7_B29_1a	Received Any Job Offers within the Past 4 Weeks	X	X
R7_B29_1b	Turned Down Job Offered within Past 4 weeks	X	
R7_B29_2_a	Declined Job Offer b/c No Special Equipment or Devices	X	
R7_B29_2_b	Declined Job Offer b/c No Personal Assistance	X	
R7_B29_2_c	Declined Job Offer b/c No Help Caring for Others	X	
R7_B29_2_d	Declined Job Offer b/c No Reliable Transportation	X	
R7_B29_2_e	Declined Job Offer b/c No Flexible Schedule	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_B29_2_f	Declined Job Offer b/c Job Did Not Pay Enough	X	
R7_B29_2_g	Declined Job Offer b/c No Health Insurance Benefits	X	
R7_B29_2_h	Declined Job Offer b/c Would Have Lost Benefits (SS, Medicaid, etc.)	X	
R7_B29_2_i	Declined Job Offer for Other Reason	X	
R7_B29_3a	Lowest Wage/Salary Needed to Accept Job Declined	X	
R7_B29_3ahop	How Often Paid for Job Declined	X	
R7_B29_3b	Lowest Wage/Salary Needed to Accept Job if Offered	X	
R7_B29_3bhop	How Often Paid for Job if Offered	X	
R7_B29_4a	Hours per Week Expect to Work for Job Declined	X	
R7_B29_4b	Expect to Work Full or Part Time at Job Declined	X	
R7_B29_5	Contacted Someone to Find out How Benefits Affected if Took Job Declined	X	
R7_B29_6_1	Worried About Losing Private Disability Insurance if Took Job Declined	X	
R7_B29_6_2	Worried About Losing Workers' Compensation if Took Job Declined	X	
R7_B29_6_3	Worried About Losing Veterans' Benefits if Took Job Declined	X	
R7_B29_6_4	Worried About Losing Medicare if Took Job Declined	X	
R7_B29_6_5	Worried About Losing Medicaid if Took Job Declined	X	
R7_B29_6_6	Worried About Losing SSA Disability Benefits if Took Job Declined	X	
R7_B29_6_7	Worried About Losing Public Assistance if Took Job Declined	X	
R7_B29_6_8	Worried About Losing Food Stamps if Took Job Declined	X	
R7_B29_6_9	Worried About Losing Personal Assistance Services if Took Job Declined	X	
R7_B29_6_10	Worried About Losing Unemployment Benefits if Took Job Declined	X	
R7_B29_6_11	Worried About Losing Other State Disability Benefits if Took Job Declined	X	
R7_B29_6_12	Worried About Losing Other Government Programs if Took Job Declined	X	
R7_B29_6_13	Worried About Losing Other Benefits if Took Job Declined	X	
R7_B29_6_14	Worried About Losing Health Insurance (unspecified type) if Took Job Declined	X	
R7_B29_7_a	Unable to Find Job b/c no Special Equipment or Devices	X	X
R7_B29_7_b	Unable to Find Job b/c no Personal Assistance	X	X
R7_B29_7_c	Unable to Find Job b/c no Help Caring for Others	X	X
R7_B29_7_d	Unable to Find Job b/c no Reliable Transportation	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_B29_7_e	Unable to Find Job b/c Jobs Do Not Have Flexible Schedule	X	X
R7_B29_7_f	Unable to Find Job b/c no Jobs Qualified for	X	X
R7_B29_7_g	Unable to Find Job b/c Jobs Do Not Pay Enough	X	X
R7_B29_7_h	Unable to Find Job b/c Employers Won't Give Chance to Show Can Work	X	X
R7_B29_7_i	Unable to Find Job b/c no Health Insurance Benefits	X	X
R7_B29_7_j	Unable to Find Job b/c Would Lose Benefits	X	X
R7_B29_7_k	Unable to Find Job for Other Reason	X	X
R7_B29_8a	Lowest Wage/Salary Needed to Accept Job if Found One	X	
R7_B29_8ahop	How Often Paid if Found Job	X	
R7_B29_8b	Lowest Wage/Salary Needed to Accept Job if Found and Offered	X	
R7_B29_8bhop	How Often Paid if Job Found and Offered	X	
R7_B29_8c	Hours per Week Expect to Work at Job if Found and Offered	X	
R7_B29_8d	Expect to Work Full or Part Time at Job Found and Offered	X	
R7_B29_9	Contacted Someone to Find out How Benefits Affected if Found Job	X	
R7_B29_10_1	Worried About Losing Private Disability Insurance if Found Job	X	
R7_B29_10_2	Worried About Losing Workers' Compensation if Found Job	X	
R7_B29_10_3	Worried About Losing Veterans' Benefits if Found Job	X	
R7_B29_10_4	Worried About Losing Medicare if Found Job	X	
R7_B29_10_5	Worried About Losing Medicaid if Found Job	X	
R7_B29_10_6	Worried About Losing SSA Disability Benefits if Found Job	X	
R7_B29_10_7	Worried About Losing Public Assistance if Found Job	X	
R7_B29_10_8	Worried About Losing Food Stamps if Found Job	X	
R7_B29_10_9	Worried About Losing Personal Assistance Services if Found Job	X	
R7_B29_10_10	Worried About Losing Unemployment Benefits if Found Job	X	
R7_B29_10_11	Worried About Losing Other State Disability Benefits if Found Job	X	
R7_B29_10_12	Worried About Losing Other Government Programs if Found Job	X	
R7_B29_10_13	Worried About Losing Other Benefits if Found Job	X	
R7_B29_10_14	Worried About Losing Health Insurance (unspecified type) if Found Job	X	
R7_B25_a	Not Working b/c Phys/Mental Condition	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_B25_b	Not Working b/c Can't Find Job Qualified For	X	X
R7_B25_c	Not Working b/c Transportation Problem	X	X
R7_B25_d	Not Working b/c Caring for Someone	X	X
R7_B25_f	Not Working b/c Can't Find Job Want	X	X
R7_B25_g	Not working b/c Finishing School	X	X
R7_B25_h	Not working b/c Workplaces Not Accessible	X	X
R7_B25_i	Not Working b/c Lose Benefits	X	X
R7_B25_j	Not Working b/c Discouraging	X	X
R7_B25_l	Not Working b/c Others Don't Think Can Work	X	X
R7_B25_m	Not working b/c Employers Won't Give Chance	X	X
R7_B25_n	Not Working b/c No Special Equipment or Devices	X	X
R7_B25_o	Not Working b/c Need Help with Personal Care	X	X
R7_B25_p	Not Working b/c Cannot Get Help w/ Tasks at Work	X	X
R7_B25_q	Not Working b/c Lack skills	X	X
R7_B25_r	Not Working b/c Cannot find a job/job market is bad	X	X
R7_B26	Other Reasons Not Currently Working	X	X
R7_BP3_a	Not Working b/c Health Interferes with Job Performance	X	X
R7_BP3_b	Not Working b/c Lacks Physical Energy or Stamina for Work	X	X
R7_BP3_c	Not Working b/c Severe Pain Interferes with Job	X	X
R7_BP3_d	Not Working b/c Work at Job too Stressful	X	X
R7_BP3_e	Not Working b/c Work Would be Harmful to Health	X	X
R7_BP3_f	Not Working b/c Medical Apps. Interfere with Work Schedule	X	X
R7_BP3_g	Not Working b/c Time for Personal Care Interferes with Work Schedule	X	X
R7_BP3_h	Not Working b/c Health Unpredictable	X	X
R7_BP3_i	Not Working b/c Unable to get Needed Medical Treatment	X	X
R7_BP3_j	Not Working b/c of Any Other Reason	X	X
R7_B29_11a	Contacted Someone to Find out How Benefits Affected if Looked for Work	X	
R7_B29_11b_1	Worried About Losing Private Disability Insurance if Looked for Work	X	
R7_B29_11b_2	Worried About Losing Workers' Compensation if Looked for Work	X	
R7_B29_11b_3	Worried About Losing Veterans' Benefits if Looked for Work	X	
R7_B29_11b_4	Worried About Losing Medicare if Looked for Work	X	
R7_B29_11b_5	Worried About Losing Medicaid if Looked for Work	X	
R7_B29_11b_6	Worried About Losing SSA Disability Benefits if Looked for Work	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_B29_11b_7	Worried About Losing Public Assistance or Welfare if Looked for Work	X	
R7_B29_11b_8	Worried About Losing Food Stamps if Looked for Work	X	
R7_B29_11b_9	Worried About Losing Personal Assistance Services if Looked for Work	X	
R7_B29_11b_10	Worried About Losing Unemployment Benefits if Looked for Work	X	
R7_B29_11b_11	Worried About Losing Other State Disability Benefits if Looked for Work	X	
R7_B29_11b_12	Worried About Losing Other Government Programs if Looked for Work	X	
R7_B29_11b_13	Worried About Losing Other Benefits if Looked for Work	X	
R7_B29_11b_14	Worried About Losing Health Insurance (unspecified type) if Looked for Work	X	
R7_B29_12a	Lowest Wage/Salary Needed to Accept Job if Looked for Work	X	
R7_B29_12ahop	How Often Paid if Looked for Work	X	
R7_B29_12b	Hours per Week Expect to Work at Job if Looked for Work	X	
R7_B29_12c	Expect to Work Full or Part Time if Looked for Work	X	
R7_B30	Worked in 2018	X	X
R7_B30_b	Worked For Pay Since Receiving Disability Benefits	X	X
R7_B36	Ever Worked	X	
R7_B36b	Year Last Worked for Profit	X	
R7_B36c	Left Last Job Health Long Samp	X	X
R7_B36c_1_1	Health - Existing Health Problem Gets Worse (Last Job)	X	X
R7_B36c_1_2	Health - New Health Problem Starts (Last Job)	X	X
R7_B36c_1_3	Health - Got Injured (Last Job)	X	X
R7_B36c_1_4	Health - Job has Negative Impact on Health (Last Job)	X	X
R7_B36c_1_5	Health - Need to be Hospitalized (Last Job)	X	X
R7_B36c_1_6	Health - Needs Time to Go to Medical Apps. (Last Job)	X	X
R7_B36c_1_7	Health - Gets Fired for Missing Too Much Time for Apps. (Last Job)	X	X
R7_B36c_1_8	Health - Health Interferes with Job Performance (Last Job)	X	X
R7_B36c_1_9	Health - Lack Strength, Physical Energy, and Stamina (Last Job)	X	X
R7_B36c_1_10	Health - Pain Interferes with Working Set Schedule (Last Job)	X	X
R7_B36c_1_11	Health - Personal Care Takes Too Long (Last Job)	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_B36c_1_12	Health - Health Status Fluctuates Unpredictably (Last Job)	X	X
R7_B36c_1_13	Health - Do not have Special Equipment or Medical Devices (Last Job)	X	X
R7_B36c_1_14	Health - Work is Too Tiring/Stressful (Last Job)	X	X
R7_B36c_1_15	Health - Other (Last Job)	X	X
R7_B36d	Left Job Because of Job Long Samp	X	X
R7_B36d_1_1	Job - Job does not Pay Enough (Last Job)	X	X
R7_B36d_1_2	Job - Job does not Offer Health Insurance Benefits (Last Job)	X	X
R7_B36d_1_3	Job - Need a Different Schedule (Last Job)	X	X
R7_B36d_1_4	Job - Need Time for Medical Apps. (Last Job)	X	X
R7_B36d_1_5	Job - Got Fired for Missing Too Much Time for Apps. (Last Job)	X	X
R7_B36d_1_6	Job - Health Interferes with Job Performance (Last Job)	X	X
R7_B36d_1_7	Job - Lacks Strength, Physical Energy, or Stamina (Last Job)	X	X
R7_B36d_1_8	Job - Pain Interferes with Working Set Schedule (Last Job)	X	X
R7_B36d_1_9	Job - Personal Care Takes Too Long (Last Job)	X	X
R7_B36d_1_10	Job - Do not have Special Equipment or Medical Devices (Last Job)	X	X
R7_B36d_1_11	Job - Personality Conflicted With Others At The Job (Last Job)	X	X
R7_B36d_1_12	Job - Got Fired for Behavior (Last Job)	X	X
R7_B36d_1_13	Job - Other (Last Job)	X	X
R7_B36d_1_20	Job - Found Another Job (Last Job)	X	X
R7_B36d_1_22	Job - Seasonal/Temporary (Last Job)	X	X
R7_B36e	Stopped Working due to Personal Circumstances Long Samp	X	X
R7_B36e_1_1	Personal Circumstances - Need Help Caring for Children (Last Job)	X	X
R7_B36e_1_2	Personal Circumstances - Need Personal Assistance Getting Ready (Last Job)	X	X
R7_B36e_1_3	Personal Circumstances - Get Injured (Last Job)	X	X
R7_B36e_1_4	Personal Circumstances - Might Lose Benefits (Last Job)	X	X
R7_B36e_1_5	Personal Circumstances - No Reliable Transportation (Last Job)	X	X
R7_B36e_1_6	Personal Circumstances - Drug/Alcohol Relapse (Last Job)	X	X
R7_B36e_1_7	Personal Circumstances - Rather Do Other Things (Last Job)	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_B36e_1_8	Personal Circumstances - Do Not Like Working (Last Job)	X	X
R7_B36e_1_9	Personal Circumstances - Increase Income from Other Source (Last Job)	X	X
R7_B36e_1_10	Personal Circumstances - Other (Last Job)	X	X
R7_B36e_1_19	Personal Circumstances - Moved to another area (Last Job)	X	X
R7_B36e_1_21	Personal Circumstances - Loss of government benefits (Last Job)	X	X
R7_B36f	Other Reasons Left Job	X	X
R7_B37	Goals Include Working	X	X
R7_B37a	Goals Include Stop Receiving Benefits	X	X
R7_B38	Ever Discuss Work Goals	X	X
R7_B39	Who Discuss Work Goals w/ Most	X	X
R7_B40	Person Discuss Goals w/ Most Thinks Work Should be Goal	X	X
R7_B47_a	See Working for Pay Next Year	X	X
R7_B47_b	See Working to Stop Benefits	X	X
R7_B47_c	See Working for Pay Next Five Years	X	X
R7_B47_d	See Working to Stop Benefits Next Five Years	X	X
R7_BP4a1	Health Reasons Prevent from Working	X	X
R7_BP4a1_1_1	Health Reasons - Existing Health Problem Gets Worse	X	X
R7_BP4a1_1_2	Health Reasons - Get Injured	X	X
R7_BP4a1_1_3	Health Reasons - Work has Negative Impact on Health	X	X
R7_BP4a1_1_4	Health Reasons - Need Time for Medical Apps.	X	X
R7_BP4a1_1_5	Health Reasons - Fired for Missing too Much Time	X	X
R7_BP4a1_1_6	Health Reasons - Health Interfering with Job Performance	X	X
R7_BP4a1_1_7	Health Reasons - Lacks Strength, Physical Energy, Stamina	X	X
R7_BP4a1_1_8	Health Reasons - Personal Care takes too Long	X	X
R7_BP4a1_1_9	Health Reasons - Health Fluctuates Unpredictably	X	X
R7_BP4a1_1_10	Health Reasons - Lacks Special Equipment or Medical Devices	X	X
R7_BP4a1_1_11	Health Reasons - Work too Stressful	X	X
R7_BP4a1_1_12	Health Reasons - Other	X	X
R7_BP4a2	Job Related Problems Prevent from Working	X	X
R7_BP4a2_1_1	Job Reasons - Need Time for Medical Apps.	X	X
R7_BP4a2_1_2	Job Reasons - Health Interferes with Job Performance	X	X
R7_BP4a2_1_3	Job Reasons - Lacks Strength, Physical Energy, Stamina	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_BP4a2_1_4	Job Reasons - Pain Interferes with Work Schedule	X	X
R7_BP4a2_1_5	Job Reasons - Personal Care Takes too Long	X	X
R7_BP4a2_1_6	Job Reasons - Lack Special Equipment or Medical Devices	X	X
R7_BP4a2_1_7	Job Reasons - Personality Conflicts with Others	X	X
R7_BP4a2_1_8	Job Reasons - Other	X	X
R7_BP4a3	Personal Circumstances Prevent from Working	X	X
R7_BP4a3_1_1	Personal Circumstances - Need to Care for Children/Others (In Future)	X	X
R7_BP4a3_1_2	Personal Circumstances - Need Personal Assistance to get Ready (In Future)	X	X
R7_BP4a3_1_3	Personal Circumstances - Might Lose Benefits (In Future)	X	X
R7_BP4a3_1_4	Personal Circumstances - Lacks Reliable Transportation (In Future)	X	X
R7_BP4a3_1_5	Personal Circumstances - Drugs/Alcohol Relapse (In Future)	X	X
R7_BP4a3_1_6	Personal Circumstances - Rather Do Other Things (In Future)	X	X
R7_BP4a3_1_7	Personal Circumstances - Does Not Like Working (In Future)	X	X
R7_BP4a3_1_8	Personal Circumstances - Work Too Stressful	X	X
R7_BP4a3_1_9	Personal Circumstances - Other (In Future)	X	X
R7_BP4a3_1_19	Personal Circumstances - Moved to Another Area (In Future)	X	X
R7_BP4a3_1_21	Personal Circumstances - Loss of Government Benefits (In Future)	X	X
R7_BP4b1	Not Working Enough to Leave Benefits due to Health Reasons	X	X
R7_BP4b1_1_1	Health Problems - Existing Health Problem Gets Worse	X	X
R7_BP4b1_1_2	Health Problems - Get Injured	X	X
R7_BP4b1_1_3	Health Problems - Work has Negative Impact on Health	X	X
R7_BP4b1_1_4	Health Problems - Need Time for Medical Apps.	X	X
R7_BP4b1_1_5	Health Problems - Fired for Missing too Much Time	X	X
R7_BP4b1_1_6	Health Problems - Health Interferes with Job performance	X	X
R7_BP4b1_1_7	Health Problems - Lacks Stamina, Physical Energy, or Stamina	X	X
R7_BP4b1_1_8	Health Problems - Personal Care Takes Too Long	X	X
R7_BP4b1_1_9	Health Problems - Health Status Fluctuates Unpredictably	X	X
R7_BP4b1_1_10	Health Problems - Lacks Special Equipment or Medical Devices	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_BP4b1_1_11	Health Problems - Work is Too Stressful	X	X
R7_BP4b1_1_12	Health Problems - Other	X	X
R7_BP4b2	Not Working Enough to Leave Benefits due to Job Problems	X	X
R7_BP4b2_1_1	Job Problems - Need Time for Medical Apps.	X	X
R7_BP4b2_1_2	Job Problems - Health Interferes with Job Performance	X	X
R7_BP4b2_1_3	Job Problems - Lacks Strength, Physical Energy, and Stamina	X	X
R7_BP4b2_1_4	Job Problems - Pain Interferes with Work Schedule	X	X
R7_BP4b2_1_5	Job Problems - Personal Care Takes Too Long	X	X
R7_BP4b2_1_6	Job Problems - Lacks Special Equipment or Medical Device	X	X
R7_BP4b2_1_7	Job Problems - Personality Conflicts with Others	X	X
R7_BP4b2_1_8	Job Problems - Other	X	X
R7_BP4b3	Not Working Enough to Leave Benefits due to Personal Circumstances	X	X
R7_BP4b3_1_1	Personal Circumstances - Need to Care for Children/Others	X	X
R7_BP4b3_1_2	Personal Circumstances - Need Personal Assistance to get Ready	X	X
R7_BP4b3_1_3	Personal Circumstances - Might Lose Benefits	X	X
R7_BP4b3_1_4	Personal Circumstances - Lacks Reliable Transportation	X	X
R7_BP4b3_1_5	Personal Circumstances - Drugs/Alcohol Relapse	X	X
R7_BP4b3_1_6	Personal Circumstances - Rather Do Other Things	X	X
R7_BP4b3_1_7	Personal Circumstances - Does Not Like Working	X	X
R7_BP4b3_1_8	Personal Circumstances - Work Too Stressful	X	X
R7_BP4b3_1_9	Personal Circumstances - Other	X	X
R7_BP4b3_1_19	Personal Circumstances - Moved to Another Area	X	X
R7_BP4b3_1_21	Personal Circumstances - Loss of Government Benefits	X	X
R7_C_MainConDiagGrpNew_1	Main Condition Primary Diag Grp NEW Condition 1	X	
R7_C_MainConDiagGrpNew_2	Main Condition Primary Diag Grp NEW Condition 2	X	
R7_C_MainConDiagGrpNew_3	Main Condition Primary Diag Grp NEW Condition 3	X	
R7_C_MainConDiagGrpNew_4	Main Condition Primary Diag Grp NEW Condition 4	X	
R7_C_MainConDiagGrpNew_5	Main Condition Primary Diag Grp NEW Condition 5	X	
R7_C_MainConDiagGrpNew_6	Main Condition Primary Diag Grp NEW Condition 6	X	
R7_C_MAINCONDIAGGRPNEW_IFLAG	Main Condition Primary Diag Grp NEW Condition 1, Imputation Flag	X	
R7_C_MAINCONDIAGGRPNEW_I	Main Condition Primary Diag Grp NEW Condition 1, Imputed	X	
R7_C_MainConColDiagGrp_1	Main Con Primary Diag Grp Collapsed (Code 1)	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_MainConColDiagGrp_2	Main Con Primary Diag Grp Collapsed (Code 22)	X	
R7_C_MainConColDiagGrp_3	Main Con Primary Diag Grp Collapsed (Code 33)	X	
R7_C_MainConColDiagGrp_4	Main Con Primary Diag Grp Collapsed (Code 44)	X	
R7_C_MainConColDiagGrp_5	Main Con Primary Diag Grp Collapsed (Code 55)	X	
R7_C_MainConColDiagGrp_6	Main Con Primary Diag Grp Collapsed (Code 66)	X	
R7_C_MAINCONCOLDIAGGRP_I	Main Condition Diagnosis Group Collapsed (Code 1), Imputed	X	X
R7_C_MAINCONCOLDIAGGRP_I FLAG	Main Condition Diagnosis Group Collapsed (Code 1), Imputation Flag	X	
R7_C_MainConBodyGroup_1	Main Cond BG (Code 1)	X	
R7_C_MainConBodyGroup_2	Main Cond BG (Code 22)	X	
R7_C_MainConBodyGroup_3	Main Cond BG (Code 33)	X	
R7_C_MainConBodyGroup_4	Main Cond BG (Code 44)	X	
R7_C_MainConBodyGroup_5	Main Cond BG (Code 55)	X	
R7_C_MainConBodyGroup_6	Main Cond BG (Code 66)	X	
R7_C_MAINCONBODYGROUP_I FLAG	Main Condition Body Group (Code 1), Imputation Flag	X	
R7_C_MAINCONBODYGROUP_I	Main Condition Body Group (Code 1), Imputed	X	
R7_C_SeconDiagGrpNew_1	Sec Cond Primary Diag Grp NEW Condition 1	X	
R7_C_SeconDiagGrpNew_2	Sec Cond Primary Diag Grp NEW Condition 2	X	
R7_C_SeconDiagGrpNew_3	Sec Cond Primary Diag Grp NEW Condition 3	X	
R7_C_SeconDiagGrpNew_4	Sec Cond Primary Diag Grp NEW Condition 4	X	
R7_C_SeconDiagGrpNew_5	Sec Cond Primary Diag Grp NEW Condition 5	X	
R7_C_SeconDiagGrpNew_6	Sec Cond Primary Diag Grp NEW Condition 6	X	
R7_C_SeconDiagGrpNew_7	Sec Cond Primary Diag Grp NEW Condition 7	X	
R7_C_SeconDiagGrpNew_8	Sec Cond Primary Diag Grp NEW Condition 8	X	
R7_C_SeconColDiagGrp_1	Sec Con Primary Diag Grp Collapsed (Code 1)	X	
R7_C_SeconColDiagGrp_2	Sec Con Primary Diag Grp Collapsed (Code 22)	X	
R7_C_SeconColDiagGrp_3	Sec Con Primary Diag Grp Collapsed (Code 33)	X	
R7_C_SeconColDiagGrp_4	Sec Con Primary Diag Grp Collapsed (Code 44)	X	
R7_C_SeconColDiagGrp_5	Sec Con Primary Diag Grp Collapsed (Code 55)	X	
R7_C_SeconColDiagGrp_6	Sec Con Primary Diag Grp Collapsed (Code 66)	X	
R7_C_SeconColDiagGrp_7	Sec Con Primary Diag Grp Collapsed (Code 77)	X	
R7_C_SeconColDiagGrp_8	Sec Con Primary Diag Grp Collapsed (Code 88)	X	
R7_C_SeconBodyGroup_1	Sec Cond BG (Code 1)	X	
R7_C_SeconBodyGroup_2	Sec Cond BG (Code 22)	X	
R7_C_SeconBodyGroup_3	Sec Cond BG (Code 33)	X	
R7_C_SeconBodyGroup_4	Sec Cond BG (Code 44)	X	
R7_C_SeconBodyGroup_5	Sec Cond BG (Code 55)	X	
R7_C_SeconBodyGroup_6	Sec Cond BG (Code 66)	X	
R7_C_SeconBodyGroup_7	Sec Cond BG (Code 77)	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_SeconBodyGroup_8	Sec Cond BG (Code 88)	X	
R7_C_ReasBecEligDiagGrpNew	Reason Became Eligible, Diagnosis Group NEW	X	
R7_C_ReasBecEligColDiagGrp	Reason Became Eligible Diagnosis Group Collapsed (Code 1)	X	
R7_C_ReasBecEligBodyGroup	Reason Became Eligible Body Group (Code 1)	X	
R7_C_MainReasEligDiagGrpNew_1	Main Reason Eligible Primary Diag Grp NEW (Code 1)	X	
R7_C_MainReasEligColDiagGrp_1	Main Reas Elig Primary Diag Grp Collapsed (Code 1)	X	
R7_C_MainReasEligBodyGroup_1	Main Reas Elig Body Group (Code 1)	X	
R7_C_MainReasEligDiagGrpNew_2	Main Reason Eligible Primary Diag Grp NEW (Code 2)	X	
R7_C_MainReasEligColDiagGrp_2	Main Reas Elig Primay Diag Grp Collapsed (Code 2)	X	
R7_C_MainReasEligBodyGroup_2	Main Reas Elig Body Group (Code 2)	X	
R7_C_MainReasEligDiagGrpNew_3	Main Reason Eligible Primary Diag Grp NEW (Code 3)	X	
R7_C_MainReasEligColDiagGrp_3	Main Reas Elig Primay Diag Grp Collapsed (Code 3)	X	
R7_C_MainReasEligBodyGroup_3	Main Reas Elig Body Group (Code 3)	X	
R7_C_MainReasEligDiagGrpNew_4	Main Reason Eligible Primary Diag Grp NEW (Code 4)	X	
R7_C_MainReasEligColDiagGrp_4	Main Reas Elig Primay Diag Grp Collapsed (Code 4)	X	
R7_C_MainReasEligBodyGroup_4	Main Reas Elig Body Group (Code 4)	X	
R7_C_DisAge	Age at Onset of Disability	X	
R7_C_DISAGE_I	Age at Onset of Disability, Imputed	X	
R7_C_DISAGE_IFLAG	Age at Onset of Disability, Imputation Flag	X	
R7_C_AdultChild_Onset	Adult/Child Onset of Disability	X	
R7_C_ADULTCHILD_ONSET_I	Adult/Child Onset of Disability, Imputed	X	X
R7_C_ADULTCHILD_ONSET_IFLAG	Adult/Child Onset of Disability, Imputation Flag	X	
R7_C_WrkdWhenLim	Worked for pay when first became limited	X	X
R7_C_EvrWorked	Ever Worked for Pay	X	X
R7_C_HrPayNeeded	Hourly pay needed to accept Job	X	
R7_c_hrpayneed_looking	Hourly Pay Needed to Enter Workforce for Beneficiaries Looking for Work	X	
R7_C_HRPAYNEED_NOTLOOKING	Hourly Pay Needed to Enter Workforce for Beneficiaries not Looking for Work	X	
R7_C1	Number Current Jobs	X	
R7_C1_I	Number Current Jobs, Imputed	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C1_IFLAG	Number Current Jobs, Imputation Flag	X	
R7_C1a_1	Main Reason for Working - Have More Income	X	X
R7_C1a_2	Main Reason for Working - Improve Well Being	X	X
R7_C1a_3	Main Reason for Working - Feel More Independent	X	X
R7_C1a_4	Main Reason for Working - Achieve Career Goals	X	X
R7_C1a_5	Main Reason for Working - Enjoy Working	X	X
R7_C1a_6	Main Reason for Working - Don't Want to Rely on Benefits	X	X
R7_C1a_7	Main Reason for Working - Health Improved	X	X
R7_C1a_8	Main Reason for Working - Had More Time	X	X
R7_C1a_9	Main Reason for Working - Other	X	X
R7_C4mth_1	Month Started Current Job (Job 1)	X	
R7_C4yr_1	Year Started Current Job (Job 1)	X	
R7_C5a_1	Notified SSA Working (Job 1)	X	X
R7_C5b_1	Notified SSA Working-Weeks or Months (Job 1)	X	
R7_C5BWEEK_1	Number Weeks Before Notified SSA (Job 1)	X	
R7_C5BMONTH_1	Number Months Before Notified SSA (Job 1)	X	
R7_C6_1	Self-employed at Current Job (Job 1)	X	
R7_C7_1	Current Job Part of Sheltered or supported employment (Job 1)	X	X
R7_C8_1	Hours per Week Usually Work at Current Job (Job 1)	X	
R7_C8_1_I	Hours per Week Usually Work at Current Job (Job 1), Imputed	X	
R7_C8_1_IFLAG	Hours per Week Usually Work at Current Job (Job 1), Imputation Flag	X	
R7_C9_1	Weeks per Year Usually Work at Current Job (Job 1)	X	
R7_C10_1	Paid by Hour at Current Job (Job 1)	X	X
R7_C11_1	Regular Hourly Pay at Current Job (Job 1)	X	
R7_C12amt_1	Amount Paid Before Taxes at Current Job (Job 1)	X	
R7_C12hop_1	How Often Paid at Current Job (Job 1)	X	
R7_C13amt_1	Amount Take Home Pay at Current Job (Job 1)	X	
R7_C13hop_1	How Often Paid at Current Job (Job 1)	X	
R7_C16	Received Promotion in Past 12 Months	X	
R7_C18	Satisfaction With Current/Main Job	X	X
R7_C20_a	Employer Offers Health Insurance	X	X
R7_C20_b	Employer Offers Dental	X	X
R7_C20_c	Employer Offers Sick Days	X	X
R7_C20_d	Employer Offers Paid Vacation	X	X
R7_C20_e	Employer Offers Childcare	X	
R7_C20_f	Employer Offers Transportation	X	X
R7_C20_g	Employer Offers Long-Term Dis	X	X
R7_C20_h	Employer Offers Pension	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C20_i	Employer Offers Flex Health Spending	X	
R7_C4mth_2	Month Started Current Job (Job 2)	X	
R7_C4yr_2	Year Started Current Job (Job 2)	X	
R7_C5a_2	Notified SSA Working (Job 2)	X	
R7_C5b_2	Notified SSA Working-Weeks or Months (Job 2)	X	
R7_C5BWEEK_2	Number Weeks Before Notified SSA (Job 2)	X	
R7_C5BMONTH_2	Number Months Before Notified SSA (Job 2)	X	
R7_C6_2	Self-employed at Current Job (Job 2)	X	
R7_C7_2	Current Job Part of Sheltered or supported employment (Job 2)	X	
R7_C8_2	Hours per Week Usually Work at Current Job (Job 2)	X	
R7_C9_2	Weeks per Year Usually Work at Current Job (Job 2)	X	
R7_C10_2	Paid by Hour at Current Job (Job 2)	X	
R7_C11_2	Regular Hourly Pay at Current Job (Job 2)	X	
R7_C12amt_2	Amount Paid Before Taxes at Current Job (Job 2)	X	
R7_C12hop_2	How Often Paid at Current Job (Job 2)	X	
R7_C13amt_2	Amount Take Home Pay at Current Job (Job 2)	X	
R7_C13hop_2	How Often Paid at Current Job (Job 2)	X	
R7_C4mth_3	Month Started Current Job (Job 3)	X	
R7_C4yr_3	Year Started Current Job (Job 3)	X	
R7_C5a_3	Notified SSA Working (Job 3)	X	
R7_C5b_3	Notified SSA Working-Weeks or Months (Job 3)	X	
R7_C5BWEEK_3	Number Weeks Before Notified SSA (Job 3)	X	
R7_C5BMONTH_3	Number Months Before Notified SSA (Job 3)	X	
R7_C6_3	Self-employed at Current Job (Job 3)	X	
R7_C7_3	Current Job Part of Sheltered or supported employment (Job 3)	X	
R7_C8_3	Hours per Week Usually Work at Current Job (Job 3)	X	
R7_C9_3	Weeks per Year Usually Work at Current Job (Job 3)	X	
R7_C10_3	Paid by Hour at Current Job (Job 3)	X	
R7_C11_3	Regular Hourly Pay at Current Job (Job 3)	X	
R7_C12amt_3	Amount Paid Before Taxes at Current Job (Job 3)	X	
R7_C12hop_3	How Often Paid at Current Job (Job 3)	X	
R7_C13amt_3	Amount Take Home Pay at Current Job (Job 3)	X	
R7_C13hop_3	How Often Paid at Current Job (Job 3)	X	
R7_C4mth_4	Month Started Working (Job 4)	X	
R7_C4yr_4	Year Started Working (Job 4)	X	
R7_C5a_4	Notified SSA Working (Job 4)	X	
R7_C5b_4	Notified SSA Working-Weeks or Months (Job 4)	X	
R7_C5BWEEK_4	Number Weeks Before Notified SSA (Job 4)	X	
R7_C5BMONTH_4	Number Months Before Notified SSA (Job 4)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C6_4	Self-employed at Current Job (Job 4)	X	
R7_C7_4	Current Job Part of Sheltered or supported employment (Job 4)	X	
R7_C8_4	Hours per Week Usually Work at Current Job (Job 4)	X	
R7_C9_4	Weeks per Year Usually Work at Current Job (Job 4)	X	
R7_C10_4	Paid by Hour at Job (Job 4)	X	
R7_C11_4	Regular Hourly Pay at Job (Job 4)	X	
R7_C12AMT_4	Amount Paid Before Taxes at Current Job (Job 4)	X	
R7_C12HOP_4	How Often Paid at Current Job (Job 4)	X	
R7_C13AMT_4	Amount Take Home Pay at Current Job (Job 4)	X	
R7_C13HOP_4	How Often Paid at Current Job (Job 4)	X	
R7_C4mth_5	Month Started Working (Job 5)	X	
R7_C4yr_5	Year Started Working (Job 5)	X	
R7_C5a_5	Let SSA Know about Working (Job 5)	X	
R7_C5b_5	Notified SSA Working-Weeks or Months (Job 5)	X	
R7_C5BWEEK_5	Number Weeks Before Notified SSA (Job 5)	X	
R7_C5BMONTH_5	Number Months Before Notified SSA (Job 5)	X	
R7_C6_5	Self-employed at Current Job (Job 5)	X	
R7_C7_5	Current Job Part of Sheltered or supported employment (Job 5)	X	
R7_C8_5	Hours per Week Usually Work at Current Job (Job 5)	X	
R7_C9_5	Weeks per Year Usually Work at Current Job (Job 5)	X	
R7_C10_5	Paid by Hour (Job 5)	X	
R7_C11_5	Regular Hourly Pay (Job 5)	X	
R7_C12AMT_5	Amount Paid Before Taxes at Current Job (Job 5)	X	
R7_C12HOP_5	How Often Paid at Current Job (Job 5)	X	
R7_C13AMT_5	Amount Take Home Pay at Current Job (Job 5)	X	
R7_C13HOP_5	How Often Paid at Current Job (Job 5)	X	
R7_C4mth_6	Month Started Current Job (Job 6)	X	
R7_C4yr_6	Year Started Current Job (Job 6)	X	
R7_C5a_6	Notified SSA Working (Job 6)	X	
R7_C5b_6	Notified SSA Working-Weeks or Months (Job 6)	X	
R7_C5BWEEK_6	Number Weeks Before Notified SSA (Job 6)	X	
R7_C5BMONTH_6	Number Months Before Notified SSA (Job 6)	X	
R7_C6_6	Self-employed at Current Job (Job 6)	X	
R7_C7_6	Current Job Part of Sheltered or supported employment (Job 6)	X	
R7_C8_6	Hours per Week Usually Work at Current Job (Job 6)	X	
R7_C9_6	Weeks per Year Usually Work at Current Job (Job 6)	X	
R7_C10_6	Paid by Hour at Current Job (Job 6)	X	
R7_C11_6	Regular Hourly Pay at Current Job (Job 6)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C12AMT_6	Amount Paid Before Taxes at Current Job (Job 6)	X	
R7_C12HOP_6	How Often Paid at Current Job (Job 6)	X	
R7_C13AMT_6	Amount Take Home Pay at Current Job (Job 6)	X	
R7_C13HOP_6	How Often Paid at Current Job (Job 6)	X	
R7_CP2_1	Found Main/Current Job - State Unemployment	X	X
R7_CP2_2	Found Main/Current Job - America's Workforce Center	X	X
R7_CP2_3	Found Main/Current Job - Through Friends/Relatives	X	X
R7_CP2_4	Found Main/Current Job - Job Advertisement	X	X
R7_CP2_5	Found Main/Current Job - State Vocational Rehab Agency	X	X
R7_CP2_6	Found Main/Current Job - Private Employment Agency	X	X
R7_CP2_7	Found Main/Current Job - Former Employer	X	X
R7_CP2_8	Found Main/Current Job - Contacting Other Employers	X	X
R7_CP2_9	Found Main/Current Job - Other	X	X
R7_CP2b_1	Main Way Found Main/Current Job - State Unemployment	X	
R7_CP2b_2	Main Way Found Main/Current Job - America's Workforce Center	X	
R7_CP2b_3	Main Way Found Main/Current Job - Through Friends/Relatives	X	
R7_CP2b_4	Main Way Found Main/Current Job - Job Advertisement	X	
R7_CP2b_5	Main Way Found Main/Current Job - State Vocational Rehab Agency	X	
R7_CP2b_6	Main Way Found Main/Current Job - Private Employment Agency	X	
R7_CP2b_7	Main Way Found Main/Current Job - Former Employer	X	
R7_CP2b_8	Main Way Found Main/Current Job - Contacting Other Employers	X	
R7_CP2b_9	Main Way Found Main/Current Job - Other	X	
R7_CP3_a	Used Job Coach to Help Find or Keep Work	X	X
R7_CP3_b	Used Sign Lang. Interpreter to Help Find or Keep Work	X	X
R7_CP3_c	Used Reader or Interpreter to Help Find or Keep Work	X	X
R7_CP3_d	Used Assistant or Caregiver to Help Find or Keep Work	X	X
R7_CP3_e	Used Personal Care Assistant at Work	X	X
R7_CP3_f	Received on the Job Training	X	X
R7_CP3_g	Received Counseling about Benefits to Help Find or Keep Work	X	X
R7_CP3_h	Received Help with Transportation to Help Find or Keep Work	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_CP3_i	Received Help with Children or Family Care	X	X
R7_CP3_j	Used Special Equipment or Devices	X	X
R7_CP3k_1	Special Equipment or Device - Brace	X	
R7_CP3k_2	Special Equipment or Device - Cane/Crutches/Walker	X	
R7_CP3k_3	Special Equipment or Device - Wheelchair	X	
R7_CP3k_4	Special Equipment or Device - Modified Computer Hardware	X	
R7_CP3k_5	Special Equipment or Device - Modified Computer Software	X	
R7_CP3k_6	Special Equipment or Device - Other	X	
R7_CP3k_7	Special Equipment or Device - Hearing Air/Device	X	
R7_CP3k_8	Special Equipment or Device - Special Glasses	X	
R7_CP3k_9	Special Equipment or Device - Special Chair/Back Support	X	
R7_CP3k_10	Special Equipment or Device - Special Shoes/Stockings	X	
R7_CP3l	Received Anything Else to Help Find or Keep Work	X	
R7_CP4	Anyone Helped Find or Keep Work	X	X
R7_CP5_1	Parent or Guardian Helped Find or Keep Work	X	X
R7_CP5_2	Spouse Or Partner Helped Find or Keep Work	X	X
R7_CP5_3	Another Relative Helped Find or Keep Work	X	X
R7_CP5_4	A Friend or Helped Find or Keep Work	X	X
R7_CP5_5	An Employer or Supervisor Helped Find or Keep Work	X	X
R7_CP5_6	A Co-worker Helped Find or Keep Work	X	X
R7_CP5_7	A Caseworker or Counselor Helped Find or Keep Work	X	X
R7_CP5_8	A Job Coach Helped Find or Keep Work	X	X
R7_CP5_9	A Medical Provider Helped Find or Keep Work	X	X
R7_CP5_10	Other Helped Find or Keep Work	X	X
R7_CP6_1	Got Help Caring for Children/Others	X	X
R7_CP6_2	Got Help with Personal Care	X	X
R7_CP6_3	Got Help with Transportation	X	X
R7_CP6_4	Got Help with Finding a Job	X	X
R7_CP6_5	Got Help with Training	X	X
R7_CP6_6	Got Advice/Someone to Talk to	X	X
R7_CP6_7	Got Help Getting Accommodations	X	X
R7_CP6_8	Got Help with Financial Assistance	X	X
R7_CP6_9	Got Help with Other	X	X
R7_CP7	Anyone at Main/Current Job Know about Disability	X	X
R7_CP7a_a	Co-Workers Know about Disability	X	X
R7_CP7a_b	Manger, Supervisor, Boss Know about Disability	X	X
R7_CP7a_c	Human Resources Know about Disability	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_CP7a_d	Anyone Else Knows about Disability	X	X
R7_CP8	How Comfortable Discussing Disability with Others at Main/Current Job	X	X
R7_CP10	Other People with Disabilities Work at Job	X	X
R7_C33_a	Employer Provided Special Equipment	X	X
R7_C33_b	Employer Made Changes to Schedule	X	X
R7_C33_c	Employer Made Changes to Tasks	X	X
R7_C33_d	Employer Made Changes to Environment	X	X
R7_C33_e	Employer Arranged for Co-Workers to Assist	X	X
R7_C33_f	Employer Made Other changes	X	X
R7_C34	Changes Need But Not Made	X	X
R7_C35_a	Need Special Equipment at Current Workplace	X	
R7_C35_b	Need Changes to Work Schedule at Current Workplace	X	
R7_C35_c	Need Changes to Tasks at Current Workplace	X	
R7_C35_d	Need Changes to Environment at Current Workplace	X	
R7_C35_e	Need Co-Workers to Assist at Current Workplace	X	
R7_c35_f	Other Changes Needed	X	
R7_C37	Asked for Changes	X	
R7_CP12	Anything Special About Main/Current Job that Helps You Keep Working	X	X
R7_CP12a_1	Modified Job Duties Help to Keep Working	X	X
R7_CP12a_2	Special Equipment/ Modified Space Help to Keep Working	X	X
R7_CP12a_3	Flexible Schedule Helps to Keep Working	X	X
R7_CP12a_4	Working From Home Helps to Keep Working	X	X
R7_CP12a_5	Health Insurance Helps to Keep Working	X	X
R7_CP12a_6	Sick Leave Helps to Keep Working	X	X
R7_CP12a_7	Supervisor Understanding Helps to Keep Working	X	X
R7_CP12a_8	Co-Worker Assistance Helps to Keep Working	X	X
R7_CP12a_9	Other Helps to Keep Working	X	X
R7_CP13a	Worked Less/Stopped Working Due to Health Problems	X	X
R7_CP13a1_1	Health - Existing Health Problem Gets Worse	X	X
R7_CP13a1_2	Health - New Health Problem Starts	X	X
R7_CP13a1_3	Health - Got Injured	X	X
R7_CP13a1_4	Health - Job has Negative Impact on Health	X	X
R7_CP13a1_5	Health - Need to be Hospitalized	X	X
R7_CP13a1_6	Health - Needs Time to Go to Medical App.	X	X
R7_CP13a1_7	Health - Gets Fired for Missing Too Much Time for Apps.	X	X
R7_CP13a1_8	Health - Health Interferes with Job Performance	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_CP13a1_9	Health - Lack Strength, Physical Energy, and Stamina	X	X
R7_CP13a1_10	Health - Pain Interferes with Working Set Schedule	X	X
R7_CP13a1_11	Health - Personal Care Takes Too Long	X	X
R7_CP13a1_12	Health - Health Status Fluctuates Unpredictably	X	X
R7_CP13a1_13	Health - Do not have Special Equipment or Medical Devices	X	X
R7_CP13a1_14	Health - Work is Too Tiring/Stressful	X	X
R7_CP13a1_15	Health - Other	X	X
R7_CP13b	Worked Less/Stopped Working Due to Job Problems	X	X
R7_CP13b1_1	Job - Job does not Pay Enough	X	X
R7_CP13b1_2	Job - Job does not Offer Health Insurance Benefits	X	X
R7_CP13b1_3	Job - Need a Different Schedule	X	X
R7_CP13b1_4	Job - Need Time for Medical Apps.	X	X
R7_CP13b1_5	Job - Got Fired for Missing too Much Time for Apps.	X	X
R7_CP13b1_6	Job - Health Interferes with Job Performance	X	X
R7_CP13b1_7	Job - Lacks Strength, Physical Energy, or Stamina	X	X
R7_CP13b1_8	Job - Pain Interferes with Working Set Schedule	X	X
R7_CP13b1_9	Job - Personal Care Takes too Long	X	X
R7_CP13b1_10	Job - Do Not have Special Equipment or Medical Devices	X	X
R7_CP13b1_11	Job - Other	X	X
R7_CP13b1_20	Job - Found Another Job	X	X
R7_CP13b1_22	Job - Work Schedule	X	X
R7_CP13b1_23	Job - Did not get Along with Co-Workers	X	X
R7_CP13b1_24	Job - Did not get Along with Manager/Supervisor/Boss	X	X
R7_CP13b1_25	Job - Did not get Along with Human Resources	X	X
R7_CP13c	Problems with Personal Circumstances in Past Year	X	X
R7_CP13c1_1	Personal Circumstances - Need Help Caring for Children	X	X
R7_CP13c1_2	Personal Circumstances - Need Personal Assistance Getting Ready	X	X
R7_CP13c1_3	Personal Circumstances - Get Injured	X	X
R7_CP13c1_4	Personal Circumstances - Might Lose Benefits	X	X
R7_CP13c1_5	Personal Circumstances - Personality Conflicts with Other at Job	X	X
R7_CP13c1_6	Personal Circumstances - Might Get Fired due to Behavior	X	X
R7_CP13c1_7	Personal Circumstances - No Reliable Transportation	X	X
R7_CP13c1_8	Personal Circumstances - Drug/Alcohol Relapse	X	X
R7_CP13c1_9	Personal Circumstances - Rather Do Other Things	X	X
R7_CP13c1_10	Personal Circumstances - Do Not Like Working	X	X
R7_CP13c1_11	Personal Circumstances - Work is too Tiring/Stressful	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_CP13c1_12	Personal Circumstances - Other	X	X
R7_CP13c1_19	Personal Circumstances - Moved to Another Area	X	X
R7_CP13c1_21	Personal Circumstances - Loss of Gov't Benefits	X	X
R7_CP14_1	Might Help to Keep Working - Working Fewer Hours	X	X
R7_CP14_2	Might Help to Keep Working - Working Fewer Days	X	X
R7_CP14_3	Might Help to Keep Working - Working Different Shift	X	X
R7_CP14_4	Might Help to Keep Working - Flexible Schedule	X	X
R7_CP14_5	Might Help to Keep Working - Having More Sick Leave	X	X
R7_CP14_6	Might Help to Keep Working - Personal Care Attendant	X	X
R7_CP14_7	Might Help to Keep Working - Assistance with Work Tasks	X	X
R7_CP14_8	Might Help to Keep Working - More Understanding Co-Workers	X	X
R7_CP14_9	Might Help to Keep Working - Assistive Devices at Work	X	X
R7_CP14_10	Might Help to Keep Working - Physical Modification to Workspace	X	X
R7_CP14_11	Might Help to Keep Working - Job Coach	X	X
R7_CP14_12	Might Help to Keep Working - Sign Lang. Interpreter	X	X
R7_CP14_13	Might Help to Keep Working - Reader/ Interpreter for Blind	X	X
R7_CP14_14	Might Help to Keep Working - On Job Training	X	X
R7_CP14_15	Might Help to Keep Working - Behavioral Coaching	X	X
R7_CP14_16	Might Help to Keep Working - Benefit Counseling	X	X
R7_CP14_17	Might Help to Keep Working - Transportation Assistance	X	X
R7_CP14_18	Might Help to Keep Working - Child and Family Care Assistance	X	X
R7_CP14_19	Might Help to Keep Working - Other	X	X
R7_C39_a	Chance to Dev Abilities at Current/Main Job	X	X
R7_C39_b	Have Recognition or Respect at Current/Main Job	X	X
R7_C39_c	Can Work on Own at Current/Main Job	X	X
R7_C39_d	Can Work with Others at Current/Main Job	X	X
R7_C39_e	Work Interesting at Current/Main Job	X	X
R7_C39_f	Have Feeling of Accomplishment at Current/Main Job	X	X
R7_C39_g	Supervisor Supportive at Current/Main Job	X	X
R7_C39_h	Co-workers Friendly at Current/Main Job	X	X
R7_C39a2	Work Fewer Hours at Current Job than Could	X	X
R7_C39b_a	Work Fewer Hours at Current Job b/c Caring for Others	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C39b_b	Work Fewer Hours at Current Job b/c in School/Training	X	X
R7_C39b_c	Work Fewer Hours at Current Job b/c Want to Keep Medicare/Medicaid	X	X
R7_C39b_d	Work Fewer Hours at Current Job b/c Want to keep cash benefits	X	X
R7_C39b_e	Work Fewer Hours at Current Job b/c Don't Want to Work More	X	X
R7_C39b_f	Work Fewer Hours at Current Job b/c Other	X	X
R7_C39b_g	Work Fewer Hours at Current Job b/c of Poor Health	X	X
R7_C39_1	Disability Related Benefits Reduced or Ended b/c Currently Working	X	X
R7_C39_2_1	Private Disability Insurance Reduced or Ended b/c Currently Working	X	
R7_C39_2_2	Workers' Compensation Reduced or Ended b/c Currently Working	X	
R7_C39_2_3	Veterans' Benefits Reduced or Ended b/c Currently Working	X	
R7_C39_2_4	Medicare Reduced or Ended b/c Currently Working	X	
R7_C39_2_5	Medicaid Reduced or Ended b/c Currently Working	X	
R7_C39_2_6	SSA Disability Benefits Reduced or Ended b/c Currently Working	X	
R7_C39_2_7	Public Assistance Reduced or Ended b/c Currently Working	X	
R7_C39_2_8	Food Stamps Reduced or Ended b/c Currently Working	X	
R7_C39_2_9	Personal Assistance Services Reduced or Ended b/c Currently Working	X	
R7_C39_2_10	Unemployment Benefits Reduced or Ended b/c Currently Working	X	
R7_C39_2_11	Other State Disability Benefits Reduced or Ended b/c Currently Working	X	
R7_C39_2_12	Other Government Programs Reduced or Ended b/c Currently Working	X	
R7_C39_2_13	Other Benefits Reduced or Ended b/c Currently Working	X	
R7_c39_2_14	Health Insurance Benefits Reduced or Ended b/c Currently Working	X	
R7_C39_3_a	Could Earn or Work More if Had Help Caring for Others	X	X
R7_C39_3_b	Could Earn or Work More if Had Help with Personal Care	X	X
R7_C39_3_c	Could Earn or Work More if Had Reliable Transportation	X	X
R7_C39_3_d	Could Earn or Work More if Had Job Skills	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C39_3_e	Could Earn or Work More if Had Flexible Work Schedule	X	X
R7_C39_3_f	Could Earn or Work More if Had Help Finding Better Job	X	X
R7_C39_3_g	Could Earn or Work More if Had Special Equipment or Medical Devices	X	X
R7_C39_3_h	Could Earn or Work More if had Other	X	X
R7_C39_3g_1	Other Special Equipment or Devices - Brace	X	
R7_C39_3g_2	Other Special Equipment or Devices - Cane/Crutches/Walker	X	
R7_C39_3g_3	Other Special Equipment or Devices - Wheelchair	X	
R7_C39_3g_4	Other Special Equipment or Devices - Modified Computer Hardware	X	
R7_C39_3g_5	Other Special Equipment or Devices - Modified Computer Software	X	
R7_C39_3g_7	Other Special Equipment or Devices - Hearing Aid/Device	X	
R7_C39_3g_8	Other Special Equipment or Devices - Special Glasses	X	
R7_C39_3g_9	Other Special Equipment or Devices - Special Chair/Back Support	X	
R7_C39_3g_10	Other Special Equipment or Devices - Special Shoes/Stockings	X	
R7_C39_4	Changes Made to Benefits b/c of Current Job	X	X
R7_C39_4a	SSA Paid Wrong Benefit Amount b/c of Current Job	X	X
R7_C39_5	Asked to Re-Pay Benefits b/c Overpaid	X	X
R7_C39_6	Asked to Re-Pay Benefits b/c Working	X	X
R7_CP16	Changed Amount of Work b/c of re-payment to SSA	X	X
R7_CP16a	Reduced/Increased Hours Worked	X	
R7_C_MainCurJobSOC	Occupation (Main Job)	X	
R7_C_MainCurJobSOC_PUB	Current Occupation, SOC Code (Public)	X	X
R7_C2_1_1D_I	C_MainCurJobSOC, Imputed to One Digit	X	
R7_C2_1_1D_IFLAG	C_MainCurJobSOC, Imputation Flag	X	
R7_C_MainCurJobNAICS	Industry (Main Job)	X	
R7_C_MainCurJobNAICS_PUB	Current Industry, Main Job, NAICS Code (Public)	X	X
R7_C_CurJob2SOC	Occupation (Job 2)	X	
R7_C_CurJob2NAICS	Industry (Job 2)	X	
R7_C_CurJob3SOC	Occupation (Job 3)	X	
R7_C_CurJob3NAICS	Industry (Job 3)	X	
R7_C_CurJob4SOC	Occupation (Job 4)	X	
R7_C_CurJob4NAICS	Industry (Job 4)	X	
R7_C_CurJob5SOC	Occupation (Job 5)	X	
R7_C_CurJob5NAICS	Industry (Job 5)	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_CurJob6SOC	Occupation (Job 6)	X	
R7_C_CurJob6NAICS	Industry (Job 6)	X	
R7_C_MainCurJobHrPay	Hourly Pay, Current Main Job (Pre-tax)	X	
R7_C_MAINCURJOBHRPAY_I	Hourly Pay Current Main Job (Pre-tax), Imputed	X	
R7_C_MAINCURJOBHRPAY_IFLAG	Hourly Pay Current Main Job (Pre-tax), Imputation Flag	X	
R7_C_MainCurJobMnthPay	Monthly Pay, Current Main Job (Pre-tax)	X	
R7_C_MAINCURJOBMNTHPAY_I	Monthly Pay Current Main Job (Pre-tax), Imputed	X	
R7_C_MAINCURJOBMNTHPAY_IFLAG	Monthly Pay Current Main Job (Pre-tax), Imputation Flag	X	
R7_C_MainCurJobMnthPayTH	Monthly Pay, Current Main Job (Take Home)	X	
R7_C_MainCurJobRepSSA	Weeks to Report Current Job to SSA (Main Job)	X	
R7_C_MainCurJobRepSSA_PUB	Weeks to Report Current Job to SSA (main) (Public)	X	X
R7_C_MnthsMainCurJob	Months at current job (main)	X	
R7_C_MnthsMainCurJob_PUB	Months at current job (main) (Public)	X	X
R7_C_CurJob2HrPay	Hourly Pay, Current Job 2 (Pre-tax)	X	
R7_C_CurJob2MnthPay	Monthly Pay, Current Job 2 (Pre-tax)	X	
R7_C_CurJob2MnthPayTH	Monthly Pay, Current Job 2 (Take Home)	X	
R7_C_CurJob2RepSSA	Weeks to Report Current Job 2	X	
R7_C_MnthsCurJob2	Months at current job 2	X	
R7_C_CurJob3HrPay	Hourly Pay Current Job 3 (Pre-tax)	X	
R7_C_CurJob3MnthPay	Monthly Pay Current Job 3 (Pre-tax)	X	
R7_C_CurJob3MnthPayTH	Monthly Pay Current Job 3 (Take Home)	X	
R7_C_CurJob3RepSSA	Weeks to Report Current Job 3 to SSA	X	
R7_C_MnthsCurJob3	Months at Current Job 3	X	
R7_C_CurJob4HrPay	Hourly Pay Current Job 4 (Pre-tax)	X	
R7_C_CurJob4MnthPay	Monthly Pay, Current Job 4 (Pre-tax)	X	
R7_C_CurJob4MnthPayTH	Monthly Pay Current Job 4 (Take Home)	X	
R7_C_CurJob4RepSSA	Weeks to Report Current Job 4 to SSA	X	
R7_C_MnthsCurJob4	Months at Current Job 4	X	
R7_C_CurJob5HrPay	Hourly Pay Current Job 5 (Pre-tax)	X	
R7_C_CurJob5MnthPay	Monthly Pay, Current Job 5 (Pre-tax)	X	
R7_C_CurJob5MnthPayTH	Monthly Pay Current Job 5 (Take Home)	X	
R7_C_CurJob5RepSSA	Weeks to Report Current Job 5 to SSA	X	
R7_C_MnthsCurJob5	Months at Current Job 5	X	
R7_C_CurJob6HrPay	Hourly Pay Current Job 6 (Pre-tax)	X	
R7_C_CurJob6MnthPay	Monthly Pay, Current Job 6 (Pre-tax)	X	
R7_C_CurJob6MnthPayTH	Monthly Pay Current Job 6 (Take Home)	X	
R7_C_CurJob6RepSSA	Weeks to Report Current Job 6 to SSA	X	
R7_C_MnthsCurJob6	Months at Current Job 6	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_TotCurMnthPay	Total Monthly Salary (All Current Jobs)	X	
R7_C_TOTCURMNTHPAY_I	Total Monthly Salary all Current Jobs, Imputed	X	
R7_C_TotCurMnthPay_i_PUB	Total Monthly Salary all Current Jobs, Imputed (Public)	X	X
R7_C_TOTCURMNTHPAY_IFLAG	Total Monthly Salary all Current Jobs, Imputation Flag	X	
R7_C_TOTCURMNTHPAY_HIGH	Flag for High Total Monthly Pay	X	
R7_C_TOTCURMNTHPAY_LOW	Flag for Low Total Monthly Pay	X	
R7_C_TotCurWkHrs	Total Weekly Hours (all current jobs)	X	
R7_C_TOTCURWKHRS_I	Total Weekly Hours all Current Jobs, Imputed	X	
R7_C_TotCurWkHrs_i_PUB	Total Weekly Hours all Current Jobs, Imputed (Public)	X	X
R7_C_TOTCURWKHRS_IFLAG	Total Weekly Hours all Current Jobs, Imputation Flag	X	
R7_C_TotCurHrMnth	Total Hours per Month (all current jobs)	X	
R7_C_TOTCURHRMNTH_I	Total Hours per Month all Current Jobs, Imputed	X	
R7_C_TotCurHrMnth_i_PUB	Total Hours per Month all Current Jobs, Imputed (Public)	X	X
R7_C_TOTCURHRMNTH_IFLAG	Total Hours per Month all Current Jobs, Imputation Flag	X	
R7_C_CurSGA	Current pay above non-blind substantial gainful activity	X	
R7_C_B1	Number Jobs in Past 6 Mo	X	
R7_C_B1a_1	Main Reason for Work - To Have More Income	X	X
R7_C_B1a_2	Main Reason for Work - To Improve Well Being	X	X
R7_C_B1a_3	Main Reason for Work - To Feel Independent	X	X
R7_C_B1a_4	Main Reason for Work - Achieve Career Goals	X	X
R7_C_B1a_5	Main Reason for Work - Enjoy Working	X	X
R7_C_B1a_6	Main Reason for Work - Don't want to Rely on Benefits	X	X
R7_C_B1a_7	Main Reason for Work - Health Improved	X	X
R7_C_B1a_8	Main Reason for Work - Had More Time	X	X
R7_C_B1a_9	Main Reason for Work - Other	X	X
R7_C_B4amth_1	Month Started Job (Job 1)	X	
R7_C_B4ayr_1	Year Started Job (Job 1)	X	
R7_C_B4bmth_1	Month Ended Job (Job 1)	X	
R7_C_B4byr_1	Year Ended Job (Job 1)	X	
R7_C_B5a_1	Notified SSA Working (Job 1)	X	X
R7_C_B5b_1	Notified SSA Working-Weeks or Months (Job 1)	X	
R7_C_B5bWeek_1	Number Weeks Before Notified SSA (Job 1)	X	
R7_C_B5bMonth_1	Number Months Before Notified SSA (Job 1)	X	
R7_C_B6_1	Self-employed at Job (Job 1)	X	
R7_C_B7_1	Job Part of Sheltered or supported employment (Job 1)	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_B8_1	Hours per Week Usually Work at Job (Job 1)	X	
R7_C_B9_1	Weeks per Year Usually Work at Job (Job 1)	X	
R7_C_B10_1	Paid by Hour at Job (Job 1)	X	X
R7_C_B11_1	Regular Hourly Pay at Job (Job 1)	X	
R7_C_B12amt_1	Amount Paid Before Taxes at Job (Job 1)	X	
R7_C_B12hop_1	How often Paid at Job (Job 1)	X	
R7_C_B13amt_1	Amount Take Home Pay at Job (Job 1)	X	
R7_C_B13hop_1	How often Paid at Job (Job 1)	X	
R7_C_B4amth_2	Month Started Job (Job 2)	X	
R7_C_B4ayr_2	Year Started Job (Job 2)	X	
R7_C_B4bmth_2	Month Ended Job (Job 2)	X	
R7_C_B4byr_2	Year Ended Job (Job 2)	X	
R7_C_B5a_2	Notified SSA Working (Job 2)	X	
R7_C_B5b_2	Notified SSA Working-Weeks or Months (Job 2)	X	
R7_C_B5bWeek_2	Number Weeks Before Notified SSA (Job 2)	X	
R7_C_B5bMonth_2	Number Months Before Notified SSA (Job 2)	X	
R7_C_B6_2	Self-employed at Job (Job 2)	X	
R7_C_B7_2	Job Part of Sheltered or supported employment (Job 2)	X	
R7_C_B8_2	Hours per Week Usually Work at Job (Job 2)	X	
R7_C_B9_2	Weeks per Year Usually Work at Job (Job 2)	X	
R7_C_B10_2	Paid by Hour at Job (Job 2)	X	
R7_C_B11_2	Regular Hourly Pay at Job (Job 2)	X	
R7_C_B12amt_2	Amount Paid Before Taxes at Job (Job 2)	X	
R7_C_B12hop_2	How often Paid at Job (Job 2)	X	
R7_C_B13amt_2	Amount Take Home Pay at Job (Job 2)	X	
R7_C_B13hop_2	How often Paid at Job (Job 2)	X	
R7_C_B4amth_3	Month Started Job (Job 3)	X	
R7_C_B4ayr_3	Year Started Job (Job 3)	X	
R7_C_B4bmth_3	Month Ended Job (Job 3)	X	
R7_C_B4byr_3	Year Ended Job (Job 3)	X	
R7_C_B5a_3	Notified SSA Working (Job 3)	X	
R7_C_B5b_3	Notified SSA Working-Weeks or Months (Job 3)	X	
R7_C_B5bWeek_3	Number Weeks Before Notified SSA (Job 3)	X	
R7_C_B5bMonth_3	Number Months Before Notified SSA (Job 3)	X	
R7_C_B6_3	Self-employed at Job (Job 3)	X	
R7_C_B7_3	Job Part of Sheltered or supported employment (Job 3)	X	
R7_C_B8_3	Hours per Week Usually Work at Job (Job 3)	X	
R7_C_B9_3	Weeks per Year Usually Work at Job (Job 3)	X	
R7_C_B10_3	Paid by Hour at Job (Job 3)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_B11_3	Regular Hourly Pay at Job (Job 3)	X	
R7_C_B12amt_3	Amount Paid Before Taxes at Job (Job 3)	X	
R7_C_B12hop_3	How often Paid at Job (Job 3)	X	
R7_C_B13amt_3	Amount Take Home Pay at Job (Job 3)	X	
R7_C_B13hop_3	How often Paid at Job (Job 3)	X	
R7_C_B4amth_4	Month Started Job (Job 4)	X	
R7_C_B4ayr_4	Year Started Job (Job 4)	X	
R7_C_B4bmth_4	Month Ended Job (Job 4)	X	
R7_C_B4byr_4	Year Ended Job (Job 4)	X	
R7_C_B5a_4	Notified SSA Working (Job 4)	X	
R7_C_B5b_4	Notified SSA Working-Weeks or Months (Job 4)	X	
R7_C_B5bWeek_4	Number Weeks Before Notified SSA (Job 4)	X	
R7_C_B5BMONTH_4	Number Months Before Notified SSA (Job 4)	X	
R7_C_B6_4	Self-employed at Job (Job 4)	X	
R7_C_B7_4	Job Part of Sheltered or supported employment (Job 4)	X	
R7_C_B8_4	Hours per Week Usually Work at Job (Job 4)	X	
R7_C_B9_4	Weeks per Year Usually Work at Job (Job 4)	X	
R7_C_B10_4	Paid by Hour at Job (Job 4)	X	
R7_C_B11_4	Regular Hourly Pay at Job (Job 4)	X	
R7_C_B12AMT_4	Amount Paid Before Taxes at Job (Job 4)	X	
R7_C_B12HOP_4	How often Paid at Job (Job 4)	X	
R7_C_B13AMT_4	Amount Take Home Pay at Job (Job 4)	X	
R7_C_B13HOP_4	How often Paid at Job (Job 4)	X	
R7_C_B4amth_5	Month Started Job (Job 5)	X	
R7_C_B4ayr_5	Year Started Job (Job 5)	X	
R7_C_B4bmth_5	Month Ended Job (Job 5)	X	
R7_C_B4byr_5	Year Ended Job (Job 5)	X	
R7_C_B5a_5	Notified SSA Working (Job 5)	X	
R7_C_B5B_5	Notified SSA Working-Weeks or Months (Job 5)	X	
R7_C_B5BWEEK_5	Number Weeks Before Notified SSA (Job 5)	X	
R7_C_B5BMONTH_5	Number Months Before Notified SSA (Job 5)	X	
R7_C_B6_5	Self-employed at Job (Job 5)	X	
R7_C_B7_5	Job Part of Sheltered or supported employment (Job 5)	X	
R7_C_B8_5	Hours per Week Usually Work at Job (Job 5)	X	
R7_C_B9_5	Weeks per Year Usually Work at Job (Job 5)	X	
R7_C_B10_5	Paid by Hour at Job (Job 5)	X	
R7_C_B11_5	Regular Hourly Pay at Job (Job 5)	X	
R7_C_B12AMT_5	Amount Paid Before Taxes at Job (Job 5)	X	
R7_C_B12HOP_5	How often Paid at Job (Job 5)	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_B13AMT_5	Amount Take Home Pay at Job (Job 5)	X	
R7_C_B13HOP_5	How often Paid at Job (Job 5)	X	
R7_C_B4amth_6	Month Started Job (Job 6)	X	
R7_C_B4ayr_6	Year Started Job (Job 6)	X	
R7_C_B4bmth_6	Month Ended Job (Job 6)	X	
R7_C_B4byr_6	Year Ended Job (Job 6)	X	
R7_C_B5a_6	Notified SSA Working (Job 6)	X	
R7_C_B5B_6	Notified SSA Working-Weeks or Months (Job 6)	X	
R7_C_B5BWEEK_6	Number Weeks Before Notified SSA (Job 6)	X	
R7_C_B5BMONTH_6	Number Months Before Notified SSA (Job 6)	X	
R7_C_B6_6	Self-employed at Job (Job 6)	X	
R7_C_B7_6	Job Part of Sheltered or supported employment (Job 6)	X	
R7_C_B8_6	Hours per Week Usually Work at Job (Job 6)	X	
R7_C_B9_6	Weeks per Year Usually Work at Job (Job 6)	X	
R7_C_B10_6	Paid by Hour at Job (Job 6)	X	
R7_C_B11_6	Regular Hourly Pay at Job (Job 6)	X	
R7_C_B12AMT_6	Amount Paid Before Taxes at Job (Job 6)	X	
R7_C_B12HOP_6	How often Paid at Job (Job 6)	X	
R7_C_B13AMT_6	Amount Take Home Pay at Job (Job 6)	X	
R7_C_B13HOP_6	How often Paid at Job (Job 6)	X	
R7_C_BP2_1	Found Job - State Unemployment Office	X	X
R7_C_BP2_2	Found Job - America's Workforce Center	X	X
R7_C_BP2_3	Found Job - Through Friends/Relatives	X	X
R7_C_BP2_4	Found Job - Job Advertisement	X	X
R7_C_BP2_5	Found Job - State Vocational Rehab Agency	X	X
R7_C_BP2_6	Found Job - Private Employment Agency	X	X
R7_C_BP2_7	Found Job - Former Employer	X	X
R7_C_BP2_8	Found Job - Contacting Other Employers	X	X
R7_C_BP2_9	Found Job - Other	X	X
R7_C_BP2b_1	Main Way Found Job - State Unemployment Office	X	
R7_C_BP2b_2	Main Way Found Job - America's Workforce Center	X	
R7_C_BP2b_3	Main Way Found Job - Through Friends/Relatives	X	
R7_C_BP2b_4	Main Way Found Job - Job Advertisement	X	
R7_C_BP2b_5	Main Way Found Job - State Vocational Rehab Agency	X	
R7_C_BP2b_6	Main Way Found Job - Private Employment Agency	X	
R7_C_BP2b_7	Main Way Found Job - Former Employer	X	
R7_C_BP2b_8	Main Way Found Job - Contacting Other Employers	X	
R7_C_BP2b_9	Main Way Found Job - Other	X	
R7_C_BP3_a	Used Job Coach to Find Work	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_BP3_b	Used Sign Lang. Interpreter to Find Work	X	X
R7_C_BP3_c	Used Reader or Interpreter to Find Work	X	X
R7_C_BP3_d	Used Assistant or Caregiver to Find Work	X	X
R7_C_BP3_e	Used Personal Care Assistant for Job Related Tasks	X	X
R7_C_BP3_f	Received on the Job Training	X	X
R7_C_BP3_g	Received Counseling about How Work Will Affect Benefits	X	X
R7_C_BP3_h	Received Help with Transportation	X	X
R7_C_BP3_i	Received Help with Children or Family Care	X	X
R7_C_BP3_j	Used Special Equipment or Devices	X	X
R7_C_BP3k_1	Special Equipment or Device - Brace	X	
R7_C_BP3k_2	Special Equipment or Device - Cane/Crutches/Walker	X	
R7_C_BP3k_3	Special Equipment or Device - Wheelchair	X	
R7_C_BP3k_4	Special Equipment or Device - Modified Computer Hardware	X	
R7_C_BP3k_5	Special Equipment or Device - Modified Computer Software	X	
R7_C_BP3k_6	Special Equipment or Device - Other	X	
R7_C_BP3k_7	Special Equipment or Device - Hearing Air/Device	X	
R7_C_BP3k_8	Special Equipment or Device - Special Glasses	X	
R7_C_BP3k_9	Special Equipment or Device - Special Chair/Back Support	X	
R7_C_BP3k_10	Special Equipment or Device - Special Shoes/Stockings	X	
R7_C_BP3l	Revd. Anything Else to Help Find or Keep Working	X	
R7_C_BP4	Anyone Helped Find or Keep Work	X	X
R7_C_BP5_1	Parent or Guardian Helped Find Work	X	X
R7_C_BP5_2	Spouse Or Partner Helped Find Work	X	X
R7_C_BP5_3	Another Relative Helped Find Work	X	X
R7_C_BP5_4	A Friend or Helped Find Work	X	X
R7_C_BP5_5	An Employer or Supervisor Helped Find Work	X	X
R7_C_BP5_6	A Co-worker Helped Find Work	X	X
R7_C_BP5_7	A Caseworker or Counselor Helped Find Work	X	X
R7_C_BP5_8	A Job Coach Helped Find Work	X	X
R7_C_BP5_9	A Medical Provider Helped Find Work	X	X
R7_C_BP5_10	Other Helped Find Work	X	X
R7_C_BP6_1	Got Help Caring for Children/Others	X	X
R7_C_BP6_2	Got Help with Personal Care	X	X
R7_C_BP6_3	Got Help with Transportation	X	X
R7_C_BP6_4	Got Help with Finding a Job	X	X
R7_C_BP6_5	Got Help with Training	X	X
R7_C_BP6_6	Got Advice/Someone to Talk to	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_BP6_7	Got Help Getting Accommodations	X	X
R7_C_BP6_8	Got Help with Financial Assistance	X	X
R7_C_BP6_9	Got Help with Other	X	X
R7_C_BP7	Anyone at Job Know about Disability	X	X
R7_C_BP7a_a	Co-Workers Know about Disability	X	X
R7_C_BP7a_b	Manger, Supervisor, Boss Know about Disability	X	X
R7_C_BP7a_c	Human Resources Know about Disability	X	X
R7_C_BP7a_d	Anyone Else Knows about Disability	X	X
R7_C_BP8	How Comfortable Discussing Disability with Others at Job	X	X
R7_C_BP10	Other People with Disabilities Work at Job (Past 6 Months)	X	X
R7_C_B16	Revd. Promotions at Job	X	
R7_C_B18	Satisfaction with Job	X	X
R7_C_B20_a	Employer Offers Health Insurance	X	X
R7_C_B20_b	Employer Offers Dental	X	X
R7_C_B20_c	Employer Offers Sick Days	X	X
R7_C_B20_d	Employer Offers Paid Vacation	X	X
R7_C_B20_e	Employer Offers Childcare	X	
R7_C_B20_f	Employer Offers Transportation	X	X
R7_C_B20_g	Employer Offers Long-Term Disability	X	X
R7_C_B20_h	Employer Offers Pension	X	X
R7_C_B20_i	Employer Offers Flex Health Spending	X	
R7_C_B33_a	Employer Provided Special Equipment or Assistive Tech.	X	X
R7_C_B33_b	Employer Made Changes to Work Schedule	X	X
R7_C_B33_c	Employer Made Changes to Tasks	X	X
R7_C_B33_d	Employer Made Changes to Work Environment	X	X
R7_C_B33_e	Employer Arranged for Co-Workers to Assist	X	X
R7_C_B33_f	Employer Made Other Changes	X	X
R7_C_B34	Any Needed Changes Not Made	X	X
R7_C_B35_a	Provided Special Equipment or Assistive Tech.	X	
R7_C_B35_b	Made Changes to Work Schedule	X	
R7_C_B35_c	Made Changes to Tasks	X	
R7_C_B35_d	Made Changes to Work Environment	X	
R7_C_B35_e	Arranged for Co-Workers to Assist	X	
R7_C_B35_f	Made Other Changes	X	
R7_C_B37	Asked Employer for These Changes	X	
R7_C_BP12	Anything Special about Job that Helped to Work	X	X
R7_C_BP12a_1	Modified Job Duties	X	X
R7_C_BP12a_2	Special Equipment/ Modified Space	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_BP12a_3	Flexible Schedule	X	X
R7_C_BP12a_4	Working From Home	X	X
R7_C_BP12a_5	Health Insurance	X	X
R7_C_BP12a_6	Sick Leave	X	X
R7_C_BP12a_7	Supervisor Understanding	X	X
R7_C_BP12a_8	Co-Worker Assistance	X	X
R7_C_BP12a_9	Other Help	X	X
R7_C_BP13a	Stopped Working Due to Health Problems	X	X
R7_C_BP13a1_1	Health - Existing Health Problem Gets Worse	X	X
R7_C_BP13a1_2	Health - New Health Problem Starts	X	X
R7_C_BP13a1_3	Health - Get Injured	X	X
R7_C_BP13a1_4	Health - Job has Negative Impact on Health	X	X
R7_C_BP13a1_5	Health - Need to be Hospitalized	X	X
R7_C_BP13a1_6	Health - Needs Time to Go to Medical App.	X	X
R7_C_BP13a1_7	Health - Gets Fired for Missing Too Much Time for Apps.	X	X
R7_C_BP13a1_8	Health - Interferes with Job Performance	X	X
R7_C_BP13a1_9	Health - Lack Strength, Physical Energy, and Stamina	X	X
R7_C_BP13a1_10	Health - Pain Interferes with Working Set Schedule	X	X
R7_C_BP13a1_11	Health - Personal Care Takes Too Long	X	X
R7_C_BP13a1_12	Health - Health Status Fluctuates Unpredictably	X	X
R7_C_BP13a1_13	Health - Do not have Special Equipment or Medical Devices	X	X
R7_C_BP13a1_14	Health - Work is Too Tiring/Stressful	X	X
R7_C_BP13a1_15	Health - Other	X	X
R7_C_BP13b	Stopped Working due to Job Problems	X	X
R7_C_BP13b1_1	Job - Job does not Pay Enough	X	X
R7_C_BP13b1_2	Job - Job does not Offer Health Insurance	X	X
R7_C_BP13b1_3	Job - Need a Different Schedule	X	X
R7_C_BP13b1_4	Job - Need Time for Medical Apps.	X	X
R7_C_BP13b1_5	Job - Got Fired for Missing too Much Time for Apps.	X	X
R7_C_BP13b1_6	Job - Health Interferes with Job Performance	X	X
R7_C_BP13b1_7	Job - Lacks Strength, Physical Energy, or Stamina (Past 6 Months)	X	X
R7_C_BP13b1_8	Job - Pain Interferes with Working Set Schedule	X	X
R7_C_BP13b1_9	Job - Personal Care Takes too Long	X	X
R7_C_BP13b1_10	Job - Do Not have Special Equipment or Medical Devices	X	X
R7_C_BP13b1_11	Job - Other	X	X
R7_C_BP13b1_20	Job - Found Another Job	X	X
R7_C_BP13b1_22	Job - Work Schedule	X	X
R7_C_BP13b1_23	Job - Did not get Along with Co-Workers	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_BP13b1_24	Job - Did not get Along with Manager/Supervisor/Boss	X	X
R7_C_BP13b1_25	Job - Did not get Along with Human Resources	X	X
R7_C_BP13c	Stopped Working Due to Personal Circumstances	X	X
R7_C_BP13c1_1	Personal Circumstances - Need Help Caring for Children	X	X
R7_C_BP13c1_2	Personal Circumstances - Need Personal Assistance Getting Ready	X	X
R7_C_BP13c1_3	Personal Circumstances - Get Injured	X	X
R7_C_BP13c1_4	Personal Circumstances - Might Lose Benefits	X	X
R7_C_BP13c1_5	Personal Circumstances - Personality Conflicts with Other at Job	X	X
R7_C_BP13c1_6	Personal Circumstances - Might Get Fired due to Behavior	X	X
R7_C_BP13c1_7	Personal Circumstances - No Reliable Transportation	X	X
R7_C_BP13c1_8	Personal Circumstances - Drug/Alcohol Relapse	X	X
R7_C_BP13c1_9	Personal Circumstances - Rather Do Other Things	X	X
R7_C_BP13c1_10	Personal Circumstances - Do Not Like Working	X	X
R7_C_BP13c1_11	Personal Circumstances - Work is too Tiring/Stressful	X	X
R7_C_BP13c1_12	Personal Circumstances - Other	X	X
R7_C_BP13C1_19	Personal Circumstances - Moved to Another Area	X	X
R7_C_BP13c1_21	Personal Circumstances - Loss of Gov't Benefits	X	X
R7_C_B39_a	Chance to Dev Abilities	X	X
R7_C_B39_b	Have Recognition or Respect	X	X
R7_C_B39_c	Can Work on Own	X	X
R7_C_B39_d	Can Work with Others	X	X
R7_C_B39_e	Work Interesting	X	X
R7_C_B39_f	Have Feeling of Accomplishment	X	X
R7_C_B39_g	Supervisor Supportive	X	X
R7_C_B39_h	Co-workers Friendly	X	X
R7_C_B39a2	Work Fewer Hours than Could	X	X
R7_C_B39b_a	Work Fewer Hours b/c Caring for Others	X	X
R7_C_B39b_b	Work Fewer Hours b/c in School/Training	X	X
R7_C_B39b_c	Work Fewer Hours b/c Want to Keep Medicare/Medicaid	X	X
R7_C_B39b_d	Work Fewer Hours b/c Want to keep cash benefits	X	X
R7_C_B39b_e	Work Fewer Hours b/c Don't Want to Work More	X	X
R7_C_B39b_f	Work Fewer Hours b/c Other	X	X
R7_C_B39b_g	Work Fewer Hours b/c of Poor Health	X	X
R7_C_B39_1	Disability Related Benefits Reduced or Ended b/c Working	X	X
R7_C_B39_2_1	Private Disability Insurance Reduced or Ended b/c Working	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_B39_2_2	Workers' Compensation Reduced or Ended b/c Working	X	
R7_C_B39_2_3	Veterans' Benefits Reduced or Ended b/c Working	X	
R7_C_B39_2_4	Medicare Reduced or Ended b/c Working	X	
R7_C_B39_2_5	Medicaid Reduced or Ended b/c Working	X	
R7_C_B39_2_6	SSA Disability Benefits Reduced or Ended b/c Working	X	
R7_C_B39_2_7	Public Assistance Reduced or Ended b/c Working	X	
R7_C_B39_2_8	Food Stamps Reduced or Ended b/c Working	X	
R7_C_B39_2_9	Personal Assistance Services Reduced or Ended b/c Working	X	
R7_C_B39_2_10	Unemployment Benefits Reduced or Ended b/c Working	X	
R7_C_B39_2_11	Other State Disability Benefits Reduced or Ended b/c Working	X	
R7_C_B39_2_12	Other Government Programs Reduced or Ended b/c Working	X	
R7_C_B39_2_13	Other Benefits Reduced or Ended b/c Working	X	
R7_C_B39_2_14	Health Insurance Benefits Reduced or Ended b/c Working	X	
R7_C_B39_3_a	Could Have Kept Working if Had Help Caring for Others	X	X
R7_C_B39_3_b	Could Have Kept Working if Had Help with Personal Care	X	X
R7_C_B39_3_c	Could Have Kept Working if Had Reliable Transportation	X	X
R7_C_B39_3_d	Could Have Kept Working if Had Job Skills	X	X
R7_C_B39_3_e	Could Have Kept Working if Had Flexible Work Schedule	X	X
R7_C_B39_3_f	Could Have Kept Working if Had Help Finding Better Job	X	X
R7_C_B39_3_g	Could Have Kept Working if Had Special Equipment or Medical Devices	X	X
R7_C_B39_3_h	Could Have Kept Working if had Other	X	X
R7_C_B39_3_G_1	Special Equipment or Device - Brace	X	
R7_C_B39_3_G_2	Special Equipment or Device - Cane/Crutches/Walker	X	
R7_C_B39_3_G_3	Special Equipment or Device - Wheelchair	X	
R7_C_B39_3_G_4	Special Equipment or Device - Modified Computer Hardware	X	
R7_C_B39_3_G_5	Special Equipment or Device - Modified Computer Software	X	
R7_C_B39_3_G_6	Special Equipment or Device - Other	X	
R7_C_B39_3_G_7	Special Equipment or Device - Hearing Air/Device	X	
R7_C_B39_3_G_8	Special Equipment or Device - Special Glasses	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_B39_3_G_9	Special Equipment or Device - Special Chair/Back Support	X	
R7_C_B39_3_G_10	Special Equipment or Device - Special Shoes/Stockings	X	
R7_C_B39_4	Changes Made to Benefits b/c of Job	X	X
R7_C_B39_4a	SSA Paid Wrong Benefit Amount b/c of Job	X	X
R7_C_B39_5	Asked to Re-Pay Benefits b/c Overpaid	X	X
R7_C_B39_6	Asked to Re-Pay Benefits b/c Working	X	X
R7_C_BP16	Changed Amount of Work b/c of re-payment to SSA (Past 6 Months)	X	X
R7_C_BP16a	Reduced/Increased Work Hours	X	
R7_C_Main6MoJobSOC	Occupation (main job in last 6 months)	X	
R7_C_Main6MoJobSOC_PUB	Occupation (main job in last 6 months) (Public)	X	X
R7_C_6MoJob2SOC	Occupation (Job 2 in last 6 months)	X	
R7_C_6MoJob3SOC	Occupation (Job 3 in last 6 months)	X	
R7_C_6MoJob4SOC	Occupation (Job 4 in last 6 months)	X	
R7_C_6MoJob5SOC	Occupation (Job 5 in last 6 months)	X	
R7_C_6MoJob6SOC	Occupation (Job 6 in last 6 months)	X	
R7_C_Main6MoJobNAICS	Industry (main job in last 6 months)	X	
R7_C_Main6MoJobNAICS_PUB	Industry (main job in last 6 months) (Public)	X	X
R7_C_6MoJob2NAICS	Industry (Job 2 in last 6 months)	X	
R7_C_6MoJob3NAICS	Industry (Job 3 in last 6 months)	X	
R7_C_6MoJob4NAICS	Industry (Job 4 in last 6 months)	X	
R7_C_6MoJob5NAICS	Industry (Job 5 in last 6 months)	X	
R7_C_6MoJob6NAICS	Industry (Job 6 in last 6 months)	X	
R7_C_Main6MoJobHrPay	Hourly Pay, Main Job (Pre-tax) in last 6 months	X	
R7_C_6MoJob2HrPay	Hourly Pay, Job 2 (Pre-tax) in last 6 months	X	
R7_C_6MoJob3HrPay	Hourly Pay, Job 3 (Pre-tax) in last 6 months	X	
R7_C_6MoJob4HrPay	Hourly Pay, Job 4 (Pre-tax) in last 6 months	X	
R7_C_6MoJob5HrPay	Hourly Pay, Job 5 (Pre-tax) in last 6 months	X	
R7_C_6MoJob6HrPay	Hourly Pay, Job 6 (Pre-tax) in last 6 months	X	
R7_C_Main6MoJobMnthPay	Monthly Pay, Main Job in last 6 months (Pre-tax)	X	
R7_C_6MoJob2MnthPay	Monthly Pay, Job 2 in last 6 months (Pre-tax)	X	
R7_C_6MoJob3MnthPay	Monthly Pay, Job 3 in last 6 months (Pre-tax)	X	
R7_C_6MoJob4MnthPay	Monthly Pay, Job 4 in last 6 months (Pre-tax)	X	
R7_C_6MoJob5MnthPay	Monthly Pay, Job 5 in last 6 months (Pre-tax)	X	
R7_C_6MoJob6MnthPay	Monthly Pay, Job 6 in last 6 months (Pre-tax)	X	
R7_C_Main6MoJobMnthPayTH	Monthly Pay, Main Job in last 6 Months (Take Home)	X	
R7_C_6MoJob2MnthPayTH	Monthly Pay, Job 2 in last 6 Months (Take Home)	X	
R7_C_6MoJob3MnthPayTH	Monthly Pay, Job 3 in last 6 Months (Take Home)	X	
R7_C_6MoJob4MnthPayTH	Monthly Pay, Job 4 in last 6 Months (Take Home)	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_6MoJob5MnthPayTH	Monthly Pay, Job 5 in last 6 Months (Take Home)	X	
R7_C_6MoJob6MnthPayTH	Monthly Pay, Job 6 in last 6 Months (Take Home)	X	
R7_C_Tot6MoMnthPay	Total 6 month pay (all jobs in last 6 months)	X	
R7_C_Tot6MoMnthPay_PUB	Total 6 month pay (all jobs in last 6 months) (Public)	X	X
R7_C_MnthsMain6MoJob	Months at 6 month job (main) over last 6 months	X	
R7_C_Mnths6MoJob2	Months at 6 month job 2 over last 6 months	X	
R7_C_Mnths6MoJob3	Months at 6 month job 3 over last 6 months	X	
R7_C_Mnths6MoJob4	Months at 6 month job 4 over last 6 months	X	
R7_C_Mnths6MoJob5	Months at 6 month job 5 over last 6 months	X	
R7_C_Mnths6MoJob6	Months at 6 month job 6 over last 6 months	X	
R7_C_MnthsEvrMain6MoJob	Months ever at 6 month job (main)	X	
R7_C_MnthsEvr6MoJob2	Months ever at 6 month job 2	X	
R7_C_MnthsEvr6MoJob3	Months ever at 6 month job 3	X	
R7_C_MnthsEvr6MoJob4	Months ever at 6 month job 4	X	
R7_C_MnthsEvr6MoJob5	Months ever at 6 month job 5	X	
R7_C_MnthsEvr6MoJob6	Months ever at 6 month job 6	X	
R7_C_Main6MoJobRepSSA	Weeks to Report Main Job in last 6 months to SSA	X	
R7_C_Main6MoJobRepSSA_PUB	Weeks to Report Job in last 6 months to SSA (Main) (Public)	X	X
R7_C_6MoJobRep2SSA	Weeks to Report Job 2 in last 6 months to SSA	X	
R7_C_6MoJobRep3SSA	Weeks to Report Job 3 in last 6 months to SSA	X	
R7_C_6MoJobRep4SSA	Weeks to Report Job 4 in last 6 months to SSA	X	
R7_C_6MoJobRep5SSA	Weeks to Report Job 5 in last 6 months to SSA	X	
R7_C_6MoJobRep6SSA	Weeks to Report Job 6 in last 6 months to SSA	X	
R7_D1	Worked in 2018 (Sec D)	X	X
R7_D3	Number Jobs in 2018	X	
R7_D6mth_1	Month Started 2018 Job (Job 1)	X	
R7_D6yr_1	Year Started 2018 Job (Job 1)	X	
R7_d6yr_m_PUB	Year Started 2018 Job (Main Job) (Public)	X	X
R7_D8mth_1	Month Stopped 2018 Job (Job 1)	X	
R7_D8yr_1	Year Stopped 2018 Job (Job 1)	X	
R7_d8yr_m_PUB	Year Stopped 2018 Job (Main Job) (Public)	X	X
R7_D14_1	Self-Employed at 2018 Job (Job 1)	X	
R7_D15_1	2018 Job Part of Sheltered or supported employment (Job 1)	X	X
R7_D16_1	Hours Usually Worked per Week at 2018 Job (Job 1)	X	
R7_D16_m_PUB	Hours Usually Worked per Week at 2018 Job (Main Job) (Public)	X	X
R7_D17_1	Weeks Usually Worked at 2018 Job (Job 1)	X	
R7_D17_m_PUB	Weeks Usually Worked at 2018 Job (Main Job) (Public)	X	X
R7_D18_1	Paid by the Hour in 2018 (Job 1)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_D18_m	Paid by the Hour in 2018 (Main Job)	X	X
R7_D19_1	Hourly Pay in 2018 (Job 1)	X	
R7_D20amt_1	Amount Paid Before Taxes in 2018 (Job 1)	X	
R7_D20hop_1	How Often Paid in 2018 (Job 1)	X	
R7_D21amt_1	Amount of Take Home Pay in 2018 (Job 1)	X	
R7_D21hop_1	How Often Paid in 2018 (Job 1)	X	
R7_DP1a_1	Left Job Because of Health (Job 1)	X	X
R7_DP1a_1_1_1	Health - Existing Health Problem Gets Worse (Job 1)	X	X
R7_DP1a_1_2_1	Health - New Health Problem Starts (Job 1)	X	X
R7_DP1a_1_3_1	Health - Got Injured (Job 1)	X	X
R7_DP1a_1_4_1	Health - Job has Negative Impact on Health (Job 1)	X	X
R7_DP1a_1_5_1	Health - Need to be Hospitalized (Job 1)	X	X
R7_DP1a_1_6_1	Health - Needs Time to Go to Medical App. (Job 1)	X	X
R7_DP1a_1_7_1	Health - Gets Fired for Missing Too Much Time for Apps. (Job 1)	X	X
R7_DP1a_1_8_1	Health - Interferes with Job Performance (Job 1)	X	X
R7_DP1a_1_9_1	Health - Lack Strength, Physical Energy, and Stamina (Job 1)	X	X
R7_DP1a_1_10_1	Health - Pain Interferes with Working Set Schedule (Job 1)	X	X
R7_DP1a_1_11_1	Health - Personal Care Takes Too Long (Job 1)	X	X
R7_DP1a_1_12_1	Health - Health Status Fluctuates Unpredictably (Job 1)	X	X
R7_DP1a_1_13_1	Health - Do not have Special Equipment or Medical Devices (Job 1)	X	X
R7_DP1a_1_14_1	Health - Work is Too Tiring/Stressful (Job 1)	X	X
R7_DP1a_1_15_1	Health - Other (Job 1)	X	X
R7_DP1b_1	Stopped Working due to Job Problems (Job 1)	X	X
R7_DP1b_1_1_1	Job - Job does not Pay Enough (Job 1)	X	X
R7_DP1b_1_2_1	Job - Job does not Offer Health Insurance (Job 1)	X	X
R7_DP1b_1_3_1	Job - Need a Different Schedule (Job 1)	X	X
R7_DP1b_1_4_1	Job - Need Time for Medical Apps. (Job 1)	X	X
R7_DP1b_1_5_1	Job - Got Fired for Missing too Much Time for Apps. (Job 1)	X	X
R7_DP1b_1_6_1	Job - Health Interferes with Job Performance (Job 1)	X	X
R7_DP1b_1_7_1	Job - Lacks Strength, Physical Energy, or Stamina (Job 1)	X	X
R7_DP1b_1_8_1	Job - Pain Interferes with Working Set Schedule (Job 1)	X	X
R7_DP1b_1_9_1	Job - Personal Care Takes too Long (Job 1)	X	X
R7_DP1b_1_10_1	Job - Do Not have Special Equipment or Medical Devices (Job 1)	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1b_1_11_1	Job - Personality Conflicted With Others At The Job (Job 1)	X	X
R7_DP1b_1_12_1	Job - Got Fired for Behavior (Job 1)	X	X
R7_DP1b_1_13_1	Job - Other (Job 1)	X	X
R7_DP1b_1_20_1	Job - Found Another Job (Job 1)	X	X
R7_DP1b_1_22_1	Job - Work Schedule (Job 1)	X	X
R7_DP1b_1_23_1	Job - Seasonal/Temporary (Job 1)	X	X
R7_DP1c_1	Left Job Because of Personal Circumstances (Job 1)	X	X
R7_DP1c_1_1_1	Personal Circumstances - Need Help Caring for Children (Job 1)	X	X
R7_DP1c_1_2_1	Personal Circumstances - Need Personal Assistance Getting Ready (Job 1)	X	X
R7_DP1c_1_3_1	Personal Circumstances - Get Injured (Job 1)	X	X
R7_DP1c_1_4_1	Personal Circumstances - Might Lose Benefits (Job 1)	X	X
R7_DP1c_1_5_1	Personal Circumstances - No Reliable Transportation (Job 1)	X	X
R7_DP1c_1_6_1	Personal Circumstances - Drug/Alcohol Relapse (Job 1)	X	X
R7_DP1c_1_7_1	Personal Circumstances - Rather Do Other Things (Job 1)	X	X
R7_DP1c_1_8_1	Personal Circumstances - Do Not Like Working (Job 1)	X	X
R7_DP1c_1_9_1	Personal Circumstances - Increase Income from Other Source (Job 1)	X	X
R7_DP1c_1_10_1	Personal Circumstances - Other (Job 1)	X	X
R7_DP1c_1_19_1	Personal Circumstances - Moved to Another Area (Job 1)	X	X
R7_DP1c_1_21_1	Personal Circumstances - Loss of Gov't Benefits (Job 1)	X	X
R7_D6mth_2	Month Started 2018 Job (Job 2)	X	
R7_D6yr_2	Year Started 2018 Job (Job 2)	X	
R7_D8mth_2	Month Stopped 2018 Job (Job 2)	X	
R7_D8yr_2	Year Stopped 2018 Job (Job 2)	X	
R7_D14_2	Self-Employed at 2018 Job (Job 2)	X	
R7_D15_2	2018 Job Part of Sheltered or supported employment (Job 2)	X	
R7_D16_2	Hours Usually Worked per Week at 2018 Job (Job 2)	X	
R7_D17_2	Weeks Usually Worked at 2018 Job (Job 2)	X	
R7_D18_2	Paid by the Hour in 2018 (Job 2)	X	
R7_D19_2	Hourly Pay in 2018 (Job 2)	X	
R7_D20amt_2	Amount Paid Before Taxes in 2018 (Job 2)	X	
R7_D20hop_2	How Often Paid in 2018 (Job 2)	X	
R7_D21amt_2	Amount of Take Home Pay in 2018 (Job 2)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_D21hop_2	How Often Paid in 2018 (Job 2)	X	
R7_DP1a_2	Left Job Because of Health (Job 2)	X	
R7_DP1a_1_1_2	Health - Existing Health Problem Gets Worse (Job 2)	X	
R7_DP1a_1_2_2	Health - New Health Problem Starts (Job 2)	X	
R7_DP1a_1_3_2	Health - Got Injured (Job 2)	X	
R7_DP1a_1_4_2	Health - Job has Negative Impact on Health (Job 2)	X	
R7_DP1a_1_5_2	Health - Need to be Hospitalized (Job 2)	X	
R7_DP1a_1_6_2	Health - Needs Time to Go to Medical App. (Job 2)	X	
R7_DP1a_1_7_2	Health - Gets Fired for Missing Too Much Time for Apps. (Job 2)	X	
R7_DP1a_1_8_2	Health - Interferes with Job Performance (Job 2)	X	
R7_DP1a_1_9_2	Health - Lack Strength, Physical Energy, and Stamina (Job 2)	X	
R7_DP1a_1_10_2	Health - Pain Interferes with Working Set Schedule (Job 2)	X	
R7_DP1a_1_11_2	Health - Personal Care Takes Too Long (Job 2)	X	
R7_DP1a_1_12_2	Health - Health Status Fluctuates Unpredictably (Job 2)	X	
R7_DP1a_1_13_2	Health - Do not have Special Equipment or Medical Devices (Job 2)	X	
R7_DP1a_1_14_2	Health - Work is Too Tiring/Stressful (Job 2)	X	
R7_DP1a_1_15_2	Health - Other (Job 2)	X	
R7_DP1b_2	Stopped Working due to Job Problems (Job 2)	X	
R7_DP1b_1_1_2	Job - Job does not Pay Enough (Job 2)	X	
R7_DP1b_1_2_2	Job - Job does not Offer Health Insurance (Job 2)	X	
R7_DP1b_1_3_2	Job - Need a Different Schedule (Job 2)	X	
R7_DP1b_1_4_2	Job - Need Time for Medical Apps. (Job 2)	X	
R7_DP1b_1_5_2	Job - Got Fired for Missing too Much Time for Apps. (Job 2)	X	
R7_DP1b_1_6_2	Job - Health Interferes with Job Performance (Job 2)	X	
R7_DP1b_1_7_2	Job - Lacks Strength, Physical Energy, or Stamina (Job 2)	X	
R7_DP1b_1_8_2	Job - Pain Interferes with Working Set Schedule (Job 2)	X	
R7_DP1b_1_9_2	Job - Personal Care Takes too Long (Job 2)	X	
R7_DP1b_1_10_2	Job - Do Not have Special Equipment or Medical Devices (Job 2)	X	
R7_DP1b_1_11_2	Job - Personality Conflicted With Others At The Job (Job 2)	X	
R7_DP1b_1_12_2	Job - Got Fired for Behavior (Job 2)	X	
R7_DP1b_1_13_2	Job - Other (Job 2)	X	
R7_DP1b_1_20_2	Job - Found Another Job (Job 2)	X	
R7_DP1b_1_22_2	Job - Work Schedule (Job 2)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1b_1_23_2	Job - Seasonal/Temporary (Job 2)	X	
R7_DP1c_2	Left Job Because of Personal Circumstances (Job 2)	X	
R7_DP1c_1_1_2	Personal Circumstances - Need Help Caring for Children (Job 2)	X	
R7_DP1c_1_2_2	Personal Circumstances - Need Personal Assistance Getting Ready (Job 2)	X	
R7_DP1c_1_3_2	Personal Circumstances - Got Injured (Job 2)	X	
R7_DP1c_1_4_2	Personal Circumstances - Might Lose Benefits (Job 2)	X	
R7_DP1c_1_5_2	Personal Circumstances - No Reliable Transportation (Job 2)	X	
R7_DP1c_1_6_2	Personal Circumstances - Drug/Alcohol Relapse (Job 2)	X	
R7_DP1c_1_7_2	Personal Circumstances - Rather Do Other Things (Job 2)	X	
R7_DP1c_1_8_2	Personal Circumstances - Do Not Like Working (Job 2)	X	
R7_DP1c_1_9_2	Personal Circumstances - Increase Income from Other Source (Job 2)	X	
R7_DP1c_1_10_2	Personal Circumstances - Other (Job 2)	X	
R7_DP1c_1_19_2	Personal Circumstances - Moved to Another Area (Job 2)	X	
R7_DP1c_1_21_2	Personal Circumstances - Loss of Gov't Benefits (Job 2)	X	
R7_D6mth_3	Month Started 2018 Job (Job 3)	X	
R7_D6yr_3	Year Started 2018 Job (Job 3)	X	
R7_D8mth_3	Month Stopped 2018 Job (Job 3)	X	
R7_D8yr_3	Year Stopped 2018 Job (Job 3)	X	
R7_D14_3	Self-Employed at 2018 Job (Job 3)	X	
R7_D15_3	2018 Job Part of Sheltered or supported employment (Job 3)	X	
R7_D16_3	Hours Usually Worked per Week at 2018 Job (Job 3)	X	
R7_D17_3	Weeks Usually Worked at 2018 Job (Job 3)	X	
R7_D18_3	Paid by the Hour in 2018 (Job 3)	X	
R7_D19_3	Hourly Pay in 2018 (Job 3)	X	
R7_D20amt_3	Amount Paid Before Taxes in 2018 (Job 3)	X	
R7_D20hop_3	How Often Paid in 2018 (Job 3)	X	
R7_D21amt_3	Amount of Take Home Pay in 2018 (Job 3)	X	
R7_D21hop_3	How Often Paid in 2018 (Job 3)	X	
R7_DP1a_3	Left Job Because of Health (Job 3)	X	
R7_DP1a_1_1_3	Health - Existing Health Problem Gets Worse (Job 3)	X	
R7_DP1a_1_2_3	Health - New Health Problem Starts (Job 3)	X	
R7_DP1a_1_3_3	Health - Got Injured (Job 3)	X	
R7_DP1a_1_4_3	Health - Job has Negative Impact on Health (Job 3)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1a_1_5_3	Health - Need to be Hospitalized (Job 3)	X	
R7_DP1a_1_6_3	Health - Needs Time to Go to Medical App. (Job 3)	X	
R7_DP1a_1_7_3	Health - Gets Fired for Missing Too Much Time for Apps. (Job 3)	X	
R7_DP1a_1_8_3	Health - Interferes with Job Performance (Job 3)	X	
R7_DP1a_1_9_3	Health - Lack Strength, Physical Energy, and Stamina (Job 3)	X	
R7_DP1a_1_10_3	Health - Pain Interferes with Working Set Schedule (Job 3)	X	
R7_DP1a_1_11_3	Health - Personal Care Takes Too Long (Job 3)	X	
R7_DP1a_1_12_3	Health - Health Status Fluctuates Unpredictably (Job 3)	X	
R7_DP1a_1_13_3	Health - Do not have Special Equipment or Medical Devices (Job 3)	X	
R7_DP1a_1_14_3	Health - Work is Too Tiring/Stressful (Job 3)	X	
R7_DP1a_1_15_3	Health - Other (Job 3)	X	
R7_DP1b_3	Stopped Working due to Job Problems (Job 3)	X	
R7_DP1b_1_1_3	Job - Job does not Pay Enough (Job 3)	X	
R7_DP1b_1_2_3	Job - Job does not Offer Health Insurance (Job 3)	X	
R7_DP1b_1_3_3	Job - Need a Different Schedule (Job 3)	X	
R7_DP1b_1_4_3	Job - Need Time for Medical Apps. (Job 3)	X	
R7_DP1b_1_5_3	Job - Got Fired for Missing too Much Time for Apps. (Job 3)	X	
R7_DP1b_1_6_3	Job - Health Interferes with Job Performance (Job 3)	X	
R7_DP1b_1_7_3	Job - Lacks Strength, Physical Energy, or Stamina (Job 3)	X	
R7_DP1b_1_8_3	Job - Pain Interferes with Working Set Schedule (Job 3)	X	
R7_DP1b_1_9_3	Job - Personal Care Takes too Long (Job 3)	X	
R7_DP1b_1_10_3	Job - Do Not have Special Equipment or Medical Devices (Job 3)	X	
R7_DP1b_1_11_3	Job - Personality Conflicted With Others At The Job (Job 3)	X	
R7_DP1b_1_12_3	Job - Got Fired for Behavior (Job 3)	X	
R7_DP1b_1_13_3	Job - Other (Job 3)	X	
R7_DP1b_1_20_3	Job - Found Another Job (Job 3)	X	
R7_DP1b_1_22_3	Job - Work Schedule (Job 3)	X	
R7_DP1b_1_23_3	Job - Seasonal Temporary (Job 3)	X	
R7_DP1c_3	Left Job Because of Personal Circumstances (Job 3)	X	
R7_DP1c_1_1_3	Personal Circumstances - Need Help Caring for Children (Job 3)	X	
R7_DP1c_1_2_3	Personal Circumstances - Need Personal Assistance Getting Ready (Job 3)	X	
R7_DP1c_1_3_3	Personal Circumstances - Got Injured (Job 3)	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1c_1_4_3	Personal Circumstances - Might Lose Benefits (Job 3)	X	
R7_DP1c_1_5_3	Personal Circumstances - No Reliable Transportation (Job 3)	X	
R7_DP1c_1_6_3	Personal Circumstances - Drug/Alcohol Relapse (Job 3)	X	
R7_DP1c_1_7_3	Personal Circumstances - Rather Do Other Things (Job 3)	X	
R7_DP1c_1_8_3	Personal Circumstances - Do Not Like Working (Job 3)	X	
R7_DP1c_1_9_3	Personal Circumstances - Increase Income from Other Source (Job 3)	X	
R7_DP1c_1_10_3	Personal Circumstances - Other (Job 3)	X	
R7_DP1c_1_19_3	Personal Circumstances - Moved to Another Area (Job 3)	X	
R7_DP1c_1_21_3	Personal Circumstances - Loss of Gov't Benefits (Job 3)	X	
R7_D6mth_4	Month Started 2018 Job (Job 4)	X	
R7_D6yr_4	Year Started 2018 Job (Job 4)	X	
R7_D8mth_4	Month Stopped 2018 Job (Job 4)	X	
R7_D8yr_4	Year Stopped 2018 Job (Job 4)	X	
R7_D14_4	Self-Employed at 2018 Job (Job 4)	X	
R7_D15_4	2018 Job Part of Sheltered or supported employment (Job 4)	X	
R7_D16_4	Hours Usually Worked per Week at 2018 Job (Job 4)	X	
R7_D17_4	Weeks Usually Worked at 2018 Job (Job 4)	X	
R7_D18_4	Paid by the Hour in 2018 (Job 4)	X	
R7_D19_4	Hourly Pay in 2018 (Job 4)	X	
R7_D20amt_4	Amount Paid Before Taxes in 2018 (Job 4)	X	
R7_D20hop_4	How Often Paid in 2018 (Job 4)	X	
R7_D21amt_4	Amount of Take Home Pay in 2018 (Job 4)	X	
R7_D21hop_4	How Often Paid in 2018 (Job 4)	X	
R7_DP1a_4	Left Job Because of Health (Job 4)	X	
R7_DP1a_1_1_4	Health - Existing Health Problem Gets Worse (Job 4)	X	
R7_DP1a_1_2_4	Health - New Health Problem Starts (Job 4)	X	
R7_DP1a_1_3_4	Health - Got Injured (Job 4)	X	
R7_DP1a_1_4_4	Health - Job has Negative Impact on Health (Job 4)	X	
R7_DP1a_1_5_4	Health - Need to be Hospitalized (Job 4)	X	
R7_DP1a_1_6_4	Health - Needs Time to Go to Medical App. (Job 4)	X	
R7_DP1a_1_7_4	Health - Gets Fired for Missing Too Much Time for Apps. (Job 4)	X	
R7_DP1a_1_8_4	Health - Interferes with Job Performance (Job 4)	X	
R7_DP1a_1_9_4	Health - Lack Strength, Physical Energy, and Stamina (Job 4)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1a_1_10_4	Health - Pain Interferes with Working Set Schedule (Job 4)	X	
R7_DP1a_1_11_4	Health - Personal Care Takes Too Long (Job 4)	X	
R7_DP1a_1_12_4	Health - Health Status Fluctuates Unpredictably (Job 4)	X	
R7_DP1a_1_13_4	Health - Do not have Special Equipment or Medical Devices (Job 4)	X	
R7_DP1a_1_14_4	Health - Work is Too Tiring/Stressful (Job 4)	X	
R7_DP1a_1_15_4	Health - Other (Job 4)	X	
R7_DP1b_4	Stopped Working due to Job Problems (Job 4)	X	
R7_DP1b_1_1_4	Job - Job does not Pay Enough (Job 4)	X	
R7_DP1b_1_2_4	Job - Job does not Offer Health Insurance (Job 4)	X	
R7_DP1b_1_3_4	Job - Need a Different Schedule (Job 4)	X	
R7_DP1b_1_4_4	Job - Need Time for Medical Apps. (Job 4)	X	
R7_DP1b_1_5_4	Job - Got Fired for Missing too Much Time for Apps. (Job 4)	X	
R7_DP1b_1_6_4	Job - Health Interferes with Job Performance (Job 4)	X	
R7_DP1b_1_7_4	Job - Lacks Strength, Physical Energy, or Stamina (Job 4)	X	
R7_DP1b_1_8_4	Job - Pain Interferes with Working Set Schedule (Job 4)	X	
R7_DP1b_1_9_4	Job - Personal Care Takes too Long (Job 4)	X	
R7_DP1b_1_10_4	Job - Do Not have Special Equipment or Medical Devices (Job 4)	X	
R7_DP1b_1_11_4	Job - Personality Conflicted With Others At The Job (Job 4)	X	
R7_DP1b_1_12_4	Job - Got Fired for Behavior (Job 4)	X	
R7_DP1b_1_13_4	Job - Other (Job 4)	X	
R7_DP1b_1_20_4	Job - Found Another Job (Job 4)	X	
R7_DP1b_1_22_4	Job - Work Schedule (Job 4)	X	
R7_DP1b_1_23_4	Job - Seasonal/Temporary (Job 4)	X	
R7_DP1c_4	Left Job Because of Personal Circumstances (Job 4)	X	
R7_DP1c_1_1_4	Personal Circumstances - Need Help Caring for Children (Job 4)	X	
R7_DP1c_1_2_4	Personal Circumstances - Need Personal Assistance Getting Ready (Job 4)	X	
R7_DP1c_1_3_4	Personal Circumstances - Got Injured (Job 4)	X	
R7_DP1c_1_4_4	Personal Circumstances - Might Lose Benefits (Job 4)	X	
R7_DP1c_1_5_4	Personal Circumstances - No Reliable Transportation (Job 4)	X	
R7_DP1c_1_6_4	Personal Circumstances - Drug/Alcohol Relapse (Job 4)	X	
R7_DP1c_1_7_4	Personal Circumstances - Rather Do Other Things (Job 4)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1c_1_8_4	Personal Circumstances - Do Not Like Working (Job 4)	X	
R7_DP1c_1_9_4	Personal Circumstances - Increase Income from Other Source (Job 4)	X	
R7_DP1c_1_10_4	Personal Circumstances - Other (Job 4)	X	
R7_DP1c_1_19_4	Personal Circumstances - Moved to Another Area (Job 4)	X	
R7_DP1c_1_21_4	Personal Circumstances - Loss of Gov't Benefits (Job 4)	X	
R7_D6mth_5	Month Started 2018 Job (Job 5)	X	
R7_D6yr_5	Year Started 2018 Job (Job 5)	X	
R7_D8mth_5	Month Stopped 2018 Job (Job 5)	X	
R7_D8yr_5	Year Stopped 2018 Job (Job 5)	X	
R7_D14_5	Self-Employed at 2018 Job (Job 5)	X	
R7_D15_5	2018 Job Part of Sheltered or supported employment (Job 5)	X	
R7_D16_5	Hours Usually Worked per Week at 2018 Job (Job 5)	X	
R7_D17_5	Weeks Usually Worked at 2018 Job (Job 5)	X	
R7_D18_5	Paid by the Hour in 2018 (Job 5)	X	
R7_D19_5	Hourly Pay in 2018 (Job 5)	X	
R7_D20amt_5	Amount Paid Before Taxes in 2018 (Job 5)	X	
R7_D20hop_5	How Often Paid in 2018 (Job 5)	X	
R7_D21amt_5	Amount of Take Home Pay in 2018 (Job 5)	X	
R7_D21hop_5	How Often Paid in 2018 (Job 5)	X	
R7_DP1a_5	Left Job Because of Health (Job 5)	X	
R7_DP1a_1_1_5	Health - Existing Health Problem Gets Worse (Job 5)	X	
R7_DP1a_1_2_5	Health - New Health Problem Starts (Job 5)	X	
R7_DP1a_1_3_5	Health - Got Injured (Job 5)	X	
R7_DP1a_1_4_5	Health - Job has Negative Impact on Health (Job 5)	X	
R7_DP1a_1_5_5	Health - Need to be Hospitalized (Job 5)	X	
R7_DP1a_1_6_5	Health - Needs Time to Go to Medical App. (Job 5)	X	
R7_DP1a_1_7_5	Health - Gets Fired for Missing Too Much Time for Apps. (Job 5)	X	
R7_DP1a_1_8_5	Health - Interferes with Job Performance (Job 5)	X	
R7_DP1a_1_9_5	Health - Lack Strength, Physical Energy, and Stamina (Job 5)	X	
R7_DP1a_1_10_5	Health - Pain Interferes with Working Set Schedule (Job 5)	X	
R7_DP1a_1_11_5	Health - Personal Care Takes Too Long (Job 5)	X	
R7_DP1a_1_12_5	Health - Health Status Fluctuates Unpredictably (Job 5)	X	
R7_DP1a_1_13_5	Health - Do not have Special Equipment or Medical Devices (Job 5)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1a_1_14_5	Health - Work is Too Tiring/Stressful (Job 5)	X	
R7_DP1a_1_15_5	Health - Other (Job 5)	X	
R7_DP1b_5	Stopped Working due to Job Problems (Job 5)	X	
R7_DP1B_1_1_5	Job - Job does not Pay Enough (Job 5)	X	
R7_DP1B_1_2_5	Job - Job does not Offer Health Insurance (Job 5)	X	
R7_DP1B_1_3_5	Job - Need a Different Schedule (Job 5)	X	
R7_DP1b_1_4_5	Job - Need Time for Medical Apps. (Job 5)	X	
R7_DP1B_1_5_5	Job - Got Fired for Missing too Much Time for Apps. (Job 5)	X	
R7_DP1B_1_6_5	Job - Health Interferes with Job Performance (Job 5)	X	
R7_DP1B_1_7_5	Job - Lacks Strength, Physical Energy, or Stamina (Job 5)	X	
R7_DP1B_1_8_5	Job - Pain Interferes with Working Set Schedule (Job 5)	X	
R7_DP1B_1_9_5	Job - Personal Care Takes too Long (Job 5)	X	
R7_DP1B_1_10_5	Job - Do Not have Special Equipment or Medical Devices (Job 5)	X	
R7_DP1B_1_11_5	Job - Personality Conflicted With Others At The Job (Job 5)	X	
R7_DP1B_1_12_5	Job - Got Fired for Behavior (Job 5)	X	
R7_DP1B_1_13_5	Job - Other (Job 5)	X	
R7_DP1B_1_20_5	Job - Found Another Job (Job 5)	X	
R7_DP1B_1_22_5	Job - Work Schedule (Job 5)	X	
R7_DP1B_1_23_5	Job - Seasonal/Temporary (Job 5)	X	
R7_DP1c_5	Left Job Because of Personal Circumstances (Job 5)	X	
R7_DP1C_1_1_5	Personal Circumstances - Need Help Caring for Children (Job 5)	X	
R7_DP1C_1_2_5	Personal Circumstances - Need Personal Assistance Getting Ready (Job 5)	X	
R7_DP1C_1_3_5	Personal Circumstances - Got Injured (Job 5)	X	
R7_DP1C_1_4_5	Personal Circumstances - Might Lose Benefits (Job 5)	X	
R7_DP1C_1_5_5	Personal Circumstances - No Reliable Transportation (Job 5)	X	
R7_DP1C_1_6_5	Personal Circumstances - Drug/Alcohol Relapse (Job 5)	X	
R7_DP1C_1_7_5	Personal Circumstances - Rather Do Other Things (Job 5)	X	
R7_DP1C_1_8_5	Personal Circumstances - Do Not Like Working (Job 5)	X	
R7_DP1C_1_9_5	Personal Circumstances - Increase Income from Other Source (Job 5)	X	
R7_DP1C_1_10_5	Personal Circumstances - Other (Job 5)	X	
R7_DP1C_1_19_5	Personal Circumstances - Moved to Another Area (Job 5)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_DP1C_1_21_5	Personal Circumstances - Loss of Gov't Benefits (Job 5)	X	
R7_D25	Worked Fewer Hours in 2018	X	X
R7_D25a_a	Worked Fewer Hours in 2018 b/c Caring For Someone	X	X
R7_D25a_b	Worked Fewer Hours in 2018 b/c in School	X	X
R7_D25a_c	Worked Fewer Hours in 2018 b/c Want to Keep Medicare	X	X
R7_D25a_d	Worked Fewer Hours in 2018 b/c Want to Keep Benefits	X	X
R7_D25a_e	Worked Fewer Hours in 2018 b/c Didn't Want to Work More	X	X
R7_D25a_f	Worked Fewer Hours in 2018 for Other Reason	X	X
R7_D25a_g	Worked Fewer Hours in 2018 b/c Had Medical Probs/Complications	X	X
R7_D25_1	Disability Related Benefits Reduced or Ended b/c Working in 2018	X	X
R7_D25_2_1	Private Disability Insurance Reduced or Ended b/c Working in 2018	X	
R7_D25_2_2	Workers' Compensation Reduced or Ended b/c Working in 2018	X	
R7_D25_2_3	Veterans Benefits Reduced or Ended b/c Working in 2018	X	
R7_D25_2_4	Medicare Reduced or Ended b/c Working in 2018	X	
R7_D25_2_5	Medicaid Reduced or Ended b/c Working in 2018	X	
R7_D25_2_6	SSA Disability Benefits Reduced or Ended b/c Working in 2018	X	
R7_D25_2_7	Public Assistance or Welfare Reduced or Ended b/c Working in 2018	X	
R7_D25_2_8	Food Stamps Reduced or Ended b/c Working in 2018	X	
R7_D25_2_9	Personal Assistance Services Reduced or Ended b/c Working in 2018	X	
R7_D25_2_10	Unemployment Benefits Reduced b/c Working in 2018	X	
R7_D25_2_11	Other State Disability Benefits Reduced or Ended b/c Working in 2018	X	
R7_D25_2_12	Other Government Programs Reduced or Ended b/c Working in 2018	X	
R7_D25_2_13	Other Benefits Reduced or Ended b/c Working in 2018	X	
R7_D25_2_14	Health insurance unspecified Reduced or Ended b/c Working in 2018	X	
R7_D26_a	Could Have Worked More in 2018 if Had Help Caring for Others	X	X
R7_D26_b	Could Have Worked More in 2018 if Had Help w/ Personal Care	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_D26_c	Could Have Worked More in 2018 if Had Transportation	X	X
R7_D26_d	Could Have Worked More in 2018 if Had Job Skills	X	X
R7_D26_e	Could Have Worked More in 2018 if Had Flex Schedule	X	X
R7_D26_f	Could Have Worked More in 2018 if Had Help Getting Job	X	X
R7_D26_g	Could Have Worked More in 2018 if Had Special Equipment	X	X
R7_D26_h	Could Have Worked More in 2018 if Had Other	X	X
R7_D26_i	Could Have Worked More in 2018 if Had Better Health/Treatment	X	X
R7_D26_j	Could Have Worked More in 2018 if Had More Supportive Employer	X	X
R7_D27	Changes made to Benefits in 2018	X	X
R7_D28	Wrong Amount Paid in 2018	X	X
R7_D29	Asked to Repay Benefits in 2018	X	X
R7_D30	Asked to Repay Benefits Because Working in 2018	X	X
R7_DP3	Changed Amount Worked Due to SSA re-payment	X	X
R7_DP3a	2018 Job Reduced/Increased Work Hours	X	
R7_C_Main_Job_grid_num	Job Number of 2018 main job	X	
R7_C_job_from_SecC_B_1	Number jobs in past 6 months copied to Section D (Slot 1)	X	
R7_C_job_from_SecC_B_2	Number jobs in past 6 months copied to Section D (Slot 2)	X	
R7_C_job_from_SecC_B_3	Number jobs in past 6 months copied to Section D (Slot 3)	X	
R7_C_job_from_SecC_B_4	Number jobs in past 6 months copied to Section D (Slot 4)	X	
R7_C_job_from_SecC_B_5	Number jobs in past 6 months copied to Section D (Slot 5)	X	
R7_C_job_from_SecC_B_6	Number jobs in past 6 months copied to Section D (Slot 6)	X	
R7_C_job_from_SecC_1	Current Job Copied to 2018 Job 1	X	
R7_C_job_from_SecC_2	Current Job Copied to 2018 Job 2	X	
R7_C_job_from_SecC_3	Current Job Copied to 2018 Job 3	X	
R7_C_job_from_SecC_4	Current Job Copied to 2018 Job 4	X	
R7_C_job_from_SecC_5	Current Job Copied to 2018 Job 5	X	
R7_C_job_from_SecC_6	Current Job Copied to 2018 Job 6	X	
R7_c_totjobcopied	Total jobs copied from C to D	X	
R7_C_MAINJOB2018SOC	2018 Occupation, SOC Code (Main Job)	X	
R7_C_MainJob2018SOC_PUB	2018 Occupation, SOC Code (Main Job) (Public)	X	X
R7_C_MAINJOB2018NAICS	2018 Industry, NAICS Code (Main Job)	X	
R7_C_MainJob2018NAICS_PUB	2018 Industry, NAICS Code (Main Job) (Public)	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_JOB12018SOC	2018 Occupation, SOC Code (Job 1)	X	
R7_C_JOB12018NAICS	2018 Industry, NAICS Code (Job 1)	X	
R7_C_JOB22018SOC	2018 Occupation, SOC Code (Job 2)	X	
R7_C_JOB22018NAICS	2018 Industry, NAICS Code (Job 2)	X	
R7_C_JOB32018SOC	2018 Occupation, SOC Code (Job 3)	X	
R7_C_JOB32018NAICS	2018 Industry, NAICS Code (Job 3)	X	
R7_C_JOB42018SOC	2018 Occupation, SOC Code (Job 4)	X	
R7_C_JOB42018NAICS	2018 Industry, NAICS Code (Job 4)	X	
R7_C_JOB52018SOC	2018 Occupation, SOC Code (Job 5)	X	
R7_C_JOB52018NAICS	2018 Industry, NAICS Code (Job 5)	X	
R7_C_JOB62018SOC	2018 Occupation, SOC Code (Job 6)	X	
R7_C_JOB62018NAICS	2018 Industry, NAICS Code (Job 6)	X	
R7_C_MainJobHrPay2018	Hourly Pay Main 2018 Job (Pre-tax)	X	
R7_C_MainJobMnthPay2018	Monthly Pay 2018 Main Job (Pre-tax)	X	
R7_C_MainJobMnthPay2018_PUB	Monthly Pay 2018 Main Job (Pre-tax) (Public)	X	X
R7_C_MainJobMnthPayTH2018	Monthly Pay 2018 Main Job (Take Home)	X	
R7_C_MnthsMain2018Job	Months at 2018 Main Job	X	X
R7_C_Job1HrPay2018	Hourly Pay 2018 Job 1 (Pre-Tax)	X	
R7_C_Job1MnthPay2018	Monthly Pay 2018 Job 1 (Pre-Tax)	X	
R7_C_Job1MnthPayTH2018	Monthly Pay 2018 Job 1 (Take Home)	X	
R7_C_MnthsJob12018	Months at 2018 Job 1	X	
R7_C_Job2HrPay2018	Hourly Pay 2018 Job 2 (Pre-Tax)	X	
R7_C_Job2MnthPay2018	Monthly Pay 2018 Job 2 (Pre-Tax)	X	
R7_C_Job2MnthPayTH2018	Monthly Pay 2018 Job 2 (Take Home)	X	
R7_C_MnthsJob22018	Months at 2018 Job 2	X	
R7_C_Job3HrPay2018	Hourly Pay 2018 Job 3 (Pre-Tax)	X	
R7_C_Job3MnthPay2018	Monthly Pay 2018 Job 3 (Pre-Tax)	X	
R7_C_Job3MnthPayTH2018	Monthly Pay 2018 Job 3 (Take Home)	X	
R7_C_MnthsJob32018	Months at 2018 Job 3	X	
R7_C_Job4HrPay2018	Hourly Pay 2018 Job 4 (Pre-Tax)	X	
R7_C_Job4MnthPay2018	Monthly Pay 2018 Job 4 (Pre-Tax)	X	
R7_C_Job4MnthPayTH2018	Monthly Pay 2018 Job 4 (Take Home)	X	
R7_C_MnthsJob42018	Months at 2018 Job 4	X	
R7_C_Job5HrPay2018	Hourly Pay 2018 Job 5 (Pre-Tax)	X	
R7_C_Job5MnthPay2018	Monthly Pay 2018 Job 5 (Pre-Tax)	X	
R7_C_Job5MnthPayTH2018	Monthly Pay 2018 Job 5 (Take Home)	X	
R7_C_MnthsJob52018	Months at 2018 Job 5	X	
R7_C_Job6HrPay2018	Hourly Pay 2018 Job 6 (Pre-Tax)	X	
R7_C_Job6MnthPay2018	Monthly Pay 2018 Job 6 (Pre-Tax)	X	
R7_C_Job6MnthPayTH2018	Monthly Pay 2018 Job 6 (Take Home)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_MnthsJob62018	Months at 2018 Job 6	X	
R7_C_Tot2018Pay	Total Annual pay (pre-tax) 2018	X	
R7_C_TOT2018PAY_PUB	Total Annual pay (pre-tax) 2018 (Public)	X	X
R7_C_TotHrs2018	Total hours worked in 2018	X	
R7_C_TotHrs2018_PUB	Total hours worked in 2018 (Public)	X	X
R7_C_UsWkHr2018	Usual weekly hours in 2018	X	
R7_C_UsWkHr2018_PUB	Usual weekly hours in 2018 (Public)	X	X
R7_SC1a	Stopped Receiving Benefits During Past Year b/c working	X	X
R7_SC1	Stop Receiving Benefits During Past Year b/c Working	X	X
R7_SC2	Receiving Cash Disability Benefits	X	X
R7_SC3	In Process of Getting Back on Benefits	X	X
R7_SA7	Working/Earning More Stops Benefit	X	X
R7_SA8	Would have Started Working/Earning More	X	X
R7_SS2_a	Go Back on Disability Benefits b/c of Health	X	X
R7_SS2a_1_1	Go Back on Benefits - Health - Health Getting Worse	X	X
R7_SS2a_1_2	Go Back on Benefits - Health - New Health Problem	X	X
R7_SS2a_1_3	Go Back on Benefits - Health - Injury	X	X
R7_SS2a_1_4	Go Back on Benefits - Health - Job Having Negative Health Impact	X	X
R7_SS2a_1_5	Go Back on Benefits - Health - Need to be Hospitalized	X	X
R7_SS2a_1_6	Go Back on Benefits - Health - Time Needed for Medical Apps.	X	X
R7_SS2a_1_7	Go Back on Benefits - Health - Getting Fired for Missing Time for Medical Apps.	X	X
R7_SS2a_1_8	Go Back on Benefits - Health - Health Interfering with Job	X	X
R7_SS2a_1_9	Go Back on Benefits - Health - Lack of Strength, Physical Energy, or Stamina	X	X
R7_SS2a_1_10	Go Back on Benefits - Health - Pain	X	X
R7_SS2a_1_11	Go Back on Benefits - Health - Personal Care Taking Too Long	X	X
R7_SS2a_1_12	Go Back on Benefits - Health - Health Fluctuation	X	X
R7_SS2a_1_13	Go Back on Benefits - Health - Special Equipment or Medical Devices Needed at Work	X	X
R7_SS2a_1_14	Go Back on Benefits - Health - Stressful/Tiring Work	X	X
R7_SS2a_1_15	Go Back on Benefits - Health - Other	X	X
R7_SS2_b	Go Back on Disability Benefits b/c of Job	X	X
R7_SS2b_1_1	Go Back on Benefits - Job - Job does not Pay Enough	X	X
R7_SS2b_1_2	Go Back on Benefits - Job - Job does not Offer Health Insurance	X	X
R7_SS2b_1_3	Go Back on Benefits - Job - Need Different Schedule	X	X

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_SS2b_1_4	Go Back on Benefits - Job - Need Time for Medical Apps.	X	X
R7_SS2b_1_5	Go Back on Benefits - Job - Was Fired	X	X
R7_SS2b_1_6	Go Back on Benefits - Job - Health Interferes with Job	X	X
R7_SS2b_1_7	Go Back on Benefits - Job - Lacks Strength, Physical Energy, Stamina	X	X
R7_SS2b_1_8	Go Back on Benefits - Job - Pain Interferes With Working Set Schedule	X	X
R7_SS2b_1_9	Go Back on Benefits - Job - Personal Care Takes Too Long	X	X
R7_SS2b_1_10	Go Back on Benefits - Job - Does not Have Special Equipment at Work	X	X
R7_SS2b_1_11	Go Back on Benefits - Job - Other	X	X
R7_SS2b_1_20	Go Back on Benefits - Job - Found Another Job	X	X
R7_SS2b_1_22	Go Back on Benefits - Job - Work Schedule	X	X
R7_SS2b_1_23	Go Back on Benefits - Job - Did Not Get Along with Co-Workers	X	X
R7_SS2b_1_24	Go Back on Benefits - Job - Did Not Get Along with Manager/Supervisor/Boss	X	X
R7_SS2b_1_25	Go Back on Benefits - Job - Did Not Get Along with HR	X	X
R7_SS2_c	Go Back on Disability Benefits b/c of Personal Circumstances	X	X
R7_SS2c_1_1	Go Back on Benefits - Personal Circumstances - Need Help Caring for Children	X	X
R7_SS2c_1_2	Go Back on Benefits - Personal Circumstances - Need Personal Assistance Getting Ready	X	X
R7_SS2c_1_3	Go Back on Benefits - Personal Circumstances - Get Injured	X	X
R7_SS2c_1_4	Go Back on Benefits - Personal Circumstances - Might Lose Benefits	X	X
R7_SS2c_1_5	Go Back on Benefits - Personal Circumstances - Personality Conflicts with Other at Job	X	X
R7_SS2c_1_6	Go Back on Benefits - Personal Circumstances - Might Get Fired due to Behavior	X	X
R7_SS2c_1_7	Go Back on Benefits - Personal Circumstances - No Reliable Transportation	X	X
R7_SS2c_1_8	Go Back on Benefits - Personal Circumstances - Drug/Alcohol Relapse	X	X
R7_SS2c_1_9	Go Back on Benefits - Personal Circumstances - Rather Do Other Things	X	X
R7_SS2c_1_10	Go Back on Benefits - Personal Circumstances - Do Not Like Working	X	X
R7_SS2c_1_11	Go Back on Benefits - Personal Circumstances - Work is Too Tiring/Stressful	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_SS2c_1_12	Go Back on Benefits - Personal Circumstances - Other	X	X
R7_SS2c_1_19	Go Back on Benefits - Personal Circumstances - Moved to Another Area	X	X
R7_SS2c_1_21	Go Back on Benefits - Personal Circumstances - Loss of Gov't Benefits	X	X
R7_SB1_a	Back on Benefits due to Health	X	X
R7_SB1a_1_1	Back on Benefits - Health - Health Problem Gets Worse	X	X
R7_SB1a_1_2	Back on Benefits - Health - New Health Problem	X	X
R7_SB1a_1_3	Back on Benefits - Health - Get Injured	X	X
R7_SB1a_1_4	Back on Benefits - Health - Job Has Negative Impact on Health	X	X
R7_SB1a_1_5	Back on Benefits - Health - Need to be Hospitalized	X	X
R7_SB1a_1_6	Back on Benefits - Health - Need Time for Medical Apps.	X	X
R7_SB1a_1_7	Back on Benefits - Health - Got Fired for Missing Time for Medical Apps.	X	X
R7_SB1a_1_8	Back on Benefits - Health - Health Interferes with Job Performance	X	X
R7_SB1a_1_9	Back on Benefits - Health - Lacks Strength, Physical Energy, Stamina	X	X
R7_SB1a_1_10	Back on Benefits - Health - Pain	X	X
R7_SB1a_1_11	Back on Benefits - Health - Personal Care Takes Too Long	X	X
R7_SB1a_1_12	Back on Benefits - Health - Health Status Fluctuates	X	X
R7_SB1a_1_13	Back on Benefits - Health - Do Not Have Special Equipment at Work	X	X
R7_SB1a_1_14	Back on Benefits - Health - Work Too Tiring/Stressful	X	X
R7_SB1a_1_15	Back on Benefits - Health - Other	X	X
R7_SB1_b	Back on Benefits due to Job	X	X
R7_SB1b_1_1	Back on Benefits - Job - Job Does not Pay Enough	X	X
R7_SB1b_1_2	Back on Benefits - Job - Job Does not Offer Health Insurance	X	X
R7_SB1b_1_3	Back on Benefits - Job - Need a Different Schedule	X	X
R7_SB1b_1_4	Back on Benefits - Job - Need Time for Medical Apps.	X	X
R7_SB1b_1_5	Back on Benefits - Job - Got Fired	X	X
R7_SB1b_1_6	Back on Benefits - Job - Health Interferes with Job Performance	X	X
R7_SB1b_1_7	Back on Benefits - Job - Lacks Strength, Physical Energy or Stamina	X	X
R7_SB1b_1_8	Back on Benefits - Job - Pain Interferes with Work	X	X
R7_SB1b_1_9	Back on Benefits - Job - Personal Care Take Too Long	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_SB1b_1_10	Back on Benefits - Job - Lack Special Equipment At Work	X	X
R7_SB1b_1_11	Back on Benefits - Job - Other	X	X
R7_SB1B_1_20	Back on Benefits - Job - Found Another Job	X	X
R7_SB1b_1_22	Back on Benefits - Job - Work Schedule	X	X
R7_SB1b_1_23	Back on Benefits - Job - Did Not Get Along with Co-Workers	X	X
R7_SB1b_1_24	Back on Benefits - Job - Did Not Get Along with Manager/Supervisor/Boss	X	X
R7_SB1b_1_25	Back on Benefits - Job - Did Not Get Along with HR	X	X
R7_SB1_c	Back on Benefits due to Personal Circumstances	X	X
R7_SB1c_1_1	Back on Benefits - Personal Circumstances - Needed to Care for Children/Others	X	X
R7_SB1c_1_2	Back on Benefits - Personal Circumstances - Need Personal Assistance to get Ready	X	X
R7_SB1c_1_3	Back on Benefits - Personal Circumstances - Get Injured	X	X
R7_SB1c_1_4	Back on Benefits - Personal Circumstances - Might Lose Benefits	X	X
R7_SB1c_1_5	Back on Benefits - Personal Circumstances - Personality Conflicts with Others at Job	X	X
R7_SB1c_1_6	Back on Benefits - Personal Circumstances - Might Get Fired	X	X
R7_SB1c_1_7	Back on Benefits - Personal Circumstances - No Reliable Transportation	X	X
R7_SB1c_1_8	Back on Benefits - Personal Circumstances - Drugs/Alcohol Relapse	X	X
R7_SB1c_1_9	Back on Benefits - Personal Circumstances - Would Rather Do Other Things	X	X
R7_SB1c_1_10	Back on Benefits - Personal Circumstances - Do Not Like Working	X	X
R7_SB1c_1_11	Back on Benefits - Personal Circumstances - Work Too Tiring/Stressful	X	X
R7_SB1c_1_12	Back on Benefits - Personal Circumstances - Other	X	X
R7_SB1c_1_19	Back on Benefits - Personal Circumstances - Moved to Another Area	X	X
R7_SB1c_1_21	Back on Benefits - Personal Circumstances - Loss of Gov't Benefits	X	X
R7_SB3	Could Anything Help to Keep Working and Earn Enough	X	X
R7_SB3a_1	Might Help to Keep Working/Earn Enough - Working Fewer Hours	X	X
R7_SB3a_2	Might Help to Keep Working/Earn Enough - Working Fewer Days	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_SB3a_3	Might Help to Keep Working/Earn Enough - Working Different Shift	X	X
R7_SB3a_4	Might Help to Keep Working/Earn Enough - Flexible Schedule	X	X
R7_SB3a_5	Might Help to Keep Working/Earn Enough - Starting Later in Day	X	X
R7_SB3a_6	Might Help to Keep Working/Earn Enough - Having More Sick Leaves	X	X
R7_SB3a_7	Might Help to Keep Working/Earn Enough - Personal Care Attendant	X	X
R7_SB3a_8	Might Help to Keep Working/Earn Enough - Assistance with Work Tasks	X	X
R7_SB3a_9	Might Help to Keep Working/Earn Enough - More Understanding Employer	X	X
R7_SB3a_10	Might Help to Keep Working/Earn Enough - More Understanding Co-Workers	X	X
R7_SB3a_11	Might Help to Keep Working/Earn Enough - Assistive Devices at Work	X	X
R7_SB3a_12	Might Help to Keep Working/Earn Enough - Physical Modification	X	X
R7_SB3a_13	Might Help to Keep Working/Earn Enough - Job Coach	X	X
R7_SB3a_14	Might Help to Keep Working/Earn Enough - Sign Lang. Interpreter	X	X
R7_SB3a_15	Might Help to Keep Working/Earn Enough - Reader/ Interpreter for Blind	X	X
R7_SB3a_16	Might Help to Keep Working/Earn Enough - On Job Training	X	X
R7_SB3a_17	Might Help to Keep Working/Earn Enough - Behavioral Coaching	X	X
R7_SB3a_18	Might Help to Keep Working/Earn Enough - Benefit Counseling	X	X
R7_SB3a_19	Might Help to Keep Working/Earn Enough - Transportation Assistance	X	X
R7_SB3a_20	Might Help to Keep Working/Earn Enough - Child/family Care Assistance	X	X
R7_SB3a_21	Might Help to Keep Working/Earn Enough - Other	X	X
R7_SB4	Will Work/Earn Enough to Stay off Benefits in Future	X	X
R7_SB4a_1	Not Stay Off Benefits Health Goes Up And Down	X	X
R7_SB4a_2	Not Stay Off Benefits Health Will Not Improve Enough to Work	X	X
R7_SB4a_3	Not Stay Off Benefits Not Getting Medical Treatment, Equipment, or Personal Care	X	X
R7_SB4a_4	Not Stay Off Benefits Not Finding Right Job	X	X
R7_SB4a_5	Not Stay Off Benefits Not Getting Help Caring for Children or Others	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_SB4a_6	Not Stay Off Benefits Not Getting Health Insurance	X	X
R7_SB4a_7	Not Stay Off Benefits Not Getting Transportation	X	X
R7_SB4a_8	Not Stay Off Benefits Other	X	X
R7_SB4b_1	Health Goes Up And Down	X	X
R7_SB4b_2	Health May Not Improve Enough to Work	X	X
R7_SB4b_3	May Not Get Medical Treatment, Equipment, or Personal Care	X	X
R7_SB4b_4	May Not Find Right Job	X	X
R7_SB4b_5	May Not Get Help Caring for Children or Others	X	X
R7_SB4b_6	May Not Get Health Insurance	X	X
R7_SB4b_7	May Not Get Transportation	X	X
R7_SB4b_8	Something Else	X	X
R7_EP1_1	Need More Info on Benefits, Contact SSA	X	X
R7_EP1_2	Need More Info on Benefits, Contact State Vocational Rehab	X	X
R7_EP1_3	Need More Info on Benefits, Contact Agency	X	X
R7_EP1_4	Need More Info on Benefits, Contact Benefit Specialist	X	X
R7_EP1_5	Need More Info on Benefits, Contact Caseworker	X	X
R7_EP1_6	Need More Info on Benefits, Contact	X	X
R7_EP1_7	Need More Info on Benefits, Independent Living Center	X	X
R7_EP1_8	Need More Info on Benefits, Contact Medical Doctor	X	X
R7_EP1_9	Need More Info on Benefits, Search on internet	X	X
R7_EP1_10	Need More Info on Benefits, Contact Other	X	X
R7_EP1a_a	Used Telephone to Contact SSA about Benefits	X	X
R7_EP1a_b	Visited SSA Office in Person	X	X
R7_EP1a_c	Used SSA Website or Email	X	X
R7_EP1b	How Easy to Get Info about Disability Benefits	X	X
R7_EP1d	How Helpful was Info About Disability Benefits	X	X
R7_B23_2	Access Internet	X	X
R7_B23_3	Used Computer to Access Information	X	X
R7_E3	Ever Heard of PASS	X	X
R7_E5	Ever Heard of Earned Income Exclusion	X	X
R7_E7	Ever Heard of PESS	X	X
R7_E9	Ever Heard of Continued Medicaid Elig	X	X
R7_E12	Ever Heard of Student Income Exclusion	X	X
R7_E15a	Lose Cash Benefits	X	X
R7_E15	Ever Heard of Trial Work Period	X	X
R7_E17	Ever Heard of Extended Period of Elig	X	X
R7_EP3	Lose Disability Benefits, Keep Health Insurance	X	X
R7_E19	Ever Heard of Impair Related Work Expense	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_E20A	Ever Heard of Expedited Reinstatement	X	X
R7_E20C	Ever Heard of WIPA	X	X
R7_E20D	Ever Used WIPA	X	X
R7_E20E	Ever Heard of PABSS	X	X
R7_E20F	Ever Used PABSS	X	X
R7_E21	Ever Heard of TTW program	X	X
R7_G2_a	Received Work or Job Assessment in 2018	X	X
R7_G2_b	Received Help to Find a Job in 2018	X	X
R7_G2_c	Received Advice about Modifying job/Workplace in 2018	X	X
R7_G2_d	Received Job Coaching Support Services in 2018	X	X
R7_G2_e	Received Other Employment Support Services in 2018	X	X
R7_G7_1	Received Employment Services from Vocational Rehab Agency in 2018	X	
R7_G7_2	Received Employment Services from Welfare Agency in 2018	X	
R7_G7_3	Received Employment Services from Mental Health Agency in 2018	X	
R7_G7_4	Received Employment Services from Other State Agency in 2018	X	
R7_G7_5	Received Employment Services from Workforce Center /Unemployment Office in 2018	X	
R7_G7_6	Received Employment Services from Private Business in 2018	X	
R7_G7_7	Received Employment Services at a School or College in 2018	X	
R7_G7_8	Received Employment Services at Other Type of Place in 2018	X	
R7_G11_a	Received Training to Learn New Job/Skill in 2018	X	X
R7_G11_b	Received on the Job Training in 2018	X	X
R7_G11_c	Received Any Other Training or Certification in 2018	X	X
R7_G13_1	Received Job Training from Vocational Rehab Agency in 2018	X	
R7_G13_2	Received Job Training from Welfare Agency in 2018	X	
R7_G13_3	Received Job Training from Mental Health Agency in 2018	X	
R7_G13_4	Received Job Training from Other State Agency in 2018	X	
R7_G13_5	Received Job Training from Workforce Center/Employment Office in 2018	X	
R7_G13_6	Received Training at Private Business in 2018	X	
R7_G13_7	Received Training at School or College in 2018	X	
R7_G13_8	Received Training at Other Type of Place in 2018	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_G13_9	Received Training at Job Training (unspecified) in 2018	X	
R7_G16_a	Received Physical Therapy in 2018	X	X
R7_G16_b	Received Occupational Therapy in 2018	X	X
R7_G16_c	Received Speech Therapy in 2018	X	X
R7_G16_d	Received Special Equipment or Devices in 2018	X	X
R7_G16_e	Received Prescription Medication in 2018	X	X
R7_G16_f	Received Other Medical Services in 2018	X	X
R7_G18_1	Received Medical Services from Clinic/Dr. Office in 2018	X	
R7_G18_2	Received Medical Services from a Hospital in 2018	X	
R7_G18_3	Received Medical Services from Some Other Place in 2018	X	
R7_G18_5	Received Medical Services from a School 2018	X	
R7_G18_6	Received Medical Services from a Nursing Home/Grp. Home 2018	X	
R7_G18_7	Received Medical Services from a government Agency in 2018	X	
R7_G18_8	Received Medical Services from in Home Care in 2018	X	
R7_G18_9	Received Medical Services at Medical Equipment Store in 2018	X	
R7_G18_10	Received Medical Services at Rehab/Counseling Center in 2018	X	
R7_G18_11	Received Medical Services at Physical Therapy Center in 2018	X	
R7_G20_a	Received Personal Counseling/Therapy in 2018	X	X
R7_G20_b	Received Group Therapy in 2018	X	X
R7_G20_c	Received Other Mental Health Services in 2018	X	X
R7_G22_1	Received Mental Health Therapy from Mental Health Agency in 2018	X	
R7_G22_2	Received Mental Health Therapy from a Clinic/Dr. Office in 2018	X	
R7_G22_3	Received Mental Health Therapy from a Hospital in 2018	X	
R7_G22_4	Received Mental Health Therapy from Some Other Type of Place in 2018	X	
R7_G22_6	Received Mental Health Therapy from Res Treatment Program in 2018	X	
R7_G22_7	Received Mental Health Therapy from Rehab Center in 2018	X	
R7_G22_8	Received Mental Health Therapy from Church/Religious Inst. In 2018	X	
R7_G23	Enrolled in School	X	X
R7_G26	Currently Enrolled in School	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_G27	Working Towards Degree/Cert or Taking Classes	X	
R7_G28	Type of Degree Working Towards	X	
R7_G29	Full or Part-Time Student	X	X
R7_G53_1	Used Services to Find Job	X	X
R7_G53_2	Used Services to Increase Income	X	X
R7_G53_3	Used Services to Improve Health	X	X
R7_G53_4	Used Services to Improve Daily Activities	X	X
R7_G53_5	Used Services to Avoid Review	X	X
R7_G53_6	Used Services b/c of Pressure	X	X
R7_G53_7	Used Services to Access Program	X	X
R7_G53_8	Used Services For Other Reason	X	X
R7_G58	Contacted Someone to Get Info About Services	X	X
R7_G60	Services Needed But Not Received	X	X
R7_G61_1	Unable to Get services b/c Was Not Eligible or Request Refused	X	X
R7_G61_2	Unable to Get Services b/c Lack of Information/Did Not Know About	X	X
R7_G61_3	Unable to Get Services b/c Could Not Afford Services/Insurance Did Not Cover	X	X
R7_G61_4	Unable to Get Services b/c Did Not Try to Get Services	X	X
R7_G61_5	Unable to Get Services b/c Too Difficult or Confusing	X	X
R7_G61_6	Unable to Get Services b/c Problems With Services or Agency	X	X
R7_G61_7	Unable to Get Services for Other Reasons	X	X
R7_C_UseSVR2018_rev	Used state VR in 2018 Constructed	X	X
R7_C_UseWel2018_rev	Used state welfare in 2018 Constructed	X	X
R7_C_UseSMenH2018_rev	State mental health was provider in 2018 Constructed	X	X
R7_C_UseOthSt2018_rev	Used other state in 2018 Constructed	X	X
R7_C_UsePriv2018_rev	Used private business in 2018 Constructed	X	X
R7_C_UseOthNonSt2018_rev	Used other non-state provider in 2018 Constructed	X	X
R7_C_UseSchool2018_rev	Used state employment/unemployment office in 2018 Constructed	X	X
R7_C_UseUnemp2018_rev	Used school or college in 2018 Constructed	X	X
R7_C_UseClinic2018_rev	Used clinic/hospital/MD office in 2018 Constructed	X	X
R7_C_UseRehab2018_rev	Used rehab center in 2018 Constructed	X	X
R7_C_UseOthMed2018_rev	Used other medical or mental health provider in 2018 Constructed	X	X
R7_C_EmpUnkwn2018_rev	Employment/training provider type unknown in 2018 Constructed	X	X
R7_C_MedUnkwn2018_rev	Medical/Mental health provider unknown in 2018 Constructed	X	X
R7_C_ServUse2018_rev	Used employment services in 2018 Constructed	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_UseEmploy2018_rev	Used services in 2018 Constructed	X	X
R7_C_PhyTh2018_rev	Received Physical Therapy in 2018 (across providers) Constructed	X	X
R7_C_OccTher2018_rev	Received Occupational Therapy in 2018 Constructed	X	X
R7_C_SpchTher2018_rev	Received Speech Therapy in 2018 Constructed	X	X
R7_C_Equip2018_rev	Received Special Equip in 2018 Constructed	X	X
R7_C_Coun2018_rev	Received Personal Counseling in 2018 Constructed	X	X
R7_C_GrpTh2018_rev	Received Group Therapy in 2018 Constructed	X	X
R7_C_WrkAs2018_rev	Received Work Assessment in 2018 Constructed	X	X
R7_C_FindJob2018_rev	Received Help Finding Job in 2018 Constructed	X	X
R7_C_JobTrn2018_rev	Received job training for new job/skill in 2018 Constructed	X	X
R7_C_JobMod2018_rev	Received Advice about modifying workplace in 2018 Constructed	X	X
R7_C_JobCch2018_rev	Received job coaching /support services in 2018 Constructed	X	X
R7_C_JobOJT2018_rev	Received on-the-job training services in 2018 Constructed	X	X
R7_C_RxMed2018_rev	Received prescription medications in 2018 Constructed	X	X
R7_C_OtherServ2018_rev	Received something else in 2018 Constructed	X	X
R7_I1	Health During Past 4 Weeks	X	
R7_I1_I	Health During Past 4 Weeks, Imputed	X	X
R7_I1_IFLAG	Health During Past 4 Weeks, Imputation Flag	X	
R7_I2	How Much Limited by Phy Probs in Past 4 Wks	X	X
R7_I3	Difficulty Doing Daily Work b/c of Health	X	X
R7_I4	How Much Bodily Pain in Past 4 Weeks	X	X
R7_I5	How Much Energy Had During Past 4 Weeks	X	X
R7_I6	How Much Phy/Emot Prob Limit Social Activities	X	X
R7_I7	How Much Bothered by Emot Probs in Past 4 Weeks	X	X
R7_I8	How Much Emot Probs Keep From Work	X	X
R7_IP1	Physical or Mental Condition Needs Recovery Time	X	X
R7_I9	Rate Health in General Now	X	
R7_I9_I	Rate Health in General Now, Imputed	X	X
R7_I9_IFLAG	Rate Health in General Now, Imputation Flag	X	
R7_IP2_a	In Past 12 Months Delayed or Skipped Getting Prescription Medication	X	X
R7_IP2_b	In Past 12 Months Delayed or Skipped Getting Special Equipment/Medical Devices	X	X
R7_IP2_c	In Past 12 Months Delayed or Skipped Getting Mental Health Care	X	X
R7_IP2_d	In Past 12 Months Delayed or Skipped Getting Other Type of Medical Care	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_IP5	In Bed More than Half of Day due to Illness/Injury during Past 12 Months if Needed	X	X
R7_IP7_a	How Often Had Someone to Help with Bathing/Dressing/Preparing Meals if Needed	X	X
R7_IP7_b	How Often Had Someone to Give Advice about Crisis/Personal Problem if Needed	X	X
R7_IP7_c	How Often Had Someone Help to Get to Dr. App. if Needed	X	X
R7_IP7_d	How Often Had Someone Help with Daily Chores if Needed	X	X
R7_IP7_e	How Often Had Someone Help with Expenses if Needed	X	X
R7_IP8a	How Many Times Weekly Talk on Telephone with Family/Friends/Neighbors	X	X
R7_IP8b	How Many Times Weekly Get Together with Friends/Relatives	X	X
R7_IP8c	How Many Times Weekly Attend Church/Religious Services	X	X
R7_IP8d	How Many Times Weekly Attend Meetings or Clubs	X	X
R7_IP9	Can Drive to Go Places	X	X
R7_IP9a	Someone Else Can Drives or Uses Public Transportation	X	X
R7_IP10	Satisfaction with Ability to Get Transportation when Needed	X	X
R7_I10	Take Meds for Physical Conditions	X	X
R7_I11	Take Meds for Mental Conditions	X	X
R7_I12	Received Treatment for Health Conds at Dr. Office	X	X
R7_I17b	Difficulty Seeing with Glasses / Contact Lenses	X	
R7_I17B_I	Difficulty Seeing with Glasses / Contact Lenses, Imputed	X	X
R7_I17B_IFLAG	Difficulty Seeing with Glasses / Contact Lenses, Imputation Flag	X	
R7_I19	Use Special Equip b/c of Diff Seeing	X	
R7_I19_I	Use Special Equip b/c of Diff Seeing, Imputed	X	X
R7_I19_IFLAG	Use Special Equip b/c of Diff Seeing, Imputation Flag	X	
R7_I20_1	Use Telescopic Lenses b/c of Diff Seeing	X	
R7_I20_2	Use Adapted Comp Equip b/c of Diff Seeing	X	
R7_I20_3	Use Braille b/c of Diff Seeing	X	
R7_I20_4	Use Readers b/c of Diff Seeing	X	
R7_I20_5	Use Guide Dog b/c of Diff Seeing	X	
R7_I20_6	Use White Cane b/c of Diff Seeing	X	
R7_I20_7	Use Other Seeing Assistance	X	
R7_I20_8	Use Magnifying Glasses	X	
R7_I20_9	Use Screen Readers	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_I20_10	Use Test-to-voice Devices	X	
R7_I21	Difficulty Hearing	X	
R7_I21_I	Difficulty Hearing, Imputed	X	X
R7_I21_IFLAG	Difficulty Hearing, Imputation Flag	X	
R7_I22	Able to Hear Normal Conversation	X	
R7_I22_I	Able to Hear Normal Conversation, Imputed	X	X
R7_I22_IFLAG	Able to Hear Normal Conversation, Imputation Flag	X	
R7_I23	Use Special Devices b/c of Diff Hearing	X	
R7_I23_I	Use Special Devices b/c of Diff Hearing, Imputed	X	X
R7_I23_IFLAG	Use Special Devices b/c of Diff Hearing, Imputation Flag	X	
R7_I24_1	Use Hearing Aide b/c of Diff Hearing	X	
R7_I24_2	Use Phone Amplifier b/c of Diff Hearing	X	
R7_I24_4	Use TYY b/c of Diff Hearing	X	
R7_I24_5	Use Closed Caption b/c of Diff Hearing	X	
R7_I24_6	Use Assistive Listening Device	X	
R7_I24_7	Use Interpreter	X	
R7_I24_8	Use other Hearing Assistance	X	
R7_I24_9	Use Instant Messaging	X	
R7_I24_10	Use Skype/Video Messaging	X	
R7_I25	Difficulty Having Speech Understood	X	
R7_I25_I	Difficulty Having Speech Understood, Imputed	X	X
R7_I25_IFLAG	Difficulty Having Speech Understood, Imputation Flag	X	
R7_I26	Able to Have Speech Understood At All	X	
R7_I26_I	Able to Have Speech Understood At All, Imputed	X	X
R7_I26_IFLAG	Able to Have Speech Understood At All, Imputation Flag	X	
R7_I27	Use Devices b/c of Difficulty Speaking	X	
R7_I27_I	Use Devices b/c of Difficulty Speaking, Imputed	X	X
R7_I27_IFLAG	Use Devices b/c of Difficulty Speaking, Imputation Flag	X	
R7_I28_1	Use Voice Synthesizer b/c of Diff Speaking	X	
R7_I28_2	Use Voice Amplifier b/c of Diff Speaking	X	
R7_I28_3	Use Sign Lang Interp b/c of Diff Speaking	X	
R7_I28_4	Use Other Speech Assistance	X	
R7_I29	Diff Walking Without Assistance	X	
R7_I29_I	Diff Walking Without Assistance, Imputed	X	X
R7_I29_IFLAG	Diff Walking Without Assistance, Imputation Flag	X	
R7_I30	Able to Walk Quarter Mile At All	X	
R7_I30_I	Able to Walk Quarter Mile At All, Imputed	X	X
R7_I30_IFLAG	Able to Walk Quarter Mile At All, Imputation Flag	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_I31	Use Special Equip b/c of Diff Walking	X	
R7_I31_I	Use Special Equip b/c of Diff Walking, Imputed	X	X
R7_I31_IFLAG	Use Special Equip b/c of Diff Walking, Imputation Flag	X	
R7_I32_1	Use Braces/Crutches b/c of Diff Walking	X	X
R7_I32_2	Use Wheelchair b/c of Diff Walking	X	X
R7_I32_3	Use Prosthetic Device b/c of Diff Walking	X	
R7_I32_4	Use Special Chair b/c of Diff Walking	X	
R7_I32_5	Use Pers Care Attendant b/c of Diff Walking	X	
R7_I32_6	Use Vehicle Hand Control b/c of Diff Walking	X	
R7_I32_7	Use Lift b/c of Diff Walking	X	
R7_I32_8	Use Other Mobility Assistance	X	
R7_I32_9	Use Special Shoes/Inserts b/c of Difficulty Walking	X	
R7_I32_10	Use Breathing Devices b/c of Difficulty Walking	X	
R7_I34	Able to Climb 10 Steps At All	X	
R7_I34_I	Able to Climb 10 Steps At All, Imputed	X	X
R7_I34_IFLAG	Able to Climb 10 Steps At All, Imputation Flag	X	
R7_I35	Difficulty Lifting and Carrying 10 lbs	X	
R7_I35_I	Difficulty Lifting and Carrying 10 lbs, Imputed	X	X
R7_I35_IFLAG	Difficulty Lifting and Carrying 10 lbs, Imputation Flag	X	
R7_I36	Able to Lift or Carry 10 lbs At All	X	
R7_I36_I	Able to Lift or Carry 10 lbs At All, Imputed	X	X
R7_I36_IFLAG	Able to Lift or Carry 10 lbs At All, Imputation Flag	X	
R7_I37	Difficulty Using Hands or Fingers	X	
R7_I37_I	Difficulty Using Hands or Fingers, Imputed	X	X
R7_I37_IFLAG	Difficulty Using Hands or Fingers, Imputation Flag	X	
R7_I38	Able to Use Hands or Fingers At All	X	
R7_I38_I	Able to Use Hands or Fingers At All, Imputed	X	X
R7_I38_IFLAG	Able to Use Hands or Fingers At All, Imputation Flag	X	
R7_I39	Difficulty Reaching Over Head	X	
R7_I39_I	Difficulty Reaching Over Head, Imputed	X	X
R7_I39_IFLAG	Difficulty Reaching Over Head, Imputation Flag	X	
R7_I40	Able to Reach Over Head At All	X	
R7_I40_I	Able to Reach Over Head At All, Imputed	X	X
R7_I40_IFLAG	Able to Reach Over Head At All, Imputation Flag	X	
R7_I41	Difficulty Standing	X	
R7_I41_I	Difficulty Standing, Imputed	X	X
R7_I41_IFLAG	Difficulty Standing, Imputation Flag	X	
R7_I42	Able to Stand At All	X	
R7_I42_I	Able to Stand At All, Imputed	X	X
R7_I42_IFLAG	Able to Stand At All, Imputation Flag	X	
R7_I43	Difficulty Stooping	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_I43_I	Difficulty Stooping, Imputed	X	X
R7_I43_IFLAG	Difficulty Stooping, Imputation Flag	X	
R7_I44	Able to Stoop At All	X	
R7_I44_I	Able to Stoop At All, Imputed	X	X
R7_I44_IFLAG	Able to Stoop At All, Imputation Flag	X	
R7_I45	Difficulty Getting Around Inside Home	X	
R7_I45_I	Difficulty Getting Around Inside Home, Imputed	X	X
R7_I45_IFLAG	Difficulty Getting Around Inside Home, Imputation Flag	X	
R7_I46	Need Help To Get Around Inside Home	X	
R7_I46_I	Need Help To Get Around Inside Home, Imputed	X	X
R7_I46_IFLAG	Need Help To Get Around Inside Home, Imputation Flag	X	
R7_I47	Difficulty Getting Around Outside Home	X	
R7_I47_I	Difficulty Getting Around Outside Home, Imputed	X	X
R7_I47_IFLAG	Difficulty Getting Around Outside Home, Imputation Flag	X	
R7_I48	Need Help To Get Around Outside Home	X	
R7_I48_I	Need Help To Get Around Outside Home, Imputed	X	X
R7_I48_IFLAG	Need Help To Get Around Outside Home, Imputation Flag	X	
R7_I49	Difficulty Getting Into/Out of Bed	X	
R7_I49_I	Difficulty Getting Into/Out of Bed, Imputed	X	X
R7_I49_IFLAG	Difficulty Getting Into/Out of Bed, Imputation Flag	X	
R7_I50	Need Help Getting Into/Out of Bed	X	
R7_I50_I	Need Help Getting Into/Out of Bed, Imputed	X	X
R7_I50_IFLAG	Need Help Getting Into/Out of Bed, Imputation Flag	X	
R7_I51	Difficulty Bathing or Dressing	X	
R7_I51_I	Difficulty Bathing or Dressing, Imputed	X	X
R7_I51_IFLAG	Difficulty Bathing or Dressing, Imputation Flag	X	
R7_I52	Need Help To Bathe or Dress	X	
R7_I52_I	Need Help To Bathe or Dress, Imputed	X	X
R7_I52_IFLAG	Need Help To Bathe or Dress, Imputation Flag	X	
R7_I53	Difficulty Shopping	X	
R7_I53_I	Difficulty Shopping, Imputed	X	X
R7_I53_IFLAG	Difficulty Shopping, Imputation Flag	X	
R7_I54	Need Help To Shop	X	
R7_I54_I	Need Help to Shop, Imputed	X	X
R7_I54_IFLAG	Need Help to Shop, Imputation Flag	X	
R7_I55	Difficulty Preparing Own Meals	X	
R7_I55_I	Difficulty Preparing Own Meals, Imputed	X	X
R7_I55_IFLAG	Difficulty Preparing Own Meals, Imputation Flag	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_I56	Need Help To Prepare Meals	X	
R7_I56_I	Need Help to Prepare Meals, Imputed	X	X
R7_I56_IFLAG	Need Help to Prepare Meals, Imputation Flag	X	
R7_I57	Difficulty Eating	X	
R7_I57_I	Difficulty Eating, Imputed	X	X
R7_I57_IFLAG	Difficulty Eating, Imputation Flag	X	
R7_I58	Need Help To Eat	X	
R7_I58_I	Need Help To Eat, Imputed	X	X
R7_I58_IFLAG	Need Help To Eat, Imputation Flag	X	
R7_I59	Trouble Concentrating	X	
R7_I59_I	Trouble Concentrating, Imputed	X	X
R7_I59_IFLAG	Trouble Concentrating, Imputation Flag	X	
R7_I60	Trouble Coping with Stress	X	
R7_I60_I	Trouble Coping with Stress, Imputed	X	X
R7_I60_IFLAG	Trouble Coping with Stress, Imputation Flag	X	
R7_I61	Trouble getting Along With People	X	
R7_I61_I	Trouble getting Along With People, Imputed	X	X
R7_I61_IFLAG	Trouble getting Along With People, Imputation Flag	X	
R7_I62	Felt Need to Cut Down on Drinking	X	
R7_I63	Ever Annoyed by People Criticizing Drinking	X	
R7_I64	Ever Felt Bad or Guilty About Drinking	X	
R7_I65	Ever Had Drink in Morning	X	
R7_I66	Doctor Advised to Stop Using Alcohol	X	
R7_I67	Received Treatment for Alcohol	X	
R7_I72	Ever Used Drugs in Larger Amts than Prescribed	X	
R7_I72_I	Ever Used Drugs in Larger Amts than Prescribed, Imputed	X	
R7_I72_IFLAG	Ever Used Drugs in Larger Amts than Prescribed, Imputation Flag	X	
R7_I73	Needed Larger Amts To Get Effect	X	
R7_I74	Have Emot/Phy Probs From Drugs	X	
R7_I75	Doctor Advised to Stop Using Non Prescrip Drugs	X	
R7_I76	Rec'd Treatment for Use of Non Prescrip Drugs	X	
R7_C_EquipFuncLim	Uses equipment/device for functional/sensory/communication limitation	X	
R7_C_EQUIPFUNCLIM_I	Uses Equip/Device for Functional/Sensory Limitation, Imputed	X	X
R7_C_EQUIPFUNCLIM_IFLAG	Uses Equip/Device for Functional/Sensory Limitation, Imputation Flag	X	
R7_C_numSenLim	Number of Sensory/Communication Limitations	X	
R7_C_NUMSENLIM_I	Number Sensory Limitations, Imputed	X	
R7_C_NUMSENLIM_IFLAG	Number Sensory Limitations, Imputation Flag	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_NumSevSenLim	Number of Severe Sensory/Communication Limitations	X	
R7_C_NUMSEVSENLIM_I	Number Severe Sensory Limitations, Imputed	X	
R7_C_NUMSEVSENLIM_IFLAG	Number Severe Sensory Limitations, Imputation Flag	X	
R7_C_NumPhyLim	Number of Physical Functional Limitations	X	
R7_C_NUMPHYLIM_I	Number Physical Functional Limitations, Imputed	X	
R7_C_NUMPHYLIM_IFLAG	Number Physical Functional Limitations, Imputation Flag	X	
R7_C_NumSevPhyLim	Number of Severe Physical Functional Limitations	X	
R7_C_NUMSEVPHYLIM_I	Number Severe Physical Functional Limitations, Imputed	X	
R7_C_NUMSEVPHYLIM_IFLAG	Number Severe Physical Functional Limitations, Imputation Flag	X	
R7_C_NumEmotLim	Number of Emotional/Social Limitations	X	
R7_C_NUMEMOTLIM_I	Number Emotional/Social Limitations, Imputed	X	
R7_C_NUMEMOTLIM_IFLAG	Number Emotional/Social Limitations, Imputation Flag	X	
R7_C_NumADLs	Number of ADL Difficulties	X	
R7_C_NUMADLS_I	Number ADLs, Imputed	X	
R7_C_NUMADLS_IFLAG	Number ADLs, Imputation Flag	X	
R7_C_NumADLAssist	Number of ADLs Requiring Assistance	X	
R7_C_NUMADLASSIST_I	Number ADLs Requiring Assistance, Imputed	X	
R7_C_NUMADLASSIST_IFLAG	Number ADLs Requiring Assistance, Imputation Flag	X	
R7_C_NumIADLs	Number of IADL Difficulties	X	
R7_C_NUMIADLS_I	Number of IADL Difficulties, Imputed	X	
R7_C_NUMIADLS_IFLAG	Number of IADL Difficulties, Imputation Flag	X	
R7_C_NumIADLAssist	Number of IADL Difficulties Requiring Assistance	X	
R7_C_NUMIADLASSIST_I	Number IADLs Requiring Assistance, Imputed	X	
R7_C_NUMIADLASSIST_IFLAG	Number IADLs Requiring Assistance, Imputation Flag	X	
R7_C_SF8BP	SF8 Scores: Bodily Pain	X	
R7_C_SF8GH	SF8 Scores: General Health	X	
R7_C_SF8MH	SF8 Scores: Mental Health	X	
R7_C_SF8PF	SF8 Scores: Physical Functioning	X	
R7_C_SF8RE	SF8 Scores: Role Emotional	X	
R7_C_SF8RP	SF8 Scores: Role Physical	X	
R7_C_SF8SF	SF8 Scores: Social Functioning	X	
R7_C_SF8VT	SF8 Scores: Vitality	X	
R7_C_PCSBP	PCS-8 Bodily Pain Weight	X	
R7_C_PCSGH	PCS-8 General Health Weight	X	
R7_C_PCSMH	PCS-8 Mental Health Weight	X	
R7_C_PCSPF	PCS-8 Physical Functioning Weight	X	
R7_C_PCSRE	PCS-8 Role Emotional Weight	X	
R7_C_PCSRP	PCS-8 Role Physical Weight	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_PCSSF	PCS-8 Social Functioning Weight	X	
R7_C_PCSVT	PCS-8 Vitality Weight	X	
R7_C_MCSBP	MCS-8 Bodily Pain Weight	X	
R7_C_MCSGH	MCS-8 General Health Weight	X	
R7_C_MCSMH	MCS-8 Mental Health Weight	X	
R7_C_MCSPF	MCS-8 Physical Functioning Weight	X	
R7_C_MCSRE	MCS-8 Role Emotional Weight	X	
R7_C_MCSRP	MCS-8 Role Physical Weight	X	
R7_C_MCSSF	MCS-8 Social Functioning Weight	X	
R7_C_MCSVT	MCS-8 Vitality Weight	X	
R7_C_PCS8TOT	SF8 Physical Summary Scale Score	X	
R7_C_PCS8TOT_I	SF8 Physical Summary Score, Imputed	X	X
R7_C_PCS8TOT_IFLAG	SF8 Physical Summary Score, Imputation Flag	X	
R7_C_MCS8TOT	SF8 Mental Summary Scale Score	X	
R7_C_MCS8TOT_I	SF8 Mental Summary Score, Imputed	X	X
R7_C_MCS8TOT_IFLAG	SF8 Mental Summary Score, Imputation Flag	X	
R7_C_CAGEAlcohol	CAGE Alcohol score	X	
R7_C_CAGESCORE_INDICATOR_I	CAGE Alcohol Score, Imputed	X	X
R7_C_CAGESCORE_INDICATOR_I FLAG	CAGE Alcohol Score, Imputation Flag	X	
R7_C_DrugDep	Drug Dependence	X	
R7_C_DRUGDEP_I	Drug Dependence, Imputed	X	
R7_C_DRUGDEP_IFLAG	Drug Dependence, Imputation Flag	X	
R7_J1	Currently Covered by Medicare	X	
R7_J2	Currently Covered by Medicaid	X	
R7_J4	Currently Covered by Military Health Care	X	
R7_J5	Currently Covered by Private Health Insurance	X	
R7_J6	Source of Private Health Insurance	X	
R7_J8	No Current Health Insurance	X	X
R7_J9_1	Currently Have Medicaid	X	
R7_J9_2	Currently Have Medicare	X	
R7_J9_3	Currently Have Champus	X	
R7_J9_4	Currently Have Indian Health Service	X	
R7_J9_5	Currently Have Medi-Gap	X	
R7_J9_6	Currently Have State Program Health Insur	X	
R7_J9_7	Currently Have Private Insur Thru Employer	X	
R7_J9_8	Currently Have Private Insur Thru Spouse/Partner/Parent	X	
R7_J9_9	Currently Have Insurance Paid by SP/Family	X	
R7_J9_10	Currently Have Other Health Coverage	X	
R7_J10	Covered by a Health Insurance in 2018	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_J11_1	Had Medicaid in 2018	X	X
R7_J11_2	Had Medicare in 2018	X	X
R7_J11_3	Had Champus in 2018	X	
R7_J11_4	Had Indian Health Service in 2018	X	
R7_J11_5	Had Medi-Gap in 2018	X	
R7_J11_6	Had State Program Health Insur in 2018	X	
R7_J11_7	Had Private Insur Thru Employer in 2018	X	X
R7_J11_8	Had Private Insur Thru Spouse/Partner/Parent in 2018	X	X
R7_J11_9	Had Insurance Paid by SP/Family in 2018	X	X
R7_J11_10	Had Other Health Coverage in 2018	X	
R7_J11_11	Had Private Insurance, Not specified who through in 2018	X	
R7_J11_10_PUB	Had Other Health Coverage in 2018 (Public)	X	X
R7_C_CurMedicare	Currently Covered by Medicare Constructed	X	X
R7_C_CurMedicaid	Currently Covered by Medicaid Constructed	X	X
R7_C_CurMillInsur	Currently Covered by Military Insurance Constructed	X	X
R7_C_CurIndInsur	Currently Covered by Indian Health Constructed	X	
R7_C_CurMedigap	Currently Covered by Medigap Constructed	X	
R7_C_CurStAssist	Currently Covered by State Assistance Constructed	X	
R7_C_CurPrivEmp	Currently Covered by Priv Insurance Thru Employer Constructed	X	X
R7_C_CurPrivSp	Currently Covered by Priv Insurance thru Spouse Constructed	X	X
R7_C_CurPrivSelf	Currently Covered by Priv Insurance Thru Self Constructed	X	X
R7_C_CurOtherInsur	Currently Covered by Other Insurance Constructed	X	X
R7_C_CurNoInsur	Currently No Insurance Constructed	X	X
R7_K2A	Worked Last Month	X	
R7_K3	Earnings Last Month Before Taxes	X	
R7_K3a	Earnings Last Month After Taxes	X	
R7_K4	Received Inc From Social Security Last Month	X	
R7_K6_a	Received Inc From Private Dis Insur Last Month	X	
R7_K6_b	Received Inc From Worker's Comp Last Month	X	
R7_K6_c	Received Inc From Veteran's Benefits Last Month	X	
R7_K6_d	Received Inc From Public Assistance Last Month	X	
R7_K6_e	Received Inc From Unemploy benefits Last Month	X	
R7_K6_f	Received Inc From Private Pensions Last Month	X	
R7_K6_g	Received Other Inc on Reg Basis Last Month	X	
R7_K6_h	Received Inc Not on Reg Basis Last Month	X	
R7_K7_a	Amount Received From Priv Disab Insur	X	
R7_K7_b	Amount Received From Worker's Comp	X	
R7_K7_c	Amount Received From Vets Benefits	X	

Table B.1 (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_K7_d	Amount Received From Public Assist	X	
R7_K7_e	Amount Received From Unemploy Benefits	X	
R7_K7_f	Amount Received From Priv Pension	X	
R7_K7_g	Amount of Other Inc Received on Reg Basis	X	
R7_K7_h	Amount of Other Inc Received Not on Reg Basis	X	
R7_K8_a	Inc From Priv Dis Insur More/Less Than \$300	X	
R7_K8_b	Inc From Worker's Comp More/Less Than \$300	X	
R7_K8_c	Inc From Vets Benefits More/Less Than \$300	X	
R7_K8_d	Inc From Public Assist More/Less Than \$300	X	
R7_K8_e	Inc From Unemploy Benefit More/Less Than \$300	X	
R7_K8_f	Inc From Priv Pension More/Less Than \$300	X	
R7_K8_g	Other Inc on Reg Basis More/Less Than \$300	X	
R7_K8_h	Other Inc Not on Reg Basis More/Less Than \$300	X	
R7_K9_a	Inc From Priv Disab Insur More/Less Than \$500	X	
R7_K9_b	Inc From Worker's Comp More/Less Than \$500	X	
R7_K9_c	Inc From Vets Benefits More/ Less Than \$500	X	
R7_K9_d	Inc From Public Assist More/Less Than \$500	X	
R7_K9_e	Inc From Unemploy Benefit More/Less Than \$500	X	
R7_K9_f	Inc From Priv Pension More/Less Than \$500	X	
R7_K9_g	Other Inc on Reg Basis More/ Less Than \$500	X	
R7_K9_h	Other Inc Not on Reg Basis More/Less Than \$500	X	
R7_K10_a	Inc From Priv Disab Insur More/Less than \$150	X	
R7_K10_b	Inc From Worker's Comp More/Less than \$150	X	
R7_K10_c	Inc From Vets Benefits More/Less than \$150	X	
R7_K10_d	Inc From Public Assist More/Less than \$150	X	
R7_K10_e	Inc From Unemploy Benefit More/Less than \$150	X	
R7_K10_f	Inc From Priv Pension More/Less than \$150	X	
R7_K10_g	Other Inc on Reg Basis More/Less than \$150	X	
R7_K10_h	Other Inc Not on Reg Basis More/Less than \$150	X	
R7_K11	Received Food stamps Last Month	X	
R7_K12	Dollar Value of Food stamps	X	
R7_K13	Received Assist From Other Gov't Prog Last Month	X	
R7_K14_1	Received Housing Assistance From Government	X	
R7_K14_2	Received Energy Assistance From Government	X	
R7_K14_3	Received Food Assistance From Government	X	
R7_K14_4	Received Other Assistance From Government	X	
R7_K15	Amount Received From Other Gov't Assistance	X	
R7_KP1	Current Financial Situations	X	X
R7_KP2	Support Without Income or Gifts	X	X
R7_C_AmtOthNonReg	Amount Received from Non-Reg Sources Last Month	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_AMTOTHREGSUM	Amount Received from All Regular Sources Last Month (Includes SSA administrative records)	X	
R7_C_TOTGOVCASHBEN	Total Government Cash Benefits Received (Includes SSA administrative records)	X	
R7_C_TotGovCashBen_PUB	Total Government Cash Benefits Received (Includes SSA administrative records) (Public)	X	X
R7_C_LstMnthPay	Last month pay (pre-tax)	X	
R7_C_LSTMNTHPAY_PUB	Last month pay (pre-tax) (Public)	X	X
R7_C_AmtPrivDis	Amount Received from Priv Dis Last Month (logical zero)	X	
R7_C_AmtPrivDis_I	Amount Received from Priv Dis Last Month, Imputed	X	
R7_C_AMTPRIVDIS_IFLAG	Amount Received from Priv Dis Last Month, Imputation	X	
R7_C_AmtWorkComp	Amount Received from Workers Comp Last Month (logical zero)	X	
R7_C_AmtWorkComp_I	Amount Received from Workers Comp Last Month, Imputed	X	
R7_C_AMTWORKCOMP_IFLAG	Amount Received from Workers Comp Last Month, Imputation Flag	X	
R7_C_AmtVetBen	Amount Received from Vet Ben Last Month (logical zero)	X	
R7_C_AmtVetBen_I	Amount Received from Vet Ben Last Month, Imputed	X	
R7_C_AMTVETBEN_IFLAG	Amount Received from Vet Ben Last Month, Imputation Flag	X	
R7_C_AmtPubAssis	Amount Received from Pub Assist Last Month (logical zero)	X	
R7_C_AmtPubAssis_I	Amount Received from Pub Assist Last Month, Imputed	X	
R7_C_AMTPUBASSIS_IFLAG	Amount Received from Pub Assist Last Month, Imputation Flag	X	
R7_C_AmtUnemply	Amount Received from Unemp Last Month (logical zero)	X	
R7_C_AmtUnemply_I	Amount Received from Unemp Last Month, Imputed	X	
R7_C_AMTUNEMPLY_IFLAG	Amount Received from Unemp Last Month, Imputation Flag	X	
R7_C_AmtPrivPen	Amount Received from Private Pension Last Month (logical zero)	X	
R7_C_AmtPrivPen_I	Amount Received from Private Pension Last Month, Imputed	X	
R7_C_AMTPRIVPEN_IFLAG	Amount Received from Private Pension Last Month, Imputation Flag	X	
R7_C_AmtOthReg	Amount Received from Other Regular Sources Last Month (logical zero)	X	
R7_C_AmtOthReg_I	Amount Received from Reg Sources Last Month, Imputed	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_AMTOTHREG_IFLAG	Amount Received from Reg Sources Last Month, Imputation Flag	X	
R7_C_AmtFoodStamp	Amount Received from Food Stamps Last Month (logical zero)	X	
R7_C_AmtOthGov	Amount Received from Other Gov Program Last Month (logical zero)	X	
R7_C_TotNonCashBen	Total Non-Cash Benefits Received	X	
R7_C_TotNonCashBen_PUB	Total Non-Cash Benefits Recvd (Public)	X	X
R7_L1	Ethnic Background	X	
R7_L1_I	Ethnic Background, Imputed	X	
R7_L1_I_PUB	Ethnic Background, Imputed (Public)	X	X
R7_L1_IFLAG	Ethnic Background, Imputation Flag	X	
R7_L2_1	Alaska Native or American Indian	X	
R7_L2_2	Asian	X	
R7_L2_3	Black or African American	X	
R7_L2_4	Native Hawaiian or Other Pacific Islander	X	
R7_L2_5	White	X	
R7_L3	Highest Year/Grade Finished in School	X	
R7_L3_I	Highest Year/Grade Finished in School, Imputed	X	
R7_L3_i_PUB	Highest Year/Grade Finished in School, Imputed (Public)	X	X
R7_L3_IFLAG	Highest Year/Grade Finished in School, Imputation Flag	X	
R7_L4	Highest Year/Grade Father Finished in School	X	
R7_L4_PUB	Highest Year/Grade Father Finished in School (Public)	X	X
R7_L5	Highest Year/Grade Mother Finished in School	X	
R7_L5_PUB	Highest Year/Grade Mother Finished in School (Public)	X	X
R7_L6ft	Height: Feet	X	
R7_L6in	Height: Inches	X	
R7_L7	Weight	X	
R7_L8	Marital Status	X	
R7_L8_I	Marital Status, Imputed	X	
R7_L8_I_PUB	Marital Status, Imputed (Public)	X	X
R7_L8_IFLAG	Marital Status, Imputation Flag	X	
R7_L9	Live With Spouse	X	
R7_L10	Live With Partner	X	
R7_L11	Living Situation	X	
R7_L11_I	Living Situation, Imputed	X	
R7_L11_I_PUB	Living Situation, Imputed (Public)	X	X
R7_L11_IFLAG	Living Situation, Imputation Flag	X	
R7_L12	Type of Place Live	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_L12_PUB	Type of Place Live (Public)	X	X
R7_L15	Live in Place for People With Disabilities	X	X
R7_L21b	Own or Rent Home	X	X
R7_L16	Number Adults 18 and Older in Household	X	
R7_L17	Number of Children Under 18 in Household	X	
R7_L19	Number Own Children Under 18 Living Inside Household	X	
R7_L20	Own Children Under 18 Living Outside Household	X	
R7_L21	Number Own Children Under 18 Not Living in Household	X	
R7_L22	Children Living in Household Under Age Six	X	
R7_LP23	Ever Served on Active Duty	X	
R7_LP23_PUB	Ever Served on Active Duty (Public)	X	X
R7_L23Aamt	Total 2018 Household income before taxes	X	
R7_L23Ahop	How Often Paid in 2018	X	
R7_L23B	How Many Days/Weeks/Months Rec'd Income in 2018	X	
R7_L24	Household income in 2018	X	
R7_C_HhInc2018	2018 Household Income	X	
R7_C_HHINC2018_PUB	2018 Household Income (Public)	X	X
R7_C_Cohab	Cohabitation Status	X	
R7_C_COHAB_I	Cohabitation Status, Imputed	X	X
R7_C_COHAB_IFLAG	Cohabitation Status, Imputation flag	X	
R7_C_RACE_I	Race, Imputed	X	
R7_C_race_I_PUB	Race, Imputed (Public)	X	X
R7_C_RACE_IFLAG	Race, Imputation Flag	X	
R7_C_BMI	Body Mass Index	X	
R7_C_BMI_cat	Body Mass Index Categories	X	
R7_C_BMI_CAT_I	Body Mass Index Categories, Imputation	X	X
R7_C_BMI_CAT_IFLAG	Body Mass Index Categories, Imputation Flag	X	
R7_C_Hhsize	Household size	X	
R7_C_HHSIZE_I	Household Size, Imputed	X	
R7_C_HHSize_PUB	Household Size (Public)	X	X
R7_C_HHSIZE_IFLAG	Household Size, Imputation Flag	X	
R7_C_NumChildhh	Number Children in Household	X	
R7_C_NUMCHILDHH_I	Number Children in Household, Imputed	X	
R7_C_NumChildHH_PUB	Number Children in Household (Public)	X	X
R7_C_NUMCHILDHH_IFLAG	Number Children in Household, Imputation Flag	X	
R7_C_NumChildohh	Number Children Outside Household	X	
R7_C_Numchildren	Number Children	X	
R7_c_numchildhh_pov	Number of Children for Poverty Level	X	
R7_C_NUMOWNCHILD_PUB	Number of Own Children (Public)	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_C_NUMOWNCHILDHH_PUB	Number of Own Children in Household (Public)	X	X
R7_C_NUMOWNCHILDOHH_PUB	Number of Own Children Outside of Household (Public)	X	X
R7_C_NUMNONOWNCHILDHH_PUB	Number of Non-Own Children in Household (Public)	X	X
R7_C_NUMADULTHH_PUB	Number of Adults in Household (Public)	X	X
R7_C_FedPovertyLevel	2018 Federal Poverty Level	X	
R7_C_FEDPOVERTYLEVEL_IFLAG	2018 Federal Poverty Level, Imputation Flag	X	
R7_C_FEDPOVERTYLEVEL_CATEGORY	Federal Poverty Level Categories, Imputed	X	X
R7_M2a_Rlshp	How Proxy Related to SP	X	
R7_M10a	Level of Survey Satisfaction	X	
R7_M11	Respondent or Proxy Interviewed	X	
R7_M11a	Method for Conducting Interview	X	
R7_M12	Respondent Assisted During Interview	X	
R7_M13	How Assistant/Proxy Related to SP	X	
R7_M14	Why Assist/Proxy Needed	X	
R7_M15	Respondent Intellectually Capable of Responding	X	
R7_M16	Respondent's Answers Accurate	X	
R7_M17	Respondent Understood Questions	X	
R7_M18	Interview tiring For Respondent	X	
R7_M19	Respondent Had Diff Hearing	X	
R7_M20	Respondents Hearing Diff Affected Interview	X	
R7_INCSOURCE1_PUB	Recvd Inc from Priv Dis, Work Comp, or Unemploy Last Month (Public)	X	X
R7_INCSOURCE2_PUB	Recvd Inc from Vet Ben or Public Assis Last Month (Public)	X	X
R7_INCSOURCE3_PUB	Recvd Inc from Priv Pension Last Month (Public)	X	X
R7_INCSOURCE4_PUB	Recvd Inc from Other Reg or Non-Reg Basis Last Month (Public)	X	X
R7_INCSOURCE5_PUB	Recvd Inc from Food Stamps Last Month (Public)	X	X
R7_INCSOURCE6_PUB	Recvd Housing, Energy, Food, or Other Gov Assis Last Month (Public)	X	X
R7_INCSOURCE7_PUB	Recvd Inc From Social Security Last Month (Public)	X	X
R7_N_BENSTATATINT2	Beneficiary status at interview (if status is missing at the time of interview, we use SSA's administrative records at the time the sample was drawn) (From SSA administrative records)	X	X
R7_N_BFW_RECENT	Benefits forgone for work during most recent spell of eligibility as of interview date (From SSA administrative records)	X	
R7_N_BIC_ATINT	Beneficiary identification code at interview (From SSA administrative records)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_N_BIC_ATSAMP	Beneficiary identification code at sampling (From SSA administrative records)	X	
R7_N_DAC	Disabled Adult Child (From SSA administrative records)	X	X
R7_N_DEPEN_ATINT	SSDI dependent benefits due at interview (From SSA administrative records)	X	
R7_N_DEPENLASTMNTH	SSDI dependent benefit payment amount last month (From SSA administrative records)	X	
R7_N_DEPENLASTMNTH_PUB	SSDI dependent benefit payment amount last month (From SSA administrative records) (Public)	X	X
R7_N_IMP_CIRC	Circulatory impairment (From SSA administrative records)	X	X
R7_N_IMP_ENDO	Endocrine impairment (From SSA administrative records)	X	X
R7_N_IMP_ID	Intellectual disability (From SSA administrative records)	X	X
R7_N_IMP_INJ	Injury or poisoning (From SSA administrative records)	X	X
R7_N_IMP_MISSING	Missing impairment (From SSA administrative records)	X	X
R7_N_IMP_MUSC	Musculoskeletal impairment (From SSA administrative records)	X	X
R7_N_IMP_NEO	Neoplasm (From SSA administrative records)	X	X
R7_N_IMP_NERV	Nervous system impairment (From SSA administrative records)	X	X
R7_N_IMP_OTHER	Other impairment (From SSA administrative records)	X	X
R7_N_IMP_PSYCH	Psychiatric impairment (From SSA administrative records)	X	X
R7_N_IMP_RESP	Respiratory impairment (From SSA administrative records)	X	X
R7_N_IMP_SENS	Sensory impairment (From SSA administrative records)	X	X
R7_N_MEDEX_ATINT	Medical improvement indicator at interview (From SSA administrative records)	X	X
R7_N_MEDEX_ATSAMP	Medical improvement indicator at sampling (From SSA administrative records)	X	X
R7_N_MFT	Master file type (From SSA administrative records)	X	
R7_N_MTHSEARLENT	Months Since Earliest SSI or SSDI Entitlement Date (From SSA administrative records)	X	
R7_N_MTHSEARLENT_PUB	Months Since Earliest SSI or SSDI Entitlement Date (From SSA administrative records) (Public)	X	X
R7_N_MTHSRECENT	Months since start of most recent SSI and/or SSDI spell of eligibility (From SSA administrative records)	X	
R7_N_MTHSRECENT_PUB	Months since start of most recent SSI and/or SSDI spell of eligibility (From SSA administrative records) (Public)	X	X
R7_N_ONSETDATE_SSDI	SSDI onset date (From SSA administrative records)	X	

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_N_ONSETDATE_SSI	SSI onset date (From SSA administrative records)	X	
R7_N_PIAATINT	Primary Insurance Amount (PIA) (From SSA administrative records)	X	
R7_N_PIAATINT_PUB	Primary Insurance Amount (PIA) (From SSA administrative records) (Public)	X	X
R7_N_REPPAYEE	Representative Payee (From SSA administrative records)	X	X
R7_N_SSDI_ATINT	SSDI benefit due at interview (From SSA administrative records)	X	
R7_N_SSDILASTMNTH	SSDI payment last month (From SSA administrative records)	X	
R7_N_SSDILastMnth_PUB	SSDI payment last month (From SSA administrative records) (Public)	X	X
R7_N_SSDINOMCR_ATINT	SSDI no Medicare at Interview (From SSA administrative records)	X	X
R7_N_SSI_ATINT	SSI benefit due at interview (From SSA administrative records)	X	
R7_N_SSILASTMNTH	State and federal SSI payment last month (From SSA administrative records)	X	
R7_N_SSILastMnth_PUB	State and federal SSI payment last month (From SSA administrative records) (Public)	X	X
R7_N_STW_ATINT	SSA benefits are in suspense or terminated because of work at interview (From SSA administrative records)	X	X
R7_N_STW_EVER	Ever experienced suspense or termination of cash benefits due to work (From SSA administrative records)	X	X
R7_N_STW_MNTHS_RECENT	STW months during most recent spell of eligibility (From SSA administrative records)	X	
R7_N_TOC_ATINT	Type of claim at interview (From SSA administrative records)	X	
R7_N_TOC_ATSAMP	Type of claim at sampling (From SSA administrative records)	X	
R7_N_TOTSSBEN_ATINT	Total SSI and SSDI benefits due at interview (From SSA administrative records)	X	
R7_N_TOTSSBENLASTMNTH	Total SSI and SSDI payment last month (From SSA administrative records)	X	
R7_N_TotSSbenLastMnth_PUB	Total SSI and SSDI payment last month (From SSA administrative records) (Public)	X	X
R7_N_TTWMNTHS_ASSGN	Number of months since TTW ticket first assigned as of interview date (From SSA administrative records)	X	
R7_N_TTWPART_ATINT	Ticket to Work participant at interview (From SSA administrative records)	X	
R7_N_TTWPARTEVER	TTW participant ever (From SSA administrative records)	X	X

**Table B.1** (continued)

Variable Name	Variable Label	Restricted Access	Public Use
R7_N_TTWPMT_TYPE	Ticket to Work payment type (From SSA administrative records)	X	
R7_N_TTWPROV_TYPE	Ticket to Work provider type (From SSA administrative records)	X	

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## **Appendix C**

### **Changes in Questionnaire Content Between NBS Round 6 and NBS–General Waves Round 7**

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**Table C.1. Changes in Questionnaire Content Between Round 6 and Round 7 NBS**

Item	Change	Reason
<b>Cross-cutting sections</b>		
Sections A, B, C, C_B, and D	Items modified	Throughout the Round 7 instrument, we added probes for SWS longitudinal sample members, acknowledging that we spoke to them in 2017, that we would like to conduct another interview, and that some questions may sound similar to 2017.
Sections B, C, C_B, D, and L	Items modified	In order to improve respondent and interviewer comprehension, we added clarifying text to the “bi-weekly” response option in questions that ask how often the sample member is paid. This response option now reads “Bi-weekly (every other week)” throughout the survey instrument.
<b>Section A</b>		
A1. Hello, my name is [NAME]. I'm calling on behalf of the Social Security Administration. May I please speak with {IF RTYPE=PROXY AND WE DON'T HAVE PROXY NAME: someone who can answer questions about {NAME's} health, daily activities, and any jobs {he/she} might have?}, else: {FIRST NAME} {LAST NAME}?	Item modified	We added a description of a proxy for the interviewer to read when the name of a proxy was unavailable.
<b>Section B</b>		
B36c. I'm going to ask you about reasons {you/NAME} might have left {your/his/her} last 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	Question added for longitudinal SWS cases.
B36c_1. What was it about {your/NAME's} health that made {you/him/her} leave this job?	Item added	Question added for longitudinal SWS cases.
B36c_1_oth. INTERVIEWER: PLEASE SPECIFY	Item added	Question added SWS for longitudinal sample members.
B36d. Did {you/NAME} leave {your/his/her} last job because of {your/his/her} job, for example because of the need for accommodations or problems with {your/his/her} co-workers?	Item added	Question added for longitudinal SWS cases.
B36d_1. What was it about {your/NAME's} job that made {you/him/her} leave it?	Item added	Question added for longitudinal SWS cases.
B36d_1_oth. INTERVIEWER: PLEASE SPECIFY	Item added	Question added for longitudinal SWS cases.

**Table C.1** (continued)

Item	Change	Reason
B36e. Did {you/NAME} leave {your/his/her} last job because of {your/his/her} personal circumstances, for example because {you/he/she} needed childcare, didn't have reliable transportation, or worried about losing other benefits?	Item added	Question added for longitudinal SWS cases.
B36e_1. What was it about {your/NAME's} personal circumstances that made {you/him/her} leave {your/his/her} last job?	Item added	Question added for longitudinal SWS cases.
B36e_1_oth. INTERVIEWER: PLEASE SPECIFY	Item added	Question added for longitudinal SWS cases.
B36f. Are there any other reasons that we haven't talked about why {you/NAME} left {your/his/her} last job?	Item added	Question added for longitudinal SWS cases.
B36f_oth. What other things made {you/NAME} leave this job?	Item added	Question added for longitudinal SWS cases.
BP4a3_1. What was it about {your/NAME's} personal circumstances that may prevent {you/NAME} from working?	Item modified	Two response options added: 19= MOVED TO ANOTHER AREA 21= LOSS OR POTENTIAL LOSS OF GOVERNMENT 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 modified	Two response options added: 19= MOVED TO ANOTHER AREA 21= LOSS OR POTENTIAL LOSS OF GOVERNMENT BENEFITS
<b>Section C</b>		
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?	Item modified	Five response options added: 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?	Item modified	Two response options added: 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]:	Item modified	One response option added: g= [Are/is] in poor health or [have/has] health concerns?

Table C.1 (continued)

Item	Change	Reason
<b>Section C_B</b>		
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?	Item modified	Five response options added: 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?	Item modified	Two response options added: 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]:	Item modified	One response option added: g= [Are/is] in poor health or [have/has] health concerns?
<b>Section D</b>		
DP1b_1. What was it about [your/NAME's] job that made [you/him/her] leave it?	Item modified	Three response options added: 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?	Item modified	Two response options added: 19= MOVED TO ANOTHER AREA 21= LOSS OR POTENTIAL LOSS OF GOVERNMENT BENEFITS
D25a. Did you work fewer hours or earn less money than you could have because [you/he/she] you...	Item modified	One response option added: g=Had medical problems/complications
<b>Section E</b>		
E12. {Have you/Has NAME} ever heard of the student earned-income exclusion? This is a Social Security incentive where if {you are/a beneficiary is} in school, up to \$1,870 of earnings per month are not counted when Social Security figures {your/the} benefit.	Item modified	We updated the <u>Student Earned-Income Exclusion</u> rate with 2019 rate.
E15a. Most people receiving Social Security disability benefits will lose their cash benefits if they work and earn more than \$1,220 in a month for more than nine months. Is this something {you/NAME} knew before today?	Item modified	We updated the <u>Trial Work Period</u> rate with 2019 rate.

**Table C.1** (continued)

Item	Change	Reason
E15. {Have you/Has NAME} ever heard of a Trial Work Period? This is a Social Security incentive that lets {you/beneficiaries} earn above \$880 per month for nine months without losing {your/their} benefits.	Item modified	We updated the <u>Substantial Gainful Activity</u> (SGA) rate with 2019 rate.
<b>Section SS</b>		
SS2b_1. What was it about [your/NAME's] job that makes [you/NAME] think [you/he/she] might go back on benefits?	Item modified	Five response options added: 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?	Item modified	Two response options added: 19= MOVED TO ANOTHER AREA 21= LOSS OR POTENTIAL LOSS OF GOVERNMENT BENEFITS
<b>Section SB</b>		
SB1b_1. What was it about [your/NAME's] job that made [you/NAME] have to go back on benefits?	Item modified	Five response options added: 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?	Item modified	Two response options added: 19= MOVED TO ANOTHER AREA 21= LOSS OR POTENTIAL LOSS OF GOVERNMENT BENEFITS
SB4a. Why {don't you/doesn't NAME} think {you/he/she} will {go back to work / work and earn enough to stay off benefits in the future}?	Item modified	We altered the format of this question from "choose one" to "choose all that apply."
SB4b. Why {are BP4b3_1. What is it about {your/NAME's} personal circumstances that may cause {you/is NAME} unsure about whether {you/he/she} will {go back to work / work and earn enough to stay off benefits in the future}?	Item modified	We altered the format of this question from "choose one" to "choose all that apply."

**Table C.1** (continued)

Item	Change	Reason
<b>Section G</b>		
G13. Where did {you/NAME} go to get this training? Please think about all of the places {you/NAME} went in 2016.	Item modified	One response option added: 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:	Item modified	Two response options added: 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:	Item modified	Three response options added: 06=Residential treatment program/facility 07=Rehab center/counseling center/day program 08=Church or religious institution
<b>Section L</b>		
L9. Do {you/NAME} and {your/his/her} {spouse/unmarried partner} live in the same household?	Item modified.	We added unmarried partner to this question text.
L10. {Do you/Does NAME} have a long-term partner who lives in the same household with {you/him/her} in a marriage-like relationship?	Item modified	We corrected the skip logic in the Round 7 survey instrument to ensure that unmarried sample members who are living with their partner (L8=6 and L9=1) are not asked L10, and divorcees (L8=3) are asked L10.
L12. The next question is about the place where you live. Was this place a...	Item modified	We added "homeless" as an unread answer category to this "other/specify" question.

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## **Appendix D**

**Other specify and open-ended items with additional categories created during coding**

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**Table D.1. “Other/Specify” and Open-Ended Items with Additional Categories Created During Coding**

Question #	Question Text	Current Response Options	Additional Categories Created
B29_6	What benefits [were/was] [you/NAME] most worried about losing?	01 = Private disability insurance 02 = Workers' compensation 03 = Veterans' benefits 04 = Medicare 05 = Medicaid 06 = SSA disability benefits 07 = Public assistance or welfare 08 = Food stamps 09 = Personal assistance services (pas) 10 = Unemployment benefits 11 = Other state disability benefits 12 = Other government programs 13 = Other	14 = Health insurance unspecified
B29_10	What benefits [were/was] [you/NAME] most worried about losing?	01 = Private Disability Insurance 02 = Workers' compensation 03 = Veterans' benefits 04 = Medicare 05 = Medicaid 06 = SSA Disability Benefits 07 = Public Assistance or Welfare 08 = Food Stamps 09 = Personal Assistance Services (PAS) 10 = Unemployment Benefits 11 = Other State Disability Benefits 12 = Other government programs 13 = Other	14 = Health insurance unspecified

Table D.1 (continued)

Question #	Question Text	Current Response Options	Additional Categories Created
B25	What are they (the other reasons you are not working that I didn't mention)?	<p>a = A physical or mental condition prevents [you/him/her] from working</p> <p>b = [You/NAME] cannot find a job that [you are/(he/she) is] qualified for</p> <p>c = [You do/NAME does] not have reliable transportation to and from work</p> <p>d = [You are/NAME is] caring for someone else.</p> <p>f = [You/NAME] cannot find a job [you want/(he/she) wants]</p> <p>g = [You are/NAME is] waiting to finish school or a training program.</p> <p>h = Workplaces are not accessible to people with [your/NAME's] disability.</p> <p>i = [You do/NAME does] not want to lose benefits such as disability, worker's compensation, or Medicaid</p> <p>j = [Your/NAME's] previous attempts to work have been discouraging</p> <p>l = Others do not think [you/NAME] can work</p> <p>m = Employers will not give [you/NAME] a chance to show that [you/he/she] can work.</p> <p>n = [You/NAME] does not have the special equipment or medical devices that [you/he/she] would need in order to work.</p> <p>o = [You/NAME] cannot get the personal assistance [you need/he needs/she needs] in order to get ready for work each day</p> <p>p = [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>	<p>q = Lack skills</p> <p>r = Cannot find a job/job market is bad</p>
B29_11b	What benefits [were/was] [you/NAME] most worried about losing?	<p>01 = Private Disability Insurance</p> <p>02 = Workers' compensation</p> <p>03 = Veterans' benefits</p> <p>04 = Medicare</p> <p>05 = Medicaid</p> <p>06 = SSA Disability Benefits</p> <p>07 = Public Assistance or Welfare</p> <p>08 = Food Stamps</p> <p>09 = Personal Assistance Services (PAS)</p> <p>10 = Unemployment Benefits</p> <p>11 = Other State Disability Benefits</p> <p>12 = Other government programs</p> <p>13 = Other</p>	14 = Health insurance unspecified

Table D.1 (continued)

Question #	Question Text	Current Response Options	Additional Categories Created
C39_2	What benefits have been reduced or ended as a result of [your/NAME's] (main/current) job?	01 = Private Disability Insurance 02 = Workers' compensation 03 = Veterans' benefits 04 = Medicare 05 = Medicaid 06 = SSA Disability Benefits 07 = Public Assistance or Welfare 08 = Food Stamps 09 = Personal Assistance Services (PAS) 10 = Unemployment Benefits 11 = Other State Disability Benefits 12 = Other government programs 13 = Other	14 = Health insurance unspecified
C_B39b	Do you/Does NAME] work fewer hours or earn less money than [you/he/she] could because [you/he/she]:	a = [Are/Is] taking care of children or others? b = [Are/Is] enrolled in school or a training program? c = Want[s] to keep Medicare or Medicaid coverage? d = Want[s] to keep cash benefits [you/he/she] need such as disability or workers' compensation? e = Just [do/does] not want to work more? f = Are there any reasons I didn't mention why [you are/NAME is] working or earning less than [you/he/she] could?	g = [Are/is] in poor health or [have/has] health concerns?
C_B39_2	What benefits have been reduced or ended as a result of [your/NAME's] (main/current) job?	01 = Private Disability Insurance 02 = Workers' compensation 03 = Veterans' benefits 04 = Medicare 05 = Medicaid 06 = SSA Disability Benefits 07 = Public Assistance or Welfare 08 = Food Stamps 09 = Personal Assistance Services (PAS) 10 = Unemployment Benefits 11 = Other State Disability Benefits 12 = Other government programs 13 = Other	14 = Health insurance unspecified

Table D.1 (continued)

Question #	Question Text	Current Response Options	Additional Categories Created
D25_2	What benefits were reduced or ended as a result of [your/NAME's] job in 2018?	01 = Private Disability Insurance 02 = Workers' compensation 03 = Veterans' benefits 04 = Medicare 05 = Medicaid 06 = SSA Disability Benefits 07 = Public Assistance or Welfare 08 = Food Stamps 09 = Personal Assistance Services (PAS) 10 = Unemployment Benefits 11 = Other State Disability Benefits 12 = Other government programs 13 = Other	14 = Health insurance unspecified
D26_h	In 2018, do you think [you/NAME] could have worked or earned more if [you/he/she] had:	a = Help caring for [your/his/her] children or others in the household? b = Help with [your/his/her] own personal care such as bathing, dressing, preparing meals, and doing housework? c = Reliable transportation to and from work? d = Better job skills? e = A job with a flexible work schedule? f = Help with finding and getting a better job? g = Any special equipment or medical devices? (SPECIFY: <OPEN>) h = Is there anything else that I didn't mention that would have helped [you/NAME] to work or earn more during 2018? (SPECIFY: <OPEN>)	I = Better health/treatment j = More supportive/helpful employer and/or coworker
G18	Where did {you/NAME} go to receive these medical services? Please think about all of the places {you/NAME} went in 2018. Did {you/NAME} go to:	01 = A clinic or doctor's office 02 = A hospital or 03 = Some other type of place? (SPECIFY: <OPEN>) 10 = A rehabilitation/counseling center 11 = Physical therapy center	05 = A school 06 = A nursing home/group home 07 = A government agency 08 = In home care 09 = A medical equipment store

Table D.1 (continued)

Question #	Question Text	Current Response Options	Additional Categories Created
G61	Why [were you/was NAME] unable to get these services?	<OPEN>	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
K14	What other assistance did [you/NAME] receive <u>last month</u> ?	<OPEN>	01 = Housing Assistance 02 = Energy Assistance 03 = Food assistance 04 = Other
L12	The next question is about the place where you live. Was this place a...	01 = Single family home? 02 = Mobile home? 03 = Regular apartment? 04 = Supervised apartment? 05 = Group home? 06 = Halfway house? 07 = Personal care or board and care home? 08 = Assisted living facility? 09 = Nursing or convalescent home? 10 = Center for independent living? 11 = Some other type of supervised group residence or facility? 12 = Something else?	13 = Homeless

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## **Appendix E**

### **SOC major and minor occupation classifications**

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**Table E.1. SOC major and minor occupation classifications**

Code	Occupation
<b>Management</b>	
111	Top Executives
112	Advertising, Marketing, PR, Sales
113	Operations Specialist Managers
119	Other Management Occupations
<b>Business /Financial Operations</b>	
131	Business Operations Specialist
132	Financial Specialist
<b>Computer and Mathematical Science</b>	
151	Computer Specialist
152	Mathematical Science Occupations
<b>Architecture and Engineering</b>	
171	Architects, Surveyors and Cartographers
172	Engineers
173	Drafters, Engineering and Mapping Technicians
<b>Life, Physical and Social Science</b>	
191	Life Scientists
192	Physical Scientists
193	Social Scientists and Related Workers
194	Life, Physical and Social Science Technicians
<b>Community and Social Services</b>	
211	Counselors, Social Workers and Other Community and Social Service Specialists
212	Religious Workers
<b>Legal</b>	
231	Lawyers, Judges and Related Workers
232	Legal Support Workers
<b>Education, Training and Library</b>	
251	Postsecondary Teachers
252	Primary, Secondary and Special Education School Teachers
253	Other Teachers and Instructors
254	Librarians, Curators and Archivists
259	Other Education, Training and Library Occupations
<b>Arts, Design, Entertainment, Sports and Media</b>	
271	Art and Design Workers
272	Entertainers and Performers, Sports and Related Workers
273	Media and Communication Workers
274	Media and Communication Equipment Workers

Table E.1 (continued)

Code	Occupation
<b>Healthcare Practitioner and Technical Occupations</b>	
291	Health Diagnosing and Treating Practitioners
292	Health Technologists and Technicians
299	Other Healthcare Practitioner and Technical Occupations
<b>Healthcare Support</b>	
311	Nursing, Psychiatric and Home Health Aides
312	Occupational and Physical Therapist Assistants and Aides
319	Other Healthcare Support Occupations
<b>Protective Service</b>	
331	Supervisors, Protective Service Workers
332	Firefighting and Prevention Workers
333	Law Enforcement Workers
339	Other Protective Service Workers
<b>Food Preparation and Serving Related</b>	
351	Supervisors, Food Preparation and Food Serving Workers
352	Cooks and Food Preparation Workers
353	Food and Beverage Serving Workers
359	Other Food Preparation and Serving Related Workers
<b>Building and Grounds Cleaning and Maintenance</b>	
371	Supervisors, Building and Grounds Cleaning and Maintenance Workers
372	Building Cleaning and Pest Control Workers
373	Grounds Maintenance Workers
<b>Personal Care and Service Occupations</b>	
391	Supervisors, Personal Care and Service Workers
392	Animal Care and Service Workers
393	Entertainment Attendants and Related Workers
394	Funeral Service Workers
395	Personal Appearance Workers
396	Baggage Porters, Bellhops, and Concierges
397	Tour and Travel Guides
399	Other Personal Care and Service Workers
<b>Sales and Related Occupations</b>	
411	Supervisors, Sales Workers
412	Retail Sales Workers
413	Sales Representative, Services
414	Sales Representative, Wholesale and Manufacturing
419	Other Sales and Related Workers
<b>Office and Administrative Support</b>	
431	Supervisors, Office and Administrative Support Workers
432	Communications Equipment Operators
433	Financial Clerks
434	Information and Record Clerks

**Table E.1** (continued)

Code	Occupation
435	Material Recording, Scheduling Dispatching, and Distribution Workers
436	Secretaries and Administrative Assistants
439	Other Office and Administrative Support Workers
<b>Farming, Fishing and Forestry Workers</b>	
451	Supervisors, Farming, Fishing and Forestry Workers
452	Agricultural Workers
453	Fishing and Hunting Workers
454	Forest, Conservation and Logging Workers
<b>Construction and Extraction Occupations</b>	
471	Supervisors, Construction and Extraction Workers
472	Construction Trade Workers
473	Helpers, Construction Trades
474	Other Construction and Related Workers
475	Extraction Workers
<b>Installation, Maintenance and Repair Occupations</b>	
491	Supervisors, Installation, Maintenance and Repair Workers
492	Electrical and Electronic Equipment Mechanics, Installers and Repairers
493	Vehicle and Mobile Equipment Mechanics, Installers and Repairers
494	Other Installation, Maintenance and Repair Occupations
<b>Production Occupations</b>	
511	Supervisors, Production Workers
512	Assemblers and Fabricators
513	Food Processing Workers
514	Metal Workers and Plastic Workers
515	Printing Workers
516	Textile, Apparel, and Furnishing Workers
517	Woodworkers
518	Plant and System Operators
519	Other Production Occupations
<b>Transportation and Material Moving Occupations</b>	
531	Supervisors, Transportation and Material Moving Workers
532	Air Transportation Workers
533	Motor Vehicle Operators
534	Rail Transportation Workers
535	Water Transportation Workers
536	Other Transportation Workers
537	Material Moving Workers
<b>Military Specific Occupations</b>	
551	Military Officer and Tactical Operations Leaders/Managers
552	First-Line Enlisted Military Supervisors/Managers
553	Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members

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## **Appendix F**

### **NAICS industry codes**

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**Table F.1. NAICS industry codes**

Code	Description
11	<b>Agriculture, Forestry Fishing and Hunting</b>
111	Crop Production
112	Animal Production and Aquaculture
113	Forestry and Logging
114	Fishing, Hunting and Trapping
115	Support Activities for Agriculture and Forestry
21	<b>Mining, Quarrying, and Oil and Gas Extraction</b>
211	Oil and Gas Extraction
212	Mining (except Oil and Gas)
213	Support Activities for Mining
22	<b>Utilities</b>
221	Utilities
23	<b>Construction</b>
236	Construction of Buildings
237	Heavy and Civil Engineering Construction
238	Specialty Trade Contractors
31-33	<b>Manufacturing</b>
311	Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
313	Textile Mills
314	Textile Product Mills
315	Apparel Manufacturing
316	Leather and Allied Product Manufacturing
321	Wood Product Manufacturing
322	Paper Manufacturing
323	Printing and Related Support Activities
324	Petroleum and Coal Products Manufacturing
325	Chemical Manufacturing
326	Plastics and Rubber Products Manufacturing
327	Nonmetallic Mineral Product Manufacturing
331	Primary Metal Manufacturing
332	Fabricated Metal Products Manufacturing
333	Machinery Manufacturing
334	Computer and Electronic Product Manufacturing
335	Electrical Equipment, Appliance and Component Manufacturing
336	Transportation Equipment Manufacturing
337	Furniture and Related Product Manufacturing
339	Miscellaneous Manufacturing
42	<b>Wholesale Trade</b>

**Table F.1** (continued)

Code	Description
423	Merchant Wholesalers, Durable Goods
424	Merchant Wholesalers, Nondurable Goods
425	Wholesale Electronic Markets and Agents and Brokers
44-45	<b>Retail Trade</b>
441	Motor Vehicle and Parts Dealers
442	Furniture and Home Furnishings Stores
443	Electronics and Appliance Stores
444	Building Material and Garden Equipment and Supplies Dealers
445	Food and Beverage Stores
446	Health and Personal Care Stores
447	Gasoline Stations
448	Clothing and Clothing Accessories Stores
451	Sporting Goods, Hobby, Musical Instrument, and Book Stores
452	General Merchandise Stores
453	Miscellaneous Store Retailers
454	Nonstore Retailers
48-49	<b>Transportation and Warehousing</b>
481	Air Transportation
482	Rail Transportation
483	Water Transportation
484	Truck Transportation
485	Transit and Ground Passenger Transportation
486	Pipeline Transportation
487	Scenic and Sightseeing Transportation
488	Support Activities for Transportation
491	Postal Service
492	Couriers and Messengers
493	Warehousing and Storage
51	<b>Information</b>
511	Publishing Industries (except Internet)
512	Motion Picture and Sound Recording Industries
515	Broadcasting (except Internet)
517	Telecommunications
518	Data Processing, Hosting, and Related Services
519	Other Information Services
52	<b>Finance and Insurance</b>
521	Monetary Authorities – Central Bank
522	Credit Intermediation and Related Activities
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities
524	Insurance Carriers and Related Activities
525	Funds, Trusts, and Other Financial Vehicles
53	<b>Real Estate and Rental and Leasing</b>

**Table F.1** (continued)

Code	Description
531	Real Estate
532	Rental and Leasing Services
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
54	<b>Professional, Scientific, and Technical Services</b>
541	Professional, Scientific, and Technical Services
55	<b>Management of Companies and Enterprises</b>
551	Management of Companies and Enterprises
56	<b>Administrative and Supportive Waste Management and Remediation Services</b>
561	Administrative and Support Services
562	Waste Management and Remediation Services
61	<b>Educational Services</b>
611	Educational Services
62	<b>Health Care and Social Assistance</b>
621	Ambulatory Health Care Services
622	Hospitals
623	Nursing and Residential Care Facilities
624	Social Assistance
71	<b>Arts, Entertainment, and Recreation</b>
711	Performing Arts, Spectator Sports, and Related Industries
712	Museums, Historical Sites, and Similar Institutions
713	Amusement, Gambling, and Recreation Industries
72	<b>Accommodation and Food Services</b>
721	Accommodation
722	Food Services and Drinking Places
81	<b>Other Services (except Public Administration)</b>
811	Repair and Maintenance
812	Personal and Laundry Services
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations
814	Private Households
92	<b>Public Administration</b>
921	Executive, Legislative, and Other General Government Support
922	Justice, Public Order, and Safety Activities
923	Administration of Human Resource Programs
924	Administration of Environmental Quality Programs
925	Administration of Housing Programs, Urban Planning, and Community Development
926	Administration of Economic Programs
927	Space Research and Technology
928	National Security and International Affairs

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## **Appendix G**

### **Description of constructed variables**

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**Table G.1. Description of Constructed Variables**

Variable Name	Description
<b>Sampling Variables and Administrative Variables Used in Survey Administration</b>	
OrgSamplInfo_DOB	Sample member date of birth from SSA administrative records.
OrgSamplInfo_SDate	Date sample frame pulled.
OrgSamplInfo_SSIAGE	Age began receiving SSI benefits. From SSA administrative records.
OrgSamplInfo_PSU	Sampling PSU. For beneficiaries, based on zipcode as of June of the year they were sampled.
OrgSamplInfo_Release	Sample release number for the beneficiary sample. Extract release number for the SWS sample.
OrgSamplInfo_Bstatus	Indicates whether sample member receives SSI, SSDI, or both SSI and SSDI. From SSA administrative records.
OrgSamplInfo_age	Age of sample member at time of sample selection. Based on date of birth from SSA administrative records.
OrgSamplInfo_PrimDiagT16	SSA impairment code. From SSA administrative records.
OrgSamplInfo_PrimDiagT2	SSA impairment code. From SSA administrative records.
OrgSamplInfo_SecDiagT16	SSA impairment code. From SSA administrative records.
OrgSamplInfo_SecDiagT2	SSA impairment code. From SSA administrative records.
OrgSamplInfo_hispanic	Indicates whether sample member is Hispanic or non-Hispanic. Based on ethnicity from SSA administrative records.
OrgSamplInfo_race	Race of sample member. From SSA administrative records.
OrgSamplInfo_Sex	Sex of Sample member. From SSA administrative records.
C_Cohort	Age cohort sampling strata for Beneficiary sample. Based on date of birth from SSA administrative records.
A_Strata	Analytical strata for variance estimation using SUDAAN. For A_Strata the first digit=R7_Orgsampinfo_phase.
A_PSU	Analytical PSU for variance estimation using SUDAAN. For clustered samples (beneficiaries and participants) A_PSU = PSU identifier. For unclustered Participant sample A_PSU = linkid.
OrgSamplInfo_SampGrp	Indicates whether sample member is part of the beneficiary sample (=1) or the SWS sample (=2).
<b>Survey Administration Variables</b>	
SID	Study ID
PIN	PIN
Final	Final disposition code.
LastDate	Interview date.
C_IntDay	Interview day.
C_IntMnth	Interview month.
C_IntYear	Interview year.
C_Rtype	Indicates whether interview conducted by sample person or proxy. Based on M11.
C_Resptype	Indicates whether the sample person or proxy required assistance from someone else to complete the interview. Based on M12.

**Table G.1** (continued)

Variable Name	Description
Proxy_flag	Indicates how became proxy interview.
C_IntMode	Indicates whether interview conducted via CATI or CAPI.
InterviewLanguage	Indicates whether interview conducted in Spanish or non Spanish.
C_IntAge	Sample member age at interview. Based on date of interview minus self-reported date of birth at A68 or A69, which may differ from the date of birth in SSA records.
ORGSAMPINFO_EXTRACT	SWS Sample extract
ORGSAMPINFO_SWS_SAMPLE	Indicates whether a case is part of the cross-Sectional SWS sample
ORGSAMPINFO_SWSFRAME	Indicates whether a case is part of the SWS Frame
ORGSAMPINFO_LONGSAMP	Indicates whether a case is part of the R7 longitudinal SWS sample or not
ORGSAMPINFO_STATUS6LEVEL	Disposition code
<b>Weights</b>	
Wtr7_Ben	Weights created for beneficiary sample analyses.
Wtr7_com	Weights created for the beneficiary and SWS sample analyses.
Wtr7_CSSWS	Weights created for the SWS cross-sectional sample analyses.
Wtr7_LNGSWS	Weights created for the SWS longitudinal sample analyses.
<b>Section B Variables: Disability and Current Work Status</b>	
C_MainConDiagGrpNew_1-_6	ICD-9 diagnosis categories based on verbatim at B2 (physical or mental condition that is main reason limited).
C_MainConColDiagGrp_1-_6	Collapsed ICD-9 diagnosis categories based on verbatim at B2 (physical or mental condition that is main reason limited).
C_MainConBodyGroup_1-_6	ICD-9 body group categories based on verbatim at B2 (main reason limited).
C_SeconDiagGrpNew_1-_8	ICD-9 diagnosis categories based on verbatim at B4 (other physical and mental conditions that limit work or daily activities).
C_SeconColDiagGrp_1-_8	Collapsed ICD-9 diagnosis categories based on verbatim at B4 (other physical and mental conditions that limit work or daily activities).
C_SeconBodyGroup_1-_8	ICD-9 body group categories based on verbatim at B4 (other physical or mental conditions that limit work or daily activities).
C_ReasBecEligDiagGrpNew	ICD-9 diagnosis categories for reasons eligible for disability benefits. Taken from B6, B12, or B15.
C_ReasBecEligColDiagGrp	Collapsed ICD-9 diagnosis categories for reason eligible for disability benefits. Taken from B6, B12, or B15.
C_ReasBecEligBodyGroup	ICD-9 body group categories for reason eligible for disability benefits. Taken from B6, B12, or B15.
C_MainReasEligDiagGrpNew_1-_4	ICD-9 diagnosis categories for main reason eligible for disability benefits. Taken from B6.
C_MainReasEligColDiagGrp_1-_4	Collapsed ICD-9 diagnosis categories for main reason eligible for disability benefits. Taken from B6.
C_MainReasEligBodyGroup_1-_4	ICD-9 body group categories for main reason eligible for disability benefits. Taken from B6.
C_DisAge	Sample member age of disability at onset. Based on B18_age or if missing, B18_yr minus self-reported date of birth at A68 or A69, which may differ from the date of birth in SSA records.
C_AdultChild_Onset	Indicates whether onset of disability was prior to age 18 or at age 18 and older. Based on B19 and C_Disage.

**Table G.1** (continued)

Variable Name	Description
C_WrkdWhenLim	Indicates whether sample person was working at time became disabled. Based on B22 and C_AdultChild_Onset.
C_EvrWorked	Indicates whether sample person ever worked at time of interview. Based on B36, B22, B24, B24b, B30, and B30_b.
C_HrPayNeeded	Hourly pay respondent reports needing to make to accept Job. Based on B29_3a and B29_3ahop, or B29_3b and B29_3bhop, or B29_8a and B29_8ahop, or B29_8b and B29_8bhop, or B29_12a and B29_12ahop.
C_HrPayneed_looking	Hourly pay needed to enter workforce for beneficiaries looking for work
C_HrPayNeed_notlooking	Hourly pay needed to enter workforce for beneficiaries not looking for work.
<b>Section C Variables: Current Employment</b>	
C_MainCurJobSOC	SOC code assigned to verbatim from C2 (current occupation for main job).
C_MainCurJobNAICS	NAICS code assigned to verbatim at C3 (current industry for main job).
C_CurJob2SOC	SOC code assigned to verbatim from C2 (current occupation for second job).
C_CurJob2NAICS	NAICS code assigned to verbatim at C3 (current industry for second job).
C_CurJob3SOC	SOC code assigned to verbatim from C2 (current occupation for third job).
C_CurJob3NAICS	NAICS code assigned to verbatim at C3 (current industry for third job).
C_CurJob4SOC	SOC code assigned to verbatim from C2 (current occupation for fourth job).
C_CurJob4NAICS	NAICS code assigned to verbatim at C3 (current industry for fourth job).
C_CurJob5SOC	SOC code assigned to verbatim from C2 (current occupation for fifth job).
C_CurJob5NAICS	NAICS code assigned to verbatim at C3 (current industry for fifth job).
C_CurJob6SOC	SOC code assigned to verbatim from C2 (current occupation for sixth job).
C_CurJob6NAICS	NAICS code assigned to verbatim at C3 (current industry for sixth job).
C_MainCurJobHrPay	Hourly rate at current main job (pre-tax). Based on C10, C11, C12amt, and C12hop.
C_MainCurJobMnthPay	Monthly pay rate at current main job (pre-tax). Based on C10, C11, C12amt, and C12hop.
C_MainCurJobMnthPayTH	Monthly take home pay from current main job. Based on C10, C11, C13amt, and C13hop.
C_MainCurJobRepSSA	Number of months before current job reported to SSA. Based on C5b, C5month, and C5bweek.
C_MnthsMainCurJob	Months employed at current main job. Based on year of interview, C4mth, and C4yr. Computed for each job listed.
C_CurJob2HrPay	Hourly pay at current second job
C_CurJob2MnthPay	Monthly pre-tax pay at current second job.
C_CurJob2MnthPayTH	Monthly take home pay at current second job.
C_CurJob2RepSSA	Number of months before current second job reported to SSA. Based on C5b, C5month, and C5bweek.
C_MnthsCurJob2	Months employed at current second job. Based on year of interview, C4mth, and C4yr.
C_CurJob3HrPay	Hourly pay at current third job
C_CurJob3MnthPay	Monthly pre-tax pay at current third job.
C_CurJob3MnthPayTH	Monthly take home pay at current third job.
C_CurJob3RepSSA	Number of months before current third job reported to SSA. Based on C5b, C5month, and C5bweek.

**Table G.1** (continued)

Variable Name	Description
C_MnthsCurJob3	Months employed at current third job. Based on year of interview, C4mth, and C4yr.
C_CurJob4HrPay	Hourly pay at current fourth job
C_CurJob4MnthPay	Monthly pre-tax pay at current fourth job.
C_CurJob4MnthPayTH	Monthly take home pay at current fourth job.
C_CurJob4RepSSA	Number of months before current fourth job reported to SSA. Based on C5b, C5month, and C5bweek.
C_MnthsCurJob4	Months employed at current fourth job. Based on year of interview, C4mth, and C4yr.
C_CurJob5HrPay	Hourly pay at current fifth job
C_CurJob5MnthPay	Monthly pre-tax pay at current fifth job.
C_CurJob5MnthPayTH	Monthly take home pay at current fifth job.
C_CurJob5RepSSA	Number of months before current fifth job reported to SSA. Based on C5b, C5month, and C5bweek.
C_MnthsCurJob5	Months employed at current fifth job. Based on year of interview, C4mth, and C4yr.
C_CurJob6HrPay	Hourly pay at current sixth job
C_CurJob6MnthPay	Monthly pre-tax pay at current sixth job.
C_CurJob6MnthPayTH	Monthly take home pay at current sixth job.
C_CurJob6RepSSA	Number of months before current sixth job reported to SSA. Based on C5b, C5month, and C5bweek.
C_MnthsCurJob6	Months employed at current sixth job. Based on year of interview, C4mth, and C4yr.
C_TotCurMnthPay	Total current monthly pay from all jobs combined. Summary of currently monthly pay variables.
c_totcurmnthpay_high	Flags cases where total monthly pay is higher than \$10,000.
c_totcurmnthpay_low	Flags cases where total monthly pay is less than \$20 a month.
C_TotCurWkHrs	Total number of hours work per week on all current jobs combined. Based on summary of C8 for all jobs listed.
C_TotCurHrMnth	Total number of hours worked per month on all jobs combined. Based on summary of C8 for all jobs listed.
c_CurSGA	Indicator if current pay is above non-blind substantial gainful activity
<b>Section C_B Variables: Employment Within the Last Six Months</b>	
C_Main6MoJobSOC	SOC code assigned to verbatim from C_B2 (occupation for main job).
C_Main6MoJobNAICS	NAICS code assigned to verbatim at C_B3 (industry for main job).
C_6MoJob2SOC	SOC code assigned to verbatim from C_B2 (occupation for second job).
C_6MoJob2NAICS	NAICS code assigned to verbatim at C_B3 (industry for second job).
C_6MoJob3SOC	SOC code assigned to verbatim from C_B2 (occupation for third job).
C_6MoJob3NAICS	NAICS code assigned to verbatim at C_B3 (industry for third job).
C_6MoJob4SOC	SOC code assigned to verbatim from C_B2 (occupation for fourth job).
C_6MoJob4NAICS	NAICS code assigned to verbatim at C_B3 (industry for fourth job).
C_6MoJob5SOC	SOC code assigned to verbatim from C_B2 (occupation for fifth job).
C_6MoJob5NAICS	NAICS code assigned to verbatim at C_B3 (industry for fifth job).

**Table G.1** (continued)

Variable Name	Description
C_6MoJob6SOC	SOC code assigned to verbatim from C_B2 (occupation for sixth job).
C_6MoJob6NAICS	NAICS code assigned to verbatim at C_B3 (industry for sixth job).
C_Main6MoJobHrPay	Hourly rate at main job (pre-tax). Based on C_B8, C_B9, C_B10, C_B11, C_B12amt, and C_B12hop.
C_Main6MoJobMnthPay	Monthly pay rate at main job (pre-tax). Based on C_B8, C_B10, C_B11, C_B12amt, and C_B12hop.
C_Main6MoJobMnthPayTH	Monthly take home pay from main job. Based on C_B8, C_B10, C_B11, C_B13amt, and C_B13hop.
C_Main6MoJobRepSSA	Number of months before job reported to SSA. Based on C_B5b, C_B5month, and C_B5bweek.
C_MnthsMain6MoJob	Months employed at main job within the last six months. Based on C_B4amth, C_B4ayr, C_B4bmth, and C_B4byr. Computed for each job listed.
C_6MoJob2HrPay	Hourly pay at second job
C_6MoJob2MnthPay	Monthly pre-tax pay at second job.
C_6MoJob2MnthPayTH	Monthly take home pay at second job.
C_6MoJobRep2SSA	Number of months before second job reported to SSA.
C_Mnths6MoJob2	Months employed at second job within the last six months.
C_6MoJob3HrPay	Hourly pay at third job
C_6MoJob3MnthPay	Monthly pre-tax pay at third job.
C_6MoJob3MnthPayTH	Monthly take home pay at third job.
C_6MoJobRep3SSA	Number of months before third job reported to SSA.
C_Mnths6MoJob3	Months employed at third job within the last six months.
C_6MoJob4HrPay	Hourly pay at fourth job
C_6MoJob4MnthPay	Monthly pre-tax pay at fourth job.
C_6MoJob4MnthPayTH	Monthly take home pay at fourth job.
C_6MoJobRep4SSA	Number of months before fourth job reported to SSA.
C_Mnths6MoJob4	Months employed at fourth job within the last six months.
C_6MoJob5HrPay	Hourly pay at fifth job
C_6MoJob5MnthPay	Monthly pre-tax pay at fifth job.
C_6MoJob5MnthPayTH	Monthly take home pay at fifth job.
C_6MoJobRep5SSA	Number of months before fifth job reported to SSA.
C_Mnths6MoJob5	Months employed at fifth job within the last six months.
C_6MoJob6HrPay	Hourly pay at sixth job
C_6MoJob6MnthPay	Monthly pre-tax pay at sixth job.
C_6MoJob6MnthPayTH	Monthly take home pay at sixth job.
C_6MoJobRep6SSA	Number of months before sixth job reported to SSA.
C_Mnths6MoJob6	Months employed at sixth job within the last six months.
C_Tot6MoMnthPay	Total monthly pay from all six month jobs combined. Summary of monthly pay variables.
C_MnthsEvrMain6MoJob	Total months ever employed at main job. Based on C_B4amth, C_B4ayr, C_B4bmth, and C_B4byr. Computed for each job listed.
C_MnthsEvr6MoJob2	Total months ever employed at second job.

**Table G.1** (continued)

Variable Name	Description
C_MnthsEvr6MoJob3	Total months ever employed at third job.
C_MnthsEvr6MoJob4	Total months ever employed at fourth job.
C_MnthsEvr6MoJob5	Total months ever employed at fifth job.
C_MnthsEvr6MoJob6	Total months ever employed at sixth job.
<b>Section D Variables: Jobs/Other Jobs During 2018</b>	
C_Main_Job_grid_num	Indicates which job is listed as 2018 main job.
D18_m	Indicates whether the main job reported in section D was paid by the hour
C_job_from_SecC_1	Indicates which current job from section C has been copied over to job 1 in list of jobs held during 2018.
C_job_from_SecC_2	Indicates which current job from section C has been copied over to job 2 in list of jobs held during 2018.
C_job_from_SecC_3	Indicates which current job from section C has been copied over to job 3 in list of jobs held during 2018.
C_job_from_SecC_4	Indicates which current job from section C has been copied over to job 4 in list of jobs held during 2018.
C_job_from_SecC_5	Indicates which current job from section C has been copied over to job 5 in list of jobs held during 2018.
C_job_from_SecC_6	Indicates which current job from section C has been copied over to job 6 in list of jobs held during 2018.
C_job_from_SecC_B_1	Indicates which current job from section C_B has been copied over to job 1 in list of jobs held during 2018.
C_job_from_SecC_B_2	Indicates which current job from section C_B has been copied over to job 2 in list of jobs held during 2018.
C_job_from_SecC_B_3	Indicates which current job from section C_B has been copied over to job 3 in list of jobs held during 2018.
C_job_from_SecC_B_4	Indicates which current job from section C_B has been copied over to job 4 in list of jobs held during 2018.
C_job_from_SecC_B_5	Indicates which current job from section C_B has been copied over to job 5 in list of jobs held during 2018.
C_job_from_SecC_B_6	Indicates which current job from section C_B has been copied over to job 6 in list of jobs held during 2018.
C_Totjobcopied	Total Number of 2018 Jobs Copied from C or C_B to D
C_MainJob2018SOC	SOC code assigned to verbatim at D4 (occupation at main job in 2018).
C_MainJob2018NAICS	NAICS code assigned to verbatim at D5 (industry for main job in 2018).
C_Job12018SOC	SOC code assigned to verbatim at D4 (occupation at first job in 2018).
C_Job12018NAICS	NAICS code assigned to verbatim at D5 (industry for first job in 2018).
C_Job22018SOC	SOC code assigned to verbatim at D4 (occupation at second job in 2018).
C_Job22018NAICS	NAICS code assigned to verbatim at D5 (industry for second job in 2018).
C_Job32018SOC	SOC code assigned to verbatim at D4 (occupation at third job in 2018).
C_Job32018NAICS	NAICS code assigned to verbatim at D5 (industry for third job in 2018).
C_Job42018SOC	SOC code assigned to verbatim at D4 (occupation at fourth job in 2018).
C_Job42018NAICS	NAICS code assigned to verbatim at D5 (industry for fourth job in 2018).
C_Job52018SOC	SOC code assigned to verbatim at D4 (occupation at fifth job in 2018).
C_Job52018NAICS	NAICS code assigned to verbatim at D5 (industry for fifth job in 2018).

**Table G.1** (continued)

Variable Name	Description
C_Job62018SOC	SOC code assigned to verbatim at D4 (occupation at sixth job in 2018).
C_Job62018NAICS	NAICS code assigned to verbatim at D5 (industry for sixth job in 2018).
C_MainJobHrPay2018	Hourly pay for main job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MainJobMnthPay2018	Monthly pay for main job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MainJobMnthPayTH2018	Monthly take home pay for main job in 2018. Based on D16, D18, D21amt, and D21hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MnthsMain2018Job	Months employed at main job in 2018. Based on D6mth and D8mnth. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job1HrPay2018	Hourly pay for first job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job1MnthPay2018	Monthly pay for first job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job1MnthPayTH2018	Monthly take home pay for first job in 2018. Based on D16, D18, D21amt, and D21hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MnthsJob12018	Months employed at first job in 2018. Based on D6mth and D8mnth. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job2HrPay2018	Hourly pay for second job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job2MnthPay2018	Monthly pay for second job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job2MnthPayTH2018	Monthly take home pay for second job in 2018. Based on D16, D18, D21amt, and D21hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MnthsJob22018	Months employed at second job in 2018. Based on D6mth and D8mnth. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.

**Table G.1** (continued)

Variable Name	Description
C_Job3HrPay2018	Hourly pay for third job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job3MnthPay2018	Monthly pay for third job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job3MnthPayTH2018	Monthly take home pay for third job in 2018. Based on D16, D18, D21amt, and D21hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MnthsJob32018	Months employed at third job in 2018. Based on D6mth ad D8mnth. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job4HrPay2018	Hourly pay for fourth job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job4MnthPay2018	Monthly pay for fourth job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job4MnthPayTH2018	Monthly take home pay for fourth job in 2018. Based on D16, D18, D21amt, and D21hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MnthsJob42018	Months employed at fourth job in 2018. Based on D6mth ad D8mnth. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job5HrPay2018	Hourly pay for fifth job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job5MnthPay2018	Monthly pay for fifth job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job5MnthPayTH2018	Monthly take home pay for fifth job in 2018. Based on D16, D18, D21amt, and D21hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MnthsJob52018	Months employed at fifth job in 2018. Based on D6mth ad D8mnth. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.

**Table G.1** (continued)

Variable Name	Description
C_Job6HrPay2018	Hourly pay for sixth job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job6MnthPay2018	Monthly pay for sixth job in 2018 (pre-tax). Based on D16, D18, D20amt, and D20hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Job6MnthPayTH2018	Monthly take home pay for sixth job in 2018. Based on D16, D18, D21amt, and D21hop. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_MnthsJob62018	Months employed at sixth job in 2018. Based on D6mth and D8mth. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_Tot2018Pay	Total monthly pay for all jobs combined in 2018. Summary of monthly pay variables for each 2018 job listed. Includes current jobs mentioned in Section C that are not repeated in Section D. Includes jobs within the last six months in Section C_B that are not repeated in Section D.
C_TotHrs2018	Total hours worked in 2018. Summary of hours*weeks worked for all jobs in 2018.
C_TotMnths2018	Total months worked in 2018.
C_UsWkHr2018	Usual weekly hours worked in 2018. Based on total hours worked in 2018 and number of weeks worked in 2018 for all jobs.
<b>Section G: Employment-Related Services and Supports Used in 2018</b>	
C_UseSVR2018_rev	Indicates that sample person received employment services or job training from an state vocational rehabilitation (SVR) agency in 2018.
C_UseWEL2018_rev	Indicates that sample person received employment services or job training from a welfare agency in 2018.
C_UseSMenH2018_rev	Indicates that sample person received employment services or job training from a state mental health agency in 2018.
C_UseOthSt2018_rev	Indicates that sample person received employment services or job training from another state agency in 2018.
C_UsePriv2018_rev	Indicates that sample person received employment services or job training from a private business in 2018.
C_UseOthNonSt2018_rev	Indicates that sample member received employment or job training services from another non state provider in 2018.
C_UseSchool2018_rev	Indicates that sample member received employment services or job training at a school in 2018.
C_UseUnemp2018_rev	Indicates that sample member received employment services or job training from an unemployment agency in 2018.
C_UseClinic2018_rev	Indicates that sample member received medical or mental health services at a clinic, hospital, or doctor's office in 2018.
C_UseRehab2018_rev	Indicates that sample member received medical or mental health services at a rehabilitation center in 2018.
C_UseOthMed2018_rev	Indicates that sample member received medical or mental health services from another type of place in 2018.

**Table G.1** (continued)

Variable Name	Description
C_EmpUnkwn2018_rev	Indicates that provider type was unknown for employment and job training services received in 2018.
C_MedUnkwn2018_rev	Indicates that provider type was unknown for medical and mental health services received in 2018.
C_UseEmploy2018_rev	Indicates that sample member received employment services or employment training services (G2, G11) in 2018.
C_ServUse2018_rev	Indicates that sample member used one or more services (G2, G11, G16, G20) in 2018.
C_PhyTh2018_rev	Indicates that sample member received physical therapy in 2018.
C_OccTher2018_rev	Indicates that sample member received occupational therapy in 2018.
C_SpchTher2018_rev	Indicates that sample member received speech therapy in 2018.
C_Equip2018_rev	Indicates that sample member received special equipment or devices in 2018.
C_Coun2018_rev	Indicates that sample member received personal counseling or therapy in 2018.
C_GrpTh2018_rev	Indicates that sample member received group therapy in 2018.
C_WrkAs2018_rev	Indicates that sample member received a work or job assessment in 2018.
C_FindJob2018_rev	Indicates that sample member received help finding a job in 2018.
C_JobTrn2018_rev	Indicates that sample member received training to learn a new job or skill in 2018.
C_JobMod2018_rev	Indicates that sample member received advice about modifying his/her job or work place in 2018.
C_JobCch2018_rev	Indicates that sample member received on-the-job training, job coaching, or support services in 2018.
C_JobOJT2018_rev	Indicates that sample member received on-the-job training in 2018.
C_RxMed2018_rev	Indicates that sample member received prescription medications in 2018.
C_OtherServ2018_rev	Indicates that sample member received any other services at G2, G11, G16, or G20 in 2018.
<b>Section I: Health and Functional Status</b>	
C_EquipFuncLim	Sample member uses equipment/device for any functional/sensory/communication limitation including seeing, hearing, speaking, or walking. Based on I19, I23, I27, and I31.
C_NumSenLim	Number of sensory/communication limitations reported including difficulty seeing, hearing, or speaking. Based on I21 and I25.
C_NumSevSenLim	Number of severe sensory/communication limitations reported including inability to see, hear, or speak at all. Based on I18, I22, and I26.
C_NumPhyLim	Number of physical functional limitations reported including difficulty walking, climbing, lifting, grasping, reaching, standing, or stooping. Based on I29, I33, I35, I39, I41, and I43.
C_NumSevPhyLim	Number of severe physical functional limitations reported including inability to walk, climb, lift, grasp, reach, stand, or stoop at all. Based on I30, I34, I36, I38, I40, I42, and I44.
C_NumEmotLim	Number of emotional/social limitations including trouble concentrating, coping with stress, and getting along with others. Based on I59, I60, and I61
C_NumADLs	Number of Activity of Daily Living tasks report difficulty with including getting around home, getting into and out of bed, difficulty bathing, and difficulty eating. Based on I45, I49, I51, and I57.

**Table G.1** (continued)

Variable Name	Description
C_NumADLAssist	Number of Activity of Daily Living tasks require assistance with including getting around home, getting into and out of bed, bathing, and eating. Based on I46, I50, I52, and I58.
C_NumIADLs	Number of Instrumental Activities of Daily Living tasks report difficulty with including getting around outside home, shopping, and preparing meals. Based on I47, I53, and I55.
C_NumIADLAssist	Number of Instrumental Activities of Daily Living tasks require assistance with including getting around outside home, shopping, and preparing meals. Based on I48, I54, and I56.
C_SF8BP	SF-8 bodily pain scale value. Based on I4.
C_SF8GH	SF-8 general health scale value. Based on I1.
C_SF8MH	SF-8 mental health scale value. Based on I7.
C_SF8PF	SF-8 physical functioning scale value. Based on I2.
C_SF8RE	SF-8 role emotional scale value. Based on I8.
C_SF8RP	SF-8 role physical scale value. Based on I3.
C_SF8SF	SF-8 social functioning scale value. Based on I6.
C_SF8VT	SF-8 vitality scale value. Based on I5.
C_PCSBP	Physical (PCS-8) Weights for Bodily Pain.
C_PCSGH	Physical (PCS-8) Weights for General Health.
C_PCSMH	Physical (PCS-8) Weights for Mental Health.
C_PCSPF	Physical (PCS-8) Weights for Physical Functioning.
C_PCSRE	Physical (PCS-8) Weights for Role Emotional.
C_PCSRP	Physical (PCS-8) Weights for Role Physical.
C_PCSSF	Physical (PCS-8) Weights for Social Functioning.
C_PCSVT	Physical (PCS-8) Weights for Vitality.
C_MCSBP	SF-8 Mental (MCS-8) Weight for Bodily Pain.
C_MCSGH	SF-8 Mental (MCS-8) Weight for General Health.
C_MCSMH	SF-8 Mental (MCS-8) Weight for Mental Health.
C_MCSPF	SF-8 Mental (MCS-8) Weight for Physical Functioning.
C_MCSRE	SF-8 Mental (MCS-8) Weight for Role Emotional.
C_MCSRP	SF-8 Mental (MCS-8) Weight for Role Physical.
C_MCSSF	SF-8 Mental (MCS-8) Weight for Social Functioning.
C_MCSVT	SF-8 Mental (MCS-8) Weight for Vitality.
C_PCS8TOT	SF-8 standardized aggregate summary physical health score (higher scores are indicative of better health). Based on C_PCSGH, C_PCSPF, C_PCSRP, C_PCSBP, C_PCSVT, C_PCSSF, C_PCSMH, and C_PCSRE.
C_MCS8TOT	SF-8 standardized aggregate mental health summary score (higher scores are indicative of better health). Based on C_MCSGH, C_MCSPF, C_MCSRP, C_MCSBP, C_MCSVT, C_MCSSF, C_MCSMH, C_MCSRE.
C_CAGEAlcohol	Summary of affirmative responses to CAGE items: I62-I65 (higher scores are indicative of greater alcohol dependence).
C_DrugDep	Summary of drug dependence items: I72-I76 (higher scores are indicative of greater drug dependence)

**Table G.1** (continued)

Variable Name	Description
<b>Section J: Health Insurance</b>	
C_CurMedicare	Currently covered by Medicare. Based on response to J1 or J9_2.
C_CurMedicaid	Currently covered by Medicaid. Based on response to J2 or J9_1.
C_CurMillInsur	Currently covered by military insurance. Based on response to J4 or J9_3.
C_CurIndInsur	Currently covered by Indian Health Insurance. Based on response to J9_4.
C_CurMedigap	Currently covered by Medi-Gap. Based on response to J9_5.
C_CurStAssist	Currently covered by State program. Based on response to J9_6.
C_CurPrivEmp	Currently covered by private insurance through own employer. Based on response to J6 or J9_7.
C_CurPrivSp	Currently covered by private insurance through spouse/partner/parent. Based on response to J6 or J9_8.
C_CurPrivSelf	Currently covered by private insurance paid for by self/family. Based on response to J6 or J9_9.
C_CurOtherInsur	Currently covered by other plan. Coded "yes" if report coverage associated with Indian Health Service, Medi-Gap, State program, or other plan.
C_CurNoInsur	Currently not covered by any insurance. Coded "yes" if J8=1 or no insurance coverage mentioned in J9.
<b>Section K: Income and Other Assistance</b>	
C_LstMnthPay	Last month pay (pre-tax). Based on K3 (logical zero coded if K3=.L).
C_AmtPrivDis	Amount received from Private Disability last month. Based on K6 (logical zero coded if K6_a=0).
C_AmtWorkComp	Amount received from Workers' Compensation last month. Based on K6 (logical zero coded if K6_b=0).
C_AmtVetBen	Amount received from Veterans' Benefits last month. Based on K6 (logical zero coded if K6_c=0).
C_AmtPubAssis	Amount received from public assistance or welfare payments last month. Based on K6 (logical zero coded if K6_d=0).
C_AmtUnemply	Amount received from Unemployment benefits last month. Based on K6 (logical zero coded if K6_e=0).
C_AmtPrivPen	Amount received from Private Pensions or government pensions last month. Based on K6 (logical zero coded if K6_f=0).
C_AmtOthReg	Amount received from other sources not on a regular basis last month. Based on K6 (logical zero coded if K6_g=0).
C_AmtOthRegSum	Amount from all sources received on regular basis last month. Summary of imputed values for C_AmtOthReg, C_AmtPrivDis, C_AmtWorkComp, C_AmtVetBen, C_AmtPubAssis, C_AmtUnemply, C_AmtPrivPen, and income received from Social Security last month (N_TotSSbenLastMnth) (imputed values).
C_AmtOthNonReg	Amount received from other sources not on a regular basis last month. Based on K6 (logical zero coded if K6_h=0).
C_AmtFoodStamp	Amount received from Food Stamps last month. Based on K12 (logical zero coded if K11=0).
C_AmtOthgov	Amount received from any other government program last month. Based on K15 (logical zero coded if K13=0).
C_TotGovCashBen	Total government cash benefits received. Summary of imputed values for C_AmtVetBen, C_AmtPubAssis, and N_TotSSbenLastMnth (imputed values).

**Table G.1** (continued)

Variable Name	Description
C_TotNonCashBen	Total non-cash benefits received. Summary of C_AmtFoodStamp, and C_AmtOthGov.
<b>Section L: Sociodemographic Information</b>	
C_Cohab	Indicates that sample member lives with spouse or partner. Based on L8, L9, and L10.
C_BMI	Body Mass Index score. Based on L6ft, L6in, and L7.
C_BMI_cat	Body Mass Index categories. Based on C_BMI.
C_Hhsize	Household size. Based on L11, L16, and L17.
C_NumChildhh	Total number of children in household. Based on L17.
C_NumChildohh	Total number of children outside household. Based on L20.
C_NumChildren	Total number of children. Summary of C_NumChildhh and C_NumChildohh.
C_Numchildhh_pov	Total number of children calculated for use in Federal Poverty Index. Coded as "0" if live in group quarters. If live with un-related others, counts own children only.
C_FedPovertyLevel	Percent of federal poverty threshold relative to number of people in household for 2018. Based on Census Bureau 2018 thresholds. (Values 1 and 2 have household income that is below the federal poverty threshold, and values 3 and above are at or above the federal poverty threshold. For example, value 5 represents those with 200 to 249 percent, or 2 to 2.49 times, the federal poverty threshold for households).
C_HhInc2018	Total household income in 2018. Based on L23Ahop and L23Aamt.
<b>SSA Administrative Variables</b>	
N_BENSTATATINT2	Beneficiary status at interview (if status is missing at the time of interview, we use SSA's administrative records at the time the sample was drawn) (From SSA administrative records)
N_BFW_RECENT	Benefits forgone for work
N_BIC_ATSAMP	Beneficiary identification code at sampling
N_BIC_ATINT	Beneficiary identification code at interview
N_MEDEX_ATSAMP	Medical improvement indicator at sampling
N_MEDEX_ATINT	Medical improvement indicator at interview
N_DAC	Disabled Adult Child
N_DEPEN_ATINT	SSDI dependent benefits due at interview
N_DEPENLASTMNT	SSDI dependent benefit payment amount last month
N_IMP_CIRC	Circulatory impairment
N_IMP_ENDO	Endocrine impairment
N_IMP_ID	Intellectual disability
N_IMP_INJ	Injury or poisoning
N_IMP_MISSING	Missing impairment
N_IMP_MUSC	Musculoskeletal impairment
N_IMP_NEO	Neoplasm
N_IMP_NERV	Nervous system impairment
N_IMP_OTHER	Other impairment
N_IMP_PSYCH	Psychiatric impairment

**Table G.1** (continued)

Variable Name	Description
N_IMP_RESP	Respiratory impairment
N_IMP_SENS	Sensory impairment
N_MFT	Master file type
N_MTHSEARLENT	Months Since Earliest SSI or SSDI Entitlement Date
N_MTHSRECENT	Months Since Most Recent SSI or SSDI Entitlement Date
N_ONSETDATE_SSDI	SSDI onset date
N_ONSETDATE_SSI	SSI onset date
N_PIAATINT	Primary Insurance Amount (PIA)
N_RepPayee	Representative Payee
N_SSDI_ATINT	SSDI benefit due at interview
N_SSDILASTMNTH	SSDI payment last month
N_SSDINOMCR_ATINT	SSDI no Medicare at Interview
N_SSI_ATINT	SSI benefit due at interview
N_SSILASTMNTH	State and federal SSI payment last month
N_STW_AtInt	SSA benefits are in suspense or terminated because of work at interview
N_STW_EVER	Ever experienced suspense or termination of cash benefits due to work
N_STW_MNTHS_RECENT	STW months since most recent eligibility
N_TOC_ATSAMP	Type of claim at sampling
N_TOC_ATINT	Type of claim at interview
N_TOTSSBEN_ATINT	Total SSI and SSDI benefits due at interview
N_TotSSbenLastMnth	Total SSI and SSDI payment last month
N_TTWMNTHS_ASSGN	Number of months since TTW ticket first assigned as of interview date
N_TTWPART_ATINT	Ticket to Work participant at interview
N_TTWPARTEVER	TTW participant ever
N_TTWPMT_TYPE	Ticket to Work payment type
N_TTWPPOV_TYPE	Ticket to Work provider type

## **Appendix H**

**Variables dropped or replaced on public use  
file and reason for drop/replacement**

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**Table H.1. Variables dropped or replaced on public use file and reason for drop/replacement**

Variable	Label	File Status	Reasons for Drop/Replace
R7_PIN	PIN	Drop	Survey administration variable
R7_FINAL	Final Status Code	Drop	Survey administration variable
R7_LASTDATE	Interview Date	Drop	Survey administration variable
R7_C_INTDAY	Day of Interview	Drop	Survey administration variable
R7_C_INTMNTH	Month of Interview	Drop	Survey administration variable
R7_C_INTYEAR	Year of Interview	Drop	Survey administration variable
R7_PROXY_FLAG	Proxy Flag	Drop	Survey administration variable
R7_C_INTMODE	CATI or CAPI Interview Mode	Drop	Survey administration variable
R7_INTERVIEWLANGUAGE	Interview Language	Drop	Survey administration variable
R7_C_INTAGE	Age at Interview	Replace	Possible identifier. Use C_IntAge_PUB
R7_ORGSAMPINFO_DOB	Sample Date of Birth from SSA administrative records	Drop	Unique Identifier
R7_ORGSAMPINFO_SDATE	Date Sample Frame Pulled	Drop	Survey administration variable
R7_ORGSAMPINFO_SSIage	Sample Age First Received SSI Benefits	Drop	Survey administration variable
R7_ORGSAMPINFO_PSU	Sample PSU	Drop	Contains geographic Information and not necessary. Use A_PSU_PUB
R7_ORGSAMPINFO_EXTRACT	SWS Sample Extract	Drop	Survey administration variable
R7_ORGSAMPINFO_RELEASE	Sample Release Number	Drop	Survey administration variable
R7_ORGSAMPINFO_AGE	Sample Age	Drop	Have age at interview construct
R7_OrgSamplInfo_PrimDiagT16	PRIMARY DIAGNOSIS-T16	Drop	SSA Admin Data and possible identifier
R7_OrgSamplInfo_PrimDiagT2	PRIMARY DIAGNOSIS-T2	Drop	SSA Admin Data and possible identifier
R7_OrgSamplInfo_SecDiagT16	SECONDARY DIAGNOSIS-T16	Drop	SSA Admin Data and possible identifier
R7_OrgSamplInfo_SecDiagT2	SECONDARY DIAGNOSIS-T2	Drop	SSA Admin Data and possible identifier
R7_ORGSAMPINFO_RACE	Sample Race	Drop	Have survey race construct
R7_ORGSAMPINFO_SWSFRAME	SWS Frame	Drop	Survey Administration Variable
R7_ORGSAMPINFO_STATUS6LEVEL	Disposition code	Drop	Survey Administration Variable
R7_C_COHORT	Beneficiary Age Cohort	Drop	Possible identifier. Use A_Strata_PUB
R7_A_PSU	PSU identifier (after a_strata in NEST statement in SUDAAN)	Drop	Geographic information. Use A_PSU_PUB.

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_A68	Reported Month of Birth	Drop	Unique Identifier
R7_A68a	Reported Day of Birth	Drop	Unique Identifier
R7_A68b	Reported Year of Birth	Drop	Unique Identifier
R7_A69	Reported Age	Drop	Possible identifier. Have age at interview construct.
R7_A73	Respondent and Interview Type	Drop	Have respondent type construct (C_RTYPE) and interview mode (C_INTMODE)
R7_A73A	Currently Working	Drop	Survey administration variable-screener items
R7_A73B	Worked for Pay or Profit in Last 6 Months	Drop	Survey administration variable-screener items
R7_A74	Resp Lists Topics of Survey (First Time)	Drop	Survey administration variable-screener items
R7_A76	Resp Lists Topics of Survey (Second Time)	Drop	Survey administration variable-screener items
R7_A77	Resp Understands Voluntary (First Time)	Drop	Survey administration variable-screener items
R7_A77a	Resp Understands Voluntary (Second Time)	Drop	Survey administration variable-screener items
R7_A78	Resp Understands Confidential (First Time)	Drop	Survey administration variable-screener items
R7_A78a	Resp Understands Confidential (Second Time)	Drop	Survey administration variable-screener items
R7_A86	New Proxy Lists Topics of Survey (First Time)	Drop	Survey administration variable-screener items
R7_A88	New Proxy Lists Topics of Survey (Second Time)	Drop	Survey administration variable-screener items
R7_A89	New Proxy Understands Voluntary (First Time)	Drop	Survey administration variable-screener items
R7_A89a	New Proxy Understands Voluntary (Second Time)	Drop	Survey administration variable-screener items
R7_A90	New Proxy Understands Confidential (First Time)	Drop	Survey administration variable-screener items
R7_A90a	New Proxy Understands Confidential (Second Time)	Drop	Survey administration variable-screener items
R7_A92	Proxy Failed Cognitive Test	Drop	Survey administration variable-screener items
R7_B5	Currently Receiving Benefits	Drop	Small cell sizes; identifying
R7_B7	Eligible for Other Reasons	Drop	Small cell sizes; identifying
R7_B11	Still Have Conditions That Made Elig	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_B13	Previously Eligible for Other Reasons	Drop	Small cell sizes; identifying
R7_B16	Limited by Other Conds When First Received Benefits	Drop	Small cell sizes; identifying
R7_B18_age	Age First Became Limited	Replace	Possible identifier. Use C_ADULTCHILD_ONSET_I
R7_B18_year	Year First Became Limited	Drop	Possible identifier.
R7_B19	Limited Before 19	Replace	Possible identifier. Use C_ADULTCHILD_ONSET_I
R7_B24	Currently Working	Drop	Have imputed
R7_B24_IFLAG	Currently Working, Imputation Flag	Drop	IFLAG - No analytic value
R7_B24C	Interviewing Only People Working or who Worked in past 6 Months	Drop	Little analytic value
R7_B28b	Hours per Week Would Like to Work	Drop	Small cell sizes; identifying
R7_B29_1b	Turned Down Job Offered within Past 4 weeks	Drop	Small cell sizes; identifying
R7_B29_2_a	Declined Job Offer b/c No Special Equipment or Devices	Drop	Small cell sizes; identifying
R7_B29_2_b	Declined Job Offer b/c No Personal Assistance	Drop	Small cell sizes; identifying
R7_B29_2_c	Declined Job Offer b/c No Help Caring for Others	Drop	Small cell sizes; identifying
R7_B29_2_d	Declined Job Offer b/c No Reliable Transportation	Drop	Small cell sizes; identifying
R7_B29_2_e	Declined Job Offer b/c No Flexible Schedule	Drop	Small cell sizes; identifying
R7_B29_2_f	Declined Job Offer b/c Job Did Not Pay Enough	Drop	Small cell sizes; identifying
R7_B29_2_g	Declined Job Offer b/c No Health Insurance Benefits	Drop	Small cell sizes; identifying
R7_B29_2_h	Declined Job Offer b/c Would Have Lost Benefits (SS, Medicaid, etc.)	Drop	Small cell sizes; identifying
R7_B29_2_i	Declined Job Offer for Other Reason	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_B29_3a	Lowest Wage/Salary Needed to Accept Job Declined	Drop	Small cell sizes; identifying
R7_B29_3ahop	How Often Paid for Job Declined	Drop	Small cell sizes; identifying
R7_B29_3b	Lowest Wage/Salary Needed to Accept Job if Offered	Replace	Small cell sizes; possible identifier.
R7_B29_3bhop	How Often Paid for Job if Offered	Drop	Small cell sizes; identifying
R7_B29_4a	Hours per Week Expect to Work for Job Declined	Drop	Small cell sizes; identifying
R7_B29_4b	Expect to Work Full or Part Time at Job Declined	Drop	Small cell sizes; identifying
R7_B29_5	Contacted Someone to Find out How Benefits Affected if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_1	Worried About Losing Private Disability Insurance if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_2	Worried About Losing Workers' Compensation if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_3	Worried About Losing Veterans' Benefits if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_4	Worried About Losing Medicare if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_5	Worried About Losing Medicaid if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_6	Worried About Losing SSA Disability Benefits if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_7	Worried About Losing Public Assistance if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_8	Worried About Losing Food Stamps if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_9	Worried About Losing Personal Assistance Services if Took Job Declined	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_B29_6_10	Worried About Losing Unemployment Benefits if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_11	Worried About Losing Other State Disability Benefits if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_12	Worried About Losing Other Government Programs if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_13	Worried About Losing Other Benefits if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_6_14	Worried About Losing Health Insurance (unspecified type) if Took Job Declined	Drop	Small cell sizes; identifying
R7_B29_8a	Lowest Wage/Salary Needed to Accept Job if Found One	Drop	Small cell sizes; identifying
R7_B29_8ahop	How Often Paid if Found Job	Drop	Small cell sizes; identifying
R7_B29_8b	Lowest Wage/Salary Needed to Accept Job if Found and Offered	Drop	Small cell sizes; identifying
R7_B29_8bhop	How Often Paid if Job Found and Offered	Drop	Small cell sizes; identifying
R7_B29_8c	Hours per Week Expect to Work at Job if Found and Offered	Drop	Small cell sizes; identifying
R7_B29_8d	Expect to Work Full or Part Time at Job Found and Offered	Drop	Small cell sizes; identifying
R7_B29_9	Contacted Someone to Find out How Benefits Affected if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_1	Worried About Losing Private Disability Insurance if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_2	Worried About Losing Workers' Compensation if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_3	Worried About Losing Veterans' Benefits if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_4	Worried About Losing Medicare if Found Job	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_B29_10_5	Worried About Losing Medicaid if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_6	Worried About Losing SSA Disability Benefits if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_7	Worried About Losing Public Assistance if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_8	Worried About Losing Food Stamps if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_9	Worried About Losing Personal Assistance Services if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_10	Worried About Losing Unemployment Benefits if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_11	Worried About Losing Other State Disability Benefits if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_12	Worried About Losing Other Government Programs if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_13	Worried About Losing Other Benefits if Found Job	Drop	Small cell sizes; identifying
R7_B29_10_14	Worried About Losing Health Insurance (unspecified type) if Found Job	Drop	Small cell sizes; identifying
R7_B29_11a	Contacted Someone to Find out How Benefits Affected if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_1	Worried About Losing Private Disability Insurance if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_2	Worried About Losing Workers' Compensation if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_3	Worried About Losing Veterans' Benefits if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_4	Worried About Losing Medicare if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_5	Worried About Losing Medicaid if Looked for Work	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_B29_11b_6	Worried About Losing SSA Disability Benefits if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_7	Worried About Losing Public Assistance or Welfare if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_8	Worried About Losing Food Stamps if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_9	Worried About Losing Personal Assistance Services if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_10	Worried About Losing Unemployment Benefits if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_11	Worried About Losing Other State Disability Benefits if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_12	Worried About Losing Other Government Programs if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_13	Worried About Losing Other Benefits if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_11b_14	Worried About Losing Health Insurance (unspecified type) if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_12a	Lowest Wage/Salary Needed to Accept Job if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_12ahop	How Often Paid if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_12b	Hours per Week Expect to Work at Job if Looked for Work	Drop	Small cell sizes; identifying
R7_B29_12c	Expect to Work Full or Part Time if Looked for Work	Drop	Small cell sizes; identifying
R7_B36	Ever Worked	Drop	Possible identifier--use construct, C_EVRWORKED
R7_B36b	Year Last Worked for Profit	Drop	Survey administration variable
R7_C_MainConDiagGrpNew_1	Main Condition Primary Diag Grp NEW Condition 1	Drop	Have imputed

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_MainConDiagGrpNew_2	Main Condition Primary Diag Grp NEW Condition 2	Drop	Have imputed
R7_C_MainConDiagGrpNew_3	Main Condition Primary Diag Grp NEW Condition 3	Drop	Have imputed
R7_C_MainConDiagGrpNew_4	Main Condition Primary Diag Grp NEW Condition 4	Drop	Have imputed
R7_C_MainConDiagGrpNew_5	Main Condition Primary Diag Grp NEW Condition 5	Drop	Have imputed
R7_C_MainConDiagGrpNew_6	Main Condition Primary Diag Grp NEW Condition 6	Drop	Have imputed
R7_C_MAINCONDIAGGRPNEW_IFLAG	Main Condition Primary Diag Grp NEW Condition 1, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_MAINCONDIAGGRPNEW_I	Main Condition Primary Diag Grp NEW Condition 1, Imputed	Replace	Use broader categories (C_MAINCONCOLDIAGGRPNEW_I)
R7_C_MainConColDiagGrp_1	Main Con Primary Diag Grp Collapsed (Code 1)	Drop	Have imputed
R7_C_MainConColDiagGrp_2	Main Con Primary Diag Grp Collapsed (Code 22)	Drop	Have imputed
R7_C_MainConColDiagGrp_3	Main Con Primary Diag Grp Collapsed (Code 33)	Drop	Have imputed
R7_C_MainConColDiagGrp_4	Main Con Primary Diag Grp Collapsed (Code 44)	Drop	Have imputed
R7_C_MainConColDiagGrp_5	Main Con Primary Diag Grp Collapsed (Code 55)	Drop	Have imputed
R7_C_MainConColDiagGrp_6	Main Con Primary Diag Grp Collapsed (Code 66)	Drop	Have imputed
R7_C_MAINCONCOLDIAGGRP_IFLAG	Main Condition Diagnosis Group Collapsed (Code 1), Imputation Flag	Drop	IFLAG - No analytic value
R7_C_MainConBodyGroup_1	Main Cond BG (Code 1)	Drop	Have imputed
R7_C_MainConBodyGroup_2	Main Cond BG (Code 22)	Drop	Have imputed
R7_C_MainConBodyGroup_3	Main Cond BG (Code 33)	Drop	Have imputed
R7_C_MainConBodyGroup_4	Main Cond BG (Code 44)	Drop	Have imputed
R7_C_MainConBodyGroup_5	Main Cond BG (Code 55)	Drop	Have imputed
R7_C_MainConBodyGroup_6	Main Cond BG (Code 66)	Drop	Have imputed
R7_C_MAINCONBODYGROUP_IFLAG	Main Condition Body Group (Code 1), Imputation Flag	Drop	IFLAG - No analytic value
R7_C_MAINCONBODYGROUP_I	Main Condition Body Group (Code 1), Imputed	Drop	Little analytic value.

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_SeconDiagGrpNew_1	Sec Cond Primary Diag Grp NEW Condition 1	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconDiagGrpNew_2	Sec Cond Primary Diag Grp NEW Condition 2	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconDiagGrpNew_3	Sec Cond Primary Diag Grp NEW Condition 3	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconDiagGrpNew_4	Sec Cond Primary Diag Grp NEW Condition 4	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconDiagGrpNew_5	Sec Cond Primary Diag Grp NEW Condition 5	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconDiagGrpNew_6	Sec Cond Primary Diag Grp NEW Condition 6	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconDiagGrpNew_7	Sec Cond Primary Diag Grp NEW Condition 7	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconDiagGrpNew_8	Sec Cond Primary Diag Grp NEW Condition 8	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_1	Sec Con Primary Diag Grp Collapsed (Code 1)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_2	Sec Con Primary Diag Grp Collapsed (Code 22)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_3	Sec Con Primary Diag Grp Collapsed (Code 33)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_4	Sec Con Primary Diag Grp Collapsed (Code 44)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_5	Sec Con Primary Diag Grp Collapsed (Code 55)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_6	Sec Con Primary Diag Grp Collapsed (Code 66)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_7	Sec Con Primary Diag Grp Collapsed (Code 77)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconColDiagGrp_8	Sec Con Primary Diag Grp Collapsed (Code 88)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_SeconBodyGroup_1	Sec Cond BG (Code 1)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconBodyGroup_2	Sec Cond BG (Code 22)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconBodyGroup_3	Sec Cond BG (Code 33)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconBodyGroup_4	Sec Cond BG (Code 44)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconBodyGroup_5	Sec Cond BG (Code 55)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconBodyGroup_6	Sec Cond BG (Code 66)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconBodyGroup_7	Sec Cond BG (Code 77)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_SeconBodyGroup_8	Sec Cond BG (Code 88)	Drop	Little analytic value. Drop additional codes listed under "main reason eligible" item.
R7_C_ReasBecEligDiagGrpNew	Reason Became Eligible, Diagnosis Group NEW	Drop	Possible identifier. Possibly use broad categories. This variable combines responses from B6, B12, and B15.
R7_C_ReasBecEligColDiagGrp	Reason Became Eligible Diagnosis Group Collapsed (Code 1)	Drop	Possible identifier. Possibly use broad categories. This variable combines responses from B6, B12, and B15.
R7_C_ReasBecEligBodyGroup	Reason Became Eligible Body Group (Code 1)	Replace	Use broader categories
R7_C_MainReasEligDiagGrpNew_1	Main Reason Eligible Primary Diag Grp NEW (Code 1)	Drop	Possible identifier.
R7_C_MainReasEligColDiagGrp_1	Main Reas Elig Primay Diag Grp Collapsed (Code 1)	Drop	Possible identifier.
R7_C_MainReasEligBodyGroup_1	Main Reas Elig Body Group (Code 1)	Drop	Possible identifier.
R7_C_MainReasEligDiagGrpNew_2	Main Reason Eligible Primary Diag Grp NEW (Code 2)	Drop	Small cell sizes; identifying
R7_C_MainReasEligColDiagGrp_2	Main Reas Elig Primay Diag Grp Collapsed (Code 2)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_MainReasEligBodyGroup_2	Main Reas Elig Body Group (Code 2)	Drop	Small cell sizes; identifying
R7_C_MainReasEligDiagGrpNew_3	Main Reason Eligible Primary Diag Grp NEW (Code 3)	Drop	Small cell sizes; identifying
R7_C_MainReasEligColDiagGrp_3	Main Reas Elig Primay Diag Grp Collapsed (Code 3)	Drop	Small cell sizes; identifying
R7_C_MainReasEligBodyGroup_3	Main Reas Elig Body Group (Code 3)	Drop	Small cell sizes; identifying
R7_C_MainReasEligDiagGrpNew_4	Main Reason Eligible Primary Diag Grp NEW (Code 4)	Drop	Small cell sizes; identifying
R7_C_MainReasEligColDiagGrp_4	Main Reas Elig Primay Diag Grp Collapsed (Code 4)	Drop	Small cell sizes; identifying
R7_C_MainReasEligBodyGroup_4	Main Reas Elig Body Group (Code 4)	Drop	Small cell sizes; identifying
R7_C_DisAge	Age at Onset of Disability	Drop	Possible identifier. Use C_ADULTCHILD_ONSET_I instead.
R7_C_DISAGE_I	Age at Onset of Disability, Imputed	Drop	Possible identifier. Use C_ADULTCHILD_ONSET_I instead.
R7_C_DISAGE_IFLAG	Age at Onset of Disability, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_AdultChild_Onset	Adult/Child Onset of Disability	Drop	Have imputed
R7_C_ADULTCHILD_ONSET_IFLAG	Adult/Child Onset of Disability, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_HrPayNeeded	Hourly pay needed to accept Job	Replace	Small cell sizes; possible identifier.
R7_c_hrpayneed_looking	Hourly Pay Needed to Enter Workforce for Beneficiaries Looking for Work	Drop	Small cell sizes; identifying
R7_C_HRPAYNEED_NOTLOOKING	Hourly Pay Needed to Enter Workforce for Beneficiaries not Looking for Work	Drop	Small cell sizes; identifying
R7_C1	Number Current Jobs	Drop	Have imputed
R7_C1_I	Number Current Jobs, Imputed	Drop	Small cell sizes; possible identifier for more than 1 job
R7_C1_IFLAG	Number Current Jobs, Imputation Flag	Drop	IFLAG - No analytic value

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C4mth_1	Month Started Current Job (Job 1)	Drop	Possible identifier. Have months at main current job construct (C_MNTHSMAINCURJOB)
R7_C4yr_1	Year Started Current Job (Job 1)	Drop	Possible identifier. Have months at main current job construct (C_MNTHSMAINCURJOB)
R7_C5b_1	Notified SSA Working-Weeks or Months (Job 1)	Drop	Small cell sizes; identifying
R7_C5BWEEK_1	Number Weeks Before Notified SSA (Job 1)	Drop	Have construct for number weeks to report job to SSA (C_MAINCURJOBREPSSA)
R7_C5BMONTH_1	Number Months Before Notified SSA (Job 1)	Drop	Have contract for number weeks to report job to SSA (C_MAINCURJOBREPSSA)
R7_C6_1	Self-employed at Current Job (Job 1)	Drop	Small cell sizes; identifying
R7_C8_1	Hours per Week Usually Work at Current Job (Job 1)	Drop	Have imputed
R7_C8_1_I	Hours per Week Usually Work at Current Job (Job 1), Imputed	Drop	Possible identifier. Use C_TotCurWkHrs and C_TotCurHrMnth
R7_C8_1_IFLAG	Hours per Week Usually Work at Current Job (Job 1), Imputation Flag	Drop	IFLAG - No analytic value
R7_C9_1	Weeks per Year Usually Work at Current Job (Job 1)	Drop	Small cell sizes; identifying
R7_C11_1	Regular Hourly Pay at Current Job (Job 1)	Drop	Possible identifier for outliers. Have hourly pay construct (C_MainCurJobHrPay)
R7_C12amt_1	Amount Paid Before Taxes at Current Job (Job 1)	Drop	Possible identifier for outliers. Have hourly and monthly pay constructs (C_MainCurJobHrPay, C_MainCurJobMnthPay)
R7_C12hop_1	How Often Paid at Current Job (Job 1)	Drop	Possible identifier for outliers. Have hourly and monthly pay constructs (C_MainCurJobHrPay, C_MainCurJobMnthPay)
R7_C13amt_1	Amount Take Home Pay at Current Job (Job 1)	Drop	Possible identifier for outliers. Have hourly and monthly pay constructs (C_MainCurJobMnthPayTH)

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C13hop_1	How Often Paid at Current Job (Job 1)	Drop	Possible identifier for outliers. Have hourly and monthly pay constructs (C_MainCurJobHrPayTH, C_MainCurJobMnthPayTH)
R7_C16	Received Promotion in Past 12 Months	Drop	Small cell sizes; identifying
R7_C20_e	Employer Offers Childcare	Drop	Small cell sizes; identifying
R7_C20_i	Employer Offers Flex Health Spending	Drop	Small cell sizes; identifying
R7_C4mth_2	Month Started Current Job (Job 2)	Drop	Possible identifier. Have months at main current job construct (C_MNTHSMINCURJOB)
R7_C4yr_2	Year Started Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C5a_2	Notified SSA Working (Job 2)	Drop	Small cell sizes; identifying
R7_C5b_2	Notified SSA Working-Weeks or Months (Job 2)	Drop	Small cell sizes; identifying
R7_C5BWEEK_2	Number Weeks Before Notified SSA (Job 2)	Drop	Small cell sizes; identifying
R7_C5BMONTH_2	Number Months Before Notified SSA (Job 2)	Drop	Small cell sizes; identifying
R7_C6_2	Self-employed at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C7_2	Current Job Part of Sheltered Workshop (Job 2)	Drop	Small cell sizes; identifying
R7_C8_2	Hours per Week Usually Work at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C9_2	Weeks per Year Usually Work at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C10_2	Paid by Hour at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C11_2	Regular Hourly Pay at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C12amt_2	Amount Paid Before Taxes at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C12hop_2	How Often Paid at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C13amt_2	Amount Take Home Pay at Current Job (Job 2)	Drop	Small cell sizes; identifying
R7_C13hop_2	How Often Paid at Current Job (Job 2)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C4mth_3	Month Started Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C4yr_3	Year Started Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C5a_3	Notified SSA Working (Job 3)	Drop	Small cell sizes; identifying
R7_C5b_3	Notified SSA Working-Weeks or Months (Job 3)	Drop	Small cell sizes; identifying
R7_C5BWEEK_3	Number Weeks Before Notified SSA (Job 3)	Drop	Small cell sizes; identifying
R7_C5BMONTH_3	Number Months Before Notified SSA (Job 3)	Drop	Small cell sizes; identifying
R7_C6_3	Self-employed at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C7_3	Current Job Part of Sheltered Workshop (Job 3)	Drop	Small cell sizes; identifying
R7_C8_3	Hours per Week Usually Work at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C9_3	Weeks per Year Usually Work at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C10_3	Paid by Hour at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C11_3	Regular Hourly Pay at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C12amt_3	Amount Paid Before Taxes at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C12hop_3	How Often Paid at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C13amt_3	Amount Take Home Pay at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C13hop_3	How Often Paid at Current Job (Job 3)	Drop	Small cell sizes; identifying
R7_C4mth_4	Month Started Working (Job 4)	Drop	Small cell sizes; identifying
R7_C4yr_4	Year Started Working (Job 4)	Drop	Small cell sizes; identifying
R7_C5a_4	Notified SSA Working (Job 4)	Drop	Small cell sizes; identifying
R7_C5b_4	Notified SSA Working-Weeks or Months (Job 4)	Drop	Small cell sizes; identifying
R7_C5BWEEK_4	Number Weeks Before Notified SSA (Job 4)	Drop	Small cell sizes; identifying
R7_C5BMONTH_4	Number Months Before Notified SSA (Job 4)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C6_4	Self-employed at Current Job (Job 4)	Drop	Small cell sizes; identifying
R7_C7_4	Current Job Part of Sheltered Workshop (Job 4)	Drop	Small cell sizes; identifying
R7_C8_4	Hours per Week Usually Work at Current Job (Job 4)	Drop	Small cell sizes; identifying
R7_C9_4	Weeks per Year Usually Work at Current Job (Job 4)	Drop	Small cell sizes; identifying
R7_C10_4	Paid by Hour at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C11_4	Regular Hourly Pay at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C12AMT_4	Amount Paid Before Taxes at Current Job (Job 4)	Drop	Small cell sizes; identifying
R7_C12HOP_4	How Often Paid at Current Job (Job 4)	Drop	Small cell sizes; identifying
R7_C13AMT_4	Amount Take Home Pay at Current Job (Job 4)	Drop	Small cell sizes; identifying
R7_C13HOP_4	How Often Paid at Current Job (Job 4)	Drop	Small cell sizes; identifying
R7_C4mth_5	Month Started Working (Job 5)	Drop	Small cell sizes; identifying
R7_C4yr_5	Year Started Working (Job 5)	Drop	Small cell sizes; identifying
R7_C5a_5	Let SSA Know about Working (Job 5)	Drop	Small cell sizes; identifying
R7_C5b_5	Notified SSA Working-Weeks or Months (Job 5)	Drop	Small cell sizes; identifying
R7_C5BWEEK_5	Number Weeks Before Notified SSA (Job 5)	Drop	Small cell sizes; identifying
R7_C5BMONTH_5	Number Months Before Notified SSA (Job 5)	Drop	Small cell sizes; identifying
R7_C6_5	Self-employed at Current Job (Job 5)	Drop	Small cell sizes; identifying
R7_C7_5	Current Job Part of Sheltered Workshop (Job 5)	Drop	Small cell sizes; identifying
R7_C8_5	Hours per Week Usually Work at Current Job (Job 5)	Drop	Small cell sizes; identifying
R7_C9_5	Weeks per Year Usually Work at Current Job (Job 5)	Drop	Small cell sizes; identifying
R7_C10_5	Paid by Hour (Job 5)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C11_5	Regular Hourly Pay (Job 5)	Drop	Small cell sizes; identifying
R7_C12AMT_5	Amount Paid Before Taxes at Current Job (Job 5)	Drop	Small cell sizes; identifying
R7_C12HOP_5	How Often Paid at Current Job (Job 5)	Drop	Small cell sizes; identifying
R7_C13AMT_5	Amount Take Home Pay at Current Job (Job 5)	Drop	Small cell sizes; identifying
R7_C13HOP_5	How Often Paid at Current Job (Job 5)	Drop	Small cell sizes; identifying
R7_C4mth_6	Month Started Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C4yr_6	Year Started Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C5a_6	Notified SSA Working (Job 6)	Drop	Small cell sizes; identifying
R7_C5b_6	Notified SSA Working-Weeks or Months (Job 6)	Drop	Small cell sizes; identifying
R7_C5BWEEK_6	Number Weeks Before Notified SSA (Job 6)	Drop	Small cell sizes; identifying
R7_C5BMONTH_6	Number Months Before Notified SSA (Job 6)	Drop	Small cell sizes; identifying
R7_C6_6	Self-employed at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C7_6	Current Job Part of Sheltered Workshop (Job 6)	Drop	Small cell sizes; identifying
R7_C8_6	Hours per Week Usually Work at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C9_6	Weeks per Year Usually Work at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C10_6	Paid by Hour at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C11_6	Regular Hourly Pay at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C12AMT_6	Amount Paid Before Taxes at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C12HOP_6	How Often Paid at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C13AMT_6	Amount Take Home Pay at Current Job (Job 6)	Drop	Small cell sizes; identifying
R7_C13HOP_6	How Often Paid at Current Job (Job 6)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_CP2b_1	Main Way Found Main/Current Job - State Unemployment	Drop	Small cell sizes; identifying
R7_CP2b_2	Main Way Found Main/Current Job - America's Workforce Center	Drop	Small cell sizes; identifying
R7_CP2b_3	Main Way Found Main/Current Job - Through Friends/Relatives	Drop	Small cell sizes; identifying
R7_CP2b_4	Main Way Found Main/Current Job - Job Advertisement	Drop	Small cell sizes; identifying
R7_CP2b_5	Main Way Found Main/Current Job - State Vocational Rehab Agency	Drop	Small cell sizes; identifying
R7_CP2b_6	Main Way Found Main/Current Job - Private Employment Agency	Drop	Small cell sizes; identifying
R7_CP2b_7	Main Way Found Main/Current Job - Former Employer	Drop	Small cell sizes; identifying
R7_CP2b_8	Main Way Found Main/Current Job - Contacting Other Employers	Drop	Small cell sizes; identifying
R7_CP2b_9	Main Way Found Main/Current Job - Other	Drop	Small cell sizes; identifying
R7_CP3k_1	Special Equipment or Device - Brace	Drop	Small cell sizes; identifying
R7_CP3k_2	Special Equipment or Device - Cane/Crutches/Walker	Drop	Small cell sizes; identifying
R7_CP3k_3	Special Equipment or Device - Wheelchair	Drop	Small cell sizes; identifying
R7_CP3k_4	Special Equipment or Device - Modified Computer Hardware	Drop	Small cell sizes; identifying
R7_CP3k_5	Special Equipment or Device - Modified Computer Software	Drop	Small cell sizes; identifying
R7_CP3k_6	Special Equipment or Device - Other	Drop	Small cell sizes; identifying
R7_CP3k_7	Special Equipment or Device - Hearing Air/Device	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_CP3k_8	Special Equipment or Device - Special Glasses	Drop	Small cell sizes; identifying
R7_CP3k_9	Special Equipment or Device - Special Chair/Back Support	Drop	Small cell sizes; identifying
R7_CP3k_10	Special Equipment or Device - Special Shoes/Stockings	Drop	Small cell sizes; identifying
R7_CP3I	Received Anything Else to Help Find or Keep Work	Drop	Small cell sizes; identifying
R7_C35_a	Need Special Equipment at Current Workplace	Drop	Small cell sizes; identifying
R7_C35_b	Need Changes to Work Schedule at Current Workplace	Drop	Small cell sizes; identifying
R7_C35_c	Need Changes to Tasks at Current Workplace	Drop	Small cell sizes; identifying
R7_C35_d	Need Changes to Environment at Current Workplace	Drop	Small cell sizes; identifying
R7_C35_e	Need Co-Workers to Assist at Current Workplace	Drop	Small cell sizes; identifying
R7_c35_f	Other Changes Needed	Drop	Small cell sizes; identifying
R7_C37	Asked for Changes	Drop	Small cell sizes; identifying
R7_C39_2_1	Private Disability Insurance Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_2	Workers' Compensation Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_3	Veterans' Benefits Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_4	Medicare Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_5	Medicaid Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_6	SSA Disability Benefits Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_7	Public Assistance Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C39_2_8	Food Stamps Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_9	Personal Assistance Services Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_10	Unemployment Benefits Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_11	Other State Disability Benefits Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_12	Other Government Programs Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_2_13	Other Benefits Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_c39_2_14	Health Insurance Benefits Reduced or Ended b/c Currently Working	Drop	Small cell sizes; identifying
R7_C39_3g_1	Other Special Equipment or Devices - Brace	Drop	Small cell sizes; identifying
R7_C39_3g_2	Other Special Equipment or Devices - Cane/Crutches/Walker	Drop	Small cell sizes; identifying
R7_C39_3g_3	Other Special Equipment or Devices - Wheelchair	Drop	Small cell sizes; identifying
R7_C39_3g_4	Other Special Equipment or Devices - Modified Computer Hardware	Drop	Small cell sizes; identifying
R7_C39_3g_5	Other Special Equipment or Devices - Modified Computer Software	Drop	Small cell sizes; identifying
R7_C39_3g_7	Other Special Equipment or Devices - Hearing Aid/Device	Drop	Small cell sizes; identifying
R7_C39_3g_8	Other Special Equipment or Devices - Special Glasses	Drop	Small cell sizes; identifying
R7_C39_3g_9	Other Special Equipment or Devices - Special Chair/Back Support	Drop	Small cell sizes; identifying
R7_C39_3g_10	Other Special Equipment or Devices - Special Shoes/Stockings	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_CP16a	Reduced/Increased Hours Worked	Drop	Small cell sizes; identifying
R7_C_MainCurJobSOC	Occupation (Main Job)	Replace	Possible identifier. Use broader occupation categories (C_MainCurJobSOC_PUB).
R7_C2_1_1D_I	C_MainCurJobSOC, Imputed to One Digit	Drop	Possible identifier. Use broader industry categories (C_MainCurJobNAICS_PUB)
R7_C2_1_1D_IFLAG	C_MainCurJobSOC, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_MainCurJobNAICS	Industry (Main Job)	Replace	Possible identifier. Use C_MainCurJobNAICS_PUB.
R7_C_CurJob2SOC	Occupation (Job 2)	Drop	Small cell sizes; identifying
R7_C_CurJob2NAICS	Industry (Job 2)	Drop	Small cell sizes; identifying
R7_C_CurJob3SOC	Occupation (Job 3)	Drop	Small cell sizes; identifying
R7_C_CurJob3NAICS	Industry (Job 3)	Drop	Small cell sizes; identifying
R7_C_CurJob4SOC	Occupation (Job 4)	Drop	Small cell sizes; identifying
R7_C_CurJob4NAICS	Industry (Job 4)	Drop	Small cell sizes; identifying
R7_C_CurJob5SOC	Occupation (Job 5)	Drop	Small cell sizes; identifying
R7_C_CurJob5NAICS	Industry (Job 5)	Drop	Small cell sizes; identifying
R7_C_CurJob6SOC	Occupation (Job 6)	Drop	Small cell sizes; identifying
R7_C_CurJob6NAICS	Industry (Job 6)	Drop	Small cell sizes; identifying
R7_C_MainCurJobHrPay	Hourly Pay, Current Main Job (Pre-tax)	Drop	Have imputed
R7_C_MAINCURJOBHRPAY_I	Hourly Pay Current Main Job (Pre-tax), Imputed	Drop	Use hourly pay across all jobs instead
R7_C_MAINCURJOBHRPAY_IFLAG	Hourly Pay Current Main Job (Pre-tax), Imputation Flag	Drop	IFLAG - No analytic value
R7_C_MainCurJobMnthPay	Monthly Pay, Current Main Job (Pre-tax)	Drop	Have imputed
R7_C_MAINCURJOBMNTHPAY_I	Monthly Pay Current Main Job (Pre-tax), Imputed	Drop	Use monthly pay across all jobs instead (C_TotCurMnthPay)
R7_C_MAINCURJOBMNTHPAY_IFLAG	Monthly Pay Current Main Job (Pre-tax), Imputation Flag	Drop	IFLAG - No analytic value
R7_C_MainCurJobMnthPayTH	Monthly Pay, Current Main Job (Take Home)	Drop	Use monthly pay across all jobs instead (C_TotCurMnthPay)
R7_C_MainCurJobRepSSA	Weeks to Report Current Job to SSA (Main Job)	Replace	Possible identifier. Use C_MainCurJobRepSSA_PUB.
R7_C_MnthsMainCurJob	Months at current job (main)	Replace	Possible identifier. Use C_MnthsMainCurJob_PUB
R7_C_CurJob2HrPay	Hourly Pay, Current Job 2 (Pre-tax)	Drop	Use hourly pay across all jobs instead

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_CurJob2MnthPay	Monthly Pay, Current Job 2 (Pre-tax)	Drop	Use monthly pay across all jobs instead (C_TotCurMnthPay)
R7_C_CurJob2MnthPayTH	Monthly Pay, Current Job 2 (Take Home)	Drop	Use monthly pay across all jobs instead (C_TotCurMnthPay)
R7_C_CurJob2RepSSA	Weeks to Report Current Job 2	Drop	Small cell sizes; identifying
R7_C_MnthsCurJob2	Months at current job 2	Drop	Small cell sizes; identifying
R7_C_CurJob3HrPay	Hourly Pay Current Job 3 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob3MnthPay	Monthly Pay Current Job 3 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob3MnthPayTH	Monthly Pay Current Job 3 (Take Home)	Drop	Small cell sizes; identifying
R7_C_CurJob3RepSSA	Weeks to Report Current Job 3 to SSA	Drop	Small cell sizes; identifying
R7_C_MnthsCurJob3	Months at Current Job 3	Drop	Small cell sizes; identifying
R7_C_CurJob4HrPay	Hourly Pay Current Job 4 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob4MnthPay	Monthly Pay, Current Job 4 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob4MnthPayTH	Monthly Pay Current Job 4 (Take Home)	Drop	Small cell sizes; identifying
R7_C_CurJob4RepSSA	Weeks to Report Current Job 4 to SSA	Drop	Small cell sizes; identifying
R7_C_MnthsCurJob4	Months at Current Job 4	Drop	Small cell sizes; identifying
R7_C_CurJob5HrPay	Hourly Pay Current Job 5 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob5MnthPay	Monthly Pay, Current Job 5 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob5MnthPayTH	Monthly Pay Current Job 5 (Take Home)	Drop	Small cell sizes; identifying
R7_C_CurJob5RepSSA	Weeks to Report Current Job 5 to SSA	Drop	Small cell sizes; identifying
R7_C_MnthsCurJob5	Months at Current Job 5	Drop	Small cell sizes; identifying
R7_C_CurJob6HrPay	Hourly Pay Current Job 6 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob6MnthPay	Monthly Pay, Current Job 6 (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_CurJob6MnthPayTH	Monthly Pay Current Job 6 (Take Home)	Drop	Small cell sizes; identifying
R7_C_CurJob6RepSSA	Weeks to Report Current Job 6 to SSA	Drop	Small cell sizes; identifying
R7_C_MnthsCurJob6	Months at Current Job 6	Drop	Small cell sizes; identifying
R7_C_TotCurMnthPay	Total Monthly Salary (All Current Jobs)	Drop	Have imputed

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_TOTCURMNTHPAY_I	Total Monthly Salary all Current Jobs, Imputed	Replace	Possible identifier. Use C_TotCurMnthPay_i_PUB
R7_C_TOTCURMNTHPAY_IFLAG	Total Monthly Salary all Current Jobs, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_TOTCURMNTHPAY_HIGH	Flag for High Total Monthly Pay	Drop	Not needed since outliers top-coded
R7_C_TOTCURMNTHPAY_LOW	Flag for Low Total Monthly Pay	Drop	Not needed since outliers top-coded
R7_C_TotCurWkHrs	Total Weekly Hours (all current jobs)	Drop	Have imputed
R7_C_TOTCURWKHRS_I	Total Weekly Hours all Current Jobs, Imputed	Replace	Possible identifier. Use C_TotCurWkHrs_I_PUB
R7_C_TOTCURWKHRS_IFLAG	Total Weekly Hours all Current Jobs, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_TotCurHrMnth	Total Hours per Month (all current jobs)	Drop	Have imputed
R7_C_TOTCURHRMNTH_I	Total Hours per Month all Current Jobs, Imputed	Replace	Possible identifier. Use C_TotCurWkMnth_I_PUB
R7_C_TOTCURHRMNTH_IFLAG	Total Hours per Month all Current Jobs, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_CurSGA	Current pay above non-blind substantial gainful activity	Drop	Possible identifier
R7_C_B1	Number Jobs in Past 6 Mo	Drop	Small cell sizes; identifying
R7_C_B4amth_1	Month Started Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B4ayr_1	Year Started Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B4bmth_1	Month Ended Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B4byr_1	Year Ended Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B5b_1	Notified SSA Working-Weeks or Months (Job 1)	Drop	Small cell sizes; identifying
R7_C_B5bWeek_1	Number Weeks Before Notified SSA (Job 1)	Drop	Small cell sizes; identifying
R7_C_B5bMonth_1	Number Months Before Notified SSA (Job 1)	Drop	Small cell sizes; identifying
R7_C_B6_1	Self-employed at Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B8_1	Hours per Week Usually Work at Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B9_1	Weeks per Year Usually Work at Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B11_1	Regular Hourly Pay at Job (Job 1)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_B12amt_1	Amount Paid Before Taxes at Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B12hop_1	How often Paid at Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B13amt_1	Amount Take Home Pay at Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B13hop_1	How often Paid at Job (Job 1)	Drop	Small cell sizes; identifying
R7_C_B4amth_2	Month Started Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B4ayr_2	Year Started Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B4bmth_2	Month Ended Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B4byr_2	Year Ended Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B5a_2	Notified SSA Working (Job 2)	Drop	Small cell sizes; identifying
R7_C_B5b_2	Notified SSA Working-Weeks or Months (Job 2)	Drop	Small cell sizes; identifying
R7_C_B5bWeek_2	Number Weeks Before Notified SSA (Job 2)	Drop	Small cell sizes; identifying
R7_C_B5bMonth_2	Number Months Before Notified SSA (Job 2)	Drop	Small cell sizes; identifying
R7_C_B6_2	Self-employed at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B7_2	Job Part of Sheltered Workshop (Job 2)	Drop	Small cell sizes; identifying
R7_C_B8_2	Hours per Week Usually Work at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B9_2	Weeks per Year Usually Work at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B10_2	Paid by Hour at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B11_2	Regular Hourly Pay at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B12amt_2	Amount Paid Before Taxes at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B12hop_2	How often Paid at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B13amt_2	Amount Take Home Pay at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B13hop_2	How often Paid at Job (Job 2)	Drop	Small cell sizes; identifying
R7_C_B4amth_3	Month Started Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B4ayr_3	Year Started Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B4bmth_3	Month Ended Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B4byr_3	Year Ended Job (Job 3)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_B5a_3	Notified SSA Working (Job 3)	Drop	Small cell sizes; identifying
R7_C_B5b_3	Notified SSA Working-Weeks or Months (Job 3)	Drop	Small cell sizes; identifying
R7_C_B5bWeek_3	Number Weeks Before Notified SSA (Job 3)	Drop	Small cell sizes; identifying
R7_C_B5bMonth_3	Number Months Before Notified SSA (Job 3)	Drop	Small cell sizes; identifying
R7_C_B6_3	Self-employed at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B7_3	Job Part of Sheltered Workshop (Job 3)	Drop	Small cell sizes; identifying
R7_C_B8_3	Hours per Week Usually Work at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B9_3	Weeks per Year Usually Work at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B10_3	Paid by Hour at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B11_3	Regular Hourly Pay at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B12amt_3	Amount Paid Before Taxes at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B12hop_3	How often Paid at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B13amt_3	Amount Take Home Pay at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B13hop_3	How often Paid at Job (Job 3)	Drop	Small cell sizes; identifying
R7_C_B4amth_4	Month Started Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B4ayr_4	Year Started Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B4bmth_4	Month Ended Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B4byr_4	Year Ended Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B5a_4	Notified SSA Working (Job 4)	Drop	Small cell sizes; identifying
R7_C_B5b_4	Notified SSA Working-Weeks or Months (Job 4)	Drop	Small cell sizes; identifying
R7_C_B5bWeek_4	Number Weeks Before Notified SSA (Job 4)	Drop	Small cell sizes; identifying
R7_C_B5BMONTH_4	Number Months Before Notified SSA (Job 4)	Drop	Small cell sizes; identifying
R7_C_B6_4	Self-employed at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B7_4	Job Part of Sheltered Workshop (Job 4)	Drop	Small cell sizes; identifying
R7_C_B8_4	Hours per Week Usually Work at Job (Job 4)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_B9_4	Weeks per Year Usually Work at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B10_4	Paid by Hour at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B11_4	Regular Hourly Pay at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B12AMT_4	Amount Paid Before Taxes at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B12HOP_4	How often Paid at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B13AMT_4	Amount Take Home Pay at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B13HOP_4	How often Paid at Job (Job 4)	Drop	Small cell sizes; identifying
R7_C_B4amth_5	Month Started Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B4ayr_5	Year Started Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B4bmth_5	Month Ended Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B4byr_5	Year Ended Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B5a_5	Notified SSA Working (Job 5)	Drop	Small cell sizes; identifying
R7_C_B5B_5	Notified SSA Working-Weeks or Months (Job 5)	Drop	Small cell sizes; identifying
R7_C_B5BWEEK_5	Number Weeks Before Notified SSA (Job 5)	Drop	Small cell sizes; identifying
R7_C_B5BMONTH_5	Number Months Before Notified SSA (Job 5)	Drop	Small cell sizes; identifying
R7_C_B6_5	Self-employed at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B7_5	Job Part of Sheltered Workshop (Job 5)	Drop	Small cell sizes; identifying
R7_C_B8_5	Hours per Week Usually Work at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B9_5	Weeks per Year Usually Work at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B10_5	Paid by Hour at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B11_5	Regular Hourly Pay at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B12AMT_5	Amount Paid Before Taxes at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B12HOP_5	How often Paid at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B13AMT_5	Amount Take Home Pay at Job (Job 5)	Drop	Small cell sizes; identifying
R7_C_B13HOP_5	How often Paid at Job (Job 5)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_B4amth_6	Month Started Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B4ayr_6	Year Started Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B4bmth_6	Month Ended Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B4byr_6	Year Ended Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B5a_6	Notified SSA Working (Job 6)	Drop	Small cell sizes; identifying
R7_C_B5B_6	Notified SSA Working-Weeks or Months (Job 6)	Drop	Small cell sizes; identifying
R7_C_B5BWEEK_6	Number Weeks Before Notified SSA (Job 6)	Drop	Small cell sizes; identifying
R7_C_B5BMONTH_6	Number Months Before Notified SSA (Job 6)	Drop	Small cell sizes; identifying
R7_C_B6_6	Self-employed at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B7_6	Job Part of Sheltered Workshop (Job 6)	Drop	Small cell sizes; identifying
R7_C_B8_6	Hours per Week Usually Work at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B9_6	Weeks per Year Usually Work at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B10_6	Paid by Hour at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B11_6	Regular Hourly Pay at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B12AMT_6	Amount Paid Before Taxes at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B12HOP_6	How often Paid at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B13AMT_6	Amount Take Home Pay at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_B13HOP_6	How often Paid at Job (Job 6)	Drop	Small cell sizes; identifying
R7_C_BP2b_1	Main Way Found Job - State Unemployment Office	Drop	Small cell sizes; identifying
R7_C_BP2b_2	Main Way Found Job - America's Workforce Center	Drop	Small cell sizes; identifying
R7_C_BP2b_3	Main Way Found Job - Through Friends/Relatives	Drop	Small cell sizes; identifying
R7_C_BP2b_4	Main Way Found Job - Job Advertisement	Drop	Small cell sizes; identifying
R7_C_BP2b_5	Main Way Found Job - State Vocational Rehab Agency	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_BP2b_6	Main Way Found Job - Private Employment Agency	Drop	Small cell sizes; identifying
R7_C_BP2b_7	Main Way Found Job - Former Employer	Drop	Small cell sizes; identifying
R7_C_BP2b_8	Main Way Found Job - Contacting Other Employers	Drop	Small cell sizes; identifying
R7_C_BP2b_9	Main Way Found Job - Other	Drop	Small cell sizes; identifying
R7_C_BP3k_1	Special Equipment or Device - Brace	Drop	Small cell sizes; identifying
R7_C_BP3k_2	Special Equipment or Device - Cane/Crutches/Walker	Drop	Small cell sizes; identifying
R7_C_BP3k_3	Special Equipment or Device - Wheelchair	Drop	Small cell sizes; identifying
R7_C_BP3k_4	Special Equipment or Device - Modified Computer Hardware	Drop	Small cell sizes; identifying
R7_C_BP3k_5	Special Equipment or Device - Modified Computer Software	Drop	Small cell sizes; identifying
R7_C_BP3k_6	Special Equipment or Device - Other	Drop	Small cell sizes; identifying
R7_C_BP3k_7	Special Equipment or Device - Hearing Air/Device	Drop	Small cell sizes; identifying
R7_C_BP3k_8	Special Equipment or Device - Special Glasses	Drop	Small cell sizes; identifying
R7_C_BP3k_9	Special Equipment or Device - Special Chair/Back Support	Drop	Small cell sizes; identifying
R7_C_BP3k_10	Special Equipment or Device - Special Shoes/Stockings	Drop	Small cell sizes; identifying
R7_C_BP3l	Revd. Anything Else to Help Find or Keep Working	Drop	Small cell sizes; identifying
R7_C_B16	Revd. Promotions at Job	Drop	Small cell sizes; identifying
R7_C_B20_e	Employer Offers Childcare	Drop	Small cell sizes; identifying
R7_C_B20_i	Employer Offers Flex Health Spending	Drop	Small cell sizes; identifying
R7_C_B35_a	Provided Special Equipment or Assistive Tech.	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_B35_b	Made Changes to Work Schedule	Drop	Small cell sizes; identifying
R7_C_B35_c	Made Changes to Tasks	Drop	Small cell sizes; identifying
R7_C_B35_d	Made Changes to Work Environment	Drop	Small cell sizes; identifying
R7_C_B35_e	Arranged for Co-Workers to Assist	Drop	Small cell sizes; identifying
R7_C_B35_f	Made Other Changes	Drop	Small cell sizes; identifying
R7_C_B37	Asked Employer for These Changes	Drop	Small cell sizes; identifying
R7_C_B39_2_1	Private Disability Insurance Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_2	Workers' Compensation Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_3	Veterans' Benefits Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_4	Medicare Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_5	Medicaid Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_6	SSA Disability Benefits Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_7	Public Assistance Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_8	Food Stamps Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_9	Personal Assistance Services Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_10	Unemployment Benefits Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_11	Other State Disability Benefits Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_12	Other Government Programs Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_13	Other Benefits Reduced or Ended b/c Working	Drop	Small cell sizes; identifying
R7_C_B39_2_14	Health Insurance Benefits Reduced or Ended b/c Working	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_B39_3_G_1	Special Equipment or Device - Brace	Drop	Small cell sizes; identifying
R7_C_B39_3_G_2	Special Equipment or Device - Cane/Crutches/Walker	Drop	Small cell sizes; identifying
R7_C_B39_3_G_3	Special Equipment or Device - Wheelchair	Drop	Small cell sizes; identifying
R7_C_B39_3_G_4	Special Equipment or Device - Modified Computer Hardware	Drop	Small cell sizes; identifying
R7_C_B39_3_G_5	Special Equipment or Device - Modified Computer Software	Drop	Small cell sizes; identifying
R7_C_B39_3_G_6	Special Equipment or Device - Other	Drop	Small cell sizes; identifying
R7_C_B39_3_G_7	Special Equipment or Device - Hearing Air/Device	Drop	Small cell sizes; identifying
R7_C_B39_3_G_8	Special Equipment or Device - Special Glasses	Drop	Small cell sizes; identifying
R7_C_B39_3_G_9	Special Equipment or Device - Special Chair/Back Support	Drop	Small cell sizes; identifying
R7_C_B39_3_G_10	Special Equipment or Device - Special Shoes/Stockings	Drop	Small cell sizes; identifying
R7_C_BP16a	Reduced/Increased Work Hours	Drop	Small cell sizes; identifying
R7_C_Main6MoJobSOC	Occupation (main job in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob2SOC	Occupation (Job 2 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob3SOC	Occupation (Job 3 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob4SOC	Occupation (Job 4 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob5SOC	Occupation (Job 5 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob6SOC	Occupation (Job 6 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_Main6MoJobNAICS	Industry (main job in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob2NAICS	Industry (Job 2 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob3NAICS	Industry (Job 3 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob4NAICS	Industry (Job 4 in last 6 months)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_6MoJob5NAICS	Industry (Job 5 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_6MoJob6NAICS	Industry (Job 6 in last 6 months)	Drop	Small cell sizes; identifying
R7_C_Main6MoJobHrPay	Hourly Pay, Main Job (Pre-tax) in last 6 months	Drop	Small cell sizes; identifying
R7_C_6MoJob2HrPay	Hourly Pay, Job 2 (Pre-tax) in last 6 months	Drop	Small cell sizes; identifying
R7_C_6MoJob3HrPay	Hourly Pay, Job 3 (Pre-tax) in last 6 months	Drop	Small cell sizes; identifying
R7_C_6MoJob4HrPay	Hourly Pay, Job 4 (Pre-tax) in last 6 months	Drop	Small cell sizes; identifying
R7_C_6MoJob5HrPay	Hourly Pay, Job 5 (Pre-tax) in last 6 months	Drop	Small cell sizes; identifying
R7_C_6MoJob6HrPay	Hourly Pay, Job 6 (Pre-tax) in last 6 months	Drop	Small cell sizes; identifying
R7_C_Main6MoJobMnthPay	Monthly Pay, Main Job in last 6 months (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_6MoJob2MnthPay	Monthly Pay, Job 2 in last 6 months (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_6MoJob3MnthPay	Monthly Pay, Job 3 in last 6 months (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_6MoJob4MnthPay	Monthly Pay, Job 4 in last 6 months (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_6MoJob5MnthPay	Monthly Pay, Job 5 in last 6 months (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_6MoJob6MnthPay	Monthly Pay, Job 6 in last 6 months (Pre-tax)	Drop	Small cell sizes; identifying
R7_C_Main6MoJobMnthPayTH	Monthly Pay, Main Job in last 6 Months (Take Home)	Drop	Small cell sizes; identifying
R7_C_6MoJob2MnthPayTH	Monthly Pay, Job 2 in last 6 Months (Take Home)	Drop	Small cell sizes; identifying
R7_C_6MoJob3MnthPayTH	Monthly Pay, Job 3 in last 6 Months (Take Home)	Drop	Small cell sizes; identifying
R7_C_6MoJob4MnthPayTH	Monthly Pay, Job 4 in last 6 Months (Take Home)	Drop	Small cell sizes; identifying
R7_C_6MoJob5MnthPayTH	Monthly Pay, Job 5 in last 6 Months (Take Home)	Drop	Small cell sizes; identifying
R7_C_6MoJob6MnthPayTH	Monthly Pay, Job 6 in last 6 Months (Take Home)	Drop	Small cell sizes; identifying
R7_C_Tot6MoMnthPay	Total 6 month pay (all jobs in last 6 months)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_MnthsMain6MoJob	Months at 6 month job (main) over last 6 months	Drop	Small cell sizes; identifying
R7_C_Mnths6MoJob2	Months at 6 month job 2 over last 6 months	Drop	Small cell sizes; identifying
R7_C_Mnths6MoJob3	Months at 6 month job 3 over last 6 months	Drop	Small cell sizes; identifying
R7_C_Mnths6MoJob4	Months at 6 month job 4 over last 6 months	Drop	Small cell sizes; identifying
R7_C_Mnths6MoJob5	Months at 6 month job 5 over last 6 months	Drop	Small cell sizes; identifying
R7_C_Mnths6MoJob6	Months at 6 month job 6 over last 6 months	Drop	Small cell sizes; identifying
R7_C_MnthsEvrMain6MoJob	Months ever at 6 month job (main)	Drop	Small cell sizes; identifying
R7_C_MnthsEvr6MoJob2	Months ever at 6 month job 2	Drop	Small cell sizes; identifying
R7_C_MnthsEvr6MoJob3	Months ever at 6 month job 3	Drop	Small cell sizes; identifying
R7_C_MnthsEvr6MoJob4	Months ever at 6 month job 4	Drop	Small cell sizes; identifying
R7_C_MnthsEvr6MoJob5	Months ever at 6 month job 5	Drop	Small cell sizes; identifying
R7_C_MnthsEvr6MoJob6	Months ever at 6 month job 6	Drop	Small cell sizes; identifying
R7_C_Main6MoJobRepSSA	Weeks to Report Main Job in last 6 months to SSA	Drop	Small cell sizes; identifying
R7_C_6MoJobRep2SSA	Weeks to Report Job 2 in last 6 months to SSA	Drop	Small cell sizes; identifying
R7_C_6MoJobRep3SSA	Weeks to Report Job 3 in last 6 months to SSA	Drop	Small cell sizes; identifying
R7_C_6MoJobRep4SSA	Weeks to Report Job 4 in last 6 months to SSA	Drop	Small cell sizes; identifying
R7_C_6MoJobRep5SSA	Weeks to Report Job 5 in last 6 months to SSA	Drop	Small cell sizes; identifying
R7_C_6MoJobRep6SSA	Weeks to Report Job 6 in last 6 months to SSA	Drop	Small cell sizes; identifying
R7_D3	Number Jobs in 2018	Drop	Small cell sizes; identifying
R7_D6mth_1	Month Started 2018 Job (Job 1)	Drop	Possible identifier
R7_D6yr_1	Year Started 2018 Job (Job 1)	Drop	Possible identifier
R7_D8mth_1	Month Stopped 2018 Job (Job 1)	Drop	Small cell sizes; identifying
R7_D8yr_1	Year Stopped 2018 Job (Job 1)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_D14_1	Self-Employed at 2018 Job (Job 1)	Drop	Possible identifier
R7_D16_1	Hours Usually Worked per Week at 2018 Job (Job 1)	Replace	Possible identifier. Use D16_M_PUB.
R7_D17_1	Weeks Usually Worked at 2018 Job (Job 1)	Replace	Possible identifier. Use D17_M_PUB.
R7_D18_1	Paid by the Hour in 2018 (Job 1)	Replace	Replaced with R7_D18_m_PUB
R7_D19_1	Hourly Pay in 2018 (Job 1)	Drop	Small cell sizes; identifying
R7_D20amt_1	Amount Paid Before Taxes in 2018 (Job 1)	Drop	Small cell sizes; identifying
R7_D20hop_1	How Often Paid in 2018 (Job 1)	Drop	Small cell sizes; identifying
R7_D21amt_1	Amount of Take Home Pay in 2018 (Job 1)	Drop	Small cell sizes; identifying
R7_D21hop_1	How Often Paid in 2018 (Job 1)	Drop	Small cell sizes; identifying
R7_D6mth_2	Month Started 2018 Job (Job 2)	Drop	Small cell sizes; identifying
R7_D6yr_2	Year Started 2018 Job (Job 2)	Drop	Small cell sizes; identifying
R7_D8mth_2	Month Stopped 2018 Job (Job 2)	Drop	Small cell sizes; identifying
R7_D8yr_2	Year Stopped 2018 Job (Job 2)	Drop	Small cell sizes; identifying
R7_D14_2	Self-Employed at 2018 Job (Job 2)	Drop	Small cell sizes; identifying
R7_D15_2	2018 Job Part of Sheltered Workshop (Job 2)	Drop	Small cell sizes; identifying
R7_D16_2	Hours Usually Worked per Week at 2018 Job (Job 2)	Drop	Small cell sizes; identifying
R7_D17_2	Weeks Usually Worked at 2018 Job (Job 2)	Drop	Small cell sizes; identifying
R7_D18_2	Paid by the Hour in 2018 (Job 2)	Drop	Small cell sizes; identifying
R7_D19_2	Hourly Pay in 2018 (Job 2)	Drop	Small cell sizes; identifying
R7_D20amt_2	Amount Paid Before Taxes in 2018 (Job 2)	Drop	Small cell sizes; identifying
R7_D20hop_2	How Often Paid in 2018 (Job 2)	Drop	Small cell sizes; identifying
R7_D21amt_2	Amount of Take Home Pay in 2018 (Job 2)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1a_2	How Often Paid in 2018 (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_1_2	Left Job Because of Health (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_2_2	Health - Existing Health Problem Gets Worse (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_3_2	Health - New Health Problem Starts (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_4_2	Health - Got Injured (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_5_2	Health - Job has Negative Impact on Health (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_6_2	Health - Need to be Hospitalized (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_7_2	Health - Needs Time to Go to Medical App. (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_8_2	Health - Gets Fired for Missing Too Much Time for Apps. (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_9_2	Health - Interferes with Job Performance (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_10_2	Health - Lack Strength, Physical Energy, and Stamina (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_11_2	Health - Pain Interferes with Working Set Schedule (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_12_2	Health - Personal Care Takes Too Long (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_13_2	Health - Health Status Fluctuates Unpredictably (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_14_2	Health - Do not have Special Equipment or Medical Devices (Job 2)	Drop	Small cell sizes; identifying
R7_DP1a_1_15_2	Health - Work is Too Tiring/Stressful (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_2	Health - Other (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_1_2	Stopped Working due to Job Problems (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_2_2	Job - Job does not Pay Enough (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_2_2	Job - Job does not Offer Health Insurance (Job 2)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1b_1_3_2	Job - Need a Different Schedule (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_4_2	Job - Need Time for Medical Apps. (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_5_2	Job - Got Fired for Missing too Much Time for Apps. (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_6_2	Job - Health Interferes with Job Performance (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_7_2	Job - Lacks Strength, Physical Energy, or Stamina (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_8_2	Job - Pain Interferes with Working Set Schedule (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_9_2	Job - Personal Care Takes too Long (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_10_2	Job - Do Not have Special Equipment or Medical Devices (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_11_2	Job - Personality Conflicted With Others At The Job (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_12_2	Job - Got Fired for Behavior (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_13_2	Job - Other (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_20_2	Job - Found Another Job (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_22_2	Job - Work Schedule (Job 2)	Drop	Small cell sizes; identifying
R7_DP1b_1_23_2	Job - Seasonal/Temporary (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_2	Left Job Because of Personal Circumstances (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_1_2	Personal Circumstances - Need Help Caring for Children (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_2_2	Personal Circumstances - Need Personal Assistance Getting Ready (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_3_2	Personal Circumstances - Got Injured (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_4_2	Personal Circumstances - Might Lose Benefits (Job 2)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1c_1_5_2	Personal Circumstances - No Reliable Transportation (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_6_2	Personal Circumstances - Drug/Alcohol Relapse (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_7_2	Personal Circumstances - Rather Do Other Things (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_8_2	Personal Circumstances - Do Not Like Working (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_9_2	Personal Circumstances - Increase Income from Other Source (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_10_2	Personal Circumstances - Other (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_19_2	Personal Circumstances - Moved to Another Area (Job 2)	Drop	Small cell sizes; identifying
R7_DP1c_1_21_2	Personal Circumstances - Loss of Gov't Benefits (Job 2)	Drop	Small cell sizes; identifying
R7_D6mth_3	Month Started 2018 Job (Job 3)	Drop	Small cell sizes; identifying
R7_D6yr_3	Year Started 2018 Job (Job 3)	Drop	Small cell sizes; identifying
R7_D8mth_3	Month Stopped 2018 Job (Job 3)	Drop	Small cell sizes; identifying
R7_D8yr_3	Year Stopped 2018 Job (Job 3)	Drop	Small cell sizes; identifying
R7_D14_3	Self-Employed at 2018 Job (Job 3)	Drop	Small cell sizes; identifying
R7_D15_3	2018 Job Part of Sheltered Workshop (Job 3)	Drop	Small cell sizes; identifying
R7_D16_3	Hours Usually Worked per Week at 2018 Job (Job 3)	Drop	Small cell sizes; identifying
R7_D17_3	Weeks Usually Worked at 2018 Job (Job 3)	Drop	Small cell sizes; identifying
R7_D18_3	Paid by the Hour in 2018 (Job 3)	Drop	Small cell sizes; identifying
R7_D19_3	Hourly Pay in 2018 (Job 3)	Drop	Small cell sizes; identifying
R7_D20amt_3	Amount Paid Before Taxes in 2018 (Job 3)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_D20hop_3	How Often Paid in 2018 (Job 3)	Drop	Small cell sizes; identifying
R7_D21amt_3	Amount of Take Home Pay in 2018 (Job 3)	Drop	Small cell sizes; identifying
R7_D21hop_3	How Often Paid in 2018 (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_3	Left Job Because of Health (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_1_3	Health - Existing Health Problem Gets Worse (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_2_3	Health - New Health Problem Starts (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_3_3	Health - Got Injured (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_4_3	Health - Job has Negative Impact on Health (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_5_3	Health - Need to be Hospitalized (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_6_3	Health - Needs Time to Go to Medical App. (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_7_3	Health - Gets Fired for Missing Too Much Time for Apps. (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_8_3	Health - Interferes with Job Performance (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_9_3	Health - Lack Strength, Physical Energy, and Stamina (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_10_3	Health - Pain Interferes with Working Set Schedule (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_11_3	Health - Personal Care Takes Too Long (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_12_3	Health - Health Status Fluctuates Unpredictably (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_13_3	Health - Do not have Special Equipment or Medical Devices (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_14_3	Health - Work is Too Tiring/Stressful (Job 3)	Drop	Small cell sizes; identifying
R7_DP1a_1_15_3	Health - Other (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_3	Stopped Working due to Job Problems (Job 3)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1b_1_1_3	Job - Job does not Pay Enough (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_2_3	Job - Job does not Offer Health Insurance (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_3_3	Job - Need a Different Schedule (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_4_3	Job - Need Time for Medical Apps. (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_5_3	Job - Got Fired for Missing too Much Time for Apps. (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_6_3	Job - Health Interferes with Job Performance (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_7_3	Job - Lacks Strength, Physical Energy, or Stamina (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_8_3	Job - Pain Interferes with Working Set Schedule (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_9_3	Job - Personal Care Takes too Long (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_10_3	Job - Do Not have Special Equipment or Medical Devices (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_11_3	Job - Personality Conflicted With Others At The Job (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_12_3	Job - Got Fired for Behavior (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_13_3	Job - Other (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_20_3	Job - Found Another Job (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_22_3	Job - Work Schedule (Job 3)	Drop	Small cell sizes; identifying
R7_DP1b_1_23_3	Job - Seasonal Temporary (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_3	Left Job Because of Personal Circumstances (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_1_3	Personal Circumstances - Need Help Caring for Children (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_2_3	Personal Circumstances - Need Personal Assistance Getting Ready (Job 3)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1c_1_3_3	Personal Circumstances - Got Injured (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_4_3	Personal Circumstances - Might Lose Benefits (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_5_3	Personal Circumstances - No Reliable Transportation (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_6_3	Personal Circumstances - Drug/Alcohol Relapse (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_7_3	Personal Circumstances - Rather Do Other Things (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_8_3	Personal Circumstances - Do Not Like Working (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_9_3	Personal Circumstances - Increase Income from Other Source (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_10_3	Personal Circumstances - Other (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_19_3	Personal Circumstances - Moved to Another Area (Job 3)	Drop	Small cell sizes; identifying
R7_DP1c_1_21_3	Personal Circumstances - Loss of Gov't Benefits (Job 3)	Drop	Small cell sizes; identifying
R7_D6mth_4	Month Started 2018 Job (Job 4)	Drop	Small cell sizes; identifying
R7_D6yr_4	Year Started 2018 Job (Job 4)	Drop	Small cell sizes; identifying
R7_D8mth_4	Month Stopped 2018 Job (Job 4)	Drop	Small cell sizes; identifying
R7_D8yr_4	Year Stopped 2018 Job (Job 4)	Drop	Small cell sizes; identifying
R7_D14_4	Self-Employed at 2018 Job (Job 4)	Drop	Small cell sizes; identifying
R7_D15_4	2018 Job Part of Sheltered Workshop (Job 4)	Drop	Small cell sizes; identifying
R7_D16_4	Hours Usually Worked per Week at 2018 Job (Job 4)	Drop	Small cell sizes; identifying
R7_D17_4	Weeks Usually Worked at 2018 Job (Job 4)	Drop	Small cell sizes; identifying
R7_D18_4	Paid by the Hour in 2018 (Job 4)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_D19_4	Hourly Pay in 2018 (Job 4)	Drop	Small cell sizes; identifying
R7_D20amt_4	Amount Paid Before Taxes in 2018 (Job 4)	Drop	Small cell sizes; identifying
R7_D20hop_4	How Often Paid in 2018 (Job 4)	Drop	Small cell sizes; identifying
R7_D21amt_4	Amount of Take Home Pay in 2018 (Job 4)	Drop	Small cell sizes; identifying
R7_D21hop_4	How Often Paid in 2018 (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_4	Left Job Because of Health (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_1_4	Health - Existing Health Problem Gets Worse (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_2_4	Health - New Health Problem Starts (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_3_4	Health - Got Injured (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_4_4	Health - Job has Negative Impact on Health (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_5_4	Health - Need to be Hospitalized (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_6_4	Health - Needs Time to Go to Medical App. (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_7_4	Health - Gets Fired for Missing Too Much Time for Apps. (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_8_4	Health - Interferes with Job Performance (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_9_4	Health - Lack Strength, Physical Energy, and Stamina (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_10_4	Health - Pain Interferes with Working Set Schedule (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_11_4	Health - Personal Care Takes Too Long (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_12_4	Health - Health Status Fluctuates Unpredictably (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_13_4	Health - Do not have Special Equipment or Medical Devices (Job 4)	Drop	Small cell sizes; identifying
R7_DP1a_1_14_4	Health - Work is Too Tiring/Stressful (Job 4)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1a_1_15_4	Health - Other (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_4	Stopped Working due to Job Problems (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_1_4	Job - Job does not Pay Enough (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_2_4	Job - Job does not Offer Health Insurance (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_3_4	Job - Need a Different Schedule (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_4_4	Job - Need Time for Medical Apps. (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_5_4	Job - Got Fired for Missing too Much Time for Apps. (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_6_4	Job - Health Interferes with Job Performance (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_7_4	Job - Lacks Strength, Physical Energy, or Stamina (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_8_4	Job - Pain Interferes with Working Set Schedule (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_9_4	Job - Personal Care Takes too Long (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_10_4	Job - Do Not have Special Equipment or Medical Devices (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_11_4	Job - Personality Conflicted With Others At The Job (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_12_4	Job - Got Fired for Behavior (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_13_4	Job - Other (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_20_4	Job - Found Another Job (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_22_4	Job - Work Schedule (Job 4)	Drop	Small cell sizes; identifying
R7_DP1b_1_23_4	Job - Seasonal/Temporary (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_4	Left Job Because of Personal Circumstances (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_1_4	Personal Circumstances - Need Help Caring for Children (Job 4)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1c_1_2_4	Personal Circumstances - Need Personal Assistance Getting Ready (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_3_4	Personal Circumstances - Got Injured (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_4_4	Personal Circumstances - Might Lose Benefits (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_5_4	Personal Circumstances - No Reliable Transportation (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_6_4	Personal Circumstances - Drug/Alcohol Relapse (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_7_4	Personal Circumstances - Rather Do Other Things (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_8_4	Personal Circumstances - Do Not Like Working (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_9_4	Personal Circumstances - Increase Income from Other Source (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_10_4	Personal Circumstances - Other (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_19_4	Personal Circumstances - Moved to Another Area (Job 4)	Drop	Small cell sizes; identifying
R7_DP1c_1_21_4	Personal Circumstances - Loss of Gov't Benefits (Job 4)	Drop	Small cell sizes; identifying
R7_D6mth_5	Month Started 2018 Job (Job 5)	Drop	Small cell sizes; identifying
R7_D6yr_5	Year Started 2018 Job (Job 5)	Drop	Small cell sizes; identifying
R7_D8mth_5	Month Stopped 2018 Job (Job 5)	Drop	Small cell sizes; identifying
R7_D8yr_5	Year Stopped 2018 Job (Job 5)	Drop	Small cell sizes; identifying
R7_D14_5	Self-Employed at 2018 Job (Job 5)	Drop	Small cell sizes; identifying
R7_D15_5	2018 Job Part of Sheltered Workshop (Job 5)	Drop	Small cell sizes; identifying
R7_D16_5	Hours Usually Worked per Week at 2018 Job (Job 5)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_D17_5	Weeks Usually Worked at 2018 Job (Job 5)	Drop	Small cell sizes; identifying
R7_D18_5	Paid by the Hour in 2018 (Job 5)	Drop	Small cell sizes; identifying
R7_D19_5	Hourly Pay in 2018 (Job 5)	Drop	Small cell sizes; identifying
R7_D20amt_5	Amount Paid Before Taxes in 2018 (Job 5)	Drop	Small cell sizes; identifying
R7_D20hop_5	How Often Paid in 2018 (Job 5)	Drop	Small cell sizes; identifying
R7_D21amt_5	Amount of Take Home Pay in 2018 (Job 5)	Drop	Small cell sizes; identifying
R7_D21hop_5	How Often Paid in 2018 (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_5	Left Job Because of Health (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_1_5	Health - Existing Health Problem Gets Worse (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_2_5	Health - New Health Problem Starts (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_3_5	Health - Got Injured (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_4_5	Health - Job has Negative Impact on Health (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_5_5	Health - Need to be Hospitalized (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_6_5	Health - Needs Time to Go to Medical App. (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_7_5	Health - Gets Fired for Missing Too Much Time for Apps. (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_8_5	Health - Interferes with Job Performance (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_9_5	Health - Lack Strength, Physical Energy, and Stamina (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_10_5	Health - Pain Interferes with Working Set Schedule (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_11_5	Health - Personal Care Takes Too Long (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_12_5	Health - Health Status Fluctuates Unpredictably (Job 5)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1a_1_13_5	Health - Do not have Special Equipment or Medical Devices (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_14_5	Health - Work is Too Tiring/Stressful (Job 5)	Drop	Small cell sizes; identifying
R7_DP1a_1_15_5	Health - Other (Job 5)	Drop	Small cell sizes; identifying
R7_DP1b_5	Stopped Working due to Job Problems (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_1_5	Job - Job does not Pay Enough (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_2_5	Job - Job does not Offer Health Insurance (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_3_5	Job - Need a Different Schedule (Job 5)	Drop	Small cell sizes; identifying
R7_DP1b_1_4_5	Job - Need Time for Medical Apps. (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_5_5	Job - Got Fired for Missing too Much Time for Apps. (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_6_5	Job - Health Interferes with Job Performance (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_7_5	Job - Lacks Strength, Physical Energy, or Stamina (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_8_5	Job - Pain Interferes with Working Set Schedule (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_9_5	Job - Personal Care Takes too Long (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_10_5	Job - Do Not have Special Equipment or Medical Devices (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_11_5	Job - Personality Conflicted With Others At The Job (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_12_5	Job - Got Fired for Behavior (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_13_5	Job - Other (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_20_5	Job - Found Another Job (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_22_5	Job - Work Schedule (Job 5)	Drop	Small cell sizes; identifying
R7_DP1B_1_23_5	Job - Seasonal/Temporary (Job 5)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_DP1c_5	Left Job Because of Personal Circumstances (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_1_5	Personal Circumstances - Need Help Caring for Children (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_2_5	Personal Circumstances - Need Personal Assistance Getting Ready (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_3_5	Personal Circumstances - Got Injured (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_4_5	Personal Circumstances - Might Lose Benefits (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_5_5	Personal Circumstances - No Reliable Transportation (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_6_5	Personal Circumstances - Drug/Alcohol Relapse (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_7_5	Personal Circumstances - Rather Do Other Things (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_8_5	Personal Circumstances - Do Not Like Working (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_9_5	Personal Circumstances - Increase Income from Other Source (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_10_5	Personal Circumstances - Other (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_19_5	Personal Circumstances - Moved to Another Area (Job 5)	Drop	Small cell sizes; identifying
R7_DP1C_1_21_5	Personal Circumstances - Loss of Gov't Benefits (Job 5)	Drop	Small cell sizes; identifying
R7_D25_2_1	Private Disability Insurance Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_2	Workers' Compensation Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_3	Veterans Benefits Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_D25_2_4	Medicare Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_5	Medicaid Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_6	SSA Disability Benefits Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_7	Public Assistance or Welfare Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_8	Food Stamps Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_9	Personal Assistance Services Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_10	Unemployment Benefits Reduced b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_11	Other State Disability Benefits Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_12	Other Government Programs Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_13	Other Benefits Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_D25_2_14	Health insurance unspecified Reduced or Ended b/c Working in 2018	Drop	Small cell sizes; identifying
R7_DP3a	2018 Job Reduced/Increased Work Hours	Drop	Small cell sizes; identifying
R7_C_Main_Job_grid_num	Job Number of 2018 main job	Drop	No analytic value. Used to create _m job
R7_C_job_from_SecC_B_1	Number jobs in past 6 months copied to Section D (Slot 1)	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_B_2	Number jobs in past 6 months copied to Section D (Slot 2)	Drop	No analytic value. Not needed since main job is identified.

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_job_from_SecC_B_3	Number jobs in past 6 months copied to Section D (Slot 3)	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_B_4	Number jobs in past 6 months copied to Section D (Slot 4)	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_B_5	Number jobs in past 6 months copied to Section D (Slot 5)	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_B_6	Number jobs in past 6 months copied to Section D (Slot 6)	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_1	Current Job Copied to 2018 Job 1	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_2	Current Job Copied to 2018 Job 2	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_3	Current Job Copied to 2018 Job 3	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_4	Current Job Copied to 2018 Job 4	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_5	Current Job Copied to 2018 Job 5	Drop	No analytic value. Not needed since main job is identified.
R7_C_job_from_SecC_6	Current Job Copied to 2018 Job 6	Drop	No analytic value. Not needed since main job is identified.
R7_c_totjobcopied	Total jobs copied from C to D	Drop	No analytic value. Not needed since main job is identified.
R7_C_MAINJOB2018SOC	2018 Occupation, SOC Code (Main Job)	Replace	Replaced. Use C_MainJob2018SOC_PUB.
R7_C_MAINJOB2018NAICS	2018 Industry, NAICS Code (Main Job)	Replace	Replaced. Use C_MainJob2018NAICS_PUB.
R7_C_JOB12018SOC	2018 Occupation, SOC Code (Job 1)	Drop	Possible identifier. Use C_MAINJOB2018SOC_PUB.
R7_C_JOB12018NAICS	2018 Industry, NAICS Code (Job 1)	Drop	Possible identifier. Use C_MAINJOB2018NAICS_PUB.
R7_C_JOB22018SOC	2018 Occupation, SOC Code (Job 2)	Drop	Small cell sizes; identifying
R7_C_JOB22018NAICS	2018 Industry, NAICS Code (Job 2)	Drop	Small cell sizes; identifying
R7_C_JOB32018SOC	2018 Occupation, SOC Code (Job 3)	Drop	Small cell sizes; identifying
R7_C_JOB32018NAICS	2018 Industry, NAICS Code (Job 3)	Drop	Small cell sizes; identifying
R7_C_JOB42018SOC	2018 Occupation, SOC Code (Job 4)	Drop	Small cell sizes; identifying
R7_C_JOB42018NAICS	2018 Industry, NAICS Code (Job 4)	Drop	Small cell sizes; identifying
R7_C_JOB52018SOC	2018 Occupation, SOC Code (Job 5)	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_JOB52018NAICS	2018 Industry, NAICS Code (Job 5)	Drop	Small cell sizes; identifying
R7_C_JOB62018SOC	2018 Occupation, SOC Code (Job 6)	Drop	Small cell sizes; identifying
R7_C_JOB62018NAICS	2018 Industry, NAICS Code (Job 6)	Drop	Small cell sizes; identifying
R7_C_MainJobHrPay2018	Hourly Pay Main 2018 Job (Pre-tax)	Replace	Possible identifier. Use C_MainJobMnthPay2018_PUB
R7_C_MainJobMnthPay2018	Monthly Pay 2018 Main Job (Pre-tax)	Replace	Possible identifier. Use C_MainJobMnthPay2018_PUB
R7_C_MainJobMnthPayTH2018	Monthly Pay 2018 Main Job (Take Home)	Drop	Possible identifier. Replaced.
R7_C_Job1HrPay2018	Hourly Pay 2018 Job 1 (Pre-Tax)	Drop	Possible identifier. Use C_MAINJOBMNTHPAY2018_PUB.
R7_C_Job1MnthPay2018	Monthly Pay 2018 Job 1 (Pre-Tax)	Replace	Possible identifier. Use C_MAINJOBMNTHPAY2018_PUB.
R7_C_Job1MnthPayTH2018	Monthly Pay 2018 Job 1 (Take Home)	Drop	Possible identifier. Use C_MAINJOBMNTHPAY2018_PUB.
R7_C_MnthsJob12018	Months at 2018 Job 1	Replace	Possible identifier. Use C_MNTHSMAIN2016JOB.
R7_C_Job2HrPay2018	Hourly Pay 2018 Job 2 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job2MnthPay2018	Monthly Pay 2018 Job 2 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job2MnthPayTH2018	Monthly Pay 2018 Job 2 (Take Home)	Drop	Small cell sizes; identifying
R7_C_MnthsJob22018	Months at 2018 Job 2	Drop	Possible identifier. Use C_MNTHSMAIN2018JOB.
R7_C_Job3HrPay2018	Hourly Pay 2018 Job 3 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job3MnthPay2018	Monthly Pay 2018 Job 3 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job3MnthPayTH2018	Monthly Pay 2018 Job 3 (Take Home)	Drop	Small cell sizes; identifying
R7_C_MnthsJob32018	Months at 2018 Job 3	Drop	Possible identifier. Use C_MNTHSMAIN2018JOB.
R7_C_Job4HrPay2018	Hourly Pay 2018 Job 4 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job4MnthPay2018	Monthly Pay 2018 Job 4 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job4MnthPayTH2018	Monthly Pay 2018 Job 4 (Take Home)	Drop	Small cell sizes; identifying
R7_C_MnthsJob42018	Months at 2018 Job 4	Drop	Possible identifier. Use C_MNTHSMAIN2018JOB.

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_Job5HrPay2018	Hourly Pay 2018 Job 5 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job5MnthPay2018	Monthly Pay 2018 Job 5 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job5MnthPayTH2018	Monthly Pay 2018 Job 5 (Take Home)	Drop	Small cell sizes; identifying
R7_C_MnthsJob52018	Months at 2018 Job 5	Drop	Possible identifier. Use C_MNTHSMAIN2018JOB.
R7_C_Job6HrPay2018	Hourly Pay 2018 Job 6 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job6MnthPay2018	Monthly Pay 2018 Job 6 (Pre-Tax)	Drop	Small cell sizes; identifying
R7_C_Job6MnthPayTH2018	Monthly Pay 2018 Job 6 (Take Home)	Drop	Small cell sizes; identifying
R7_C_MnthsJob62018	Months at 2018 Job 6	Drop	Small cell sizes; identifying
R7_C_Tot2018Pay	Total Annual pay (pre-tax) 2018	Replace	Possible identifier. Use C_Tot2018Pay_pub
R7_C_TotHrs2018	Total hours worked in 2018	Replace	Possible identifier. Use C_TotHrs2018_pub
R7_C_TotMnths2018	Total Months Worked in 2018	Drop	
R7_C_UsWkHr2018	Usual weekly hours in 2018	Replace	Possible identifier. Use C_UsWkHr2018_pub
R7_G7_1	Received Employment Services from Vocational Rehab Agency in 2018	Drop	Small cell sizes; identifying
R7_G7_2	Received Employment Services from Welfare Agency in 2018	Drop	Small cell sizes; identifying
R7_G7_3	Received Employment Services from Mental Health Agency in 2018	Drop	Small cell sizes; identifying
R7_G7_4	Received Employment Services from Other State Agency in 2018	Drop	Small cell sizes; identifying
R7_G7_5	Received Employment Services from Workforce Center /Unemployment Office in 2018	Drop	Small cell sizes; identifying
R7_G7_6	Received Employment Services from Private Business in 2018	Drop	Small cell sizes; identifying
R7_G7_7	Received Employment Services at a School or College in 2018	Drop	Small cell sizes; identifying
R7_G7_8	Received Employment Services at Other Type of Place in 2018	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_G13_1	Received Job Training from Vocational Rehab Agency in 2018	Drop	Small cell sizes; identifying
R7_G13_2	Received Job Training from Welfare Agency in 2018	Drop	Small cell sizes; identifying
R7_G13_3	Received Job Training from Mental Health Agency in 2018	Drop	Small cell sizes; identifying
R7_G13_4	Received Job Training from Other State Agency in 2018	Drop	Small cell sizes; identifying
R7_G13_5	Received Job Training from Workforce Center/Employment Office in 2018	Drop	Small cell sizes; identifying
R7_G13_6	Received Training at Private Business in 2018	Drop	Small cell sizes; identifying
R7_G13_7	Received Training at School or College in 2018	Drop	Small cell sizes; identifying
R7_G13_8	Received Training at Other Type of Place in 2018	Drop	Small cell sizes; identifying
R7_G13_9	Received Training at Job Training (unspecified) in 2018	Drop	Small cell sizes; identifying
R7_G18_1	Received Medical Services from Clinic/Dr. Office in 2018	Drop	Possible identifier
R7_G18_2	Received Medical Services from a Hospital in 2018	Drop	Possible identifier
R7_G18_3	Received Medical Services from Some Other Place in 2018	Drop	Possible identifier
R7_G18_5	Received Medical Services from a School 2018	Drop	Possible identifier
R7_G18_6	Received Medical Services from a Nursing Home/Grp. Home 2018	Drop	Possible identifier
R7_G18_7	Received Medical Services from a government Agency in 2018	Drop	Possible identifier
R7_G18_8	Received Medical Services from in Home Care in 2018	Drop	Possible identifier

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_G18_9	Received Medical Services at Medical Equipment Store in 2018	Drop	Possible identifier
R7_G18_10	Received Medical Services at Rehab/Counseling Center in 2018	Drop	Possible identifier
R7_G18_11	Received Medical Services at Physical Therapy Center in 2018	Drop	Possible identifier
R7_G22_1	Received Mental Health Therapy from Mental Health Agency in 2018	Drop	Small cell sizes; identifying
R7_G22_2	Received Mental Health Therapy from a Clinic/Dr. Office in 2018	Drop	Small cell sizes; identifying
R7_G22_3	Received Mental Health Therapy from a Hospital in 2018	Drop	Small cell sizes; identifying
R7_G22_4	Received Mental Health Therapy from Some Other Type of Place in 2018	Drop	Small cell sizes; identifying
R7_G22_6	Received Mental Health Therapy from Res Treatment Program in 2018	Drop	Small cell sizes; identifying
R7_G22_7	Received Mental Health Therapy from Rehab Center in 2018	Drop	Small cell sizes; identifying
R7_G22_8	Received Mental Health Therapy from Church/Religious Inst. In 2018	Drop	Small cell sizes; identifying
R7_G27	Working Towards Degree/Cert or Taking Classes	Drop	Small cell sizes; identifying
R7_G28	Type of Degree Working Towards	Drop	Small cell sizes; identifying
R7_I1	Health During Past 4 Weeks	Drop	Use R7_I1_I
R7_I1_IFLAG	Health During Past 4 Weeks, Imputation Flag	Drop	IFLAG - No analytic value
R7_I9	Rate Health in General Now	Drop	Imputed version on file
R7_I9_IFLAG	Rate Health in General Now, Imputation Flag	Drop	Little analytic value
R7_I17b	Difficulty Seeing with Glasses / Contact Lenses	Drop	Imputed version on file

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_I17B_IFLAG	Difficulty Seeing with Glasses / Contact Lenses, Imputation Flag	Drop	Little analytic value
R7_I19	Use Special Equip b/c of Diff Seeing	Drop	Imputed version on file
R7_I19_IFLAG	Use Special Equip b/c of Diff Seeing, Imputation Flag	Drop	Little analytic value
R7_I20_1	Use Telescopic Lenses b/c of Diff Seeing	Drop	Small cell sizes; identifying
R7_I20_2	Use Adapted Comp Equip b/c of Diff Seeing	Drop	Small cell sizes; identifying
R7_I20_3	Use Braille b/c of Diff Seeing	Drop	Small cell sizes; identifying
R7_I20_4	Use Readers b/c of Diff Seeing	Drop	Small cell sizes; identifying
R7_I20_5	Use Guide Dog b/c of Diff Seeing	Drop	Small cell sizes; identifying
R7_I20_6	Use White Cane b/c of Diff Seeing	Drop	Small cell sizes; identifying
R7_I20_7	Use Other Seeing Assistance	Drop	Small cell sizes; identifying
R7_I20_8	Use Magnifying Glasses	Drop	Small cell sizes; identifying
R7_I20_9	Use Screen Readers	Drop	Small cell sizes; identifying
R7_I20_10	Use Test-to-voice Devices	Drop	Small cell sizes; identifying
R7_I21	Difficulty Hearing	Drop	Imputed version on file
R7_I21_IFLAG	Difficulty Hearing, Imputation Flag	Drop	Little analytic value
R7_I22	Able to Hear Normal Conversation	Drop	Imputed version on file
R7_I22_IFLAG	Able to Hear Normal Conversation, Imputation Flag	Drop	Little analytic value
R7_I23	Use Special Devices b/c of Diff Hearing	Drop	Imputed version on file
R7_I23_IFLAG	Use Special Devices b/c of Diff Hearing, Imputation Flag	Drop	IFLAG - No analytic value
R7_I24_1	Use Hearing Aide b/c of Diff Hearing	Drop	Small cell sizes; identifying
R7_I24_2	Use Phone Amplifier b/c of Diff Hearing	Drop	Small cell sizes; identifying
R7_I24_4	Use TYY b/c of Diff Hearing	Drop	Small cell sizes; identifying
R7_I24_5	Use Closed Caption b/c of Diff Hearing	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_I24_6	Use Assistive Listening Device	Drop	Small cell sizes; identifying
R7_I24_7	Use Interpreter	Drop	Small cell sizes; identifying
R7_I24_8	Use other Hearing Assistance	Drop	Small cell sizes; identifying
R7_I24_9	Use Instant Messaging	Drop	Small cell sizes; identifying
R7_I24_10	Use Skype/Video Messaging	Drop	Small cell sizes; identifying
R7_I25	Difficulty Having Speech Understood	Drop	Imputed version on file
R7_I25_IFLAG	Difficulty Having Speech Understood, Imputation Flag	Drop	Little analytic value
R7_I26	Able to Have Speech Understood At All	Drop	Imputed version on file
R7_I26_IFLAG	Able to Have Speech Understood At All, Imputation Flag	Drop	Little analytic value
R7_I27	Use Devices b/c of Difficulty Speaking	Drop	Imputed version on file
R7_I27_IFLAG	Use Devices b/c of Difficulty Speaking, Imputation Flag	Drop	Little analytic value
R7_I28_1	Use Voice Synthesizer b/c of Diff Speaking	Drop	Small cell sizes; identifying
R7_I28_2	Use Voice Amplifier b/c of Diff Speaking	Drop	Small cell sizes; identifying
R7_I28_3	Use Sign Lang Interp b/c of Diff Speaking	Drop	Small cell sizes; identifying
R7_I28_4	Use Other Speech Assistance	Drop	Small cell sizes; identifying
R7_I29	Diff Walking Without Assistance	Drop	Imputed version on file
R7_I29_IFLAG	Diff Walking Without Assistance, Imputation Flag	Drop	Little analytic value
R7_I30	Able to Walk Quarter Mile At All	Drop	Imputed version on file
R7_I30_IFLAG	Able to Walk Quarter Mile At All, Imputation Flag	Drop	Little analytic value
R7_I31	Use Special Equip b/c of Diff Walking	Drop	Imputed version on file
R7_I31_IFLAG	Use Special Equip b/c of Diff Walking, Imputation Flag	Drop	Little analytic value
R7_I32_3	Use Prosthetic Device b/c of Diff Walking	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_I32_4	Use Special Chair b/c of Diff Walking	Drop	Small cell sizes; identifying
R7_I32_5	Use Pers Care Attendant b/c of Diff Walking	Drop	Small cell sizes; identifying
R7_I32_6	Use Vehicle Hand Control b/c of Diff Walking	Drop	Small cell sizes; identifying
R7_I32_7	Use Lift b/c of Diff Walking	Drop	Small cell sizes; identifying
R7_I32_8	Use Other Mobility Assistance	Drop	Small cell sizes; identifying
R7_I32_9	Use Special Shoes/Inserts b/c of Difficulty Walking	Drop	Small cell sizes; identifying
R7_I32_10	Use Breathing Devices b/c of Difficulty Walking	Drop	Small cell sizes; identifying
R7_I34	Able to Climb 10 Steps At All	Drop	Imputed version on file
R7_I34_IFLAG	Able to Climb 10 Steps At All, Imputation Flag	Drop	Little analytic value
R7_I35	Difficulty Lifting and Carrying 10 lbs	Drop	Imputed version on file
R7_I35_IFLAG	Difficulty Lifting and Carrying 10 lbs, Imputation Flag	Drop	Little analytic value
R7_I36	Able to Lift or Carry 10 lbs At All	Drop	Imputed version on file
R7_I36_IFLAG	Able to Lift or Carry 10 lbs At All, Imputation Flag	Drop	Little analytic value
R7_I37	Difficulty Using Hands or Fingers	Drop	Imputed version on file
R7_I37_IFLAG	Difficulty Using Hands or Fingers, Imputation Flag	Drop	Little analytic value
R7_I38	Able to Use Hands or Fingers At All	Drop	Imputed version on file
R7_I38_IFLAG	Able to Use Hands or Fingers At All, Imputation Flag	Drop	Little analytic value
R7_I39	Difficulty Reaching Over Head	Drop	Imputed version on file
R7_I39_IFLAG	Difficulty Reaching Over Head, Imputation Flag	Drop	Little analytic value
R7_I40	Able to Reach Over Head At All	Drop	Imputed version on file
R7_I40_IFLAG	Able to Reach Over Head At All, Imputation Flag	Drop	Little analytic value
R7_I41	Difficulty Standing	Drop	Imputed version on file

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_I41_IFLAG	Difficulty Standing, Imputation Flag	Drop	Little analytic value
R7_I42	Able to Stand At All	Drop	Imputed version on file
R7_I42_IFLAG	Able to Stand At All, Imputation Flag	Drop	Little analytic value
R7_I43	Difficulty Stooping	Drop	Imputed version on file
R7_I43_IFLAG	Difficulty Stooping, Imputation Flag	Drop	Little analytic value
R7_I44	Able to Stoop At All	Drop	Imputed version on file
R7_I44_IFLAG	Able to Stoop At All, Imputation Flag	Drop	Little analytic value
R7_I45	Difficulty Getting Around Inside Home	Drop	Imputed version on file
R7_I45_IFLAG	Difficulty Getting Around Inside Home, Imputation Flag	Drop	Little analytic value
R7_I46	Need Help To Get Around Inside Home	Drop	Imputed version on file
R7_I46_IFLAG	Need Help To Get Around Inside Home, Imputation Flag	Drop	Little analytic value
R7_I47	Difficulty Getting Around Outside Home	Drop	Imputed version on file
R7_I47_IFLAG	Difficulty Getting Around Outside Home, Imputation Flag	Drop	Little analytic value
R7_I48	Need Help To Get Around Outside Home	Drop	Imputed version on file
R7_I48_IFLAG	Need Help To Get Around Outside Home, Imputation Flag	Drop	Little analytic value
R7_I49	Difficulty Getting Into/Out of Bed	Drop	Imputed version on file
R7_I49_IFLAG	Difficulty Getting Into/Out of Bed, Imputation Flag	Drop	Little analytic value
R7_I50	Need Help Getting Into/Out of Bed	Drop	Imputed version on file
R7_I50_IFLAG	Need Help Getting Into/Out of Bed, Imputation Flag	Drop	Little analytic value
R7_I51	Difficulty Bathing or Dressing	Drop	Imputed version on file
R7_I51_IFLAG	Difficulty Bathing or Dressing, Imputation Flag	Drop	Little analytic value
R7_I52	Need Help To Bathe or Dress	Drop	Imputed version on file

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_I52_IFLAG	Need Help To Bathe or Dress, Imputation Flag	Drop	Little analytic value
R7_I53	Difficulty Shopping	Drop	Imputed version on file
R7_I53_IFLAG	Difficulty Shopping, Imputation Flag	Drop	Little analytic value
R7_I54	Need Help To Shop	Drop	Imputed version on file
R7_I54_IFLAG	Need Help to Shop, Imputation Flag	Drop	Little analytic value
R7_I55	Difficulty Preparing Own Meals	Drop	Imputed version on file
R7_I55_IFLAG	Difficulty Preparing Own Meals, Imputation Flag	Drop	Little analytic value
R7_I56	Need Help To Prepare Meals	Drop	Imputed version on file
R7_I56_IFLAG	Need Help to Prepare Meals, Imputation Flag	Drop	Little analytic value
R7_I57	Difficulty Eating	Drop	Imputed version on file
R7_I57_IFLAG	Difficulty Eating, Imputation Flag	Drop	Little analytic value
R7_I58	Need Help To Eat	Drop	Imputed version on file
R7_I58_IFLAG	Need Help To Eat, Imputation Flag	Drop	Little analytic value
R7_I59	Trouble Concentrating	Drop	Imputed version on file
R7_I59_IFLAG	Trouble Concentrating, Imputation Flag	Drop	Little analytic value
R7_I60	Trouble Coping with Stress	Drop	Imputed version on file
R7_I60_IFLAG	Trouble Coping with Stress, Imputation Flag	Drop	Little analytic value
R7_I61	Trouble getting Along With People	Drop	Imputed version on file
R7_I61_IFLAG	Trouble getting Along With People, Imputation Flag	Drop	Little analytic value
R7_I62	Felt Need to Cut Down on Drinking	Drop	Summarized in construct CAGESCORE_INDICATOR_I
R7_I63	Ever Annoyed by People Criticizing Drinking	Drop	Summarized in construct CAGESCORE_INDICATOR_I
R7_I64	Ever Felt Bad or Guilty About Drinking	Drop	Summarized in construct CAGESCORE_INDICATOR_I
R7_I65	Ever Had Drink in Morning	Drop	Summarized in construct CAGESCORE_INDICATOR_I
R7_I66	Doctor Advised to Stop Using Alcohol	Drop	Small cell sizes; identifying
R7_I67	Received Treatment for Alcohol	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_I72	Ever Used Drugs in Larger Amt than Prescribed	Drop	Possible identifier
R7_I72_I	Ever Used Drugs in Larger Amt than Prescribed, Imputed	Drop	Possible identifier
R7_I72_IFLAG	Ever Used Drugs in Larger Amt than Prescribed, Imputation Flag	Drop	Little analytic value
R7_I73	Needed Larger Amt To Get Effect	Drop	Small cell sizes; identifying
R7_I74	Have Emot/Phy Probs From Drugs	Drop	Small cell sizes; identifying
R7_I75	Doctor Advised to Stop Using Non Prescrip Drugs	Drop	Small cell sizes; identifying
R7_I76	Rec'd Treatment for Use of Non Prescrip Drugs	Drop	Small cell sizes; identifying
R7_C_EquipFuncLim	Uses equipment/device for functional/sensory/comm unication limitation	Drop	Imputed version on file
R7_C_EQUIPFUNCLIM_IFLAG	Uses Equip/Device for Functional/Sensory Limitation, Imputation Flag	Drop	Little analytic value
R7_C_numSenLim	Number of Sensory/Communication Limitations	Drop	Imputed version on file
R7_C_NUMSENLIM_I	Number Sensory Limitations, Imputed	Drop	No analytic value.
R7_C_NUMSENLIM_IFLAG	Number Sensory Limitations, Imputation Flag	Drop	Little analytic value
R7_C_NumSevSenLim	Number of Severe Sensory/Communication Limitations	Drop	Imputed version on file
R7_C_NUMSEVSENLIM_I	Number Severe Sensory Limitations, Imputed	Drop	Small cell sizes; identifying
R7_C_NUMSEVSENLIM_IFLAG	Number Severe Sensory Limitations, Imputation Flag	Drop	Little analytic value
R7_C_NumPhyLim	Number of Physical Functional Limitations	Drop	Imputed version on file
R7_C_NUMPHYLIM_I	Number Physical Functional Limitations, Imputed	Drop	No analytic value.

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_NUMPHYLIM_IFLAG	Number Physical Functional Limitations, Imputation Flag	Drop	Little analytic value
R7_C_NumSevPhyLim	Number of Severe Physical Functional Limitations	Drop	Imputed version on file
R7_C_NUMSEVPHYLIM_I	Number Severe Physical Functional Limitations, Imputed	Drop	Small cell sizes; identifying
R7_C_NUMSEVPHYLIM_IFLAG	Number Severe Physical Functional Limitations, Imputation Flag	Drop	Little analytic value
R7_C_NumEmotLim	Number of Emotional/Social Limitations	Drop	Imputed version on file
R7_C_NUMEMOTLIM_I	Number Emotional/Social Limitations, Imputed	Drop	No analytic value.
R7_C_NUMEMOTLIM_IFLAG	Number Emotional/Social Limitations, Imputation Flag	Drop	Little analytic value
R7_C_NumADLs	Number of ADL Difficulties	Drop	Imputed version on file
R7_C_NUMADLS_I	Number ADLs, Imputed	Drop	Possible identifier
R7_C_NUMADLS_IFLAG	Number ADLs, Imputation Flag	Drop	Little analytic value
R7_C_NumADLAssist	Number of ADLs Requiring Assistance	Drop	Imputed version on file
R7_C_NUMADLASSIST_I	Number ADLs Requiring Assistance, Imputed	Drop	Possible identifier
R7_C_NUMADLASSIST_IFLAG	Number ADLs Requiring Assistance, Imputation Flag	Drop	Little analytic value
R7_C_NumIADLs	Number of IADL Difficulties	Drop	Imputed version on file
R7_C_NUMIADLS_I	Number of IADL Difficulties, Imputed	Drop	No analytic value.
R7_C_NUMIADLS_IFLAG	Number of IADL Difficulties, Imputation Flag	Drop	Little analytic value
R7_C_NumIADLAssist	Number of IADL Difficulties Requiring Assistance	Drop	Imputed version on file
R7_C_NUMIADLASSIST_I	Number IADLs Requiring Assistance, Imputed	Drop	No analytic value.
R7_C_NUMIADLASSIST_IFLAG	Number IADLs Requiring Assistance, Imputation Flag	Drop	Little analytic value

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_SF8BP	SF8 Scores: Bodily Pain	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_SF8GH	SF8 Scores: General Health	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_SF8MH	SF8 Scores: Mental Health	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_SF8PF	SF8 Scores: Physical Functioning	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_SF8RE	SF8 Scores: Role Emotional	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_SF8RP	SF8 Scores: Role Physical	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_SF8SF	SF8 Scores: Social Functioning	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_SF8VT	SF8 Scores: Vitality	Drop	Summarized in constructs (C_PCS8TOT_I and C_MCS8TOT_I)
R7_C_PCSBP	PCS-8 Bodily Pain Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCSGH	PCS-8 General Health Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCSMH	PCS-8 Mental Health Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCSPF	PCS-8 Physical Functioning Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCSRE	PCS-8 Role Emotional Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCSRP	PCS-8 Role Physical Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCSSF	PCS-8 Social Functioning Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCSVT	PCS-8 Vitality Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_MCSBP	MCS-8 Bodily Pain Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_MCSGH	MCS-8 General Health Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_MCSMH	MCS-8 Mental Health Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_MCSPF	MCS-8 Physical Functioning Weight	Drop	No analytic value. Calculated only to create summary score

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_MCSRE	MCS-8 Role Emotional Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_MCSRP	MCS-8 Role Physical Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_MCSSF	MCS-8 Social Functioning Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_MCSVT	MCS-8 Vitality Weight	Drop	No analytic value. Calculated only to create summary score
R7_C_PCS8TOT	SF8 Physical Summary Scale Score	Drop	Imputed version on file
R7_C_PCS8TOT_IFLAG	SF8 Physical Summary Score, Imputation Flag	Drop	Little analytic value
R7_C_MCS8TOT	SF8 Mental Summary Scale Score	Drop	Imputed version on file
R7_C_MCS8TOT_IFLAG	SF8 Mental Summary Score, Imputation Flag	Drop	Little analytic value
R7_C_CAGEAlcohol	CAGE Alcohol score	Drop	Imputed version on file
R7_C_CAGESCORE_INDICATOR_IFLAG	CAGE Alcohol Score, Imputation Flag	Drop	Little analytic value
R7_C_DrugDep	Drug Dependence	Drop	Imputed version on file
R7_C_DRUGDEP_I	Drug Dependence, Imputed	Drop	Small cell sizes; identifying
R7_C_DRUGDEP_IFLAG	Drug Dependence, Imputation Flag	Drop	Little analytic value
R7_J1	Currently Covered by Medicare	Drop	Summarized in construct C_CURMEDICARE
R7_J2	Currently Covered by Medicaid	Drop	Summarized in construct C_CURMEDICAID
R7_J4	Currently Covered by Military Health Care	Drop	Summarized in construct C_CURMILINSUR
R7_J5	Currently Covered by Private Health Insurance	Drop	Summarized in constructs C_CURPRIVEMP, C_CURPRIVSP, C_CURPRIVSELF
R7_J6	Source of Private Health Insurance	Drop	Summarized in constructs C_CURPRIVEMP, C_CURPRIVSP, C_CURPRIVSELF
R7_J9_1	Currently Have Medicaid	Drop	Summarized in construct C_CURMEDICAID
R7_J9_2	Currently Have Medicare	Drop	Summarized in construct C_CURMEDICARE
R7_J9_3	Currently Have Champus	Drop	Summarized in construct C_CURMILINSUR
R7_J9_4	Currently Have Indian Health Service	Drop	Summarized in construct C_CURINDINSUR

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_J9_5	Currently Have Medi-Gap	Drop	Summarized in construct C_CURMEDIGAP
R7_J9_6	Currently Have State Program Health Insur	Drop	Summarized in construct C_CURSTASSIST
R7_J9_7	Currently Have Private Insur Thru Employer	Drop	Summarized in construct C_CURPRIVEMP
R7_J9_8	Currently Have Private Insur Thru Spouse/Partner/Parent	Drop	Summarized in construct C_CURPRIVSP
R7_J9_9	Currently Have Insurance Paid by SP/Family	Drop	Summarized in construct C_CURPRIVSELF
R7_J9_10	Currently Have Other Health Coverage	Drop	Summarized in construct C_CUROOTHERINSUR
R7_J11_3	Had Champus in 2018	Replace	Possible identifier. Grouped with J11_10_PUB
R7_J11_4	Had Indian Health Service in 2018	Replace	Possible identifier. Grouped with J11_10_PUB
R7_J11_5	Had Medi-Gap in 2018	Replace	Possible identifier. Grouped with J11_10_PUB
R7_J11_6	Had State Program Health Insur in 2018	Replace	Possible identifier. Grouped with J11_10_PUB
R7_J11_10	Had Other Health Coverage in 2018	Replace	Possible identifier. Use J11_10_PUB
R7_J11_11	Had Private Insurance, Not specified who through in 2018	Replace	Small cell sizes; identifying
R7_C_CurIndInsur	Currently Covered by Indian Health	Drop	Small cell sizes; identifying
R7_C_CurMedigap	Currently Covered by Medigap	Drop	Small cell sizes; identifying
R7_C_CurStAssist	Currently Covered by State Assistance	Drop	Small cell sizes; identifying
R7_K2A	Worked Last Month	Drop	Possible identifier
R7_K3	Earnings Last Month Before Taxes	Drop	Summarized in construct (C_LSTMNTHPAY)
R7_K3a	Earnings Last Month After Taxes	Drop	Summarized in construct (C_LSTMNTHPAY)
R7_K4	Received Inc From Social Security Last Month	Drop	Possible identifier. Use C_INCSOURCE7_PUB
R7_K6_a	Received Inc From Private Dis Insur Last Month	Drop	Possible identifier. Use C_INCSOURCE1_PUB
R7_K6_b	Received Inc From Worker's Comp Last Month	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_K6_c	Received Inc From Veteran's Benefits Last Month	Drop	Possible identifier. Use C_INCSOURCE2_PUB
R7_K6_d	Received Inc From Public Assistance Last Month	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_K6_e	Received Inc From Unemploy benefits Last Month	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_K6_f	Received Inc From Private Pensions Last Month	Drop	Possible identifier. Use C_INCSROUCE3_PUB
R7_K6_g	Received Other Inc on Reg Basis Last Month	Drop	Possible identifier. Use C_INCSOURCE4_PUB
R7_K6_h	Received Inc Not on Reg Basis Last Month	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_K7_a	Amount Received From Priv Disab Insur	Drop	Summarized in construct C_AMTPRIVDIS
R7_K7_b	Amount Received From Worker's Comp	Drop	Small cell sizes; identifying
R7_K7_c	Amount Received From Vets Benefits	Drop	Small cell sizes; identifying
R7_K7_d	Amount Received From Public Assist	Drop	Small cell sizes; identifying
R7_K7_e	Amount Received From Unemploy Benefits	Drop	Small cell sizes; identifying
R7_K7_f	Amount Received From Priv Pension	Drop	Small cell sizes; identifying
R7_K7_g	Amount of Other Inc Received on Reg Basis	Drop	Small cell sizes; identifying
R7_K7_h	Amount of Other Inc Received Not on Reg Basis	Drop	Small cell sizes; identifying
R7_K8_a	Inc From Priv Dis Insur More/Less Than \$300	Drop	Small cell sizes; identifying
R7_K8_b	Inc From Worker's Comp More/Less Than \$300	Drop	Small cell sizes; identifying
R7_K8_c	Inc From Vets Benefits More/Less Than \$300	Drop	Small cell sizes; identifying
R7_K8_d	Inc From Public Assist More/Less Than \$300	Drop	Small cell sizes; identifying
R7_K8_e	Inc From Unemploy Benefit More/Less Than \$300	Drop	Small cell sizes; identifying
R7_K8_f	Inc From Priv Pension More/Less Than \$300	Drop	Small cell sizes; identifying
R7_K8_g	Other Inc on Reg Basis More/Less Than \$300	Drop	Small cell sizes; identifying

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_K8_h	Other Inc Not on Reg Basis More/Less Than \$300	Drop	Small cell sizes; identifying
R7_K9_a	Inc From Priv Disab Insur More/Less Than \$500	Drop	Small cell sizes; identifying
R7_K9_b	Inc From Worker's Comp More/Less Than \$500	Drop	Small cell sizes; identifying
R7_K9_c	Inc From Vets Benefits More/ Less Than \$500	Drop	Small cell sizes; identifying
R7_K9_d	Inc From Public Assist More/Less Than \$500	Drop	Small cell sizes; identifying
R7_K9_e	Inc From Unemploy Benefit More/Less Than \$500	Drop	Small cell sizes; identifying
R7_K9_f	Inc From Priv Pension More/Less Than \$500	Drop	Small cell sizes; identifying
R7_K9_g	Other Inc on Reg Basis More/ Less Than \$500	Drop	Small cell sizes; identifying
R7_K9_h	Other Inc Not on Reg Basis More/Less Than \$500	Drop	Small cell sizes; identifying
R7_K10_a	Inc From Priv Disab Insur More/Less than \$150	Drop	Small cell sizes; identifying
R7_K10_b	Inc From Worker's Comp More/Less than \$150	Drop	Small cell sizes; identifying
R7_K10_c	Inc From Vets Benefits More/Less than \$150	Drop	Small cell sizes; identifying
R7_K10_d	Inc From Public Assist More/Less than \$150	Drop	Small cell sizes; identifying
R7_K10_e	Inc From Unemploy Benefit More/Less than \$150	Drop	Small cell sizes; identifying
R7_K10_f	Inc From Priv Pension More/Less than \$150	Drop	Small cell sizes; identifying
R7_K10_g	Other Inc on Reg Basis More/Less than \$150	Drop	Small cell sizes; identifying
R7_K10_h	Other Inc Not on Reg Basis More/Less than \$150	Drop	Small cell sizes; identifying
R7_K11	Received Food stamps Last Month	Drop	Possible identifier. Use C_INCSOURCE5_PUB
R7_K12	Dollar Value of Food stamps	Drop	Summarized in construct C_AMTFOODSTAMP
R7_K13	Received Assist From Other Gov't Prog Last Month	Drop	Summarized in construct C_AMTOTHGOV

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_K14_1	Received Housing Assistance From Government	Drop	Possible identifier. Use C_INCSOURCE6_PUB
R7_K14_2	Received Energy Assistance From Government	Drop	Possible identifier. Use C_INCSOURCE6_PUB
R7_K14_3	Received Food Assistance From Government	Drop	Possible identifier. Use C_INCSOURCE6_PUB
R7_K14_4	Received Other Assistance From Government	Drop	Possible identifier. Use C_INCSOURCE6_PUB
R7_K15	Amount Received From Other Gov't Assistance	Drop	Summarized in construct C_AMTOTHGOV
R7_C_AmtOthNonReg	Amount Received from Non-Reg Sources Last Month	Drop	Possible identifier for outliers and small sell sizes
R7_C_AMTOTHREGSUM	Amount Received from All Regular Sources Last Month (Includes SSA administrative records)	Drop	Possible identifier
R7_C_TOTGOVCASHBEN	Total Government Cash Benefits Received (Includes SSA administrative records)	Replace	Possible identifier. Use C_TOTGOVCASHBEN_pub
R7_C_LstMnthPay	Last month pay (pre-tax)	Replace	Possible identifier. Use C_LSTMNTHPAY_PUB_pub
R7_C_AmtPrivDis	Amount Received from Priv Dis Last Month (logical zero)	Drop	Imputed version on file
R7_C_AmtPrivDis_I	Amount Received from Priv Dis Last Month, Imputed	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_C_AMTPRIVDIS_IFLAG	Amount Received from Priv Dis Last Month, Imputation	Drop	Little analytic value
R7_C_AmtWorkComp	Amount Received from Workers Comp Last Month (logical zero)	Drop	Imputed version on file
R7_C_AmtWorkComp_I	Amount Received from Workers Comp Last Month, Imputed	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_C_AMTWORKCOMP_IFLAG	Amount Received from Workers Comp Last Month, Imputation Flag	Drop	Little analytic value
R7_C_AmtVetBen	Amount Received from Vet Ben Last Month (logical zero)	Drop	Imputed version on file

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_AmtVetBen_I	Amount Received from Vet Ben Last Month, Imputed	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_C_AMTVETBEN_IFLAG	Amount Received from Vet Ben Last Month, Imputation Flag	Drop	Little analytic value
R7_C_AmtPubAssis	Amount Received from Pub Assist Last Month (logical zero)	Drop	Imputed version on file
R7_C_AmtPubAssis_I	Amount Received from Pub Assist Last Month, Imputed	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_C_AMTPUBASSIS_IFLAG	Amount Received from Pub Assist Last Month, Imputation Flag	Drop	Little analytic value
R7_C_AmtUnemply	Amount Received from Unemp Last Month (logical zero)	Drop	Imputed version on file
R7_C_AmtUnemply_I	Amount Received from Unemp Last Month, Imputed	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_C_AMTUNEMPLY_IFLAG	Amount Received from Unemp Last Month, Imputation Flag	Drop	Little analytic value
R7_C_AmtPrivPen	Amount Received from Private Pension Last Month (logical zero)	Drop	Imputed version on file
R7_C_AmtPrivPen_I	Amount Received from Private Pension Last Month, Imputed	Drop	Possible identifier. Summarized in C_INCSOURCE1-7_PUB
R7_C_AMTPRIVPEN_IFLAG	Amount Received from Private Pension Last Month, Imputation Flag	Drop	Little analytic value
R7_C_AmtOthReg	Amount Received from Other Regular Sources Last Month (logical zero)	Drop	Small cell sizes; identifying
R7_C_AmtOthReg_I	Amount Received from Reg Sources Last Month, Imputed	Drop	Possible identifier
R7_C_AMTOTHREG_IFLAG	Amount Received from Reg Sources Last Month, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_AmtFoodStamp	Amount Received from Food Stamps Last Month (logical zero)	Drop	Possible identifier for outliers. Combine with other non-cash benefits
R7_C_AmtOthGov	Amount Received from Other Gov Program Last Month (logical zero)	Drop	Possible identifier for outliers. Combine with other non-cash benefits

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_TotNonCashBen	Total Non-Cash Benefits Received	Replace	Possible identifier. Use C_TotNonCashBen_PUB
R7_L1	Ethnic Background	Drop	Imputed version on file
R7_L1_I	Ethnic Background, Imputed	Replace	Replaced with R7_L1_I_PUB
R7_L1_IFLAG	Ethnic Background, Imputation Flag	Drop	Little analytic value
R7_L2_1	Alaska Native or American Indian	Drop	Possible identifier. Use C_RACE_I_PUB
R7_L2_2	Asian	Drop	Possible identifier. Use C_RACE_I_PUB
R7_L2_3	Black or African American	Drop	Possible identifier. Use C_RACE_I_PUB
R7_L2_4	Native Hawaiian or Other Pacific Islander	Drop	Possible identifier. Use C_RACE_I_PUB
R7_L2_5	White	Drop	Possible identifier. Use C_RACE_I_PUB
R7_L3	Highest Year/Grade Finished in School	Drop	Imputed version on file
R7_L3_I	Highest Year/Grade Finished in School, Imputed	Replace	Possible identifier. Use L3_i_PUB.
R7_L3_IFLAG	Highest Year/Grade Finished in School, Imputation Flag	Drop	Little analytic value
R7_L4	Highest Year/Grade Father Finished in School	Replace	Possible identifier. Use L4_PUB.
R7_L5	Highest Year/Grade Mother Finished in School	Replace	Possible identifier. Use L5_PUB.
R7_L6ft	Height: Feet	Drop	Possible identifier. Summarized in C_BMI_CAT_I
R7_L6in	Height: Inches	Drop	Possible identifier. Summarized in C_BMI_CAT_I
R7_L7	Weight	Drop	Possible identifier. Summarized in C_BMI_CAT_I
R7_L8	Marital Status	Drop	Imputed version on file
R7_L8_I	Marital Status, Imputed	Replace	Possible identifier. Use L8_i_PUB.
R7_L8_IFLAG	Marital Status, Imputation Flag	Drop	Little analytic value
R7_L9	Live With Spouse	Drop	Possible identifier. Use C_COHAB_I, L8_I_PUB
R7_L10	Live With Partner	Drop	Possible identifier. Use C_COHAB_I, L8_I_PUB
R7_L11	Living Situation	Drop	Imputed version on file

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_L11_I	Living Situation, Imputed	Replace	Possible identifier. Use L11_i_PUB.
R7_L11_IFLAG	Living Situation, Imputation Flag	Drop	Little analytic value
R7_L12	Type of Place Live	Replace	Possible identifier. Use L12_PUB.
R7_L16	Number Adults 18 and Older in Household	Replace	Possible identifier. Use C_NUMADULTHH_PUB
R7_L17	Number of Children Under 18 in Household	Drop	Possible identifier. Use C_NUMCHILDHH
R7_L19	Number Own Children Under 18 Living Inside Household	Drop	Possible identifier. Use C_NUMOWNCHILDHH_PUB
R7_L20	Own Children Under 18 Living Outside Household	Drop	Possible identifier. Use C_NUMOWNCHILDOHH_PUB
R7_L21	Number Own Children Under 18 Not Living in Household	Drop	Possible identifier. Use C_NUMOWNCHILDOHH_PUB
R7_L22	Children Living in Household Under Age Six	Drop	Small cell sizes; identifying
R7_LP23	Ever Served on Active Duty	Replace	Possible identifier. Use LP23_PUB.
R7_L23Aamt	Total 2018 Household income before taxes	Drop	Summarized in construct C_HHINC2018
R7_L23Ahop	How Often Paid in 2018	Drop	Summarized in construct C_HHINC2018
R7_L23B	How Many Days/Weeks/Months Rec'd Income in 2018	Drop	Summarized in construct C_HHINC2018
R7_L24	Household income in 2018	Replace	Possible identifier. Use C_HHINC2018_PUB.
R7_C_HhInc2018	2018 Household Income	Replace	Possible identifier. Use C_HHINC2018_PUB.
R7_C_Cohab	Cohabitation Status	Drop	Imputed version on file
R7_C_COHAB_IFLAG	Cohabitation Status, Imputation flag	Drop	Little analytic value
R7_C_RACE_I	Race, Imputed	Replace	Possible identifier. Use C_RACE_i_PUB.
R7_C_RACE_IFLAG	Race, Imputation Flag	Drop	Little analytic value
R7_C_BMI	Body Mass Index	Drop	Possible identifier. Use C_BMI_CAT_I
R7_C_BMI_cat	Body Mass Index Categories	Drop	Imputed version on file
R7_C_BMI_CAT_IFLAG	Body Mass Index Categories, Imputation Flag	Drop	Little analytic value

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_C_Hhsize	Household size	Drop	Imputed version on file
R7_C_HHSIZE_I	Household Size, Imputed	Replace	Possible identifier. Use C_HHSize_PUB.
R7_C_HHSIZE_IFLAG	Household Size, Imputation Flag	Drop	Little analytic value
R7_C_NumChildhh	Number Children in Household	Drop	Imputed version on file
R7_C_NUMCHILDHH_I	Number Children in Household, Imputed	Replace	Possible identifier. Use C_NumChildHH_PUB.
R7_C_NUMCHILDHH_IFLAG	Number Children in Household, Imputation Flag	Drop	IFLAG - No analytic value
R7_C_NumChildohh	Number Children Outside Household	Drop	Possible identifier. Use C_NUMCHILCOHH_PUB
R7_C_Numchildren	Number Children	Drop	Little analytic value
R7_c_numchildhh_pov	Number of Children for Poverty Level	Drop	Little analytical value; only used for poverty level calculation
R7_C_FedPovertyLevel	2018 Federal Poverty Level	Drop	Imputed version on file
R7_C_FEDPOVERTYLEVEL_IFLAG	2018 Federal Poverty Level, Imputation Flag	Drop	Little analytic value
R7_M2a_Rlshp	How Proxy Related to SP	Drop	Survey administration variable
R7_M10a	Level of Survey Satisfaction	Drop	Survey administration variable
R7_M11	Respondent or Proxy Interviewed	Drop	Survey administration variable
R7_M11a	Method for Conducting Interview	Drop	Survey administration variable
R7_M12	Respondent Assisted During Interview	Drop	Survey administration variable
R7_M13	How Assistant/Proxy Related to SP	Drop	Survey administration variable
R7_M14	Why Assist/Proxy Needed	Drop	Survey administration variable
R7_M15	Respondent Intellectually Capable of Responding	Drop	Survey administration variable
R7_M16	Respondent's Answers Accurate	Drop	Survey administration variable
R7_M17	Respondent Understood Questions	Drop	Survey administration variable
R7_M18	Interview tiring For Respondent	Drop	Survey administration variable
R7_M19	Respondent Had Diff Hearing	Drop	Survey administration variable
R7_M20	Respondents Hearing Diff Affected Interview	Drop	Survey administration variable

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_N_BFW_RECENT	Benefits forgone for work during most recent spell of eligibility as of interview date (From SSA administrative records)	Drop	Administration variable
R7_N_BIC_ATINT	Beneficiary identification code at interview (From SSA administrative records)	Drop	Administration variable
R7_N_BIC_ATSAMP	Beneficiary identification code at sampling (From SSA administrative records)	Drop	Administration variable
R7_N_DEPEN_ATINT	SSDI dependent benefits due at interview (From SSA administrative records)	Drop	See construct
R7_N_DEPENLASTMNTNTH	SSDI dependent benefit payment amount last month (From SSA administrative records)	Drop	See construct R7_N_DEPENLASTMNTNTH_PUB
R7_N_MFT	Master file type (From SSA administrative records)	DROP	Administration variable
R7_N_MTHSEARLENT	Months Since Earliest SSI or SSDI Entitlement Date (From SSA administrative records)	DROP	See construct
R7_N_MTHSRECENT	Months since start of most recent SSI and/or SSDI spell of eligibility (From SSA administrative records)	DROP	Survey administration variable
R7_N_ONSETDATE_SSDI	SSDI onset date (From SSA administrative records)	DROP	Survey administration variable
R7_N_ONSETDATE_SSI	SSI onset date (From SSA administrative records)	DROP	Survey administration variable
R7_N_PIAATINT	Primary Insurance Amount (PIA) (From SSA administrative records)	DROP	Survey administration variable
R7_N_SSDI_ATINT	SSDI benefit due at interview (From SSA administrative records)	DROP	Survey administration variable
R7_N_SSDILASTMNTNTH	SSDI payment last month (From SSA administrative records)	DROP	Survey administration variable

**Table H.1** (continued)

Variable	Label	File Status	Reasons for Drop/Replace
R7_N_SSI_ATINT	SSI benefit due at interview (From SSA administrative records)	DROP	Survey administration variable
R7_N_SSILASTMNTH	State and federal SSI payment last month (From SSA administrative records)	DROP	Survey administration variable
R7_N_STW_MNTHS_RECENT	STW months during most recent spell of eligibility (From SSA administrative records)	DROP	Survey administration variable
R7_N_TOC_ATINT	Type of claim at interview (From SSA administrative records)	DROP	Survey administration variable
R7_N_TOC_ATSAMP	Type of claim at sampling (From SSA administrative records)	DROP	Survey administration variable
R7_N_TOTSSBEN_ATINT	Total SSI and SSDI benefits due at interview (From SSA administrative records)	DROP	Survey administration variable
R7_N_TOTSSBENLASTMNTH	Total SSI and SSDI payment last month (From SSA administrative records)	DROP	Survey administration variable
R7_N_TTWMNTHS_ASSGN	Number of months since TTW ticket first assigned as of interview date (From SSA administrative records)	DROP	Survey administration variable
R7_N_TTWPART_ATINT	Ticket to Work participant at interview (From SSA administrative records)	DROP	Survey administration variable
R7_N_TTWPMT_TYPE	Ticket to Work payment type (From SSA administrative records)	DROP	Survey administration variable
R7_N_TTWPROV_TYPE	Ticket to Work provider type (From SSA administrative records)	DROP	Survey administration variable

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## **Appendix I**

### **Variables recoded for the public use file**

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**Table I.1. Variables recoded for the public use file**

Variable Name	Description of Recode
R7_caseid_pub	Caseid assigned that cannot be linked across survey rounds.
R7_C_INTAGE_PUB	Grouped by ranges for PUF (18-25, 26-40, 41-55, and 56 and older). Longitudinal cases use the Round 6 value for the PUF.
R7_A_PSU_Pub	Values scrambled for PUF. Frequency not displayed for this variable.
R7_C_MainCurJobSOC_PUB	Grouped as: Service Occupations; Sales, Office, and Administrative Occupations; and Production and Transportation. "Other" category created for sheltered workshop, management, business, computer/math, architecture/engineering, scientist, social service, legal, education, art/entertainment, healthcare, protective service, farming, construction, repair, and military professions.
R7_C_MainCurJobNAICS_PUB	Recoded to two digits: Manufacturing, Construction, Utilities, Mining, and Agriculture, Retail and Wholesale Trade, Administration, Management, Professional, Real Estate, Information, Finance, and Education, Health Care and Social Assistance. "Other" category created for transportation and warehousing, arts/entertainment, accommodation and food, other services, and public administration.
R7_C_MainCurJobRepSSA_PUB	Number of weeks before current job reported to SSA. Based on C5b, C5month, and C5bweek. Top coded at 4 for the PUF.
R7_C_MnthMainCurJob_PUB	Months employed at current main job. Based on year of interview, C4mth, and C4yr. Computed for each job listed. Top coded at 30 and bottom coded at 3 for the PUF.
R7_C_TotCurMnthPay_i_PUB	Total current monthly pay from all jobs combined. Summary of currently monthly pay variables. Top coded to the mean of top-coded values for the PUF.
R7_C_TotCurWkHrs_i_PUB	Total number of hours work per week on all current jobs combined. Based on summary of C8 for all jobs listed. Top coded at 40 and bottom coded at 8 for the PUF.
R7_C_TotCurHrMnth_i_PUB	Total number of hours worked per month on all jobs combined. Based on summary of C8 for all jobs listed. Top coded at 174 and bottom coded at 35 for the PUF.
R7_C_Main6MoJobSOC_PUB	Grouped as: Service Occupations; Sales, Office, and Administrative Occupations; and Production and Transportation. "Other" category created for sheltered workshop, management, business, computer/math, architecture/engineering, scientist, social service, legal, education, art/entertainment, healthcare, protective service, farming, construction, repair, and military professions.
R7_C_Main6MoJobNAICS_PUB	Recoded to two digits: Manufacturing, Construction, Utilities, Mining, and Agriculture, Retail and Wholesale Trade, Administration, Management, Professional, Real Estate, Information, Finance, and Education, Health Care and Social Assistance. "Other" category created for transportation and warehousing, arts/entertainment, accommodation and food, other services, and public administration.
R7_C_Tot6MoMnthPay_PUB	Total monthly pay from all jobs in last 6 months combined. Summary of currently monthly pay variables. Bottom coded to 913.5 and top coded to the mean of top coded values.
R7_C_Main6MoJobRepSSA_PUB	Top coded at 12 for the PUF

Table I.1 (continued)

Variable Name	Description of Recode
R7_d6yr_m_PUB	Main job held in 2018 computed by determining which job had most hours worked in 2018. Bottom coded at 2004 for the PUF.
R7_d8yr_m_PUB	Main job held in 2018 computed by determining which job had most hours worked in 2018.
R7_D16_m_PUB	Main job held in 2018 computed by determining which job had most hours worked in 2018. Top coded at 40 and bottom coded at 8 for the PUF.
R7_D17_m_PUB	Main job held in 2018 computed by determining which job had most hours worked in 2018. Bottom coded at 24 for the PUF
R7_C_MainJob2018SOC_PUB	Grouped as: Service Occupations; Sales, Office, and Administrative Occupations; and Production and Transportation. "Other" category created for sheltered workshop, management, business, computer/math, architecture/engineering, scientist, social service, legal, education, art/entertainment, healthcare, protective service, farming, construction, repair, and military professions.
R7_C_MainJob2018NAICS_PUB	Recoded to two digits: Manufacturing, Construction, Utilities, Mining, and Agriculture, Retail and Wholesale Trade, Administration, Management, Professional, Real Estate, Information, Finance, and Education, Health Care and Social Assistance. "Other" category created for transportation and warehousing, arts/entertainment, accommodation and food, other services, and public administration.
R7_C_MainJobMnthPay2018_PUB	Monthly pay from main 2018 job. Summary of currently monthly pay variables. Bottom coded to 117 and top coded to the mean of top coded values.
R7_C_TOT2018PAY_PUB	Top coded to the mean of top coded values for the PUF.
R7_C_TotHrs2018_PUB	Top coded at 2,080 and bottom coded at 520 for the PUF.
R7_C_UsWkHr2018_PUB	Top coded at 40 for the PUF.
R7_J11_10_PUB	Grouped J11_3, 4, 5, 6 with 10 (other) for PUF
R7_C_TotGovCashBen_PUB	Top coded to the mean of top coded values for the PUF.
R7_C_LSTMNTHPAY_PUB	Top coded to the mean of top coded values for the PUF.
R7_C_TotNonCashBen_PUB	Total non-cash benefits received. Summary of C_AmtFoodStamp and C_AmtOthGov. Top coded at 1,000 for the PUF.
R7_L1_I_PUB	Longitudinal cases use the Round 6 value for the PUF.
R7_L3_i_PUB	Grouped as: 1=Did not complete HS or GED; 2=HS or equivalent; 3=Some college (1-3 years); 4=4-year degree or higher; 5=Other for PUF.
R7_L4_PUB	Grouped as: 1=Did not complete HS or GED; 2=HS or equivalent; 3=Some college (1-3 years); 4=4-year degree or higher; 5=Other for PUF.
R7_L5_PUB	Grouped as: 1=Did not complete HS or GED; 2=HS or equivalent; 3=Some college (1-3 years); 4=4-year degree or higher; 5=Other for PUF.
R7_L8_I_PUB	Grouped as: 1 = Married; 2 = Widowed/Divorced/Separated; 3 = Never married for PUF.
R7_L11_I_PUB	Grouped as: 2 = You live with parents/spouse/partner, 6 = Other for PUF.
R7_L12_PUB	Grouped as 1= Single family home/Mobile home/Regular apartment, 13=Other for PUF.
R7_LP23_PUB	Masked with data swapping. Longitudinal cases use the Round 6 value for the PUF.
R7_C_HHINC2018_PUB	Top coded to the mean of top coded values for the PUF.

**Table I.1** (continued)

Variable Name	Description of Recode
R7_C_race_I_PUB	Grouped as 3 = Black, 5 = White, 7 = Alaskan Native or American Indian, Asian, Native Hawaiian or Pacific Islander, Native Hawaiian or Pacific Islander and other non-black; Black and White or Black and other race for PUF. Longitudinal cases use the Round 6 value for the PUF.
R7_C_HHSize_PUB	Top coded at 6 for the PUF.
R7_C_NumChildHH_PUB	Top coded at 1 for the PUF.
R7_C_NUMOWNCHILD_PUB	Top coded at 3 for the PUF.
R7_C_NUMOWNCHILDHH_PUB	Top coded at 1 for the PUF.
R7_C_NUMOWNCHILDDOHH_PUB	Top coded at 3 for the PUF.
R7_C_NUMNONOWNCHILDHH_PUB	Top coded at 3 for the PUF.
R7_C_NUMADULTHH_PUB	Top coded at 2 for the PUF.
R7_INCSOURCE1_PUB	Indicates sources received income from last month. K4, K6, and K14 grouped for PUF.
R7_INCSOURCE2_PUB	Indicates sources received income from last month. K4, K6, and K14 grouped for PUF.
R7_INCSOURCE3_PUB	Indicates sources received income from last month. K4, K6, and K14 grouped for PUF.
R7_INCSOURCE4_PUB	Indicates sources received income from last month. K4, K6, and K14 grouped for PUF.
R7_INCSOURCE5_PUB	Indicates sources received income from last month. K4, K6, and K14 grouped for PUF.
R7_INCSOURCE6_PUB	Indicates sources received income from last month. K4, K6, and K14 grouped for PUF.
R7_INCSOURCE7_PUB	Indicates sources received income from last month. K4, K6, and K14 grouped for PUF.
R7_N_DEPENLASTMnth_PUB	Top coded to the mean of top coded values for the PUF.
R7_N_MTHSEARLENT_PUB	From SSA administrative records. Bottom coded at 15 and top coded to the mean of top coded values for the PUF.
R7_N_MTHSRECENT_PUB	From SSA administrative records. Bottom coded at 14 and top coded to the mean of top coded values for the PUF.
R7_N_PIAATINT_PUB	From SSA administrative records. Top coded to the mean of top coded values for the PUF.
R7_N_SSDILastMnth_PUB	From SSA administrative records. Top coded to the mean of top coded values for the PUF.
R7_N_SSILastMnth_PUB	From SSA administrative records. Top coded to the mean of top coded values for the PUF.
R7_N_TotSSbenLastMnth_PUB	From SSA administrative records. Top coded to the mean of top coded values for the PUF.

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## **Appendix J**

### **Parameter estimates and standard errors for nonresponse models**

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**Table J.1. Variables in the location logistic propensity model in the RBS**

Main effects	Parameter estimate <sup>a</sup>	Standard error
<b>Variables in the location model, Representative Beneficiary Sample</b>		
<b>Number of phone numbers on file (PHONE)</b>		
One	0.692	0.471
Two	0.477	0.494
Three	1.325**	0.502
Four	1.123*	0.527
Five or more, or zero	Ref. cell	
<b>Beneficiary's age category (AGECAT)</b>		
Age in range 18 to 29 years	-0.416	0.275
Age in range 30 to 39 years	-0.308	0.240
Age in range 40 to FRA	Ref. cell	
<b>U.S. Census division (DIVISION)</b>		
Middle Atlantic	-0.619*	0.265
Not Middle Atlantic	Ref. cell	
<b>Beneficiary's race (RACE)</b>		
White	-1.050**	0.320
Black	-0.511	0.375
Not White or Black	Ref. cell	
<b>Identify of payee relative to beneficiary (REPREPAYEE)</b>		
Family	0.526	0.353
Not family	Ref. cell	
<b>Beneficiary title (SSI_SSDI) (ONLY SSI)</b>		
SSI only	-0.720*	0.358
Other	Ref. cell	
<b>Retirement destination county (CNTYRET)</b>		
The number of residents in county age 60 and older grew by 15 percent or more between the 2000 and 2010 censuses due to net migration	0.736*	0.316
County that doesn't have this attribute	Ref. cell	
<b>Two-factor interactions<sup>b</sup></b>		
(none)		

<sup>a</sup> It is standard statistical practice to include main effects in models when they are a component of a significant interaction effect. Parameter estimates with a cross (†) represent such main effects that were included in the model for this reason. One star (\*) and two stars (\*\*) represent significance at the 5% and 1% levels respectively.

<sup>b</sup> All combinations for the listed interactions that are not shown are part of the reference cells

FRA = full retirement age

**Table J.2. Variables in the cooperation logistic propensity model in the RBS**

Main Effects	Parameter estimate <sup>a</sup>	Standard error
<b>Variables in the cooperation model, Representative Beneficiary Sample</b>		
<b>Number of addresses on file (MOVE)</b>		
One	0.490*	0.206
Two	0.333	0.223
Three	0.153	0.215
Four	0.427	0.258
Five or more, or zero	Ref. cell	
<b>Ethnicity (HISPANIC)</b>		
Hispanic	0.601*	0.230
Not Hispanic	Ref. cell	
<b>Beneficiary's age category (AGECAT)</b>		
Age in range 18 to 29 years	-0.106	0.126
Age in range 30 to 39 years	-0.134	0.127
Age in range 40 to 49 years	-0.037	0.128
Age in range 50 to FRA	Ref. cell	
<b>Gender (GENDER)</b>		
Female	0.158	0.115
Male	Ref. cell	
<b>County with high levels of children living in poverty (CNTYCPOV)</b>		
Yes	0.806**	0.262
No	Ref. cell	
<b>County with high levels of persistent poverty (CNTYPPOV)</b>		
Yes	-0.546	0.282
No	Ref. cell	
<b>County with recreation-based economy (CNTYREC)</b>		
Yes	0.282	0.169
No	Ref. cell	
<b>Metropolitan status of county of residence of beneficiary (METRO)</b>		
Beneficiary resides in nonmetropolitan area	0.511**	0.143
Beneficiary resides in metropolitan statistical area (MSA) of less than 250,000	0.235	0.193
Beneficiary resides in metropolitan statistical area (MSA) of 250,000 or more	Ref. cell	
<b>Earnings category (EARNCAT)</b>		
Monthly DCF earnings above SGA <sup>b</sup> for three consecutive months in 2017 or 2018	-0.489	0.313
Gross annual DCF earnings above three times SGA in 2017 or 2018	0.304	0.294
Gross annual DCF earnings above \$0 in 2017 or 2018	0.218	0.242
No annual DCF earnings in 2017 or 2018	Ref. cell	

**Table J.2** (continued)

Main Effects	Parameter estimate <sup>a</sup>	Standard error
<b>Two-Factor Interactions<sup>c</sup></b>		
<b>CNTYCPOV * AGECAT</b>		
County with high levels of child in poverty * Age in range 18 to 29	-0.846**	0.250
County with high levels of children in poverty * Age in range 30 to 39	-0.206	0.265
County with high levels of children in poverty * Age in range 40 to 49	-1.016**	0.282
Beneficiary missing one or both of these attributes	Ref. cell	

<sup>a</sup> It is standard statistical practice to include main effects in models when they are a component of a significant interaction effect. Parameter estimates with a cross (†) represent such main effects that were included in the model for this reason. One star (\*) and two stars (\*\*) represent significance at the 5% and 1% levels respectively.

<sup>b</sup> Non-blind substantial gainful activity, or \$1,170 in 2017, \$1,180 in 2018, and \$1,220 in 2019.

<sup>c</sup> All combinations for the listed interactions that are not shown are part of the reference cells

FRA = full retirement age

**Table J.3. Variables in the location logistic propensity model in the cross-sectional SWS**

Main effects	Parameter estimate <sup>a</sup>	Standard error
<b>Variables in the location model, Successful Worker Sample</b>		
<b>Extract (EXTRACT)</b>		
Age in range 50 to FRA	Ref. cell	
Recipient of SSI (concurrent or SSI only)	Ref. cell	
<b>County with government-dependent economy (CNTYGOV)</b>		
County that doesn't have this attribute	Ref. cell	
<b>Two-factor interactions<sup>b</sup></b>		
(none)		

<sup>a</sup> It is standard statistical practice to include main effects in models when they are a component of a significant interaction effect. Parameter estimates with a cross (†) represent such main effects that were included in the model for this reason. One star (\*) and two stars (\*\*) represent significance at the 5% and 1% levels respectively.

<sup>b</sup> All combinations for the listed interactions that are not shown are part of the reference cells.

FRA = full retirement age

**Table J.4. Variables in the location logistic propensity model in the cross-sectional SWS**

Main effects	Parameter estimate <sup>a</sup>	Standard error
<b>Variables in the location model, Successful Worker Sample</b>		
<b>Extract (EXTRACT)</b>		
First extract	0.612**	0.193
Second extract	0.351	0.197
Third extract	-0.235	0.206
Fourth extract	0.000	0.182
Fifth extract	-0.362*	0.174
Sixth extract	-0.226	0.181
Seventh extract	Ref. cell	
<b>Number of phone numbers on file (PHONE)</b>		
One	-0.663**	0.164
Two	-0.348*	0.156
Three	0.097	0.151
Four	-0.040	0.148
Five or more, or zero	Ref. cell	
<b>Number of addresses on file (MOVE)</b>		
One	-0.276	0.150
Two	-0.021	0.131
Three or more, or zero	Ref. cell	
<b>Beneficiary's age category (AGECAT)</b>		
Age in range 18 to 29 years	-0.282*	0.116
Age in range 30 to FRA	Ref. cell	
<b>Beneficiary's living situation (LIVING)</b>		
Beneficiary lives alone	0.342	0.245
Beneficiary lives with family, others, in an institution, or situation unknown	Ref. cell	
<b>County with government-dependent economy (CNTYGOV)</b>		
Yes	0.431**	0.163
No	Ref. cell	
<b>Beneficiary title (SSI_SSDI)</b>		
SSDI only recipient	1.027**	0.366
Recipient of SSI (concurrent or SSI only)	Ref. cell	
<b>County with nonspecialized-dependent economy (CNTYNONSP)</b>		
County with nonspecialized-dependent economy	0.312**	0.119
County that doesn't have this attribute	Ref. cell	
<b>Earnings category (EARNCAT)</b>		
Monthly DCF earnings above SGA <sup>b</sup> for three consecutive months in 2017 or 2018	-0.069	0.217

**Table J.4** (continued)

Main effects	Parameter estimate <sup>a</sup>	Standard error
Gross annual DCF earnings above three times SGA in 2017 or 2018	0.200	0.281
Gross annual DCF earnings above \$0 in 2017 or 2018	-0.414	0.319
No annual DCF earnings in 2017 or 2018	Ref. cell	
<b>Indicator whether beneficiary and applicant for benefits are in same zip code (PDZIPSAME)</b>		
Applicant and beneficiary live in same zip code	1.188**	0.347
Applicant and beneficiary live in different zip code	1.134**	0.373
Unknown	Ref. cell	
<b>Beneficiary's race</b>		
Non-Hispanic Black	0.486**	0.120
Not non-Hispanic black, or race unknown	Ref. cell	
<b>Metropolitan status of county of residence of beneficiary (METRO)</b>		
Beneficiary resides in metropolitan statistical area (MSA) of less than 250,000	-0.232	0.134
Beneficiary resides in nonmetropolitan area adjacent to large metropolitan area	0.449	0.261
Beneficiary resides in nonmetropolitan area adjacent to small, medium, or no metropolitan area	0.416	0.251
Beneficiary resides in metropolitan statistical area (MSA) of more than 250,000	Ref. cell	
<b>Metropolitan status of county of residence of beneficiary (METRO)</b>		
Beneficiary resides in nonmetropolitan area not adjacent to metropolitan area	-0.232	0.134
Beneficiary resides in nonmetropolitan area adjacent to large metropolitan area	0.449	0.261
Beneficiary resides in nonmetropolitan area adjacent to medium or small metropolitan area, or not adjacent to a metropolitan area	0.416	0.251
Beneficiary resides in metropolitan statistical area (MSA) of more than 250,000	Ref. cell	
<b>Two-factor interactions<sup>c</sup></b>		
<b>LIVING * MOVE</b>		
Not living alone * One address	-0.510*	0.229
Not living alone * Two addresses	0.424	0.228
Successful worker missing one or both of these attributes	Ref. cell	
<b>RACE * MOVE</b>		
Not non-Hispanic black * One address	0.837**	0.240
Not non-Hispanic black * Two addresses	0.515	0.264
Successful worker missing one or both of these attributes	Ref. cell	

<sup>a</sup> It is standard statistical practice to include main effects in models when they are a component of a significant interaction effect. Parameter estimates with a cross (†) represent such main effects that were included in the model for this reason. One star (\*) and two stars (\*\*) represent significance at the 5% and 1% levels respectively.

<sup>b</sup> Non-blind substantial gainful activity, or \$1,170 in 2017, \$1,180 in 2018, and \$1,220 in 2019.

<sup>c</sup> All combinations for the listed interactions that are not shown are part of the reference cells.

FRA = full retirement age

**Table J.5. Variables in the cooperation logistic propensity model in the cross-sectional SWS**

Main Effects	Parameter estimate <sup>a</sup>	Standard error
<b>Variables in the cooperation model, Successful Worker Sample</b>		
<b>Extract (EXTRACT)</b>		
First extract	0.790**	0.194
Second extract	0.483**	0.130
Third extract	0.151	0.131
Fourth extract	0.111	0.136
Fifth extract	-0.056	0.147
Sixth extract	0.135	0.129
Seventh extract	Ref. cell	
<b>Beneficiary's age category (AGECAT)</b>		
Age in range 18 to 29 years	-0.231	0.168
Age in range 30 to 39 years	-0.368**	0.074
Age in range 40 to 49 years	-0.225*	0.091
Age in range 50 to FRA	Ref. cell	
<b>Beneficiary's disability category (DISABILITY)</b>		
Deafness	-0.475*	0.219
Other disability excluding deafness, or disability unknown	Ref. cell	
<b>Identity of payee relative to beneficiary (REPREPAYEE)</b>		
Beneficiary received payments himself/herself	0.222*	0.111
Beneficiary did not receive payments himself/herself, or unknown	Ref. cell	
<b>Indicator whether beneficiary and applicant for benefits are in same zip code (PDZIPSAME)</b>		
Applicant and beneficiary live in same zip code	0.202**	0.066
Applicant and beneficiary live in different zip code, or no information	Ref. cell	
<b>DCF earnings category in 2017-2018 (EARNCAT)</b>		
<b>Monthly DCF earnings above SGA<sup>b</sup> for three consecutive months in 2017 or 2018</b>		
Gross annual DCF earnings above three times SGA in 2017 or 2018	0.177	0.175
Gross annual DCF earnings above \$0 in 2017 or 2018	0.463*	0.226
No annual DCF earnings in 2017 or 2018	Ref. cell	
<b>ETHNICITY</b>		
Non Hispanic	Ref. cell	
Hispanic	-0.375	0.140
<b>County with high levels of poverty (CNTYHPOV)</b>		
County with high levels of poverty	0.267	0.136
County that doesn't have this attribute	Ref. cell	

**Table J.5** (continued)

Main Effects	Parameter estimate <sup>a</sup>	Standard error
<b>Two-Factor Interactions<sup>c</sup></b>		
<b>AGECAT * EXTRACT</b>		
Age in range 30 to FRA not in EXTRACT1	0.386*	0.188
Beneficiary missing one or both of these attributes	Ref. cell	

<sup>a</sup> It is standard statistical practice to include main effects in models when they are a component of a significant interaction effect. Parameter estimates with a cross (†) represent such main effects that were included in the model for this reason. One star (\*) and two stars (\*\*) represent significance at the 5% and 1% levels respectively.

<sup>b</sup> Non-blind substantial gainful activity, or \$1,170 in 2017, \$1,180 in 2018, and \$1,220 in 2019.

<sup>c</sup> All combinations for the listed interactions that are not shown are part of the reference cells

FRA = full retirement age

**Table J.6. Variables in the location logistic propensity model in the longitudinal SWS, in Round 7 beneficiary frame**

Main effects	Parameter estimate <sup>a</sup>	Standard error
<b>Variables in the location model, Successful Worker Sample</b>		
<b>Extract (EXTRACT)</b>		
Fifth extract	0.381	0.220
Sixth extract	0.538	0.282
First through fourth or seventh extract	Ref. cell	
<b>Number of phone numbers on file (PHONE)</b>		
Zero	1.056**	0.384
One	0.373	0.164
Two	0.163	0.156
Three	-0.192	0.151
Four	-0.008	0.148
Five or more	Ref. cell	
<b>U.S. Census region (REGION)</b>		
Midwest	-0.428*	0.186
West	-0.717**	0.174
South	-0.479*	0.227
Northeast	Ref. cell	
<b>Beneficiary's age category (AGECAT)</b>		
Age in range 18 to 29 years	-0.952	0.095
Age in range 30 to 39 years	-1.079*	0.014
Age in range 40 to 49 years	-0.040	0.945
Age in range 50 to FRA	Ref. cell	
<b>Beneficiary's race (RACE)</b>		
Black	0.409*	0.193
Not black, or unknown	Ref. cell	
<b>Indicator whether beneficiary and applicant for benefits are in same zip code (PDZIPSAME)</b>		
Applicant and beneficiary live in same zip code	-0.951**	0.344
Applicant and beneficiary live in different zip code, or no information	Ref. cell	
<b>Beneficiary title (SSI_SSDI)</b>		
SSDI only recipient	1.068**	0.349
Recipient of SSI (concurrent or SSI only)	Ref. cell	

Table J.6 (continued)

Main effects	Parameter estimate <sup>a</sup>	Standard error
<b>Metropolitan status of county of residence of beneficiary (METRO)</b>		
Beneficiary resides in metropolitan statistical area (MSA) of less than 250,000	-0.923**	0.250
Beneficiary resides in metropolitan statistical area (MSA) of 250,000-999,999	-0.261	0.183
Beneficiary resides in metropolitan statistical area (MSA) of 1 million or more, or in nonmetropolitan area	Ref. cell	
<b>County with government-dependent economy (CNTYGOV)</b>		
Yes	0.295	0.419
No	Ref. cell	
<b>Categorized percentage of housing units in county that do not use fuel (CNTYNOFUEL)</b>		
Less than 0.4 percent	0.286	0.178
Between 0.4 and 0.6 percent	0.403	0.210
More than 0.6 percent	Ref. cell	
<b>Two-factor interactions<sup>b</sup></b>		
<b>CNTYGOV * AGE CAT</b>		
Not a government-dependent economy * Age 18 to 29	0.876	0.611
Not a government-dependent economy * Age 30 to 39	0.999*	0.503
Not a government-dependent economy * Age 40 to 49	-0.125	0.632
Successful worker missing one or both of these attributes	Ref. cell	

<sup>a</sup> It is standard statistical practice to include main effects in models when they are a component of a significant interaction effect. Parameter estimates with a cross (†) represent such main effects that were included in the model for this reason. One star (\*) and two stars (\*\*) represent significance at the 5% and 1% levels respectively.

<sup>b</sup> All combinations for the listed interactions that are not shown are part of the reference cells.

FRA = full retirement age

**Table J.7. Variables in the cooperation logistic propensity model in the longitudinal SWS, in Round 7 frame**

Main Effects	Parameter estimate <sup>a</sup>	Standard error
<b>Variables in the cooperation model, Successful Worker Sample</b>		
<b>Extract (EXTRACT)</b>		
First extract	0.270*	0.133
Third extract	0.673*	0.297
Seventh extract	0.438*	0.170
Second, fourth, fifth, or sixth extract	Ref. cell	
<b>Number of addresses on file (MOVE)</b>		
One	0.544	0.342
Two	-0.131	0.357
Three	0.177	0.308
Four or more	Ref. cell	
<b>Beneficiary's age category (AGECAT)</b>		
Age in range 18 to 29 years	-0.634**	0.129
Age in range 30 to 39 years	-0.584**	0.121
Age in range 40 to 49 years	-0.242*	0.122
Age in range 50 to FRA	Ref. cell	
<b>Beneficiary's race (RACE)</b>		
Non-Hispanic Black	0.206	0.128
Not non-Hispanic black, or race unknown	Ref. cell	
<b>Beneficiary's living situation (LIVING)</b>		
Beneficiary lives with others	-0.503	0.295
Beneficiary lives with family, others, in an institution, or situation unknown	Ref. cell	
<b>Beneficiary title (SSI_SSDI)</b>		
Recipient of SSDI and SSI	0.820*	0.360
Recipient of SSI (concurrent or SSI only)	Ref. cell	
<b>U.S. Census region or division (REGION or DIVISION)</b>		
Middle Atlantic	0.368**	0.120
West	0.280*	0.126
South	0.235*	0.118
Northeast	Ref. cell	
<b>Retirement destination county (CNTYRET)</b>		
The number of residents in county age 60 and older grew by 15 percent or more between the 2000 and 2010 censuses due to net migration	-0.430**	0.166
County does not have this attribute	Ref. cell	

Table J.6 (continued)

Main Effects	Parameter estimate <sup>a</sup>	Standard error
<b>County that doesn't have this attribute</b>		
<b>SSI_SSDI * EXTRACT</b>		
Extracts 1, 2, 4-7 * SSI only or SSDI only	-0.484	0.320
Beneficiary missing one or both of these attributes	Ref. cell	
<b>SSI_SSDI * MOVE</b>		
One address * SSI only or SSDI only	-0.551	0.365
Two addresses * SSI only or SSDI only	-0.107	0.370
Three or more addresses * SSI only or SSDI only	-0.559	0.322
Beneficiary missing one or both of these attributes	Ref. cell	

<sup>a</sup> It is standard statistical practice to include main effects in models when they are a component of a significant interaction effect. Parameter estimates with a cross (†) represent such main effects that were included in the model for this reason. One star (\*) and two stars (\*\*) represent significance at the 5% and 1% levels respectively.

<sup>b</sup> All combinations for the listed interactions that are not shown are part of the reference cells

FRA = full retirement age

## **Appendix K**

**Sudaan parameters for national estimates from  
the NBS-general waves Round 7 sample**

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**SUDAAN EXAMPLE**

```
PROC DESCRIPT data="SASdatasetname" filetype=sas design=wr;
nest      A_STRATA A_PSU / missunit;
WEIGHT                                         "WEIGHT VARIABLE" ;
var      "analysis variables" ;
print nsum wsum mean semean deffmean / style=nchs
wsumfmt=f10.0 meanfmt=f8.4 semeanfmt=f8.4 deffmeanfmt=f8.4;
title "NBS National Estimates, SSI and SSDI beneficiaries";
```

**SAS EXAMPLE**

```
PROC SURVEYMEANS data="SASdatasetname";
strata A_STRATA;
cluster A_PSU;
weight "weight variable";
var "analysis variables";
title "NBS National Estimates, SSI and SSDI successful workers";
```

**WEIGHT VARIABLES USED FOR CROSS-SECTIONAL ESTIMATES**

**RBS: Wtr7\_ben**  
**Cross-sectional SWS: Wtr7\_cssws**  
**Longitudinal SWS: Wtr7\_ingsws**  
**Combined RBS and cross-sectional SWS: Wtr7\_com**

**NEST VARIABLES USED FOR CROSS-SECTIONAL ESTIMATES****A\_STRATA**

1. Clustered samples for RBS and SWS
  - a. A\_STRATA = 1000 for non-certainty PSUs
  - b. A\_STRATA = 2110 for Los Angeles County certainty PSU, SSDI only, first extract
  - c. A\_STRATA = 2210 for Los Angeles County certainty PSU, SSI, first extract
  - d. A\_STRATA = 3110 for Cook County certainty PSU, SSDI only, first extract
  - e. A\_STRATA = 3210 for Cook County certainty PSU, SSI, first extract

A\_STRATA is defined similarly in the clustered sample certainty PSUs for other extracts, where the third digit is replaced by the extract number

2. Unclustered samples for SWS
  - a. A\_STRATA = 4110 for SSDI only, in PSU, first extract
  - b. A\_STRATA = 4210 for SSI, in PSU, first extract

- c. A\_STRATA = 5110 for SSDI only, not in PSU, first extract
- d. A\_STRATA = 5210 for SSI, not in PSU, first extract

A\_STRATA is defined similarly in the unclustered sample for other extracts, where the third digit is replaced by the extract number

### **A\_PSU**

- 1. Clustered samples for RBS

A\_PSU=FIPSCODE-derived identifier for PSU or, in Los Angeles or Cook county, SSU

- 2. Clustered samples for cross-sectional or longitudinal SWS

A\_PSU=FIPSCODE-derived identifier for PSU or, in Los Angeles or Cook county, MPRID

- 3. Unclustered samples for cross-sectional or longitudinal SWS

A\_PSU=MPRID

### **NOTES**

- 1. Before each SUDAAN procedure, sort by A\_STRATA and A\_PSU
- 2. Use SUDAAN's SUBPOPN statement to define the subpopulation for which estimates are wanted. In SAS, use the DOMAIN statement

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