MEPS HC-049 1998 Long Term Care Supplemental Public Use File

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A. Data Use Agreement

Individual identifiers have been removed from the micro-data contained in these files. Nevertheless, under sections 308 (d) and 903 (c) of the Public Health Service Act (42 U.S.C. 242m and 42 U.S.C. 299 a-1), data collected by the Agency for Healthcare Research and Quality (AHRQ) and/or the National Center for Health Statistics (NCHS) may not be used for any purpose other than for the purpose for which they were supplied; any effort to determine the identity of any reported cases is prohibited by law.

Therefore in accordance with the above referenced Federal Statute, it is understood that:

- 1. No one is to use the data in this data set in any way except for statistical reporting and analysis; and
- 2. If the identity of any person or establishment should be discovered inadvertently, then (a) no use will be made of this knowledge, (b) the Director Office of Management AHRQ will be advised of this incident, (c) the information that would identify any individual or establishment will be safeguarded or destroyed, as requested by AHRQ, and (d) no one else will be informed of the discovered identity; and
- 3. No one will attempt to link this data set with individually identifiable records from any data sets other than the Medical Expenditure Panel Survey or the National Health Interview Survey.

By using these data you signify your agreement to comply with the above stated statutorily based requirements with the knowledge that deliberately making a false statement in any matter within the jurisdiction of any department or agency of the Federal Government violates Title 18 part 1 Chapter 47 Section 1001 and is punishable by a fine of up to \$10,000 or up to 5 years in prison.

The Agency for Healthcare Research and Quality requests that users cite AHRQ and the Medical Expenditure Panel Survey as the data source in any publications or research based upon these data.

B. Background

The Medical Expenditure Panel Survey (MEPS) provides nationally representative estimates of health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian non-institutionalized population. MEPS is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS).

MEPS is a family of three surveys. The Household Component (HC) is the core survey and forms the basis for the Medical Provider Component (MPC) and part of the Insurance Component (IC). Together these surveys yield comprehensive data that provide national estimates of the level and distribution of health care use and expenditures, support health services research, and can be used to assess health care policy implications.

MEPS is the third in a series of national probability surveys conducted by AHRQ on the financing and use of medical care in the United States. The National Medical Care Expenditure Survey (NMCES, also known as NMES-1) was conducted in 1977 and the National Medical Expenditure Survey (NMES-2) in 1987. Since 1996, MEPS continues this series with design enhancements and efficiencies that provide a more current data resource to capture the changing dynamics of the health care delivery and insurance system.

The design efficiencies incorporated into MEPS are in accordance with the Department of Health and Human Services (DHHS) Survey Integration Plan of June 1995, which focused on consolidating DHHS surveys, achieving cost efficiencies, reducing respondent burden, and enhancing analytical capacities. To advance these goals, MEPS includes linkage with the National Health Interview Survey (NHIS) - a survey conducted by NCHS from which the sample for the MEPS HC is drawn - and enhanced longitudinal data collection for core survey components. The MEPS HC augments NHIS by selecting a sample of NHIS respondents, collecting additional data on their health care expenditures, and linking these data with additional information collected from the respondents' medical providers, employers, and insurance providers.

1.0 Household Component

The MEPS HC, a nationally representative survey of the U.S. civilian non-institutionalized population, collects medical expenditure data at both the person and household levels. The HC collects detailed data on demographic characteristics, health conditions, health status, use of medical care services, charges and payments, access to care, satisfaction with care, health insurance coverage, income, and employment.

The HC uses an overlapping panel design in which data are collected through a preliminary contact followed by a series of five rounds of interviews over a 2 ½-year period. Using computer-assisted personal interviewing (CAPI) technology, data on medical expenditures and use for two calendar years are collected from each household. This series of data collection rounds is launched each subsequent year on a new sample

of households to provide overlapping panels of survey data and, when combined with other ongoing panels, will provide continuous and current estimates of health care expenditures.

The sampling frame for the MEPS HC is drawn from respondents to NHIS. NHIS provides a nationally representative sample of the U.S. civilian non-institutionalized population, with oversampling of Hispanics and blacks.

2.0 Medical Provider Component

The MEPS MPC supplements and/or replaces information on medical care events reported in the MEPS HC by contacting medical providers and pharmacies identified by household respondents. The MPC sample includes all home health agencies and pharmacies reported by HC respondents. Office-based physicians, hospitals, and hospital physicians are also included in the MPC but may be subsampled at various rates, depending on burden and resources, in certain years.

Data are collected on medical and financial characteristics of medical and pharmacy events reported by HC respondents. The MPC is conducted through telephone interviews and record abstraction.

3.0 Insurance Component

The MEPS IC collects data on health insurance plans obtained through private and public-sector employers. Data obtained in the IC include the number and types of private insurance plans offered, benefits associated with these plans, premiums, contributions by employers and employees, eligibility requirements, and employer characteristics.

Establishments participating in the MEPS IC are selected through three sampling frames:

- A list of employers or other insurance providers identified by MEPS HC respondents who report having private health insurance at the Round 1 interview.
- A Bureau of the Census list frame of private sector business establishments.
- The Census of Governments from Bureau of the Census.

To provide an integrated picture of health insurance, data collected from the first sampling frame (employers and insurance providers identified by MEPS HC respondents) are linked back to data provided by those respondents. Data from the two Census Bureau sampling frames are used to produce annual national and state estimates of the supply and cost of private health insurance available to American workers and to evaluate policy issues pertaining to health insurance. National estimates of employer contributions to

group insurance from the MEPS IC are used in the computation of Gross Domestic Product (GDP) by the Bureau of Economic Analysis.

The MEPS IC is an annual panel survey. Data are collected from the selected organizations through a prescreening telephone interview, a mailed questionnaire, and a telephone follow-up for nonrespondents.

4.0 Survey Management

MEPS data are collected under the authority of the Public Health Service Act. They are edited and published in accordance with the confidentiality provisions of this act and the Privacy Act. NCHS provides consultation and technical assistance.

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports, microdata files and compendiums of tables. Data are released through MEPSnet, an online interactive tool developed to give users the ability to statistically analyze MEPS data in real time. Summary reports and compendiums of tables are released as printed documents and electronic files. Microdata files are released on electronic files.

Selected printed documents are available through the AHRQ Publications Clearinghouse. Write or call:

AHRQ Publications Clearinghouse
Attn: (publication number)
P.O. Box 8547
Silver Spring, MD 20907
800-358-9295
410-381-3150 (callers outside the United States only)
888-586-6340 (toll-free TDD service; hearing impaired only)

Be sure to specify the AHRQ number of the document you are requesting.

Additional information on MEPS is available from the MEPS project manager or the MEPS public use data manager at the Center for Cost and Financing Studies, Agency for Healthcare Research and Quality.

C. Technical and Programming Information

1.0 General Information

This documentation describes a series of MEPS variables that were obtained for calendar year 1998. This data release is intended to supplement the MEPS variables previously released for 1998. In order to use these variables, researchers will need to link them to the 1998 Consolidated Full-Year Use and Expenditure File (HC-028) which contains all previously released 1998 person level data including demographic and socio-economic information. Please refer to the HC-028 documentation for further information.

The following documentation offers a brief overview of the types and levels of data provided, the content and structure of the file, and programming information. It contains the following sections:

- Data File Information
- Variable-Source Crosswalk (Section D)

A codebook of all the variables included in this 1998 Long Term Care Supplemental File is provided in a separate file (H49CB.PDF).

A database of all MEPS products released to date and a variable locator indicating the major MEPS HC data items on public use files (including weights) that have been released to date can be found at the following link on the MEPS website: www.meps.ahrq.gov/.

2.0 Data File Information

This 1998 long term care supplemental variable public use data set consists of one person-level file. Unweighted frequencies are provided for each variable on the files. In conjunction with the weight variable (WTDPER98) provided on MEPS HC-028: 1998 Full Year Consolidated Data File, data for these persons can be used to make estimates for the civilian non-institutionalized U. S. population for 1998. The records on this data release can be linked to all other 1998 MEPS-HC public use data files by using the sample person identifier (DUPERSID). Panel 2 cases (Panel 98=2) can be linked back to the 1997 MEPS-HC public use data files. A longitudinal weight to facilitate Panel 2, 1997-98 analysis can be found on HC-035.

2.1 Codebook Structure

The codebook and data file sequence lists variables in the following order:

• Long Term Care variables

2.2 Reserved Codes

The following reserved code values are used:

VALUE DEFINITION

-1 INAPPLICABLE Question was not asked due to skip pattern

-7 REFUSED Question was asked and respondent refused to answer

question

-8 DK Question was asked and respondent did not know answer

-9 NOT

ASCERTAINED Interviewer did not record the data

2.3 Codebook Format

This codebook describes an ASCII data set and provides the following programming identifiers for each variable:

IDENTIFIER DESCRIPTION

Name Variable name (maximum of 8 characters)

Description Variable descriptor (maximum 40 characters)

Format Number of bytes

Type of data: numeric (indicated by NUM) or character (indicated by

CHAR)

Start Beginning column position of variable in record

End Ending column position of variable in record

2.4 Variable Naming

In general, variable names reflect the content of the variable, with an eight-character limitation. Edited variables end in an X, and are so noted in the variable label. The last two characters in round-specific variables denote the rounds of data collection, Round 3, 4, or 5 of Panel 2 and Round 1, 2, or 3 of Panel 3. Unless otherwise noted, variables that end in 98 represent status as of December 31, 1998.

Variables contained in this delivery were derived either from the questionnaire itself or from the CAPI. The source of each variable is identified in the section of the documentation entitled "Section D. Variable-Source Crosswalk." Sources for each variable are indicated in one of four ways: (1) variables derived from CAPI or assigned in sampling are so indicated; (2) variables derived from complex algorithms associated with re-enumeration are labeled "RE Section"; (3) variables that are collected by one or more specific questions in the instrument have those question numbers listed in the Source column; (4) variables constructed from multiple questions using complex algorithms are labeled "Constructed."

2.5 File Contents

2.5.1 Long Term Care (LTC) Variables (PANELRN - NUM_COND)

The MEPS LTC supplemental questionnaire is used to collect detailed information on individuals who have activity or functional limitations, hearing or vision impairments, and special equipment requirements. It includes persons in the second round of the 1998 survey (Round 4 of Panel 2 and Round 2 of Panel 3) who were flagged for one or more sections of the LTC supplement based on their responses to screener questions in the health status section of the household survey questionnaire. The health status flags could have been set in Round 3 or 4 for Panel 2, and in Round 1 or 2 for Panel 3.

The LTC supplement consists of nine series of questions about functional limitations and the use of special equipment. Each series of questions and the associated question numbers in the LTC supplement are shown below for persons who were eligible for some or all questions in a specific series:

Sections of LTC Supplement			
Activities of Daily Living	asks a full ADL battery (LC1 – LC11) for individuals who		
(ADL) Series	were flagged as having an ADL limitation		
Instrumental Activities of	asks a full IADL battery (LC12 – LC19) for individuals who		
Daily Living (IADL) Series	were flagged as having an IADL limitation		
Memory Series	asks questions about person's memory (LC20 – LC21) for		
	individuals flagged as having a cognitive limitation		
Child Series	asks a series of questions about children's delays, problems in		
	school, and functioning (LC22 – LC29) for children flagged		
	as having a limitation		

Sections of LTC Supplement			
Communication Series	asks a series of questions about a person's ability to		
	communicate and understand language (LC30 – LC33) for		
	individuals flagged as having a limitation and who did not		
	answer the LTC supplement for themselves		
Work Series	asks questions about work accommodations (LC34 – LC36) if		
	flagged as having a relevant limitation and age 16 or older		
Transportation Series	asks information about driving, limitations and reliance on		
	other individuals or special forms of transportation (LC37 –		
	LC40) if flagged as having a relevant limitation		
Assisted Technology Series	asks about use of different kinds of special equipment or		
	technology (LC41 – LC42) if person has a relevant limitation		
General Series	asks about the timing of a limitation and use of community		
	services (LC43-LC47) if eligible for any section of the LTC		
	supplement		

Eligibility for each series of questions is determined by summary variables coded as either "1" (eligible for series) or "0" (ineligible for series). These summary variables are based on age and responses to selected questions in the health status section of the household questionnaire. The nine sections of the LTC questionnaire and associated summary variables are shown below:

Eligibility Variables for Individual Series		
Activities of Daily Living	ADLQ = 1	
(ADL) series		
Instrumental Activities of	IADLQ = 1	
Daily Living (IADL) series		
Memory Series	COGQ = 1	
Child Series	CHILDQ = 1 or CHLDLT6Q = 1 or CHLDGE6Q = 1 or	
	CHLD613Q = 1. The last three variables determine	
	eligibility for questions based on age < 6, \(\)=>6, or 6-13.	
Communication Series	ADLQ=1 or IADLQ=1 or WHSLIMQ=1	
	(work/household/school limitations), or SOCLIMQ=1 (social	
	limitations), or COGQ=1, or HEARQ=1 (hearing limitation),	
	or CHLDLE4Q=1 (child ¾ with limitations), or	
	SCHLATTQ=1 (child with school attendance limitation); and	
	person did not respond for his or herself	
Work Series	WORKQ = 1	
Transportation Series	TRANSAQ = 1; $TRANSBQ = 1$	
Assisted Technology Series	ANYLTCQ = 1	
General Series	GENQ = 1	

Based on the identifiers of eligibility, logical editing was performed on variables in the LTC supplemental questionnaire. Editing was fairly minor. It mainly consisted of

editing responses to conform to questionnaire skip patterns and consistency with the eligibility variables.

Several caveats should be noted when using this file:

- Individuals who were not in the second round of 1998 (Round 4 of Panel 2 and Round 2 of Panel 3) are not represented in this file. For example, a person who was eligible for the LTC supplement but died before it was fielded would not be represented in these data. As a consequence, the data can only be generalized to individuals who were in the survey at the time that the LTC questionnaire was asked.
- A small number of individuals who only had social limitations, but not other limitations or impairments, did not receive the questions in the LTC supplement that they were supposed to receive. These individuals can be identified as having SOCONLY=1.
- Analysts interested in studying communication, work accommodations, community services, and use of assisted technology will notice that some of the individual variables have low usual source of health care levels (e.g., SERVSCTX). Use of these measures will require analysts to aggregate the individual items into summary variables.
- All medical conditions (three-digit ICD-9 codes) associated with long term care problems and limitations of persons in the LTC supplement have been added to the LTC file. The medical conditions were abstracted from 1997 and 1998 Medical Conditions files. More information on these conditions can be obtained by using the encrypted condition code IDs (CONDIX1-17) to link to the MEPS Medical Conditions files. (See Attachment A: SAS Job for linking the LTC file with the Conditions file Example.)
- There are two situations in which persons on the LTC file might have information in the Medical Conditions files even though their encrypted condition code IDs (CONDIX1-17) have a value of minus 1. The first situation applies to persons who did not reply to the LTC supplement, or who did reply but no conditions were linked to the Medical Conditions files as a result. The second situation applies to persons on the file who did reply to the LTC supplement and had one or more conditions linking to the Medical Conditions files. Persons in either of these situations may have conditions in the Medical Conditions file(s) that are unrelated to their LTC limitations.



LONG TERM CARE (LTC) VARIABLES

VARIABLE	DESCRIPTION	SOURCE
DUID	DWELLING UNIT ID	ASSIGNED IN SAMPLING
PID	PERSON NUMBER	ASSIGNED IN SAMPLING OR BY CAPI
DUPERSID	PERSON ID (DUID+PID)	ASSIGNED IN SAMPLING
PANELRN	PANEL/ROUND INDICATOR FOR LTC DATA	CONSTRUCTED
IADLQ	ELIGIBLE FOR IADL SERIES	CONSTRUCTED
COGQ	ELIGIBLE FOR MEMORY SERIES	CONSTRUCTED
SOCLIMQ	ELIGIBLE FOR SOCIAL LIMITATIONS SECTION	CONSTRUCTED
FUNCLIMQ	ELIGIBLE FOR FUNCTIONAL LIMIT QUESTIONS	CONSTRUCTED
AIDLIMQ	ELIGIBLE FOR AIDS/EQUIP SECTION	CONSTRUCTED
SCHOOLQ	ELIGIBLE FOR SCHOOL LIMITATIONS SECTION	CONSTRUCTED
VISIONQ	ELIGIBLE FOR VISION SECTION	CONSTRUCTED
ADLQ	ELIGIBLE FOR ADL SERIES	CONSTRUCTED
HELPBATX	EDITED RECEIVE HELP BATHING	LC01
HANDBATX	ED HANDS ON HELP RECEIVED BATHING	LC02
INSTBATX	ED INSTRUCTIONAL HELP RECEIVED BATHING	LC02
STAYBATX	ED STAY IN ROOM IN CASE HELP NEEDED BATH	LC02

VARIABLE	DESCRIPTION	SOURCE
HELPDREX	ED RECEIVE HELP DRESSING	LC03
HANDDRTX	ED HANDS ON HELP RECEIVED DRESSING	LC04
INSTDRTX	ED INSTRUCTIONAL HELP RECEIVED DRESSING	LC04
STAYDRTX	ED STAY IN RM IN CASE HELP NEED DRESSING	LC04
HELPTLTX	ED RECEIVE HELP TOILETING	LC05
HANDTLTX	ED HANDS ON HELP RECD USING TOILET	LC06
INSTTLTX	ED INSTRUCTIONAL HELP RECD USING TOILET	LC06
STAYTLTX	ED STAY IN RM IN CASE HELP NEEDED TOILET	LC06
HELPBEDX	ED RECEIVE HELP GETTING OUT OF BED/CHAIR	LC07
HANDBDTX	ED HANDS ON HELP TO GET OUT OF BED/CHAIR	LC08
INSTBDTX	ED INSTRUCTION/HELP GET OUT OF BED/CHAIR	LC08
STAYBDTX	ED STAY IN RM IF HELP NEEDED BED/CHAIR	LC08
HELPEATX	ED RECEIVE HELP EATING	LC09
HANDEATX	ED HANDS ON HELP RECEIVED EATING	LC10
INSTEATX	ED INSTRUCTINOAL HELP RECEIVED EATING	LC10
STAYEATX	ED STAY IN ROOM IN CASE HELP NEED EAT	LC10
HELPADLX	ED RECEIVE HELP WITH ANY ADLS > 3 MONS	LC11
HELPSHOX	ED RECEIVE HELP SHOPPING	LC12

VARIABLE	DESCRIPTION	SOURCE
HELPARNX	ED RECEIVE HELP GETTING AROUND	LC13
HELPMEAX	ED RECEIVE HELP PREP ARING MEALS	LC14
HELPMEDX	ED RECEIVE HELP TAKING MEDICATIONS	LC15
HELPMONX	ED RECEIVE HELP MANAGING MONEY	LC16
HELPLNDX	ED RECEIVE HELP DOING LAUNDRY	LC17
HELPHSWX	ED RECEIVE HELP DOING HOUSEKEEPING	LC18
HELPIADX	ED RECEIVE HELP WITH ANY IADLS > 3 MONS	LC19
HEARQ	ELIGIBLE FOR HEARING SECTION	CONSTRUCTED
CHLDLE4Q	ELIGIBLE CHILD <=4 LIMITED ACTIVIT QUEST	CONSTRUCTED
WHSLIMQ	ELIG WORK/HOUSEHOLD/SCHOOL LIMIT QUEST	CONSTRUCTED
SCHLATTQ	ELIGIBLE SCHOOL ATTEND LIMITED SECTION	CONSTRUCTED
CHILDQ	ELIGIBLE FOR CHILD W/ LIMIT SERIES	CONSTRUCTED
CHLDLT6Q	CHILDQ=1 AND 0<=AGE42X<6	CONSTRUCTED
CHLDGE6Q	CHILDQ=1 AND AGE42X>=6	CONSTRUCTED
CHLD613Q	CHILDQ=1 AND 6<=AGE42X<=13	CONSTRUCTED
WORKQ	ELIGIBLE FOR WORK SERIES	CONSTRUCTED
TRANSAQ	ELIGIBLE FOR LC37/LC38	CONSTRUCTED
TRANSBQ	ELIGIBLE FOR LC39/LC40	CONSTRUCTED

VARIABLE	DESCRIPTION	SOURCE
RATEMEMX	ED RATE PERSON MEMORY AT PRESENT TIME	LC20
COMPMEMX	ED PERS MEMORY COMPARED TO 2 YRS AGO	LC21
COGPROBX	ED DELAYS IN COGNITIVE/MENTAL DEVELOP	LC22
SPCHPRBX	ED DELAYS IN SPEECH/LANGUAGE DEVELOP	LC23
SPCDIETX	ED FOLLOW SPECIAL DIET ORDERED BY DOC	LC25
CHLDHLPX	ED NEED HELP EAT/DRESS/BATH/USE TOILET	LC26
CHLDACTX	ED DIFF PARTICIPATING STRENUOUS ACTIVIT	LC27
UNDINSTX	ED PROB UNDERSTANDING SCHL INSTRUCTIONS	LC28
PAYATTNX	ED PROB AT SCHL UNDERSTANDING INSTR MAT	LC28
PROBCOMX	ED PROB AT SCHL COMMUNICATING W/TEACHER	LC28
PROBWLKX	ED TROUBLE WALKING BLOCKS/CLIMB STAIRS	LC29
DIFFLANX	ED DIFFICUL UNDERSTANDING CONVERSATION	LC30
COMMTLKX	ED PEOPLE TALK TO COMMUNICATE	LC31
COMMSGNX	ED PEOPLE USE SIGN LANG TO COMMUNICATE	LC31
COMMPRWX	ED PEOPLE USE PRINT/WRITE TO COMMUNICAT	LC31
COMSYMBX	ED PEOPLE USE SYMBOL PICTURE TO COMMUNIC	LC31
COMMGSTX	ED PEOPLE USE GESTURES TO COMMUNICATE	LC31

VARIABLE	DESCRIPTION	SOURCE
СОММОТНХ	ED PEOPLE USE OTHER WAY TO COMMUNICATE	LC31
PERSTLKX	ED DOES PERSON HAVE DIFFICULTY TALKING	LC32
GESTCOMX	ED PERSON USES GESTURES TO COMMUNICATE	LC33
OTHRCOMX	ED PERSON USES OTHER WAY TO COMMUNICATE	LC33
PRNTCOMX	ED PERSON PRINTS OR WRITES TO COMMUNICAT	LC33
SIGNCOMX	ED PERSON COMMUNICATE WITH SIGN LANGUAGE	LC33
SYMBCOMX	ED PERSON USES SYMBOLS TO COMMUNICATE	LC33
TALKCOMX	ED PERSON TALKS TO COMMUNICATE	LC33
CRNTWRKX	ED IS PERSON CURRENTLY WORKING	LC34
ACOMRMPX	ED EMPLOYER HAS MADE RAMP TO ACCOMMODATE	LC35
ACOMELVX	ED EMPLOYER MADE ELEVATOR TO ACCOMMODATE	LC35
ACOMDSKX	ED EMPLOYER HAS MADE RAISED DESK	LC35
ACOMDORX	ED EMPLOYER HAS MADE DOOR TO ACCOMMODATE	LC35
ACOMRSTX	ED EMPLOYER HAS MADE ACCESSIBLE RESTROOM	LC35
ACOMVSYX	ED ACCOMMODATE VOICE SYNTHESIZER DEVICE	LC35

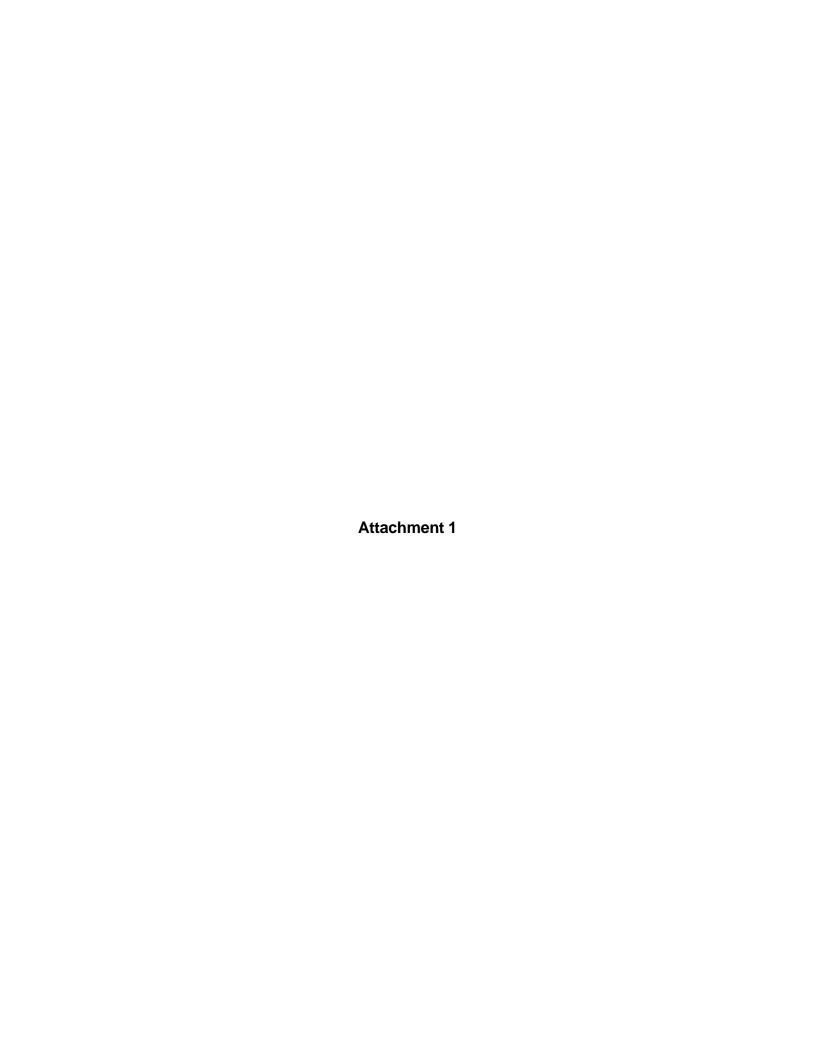
VARIABLE	DESCRIPTION	SOURCE
ACOMBRPX	ED ACCOMMODATE BRAILLE, ENLARGE PRINT	LC35
ACOMCCHX	ED ACCOMMODATE JOB COACH	LC35
ACMASISX	ED ACCOMMODATE PERSONAL ASSISTANT	LC35
ACOMPNSX	ED ACCOMMODATE SPECIAL PENS, PENCILS	LC35
ACOMREDX	ED ACCOMMODATE JOB REDESIGN, OPTIONS	LC35
ACOMHRX	ED ACCOMMODATE MODIFIED WORK HOURS/DAY	LC35
ACOMEQPX	ED ACCOMMODATE OTHER EQUIPMENT	LC35
CHNGWRKX	ED DID PERSON CHANGE THE KIND OF WORK	LC36
ANYLTCQ	ELIGIBLE FOR ANY LTC QUESTIONS	CONSTRUCTED
GENQ	ELIGIBLE FOR GENERAL SERIES	CONSTRUCTED
PRVNTDRX	ED PROBLEM PREVENT PERS FROM DRIVING	LC37
MODVEHX	ED PERS USES MODIFIED VEHICLE DRIVE	LC38
STRTLYX	ED WHEN DID LIMITATIONS START-YEAR	LC43
STRTLMX	ED WHEN DID LIMITATIONS START-MONTH	LC43
SOCONLY	SOCIAL LIMITATION ONLY	CONSTRUCTED
PROVTRAX	ED FAMILY/FRIENDS PROVIDE TRANSPORT	LC39
SPECTRAX	ED RECEIVE OTHER SPECIAL TRANSPORT	LC40
SPECTECX	ED USE SPECIAL EQUIPMENT/TECHNOLOGY	LC41

VARIABLE	DESCRIPTION	SOURCE
TECHRAMX	ED DOES PERSON USE RAILINGS, RAMPS	LC42
TECHWALX	ED DOES PERS USE WALKER,CANE,CRUTCHES	LC42
TECHSHOX	ED DOES PERSON USE ORTHOPEDIC SHOES	LC42
TECHBRAX	ED PERS USE BRACES FOR ARM,LEG,BACK	LC42
TECHHANX	ED PERSON USE ARTIFICIAL ARM,HAND ETC	LC42
TECHRECX	ED DOES PERSON USE REACHER	LC42
TECHBATX	ED DOES PERSON USE BATHING AIDS	LC42
TECHTLTX	ED DOES PERSON USE TOILETING AIDS	LC42
TECHWHEX	ED DOES PERSON USE WHEELCHAIR/SCOOTER	LC42
TECHDREX	ED DOES PERSON USE DRESSING AIDS	LC42
TECHOXYX	ED DOES PERS USE OXYGEN OR RESPIRATOR	LC42
TECHLIFX	ED DOES PERSON USE LIFT	LC42
TECHDOGX	ED DOES PERS USE GUIDE DOG ASSISTANTS	LC42
TECHCOMX	ED DOES PERS USE COMMUNICATION EQUIPM	LC42
ТЕСНОТНХ	ED OTH SPECIAL EQUIPMENT OR TECHNOLOGY	LC42
SERVDCAX	ED PERSON USES ADULT DAY CARE SERVICES	LC46
SERVMEAX	ED PERSON USES MEAL ON WHEELS SERVICES	LC46
SERVSCTX	ED PERSON USES SENIOR CENTER SERVICES	LC46

VARIABLE	DESCRIPTION	SOURCE
SERVVOCX	ED PERS USES VOCATIONAL REHABILITATION	LC46
SERVSPRX	ED PERSON USES FAMILY SUPPORT SERVICES	LC46
SERVTRNX	ED PERSON USES SPECIAL TRANSPORTATION	LC46
SERVMGMX	ED PERSON USES CASE MANAGEMENT	LC46
SERVSHEX	ED PERSON USES SHELTERED WORKSHOP	LC46
SERVOTHX	ED PERSON USES ANY OTHER SERVICES	LC46
HLPRLAFX	ED IS THE HELP RELATED TO ARMED FORCES	LC47
BEF22YRX	ED LIMITATIONS START BEFORE 22 YR OLD	LC44
CONDIX1	ENCRYPTED CONDITION ID 1 - LTC	LC45
CONDIX2	ENCRYPTED CONDITION ID 2 - LTC	LC45
CONDIX3	ENCRYPTED CONDITION ID 3 - LTC	LC45
CONDIX4	ENCRYPTED CONDITION ID 4 - LTC	LC45
CONDIX5	ENCRYPTED CONDITION ID 5 - LTC	LC45
CONDIX6	ENCRYPTED CONDITION ID 6 - LTC	LC45
CONDIX7	ENCRYPTED CONDITION ID 7 - LTC	LC45
CONDIX8	ENCRYPTED CONDITION ID 8 - LTC	LC45
CONDIX9	ENCRYPTED CONDITION ID 9 - LTC	LC45
CONDIX10	ENCRYPTED CONDITION ID 10 - LTC	LC45

VARIABLE	DESCRIPTION	SOURCE
CONDIX11	ENCRYPTED CONDITION ID 11 - LTC	LC45
CONDIX12	ENCRYPTED CONDITION ID 12 - LTC	LC45
CONDIX13	ENCRYPTED CONDITION ID 13 - LTC	LC45
CONDIX14	ENCRYPTED CONDITION ID 14 - LTC	LC45
CONDIX15	ENCRYPTED CONDITION ID 15 - LTC	LC45
CONDIX16	ENCRYPTED CONDITION ID 16 - LTC	LC45
CONDIX17	ENCRYPTED CONDITION ID 17 - LTC	LC45
ICD9CX1	ED ICD-9 CODE 1 - LTC	LC45
ICD9CX2	ED ICD-9 CODE 2 - LTC	LC45
ICD9CX3	ED ICD-9 CODE 3 - LTC	LC45
ICD9CX4	ED ICD-9 CODE 4 - LTC	LC45
ICD9CX5	ED ICD-9 CODE 5 - LTC	LC45
ICD9CX6	ED ICD-9 CODE 6 - LTC	LC45
ICD9CX7	ED ICD-9 CODE 7 - LTC	LC45
ICD9CX8	ED ICD-9 CODE 8 - LTC	LC45
ICD9CX9	ED ICD-9 CODE 9 - LTC	LC45
ICD9CX10	ED ICD-9 CODE 10 - LTC	LC45
ICD9CX11	ED ICD-9 CODE 11 -LTC	LC45

VARIABLE	DESCRIPTION	SOURCE
ICD9CX12	ED ICD-9 CODE 12 - LTC	LC45
ICD9CX13	ED ICD-9 CODE 13 - LTC	LC45
ICD9CX14	ED ICD-9 CODE 14 - LTC	LC45
ICD9CX15	ED ICD-9 CODE 15 - LTC	LC45
ICD9CX16	ED ICD-9 CODE 16 - LTC	LC45
ICD9CX17	ED ICD-9 CODE 17 - LTC	LC45
BEHVPROX	ED DELAYS EMOTION/BEHAVIOR DEVELOP	LC24
NUM_COND	NUMBER OF CONDITIONS FOR EACH PERS - LTC	CONSTRUCTED



Sample SAS Codes for Merging the LTC file with the Condition file Example – 1998

```
\slash ^{*} Convert the LTC person level file into a person-condition level file
CONDIDS. It only contains persons with valid condition IDs and only has
two variables: person ID DUPERSID and condition ID CONDIDX. */
DATA CONDIDS (KEEP=DUPERSID CONDIDX);
  SET INOUT.LTC17X (KEEP=DUPERSID CONDIX1-CONDIX17);
  ARRAY CONDID(17) CONDIX1-CONDIX17;
  DO I = 1 TO 17;
    CONDIDX=CONDID(I);
    IF CONDIDX NE '-1' THEN OUTPUT;
  END;
RUN;
/* Sort the person-condition level file CONDIDS by CONDIDX */
PROC SORT DATA=CONDIDS;
  BY CONDIDX;
RUN;
/* Sort the condition file COND by CONDIDX */
PROC SORT DATA=COND (KEEP=CONDIDX CCCODEX) OUT=CONDS;
  BY CONDIDX;
RUN;
/* Merge the CCCODEX codes from the condition file to the person-
condition level LTC file */
DATA CONDITION (DROP=CONDIDX);
 MERGE CONDIDS (IN=A) CONDS;
  BY CONDIDX;
  IF A;
RUN;
```

```
codes of persons with valid condition IDs back to a person level file
and merge it back to the original person level LTC file */
PROC SORT DATA=CONDITION;
 BY DUPERSID;
RUN;
DATA CONVET (KEEP=DUPERSID CCCODEX1-CCCODEX17);
  SET CONDITION;
  BY DUPERSID;
  ARRAY CCCODEXS(17) $3 CCCODEX1-CCCODEX17;
  RETAIN CCCODEX1-CCCODEX17;
  IF FIRST.DUPERSID THEN
  DO;
   J = 0;
   DO I = 1 TO 17;
     CCCODEXS(I) = ' ';
    END;
  END;
  J + 1;
 CCCODEXS(J) = CCCODEX;
  IF LAST.DUPERSID;
RUN;
 PROC SORT DATA=INOUT.LTC17X OUT=LTC17X;
 BY DUPERSID;
RUN;
DATA INOUT.LTC18X;
 MERGE LTC17X (IN=A) CONVET;
 BY DUPERSID;
IF A;
```

RUN;

/* Convert the person-condition level LTC file containing the CCCODEX