MEPS HC-102I:
Appendix to MEPS 2006 Event Files
HC-102A - HC-102H

November 2008

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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

1.0   Household Component

The Medical Expenditure Panel Survey (MEPS) provides nationally representative estimates of health care use, expenditures, sources of payment, and health insurance coverage for the U.S. civilian non-institutionalized population. The MEPS Household Component (HC) also provides estimates of respondents' health status, demographic and socio-economic characteristics, employment, access to care, and satisfaction with health care. Estimates can be produced for individuals, families, and selected population subgroups. The panel design of the survey, which includes 5 Rounds of interviews covering 2 full calendar years, provides data for examining person level changes in selected variables such as expenditures, health insurance coverage, and health status. Using computer assisted personal interviewing (CAPI) technology, information about each household member is collected, and the survey builds on this information from interview to interview. All data for a sampled household are reported by a single household respondent.

The MEPS-HC was initiated in 1996. Each year a new panel of sample households is selected. Because the data collected are comparable to those from earlier medical expenditure surveys conducted in 1977 and 1987, it is possible to analyze long-term trends. Each annual MEPS-HC sample size is about 15,000 households. Data can be analyzed at either the person or event level. Data must be weighted to produce national estimates.

The set of households selected for each panel of the MEPS HC is a subsample of households participating in the previous year's National Health Interview Survey (NHIS) conducted by the National Center for Health Statistics. The NHIS sampling frame provides a nationally representative sample of the U.S. civilian non-institutionalized population and reflects an oversample of blacks and Hispanics. MEPS oversamples additional policy relevant sub-groups such as Asians and low income households. The linkage of the MEPS to the previous year's NHIS provides additional data for longitudinal analytic purposes.

2.0   Medical Provider Component

Upon completion of the household CAPI interview and obtaining permission from the household survey respondents, a sample of medical providers are contacted by telephone to obtain information that household respondents can not accurately provide. This part of the MEPS is called the Medical Provider Component (MPC) and information is collected on dates of visit, diagnosis and procedure codes, charges and payments. The Pharmacy Component (PC), a subcomponent of the MPC, does not collect charges or diagnosis and procedure codes but does collect drug detail information, including National Drug Code (NDC) and medicine name, as well as date filled and sources and amounts of payment. The MPC is not designed to yield national estimates. It is primarily used as an imputation source to supplement/replace household reported expenditure information.

3.0   Survey Management and Data Collection

MEPS HC and MPC data are collected under the authority of the Public Health Service Act. Data are collected under contract with Westat, Inc. Data sets and summary statistics are edited and published in accordance with the confidentiality provisions of the Public Health Service Act and the Privacy Act. The National Center for Health statistics (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, micro data files, and tables via the MEPS Web site: www.meps.ahrq.gov. Selected data can be analyzed through MEPSnet, an on-line interactive tool designed to give data users the capability to statistically analyze MEPS data in a menu-driven environment.

Additional information on MEPS is available from the MEPS project manager or the MEPS public use data manager at the Center for Financing Access and Cost Trends, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850 (301-427-1406).

C. Technical and Programming Information

1.0 General Information

This documentation describes the MEPS Public Use Release HC-102I, which is the Appendix to MEPS releases HC-102A through HC-102H. This release contains two data files, both of which are provided in ASCII (with related SAS and SPSS programming statements) and SAS versions: 1) the condition-event link file; and 2) the prescribed medicines-event link file. Also included in this release are two tables provided as PDF files: 1) the condition-event frequency table and 2) the utilization and expenditures summary table.

This documentation offers a brief overview of the content and structure of the files and the accompanying codebook. It contains the following sections:

> Data File Information
> Merging/Linking MEPS Data Files
> Crosswalk of Clinical Classification Codes to ICD-9-CM Codes
> Sample SAS Jobs for Linking

For more information on MEPS HC survey design see S. Cohen, 1997; J. Cohen, 1997; and S. Cohen, 1996. For information on the MEPS MPC design, see S. Cohen, 1998. Both reports, along with a copy of the survey instruments used to collect the information on this file, are available on the MEPS Web site at the following address: www.meps.ahrq.gov.

2.0 Data File Information

This public use data set consists of two data files containing variables for linkage of the MEPS 2006 event-level data files. File 1, the H102IF1 or CLNK file, is used for linking the MEPS condition file with the MEPS event files; File 2, the H102IF2 or RXLK file, is used for linking the MEPS prescribed medicines event file with other MEPS event files.

The CLNK file contains 6 variables and has a logical record length of 59 with an additional 2-byte carriage return/line feed at the end of each record. The RXLK file contains 6 variables and has a logical record length of 59 with an additional 2-byte carriage return/line feed at the end of each record.

2.1   Codebook Format

Each 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 of 40 characters)
Format   Number of bytes
Type   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

2.2   Variable Naming and Source

In general, variable names reflect the content of the variable, with an 8 character limitation. All variables contained on Files 1 and 2 were derived from the CAPI.

2.3   Contents of File 1: Condition-Event Link File (CLNK)

File 1 (H102IF1) or the CLNK file, contains the variables needed to link each record on the MEPS 2006 condition file, HC-104, with one or more records on the MEPS 2006 event files, HC-102A through HC-102H. Section 3.0 contains additional information on completing this linkage.

The 8-character variable DUPERSID uniquely identifies each person represented on the file. There may be more than one record on the CLNK file for a specific DUPERSID value.

CONDIDX is the ID that uniquely identifies each condition for a person and corresponds to a unique record on the MEPS 2006 Condition file, HC-104. There may be more than one record on the CLNK file for a specific CONDIDX value.

EVNTIDX is the 12-digit number that uniquely identifies each event for a person and corresponds to a unique record on one of the MEPS 2006 event files, HC-102B through HC-102H. (EVNTIDX is not included on the 2006 Prescription Medicines event file, HC-102A; rather, on this file the variable for linking with EVNTIDX on the CLNK file is LINKIDX.) There may be more than one record on the CLNK file for a specific EVNTIDX value.

CLNKIDX is the 24-digit number that uniquely identifies each record on the CLNK file and is the combination of CONDIDX + EVNTIDX. There is just one record on this file for each value of CLNKIDX, i.e., each unique combination of CONDIDX + EVNTIDX.

The variable EVENTYPE indicates the type of event record identified by EVNTIDX, and has the following values:

    1 = MVIS – office-based medical provider visit event contained on MEPS release HC-102G
    2 = OPAT – outpatient department visit event contained on MEPS release HC-102F
    3 = EROM – emergency room visit event contained on MEPS release HC-102E
    4 = STAZ – inpatient hospital stay event contained on MEPS release HC-102D
    7 = HVIS – home health visit event contained on MEPS release HC-102H
    8 = PMED – prescribed medicines event contained on MEPS release HC-102A

2.4   Contents of File 2: Prescribed Medicines-Event Link File (RXLK)

File 2 (H102IF2) or the RXLK file, contains the variables needed to link each record on the MEPS 2006 prescribed medicines file, HC-102A, with one or more records on the MEPS 2006 event files, HC-102B and HC-102D through HC-102G. Section 3.0 contains additional information on completing this linkage.

The 8-character variable DUPERSID uniquely identifies each person represented on the file. There may be more than one record on the RXLK file for a specific DUPERSID value.

EVNTIDX is the 12-digit number that uniquely identifies each event for a person and corresponds to a unique record on one of the MEPS 2006 event files, HC-102B through HC-102G. There may be more than one record on the RXLK file for a specific EVNTIDX value.

LINKIDX is the 12-digit number that identifies the record(s) on the prescribed medicines file, HC-102A which link to an event record. There may be more than one record on the RXLK file for a specific LINKIDX value, and there may be more than one record on the HC-102A file for a specific LINKIDX value.

RXLKIDX is the 24-digit number that uniquely identifies each record on the RXLK file, and is the combination of EVNTIDX + LINKIDX. There is just one record on this file for each value of RXLKIDX, i.e., each unique combination of EVNTIDX + LINKIDX.

The variable EVENTYPE indicates the type of event record identified by EVNTIDX, and has the following values:

    1 = MVIS – office-based medical provider visit event contained on MEPS release HC-102G
    2 = OPAT – outpatient department visit event contained on MEPS release HC-102F
    3 = EROM – emergency room visit event contained on MEPS release HC-102E
    4 = STAZ – inpatient hospital stay event contained on MEPS release HC-102D
    5 = DVIS – dental visit event contained on MEPS release HC-102B

For 1996-2004, records for purchases of insulin and diabetic supplies in a round were included in the Other Medical Expenses event files. Beginning with the 2005 file, these records are <u>not</u>

included in the Other Medical Expenses file because the expenditures have always been included in the Prescribed Medicines file. As a consequence, there are no records in this file where the variable EVENTYPE = 6, the value used in 1996-2004 to identify OMED type of event record.

2.5   2006 Condition-Event Frequency Table

Table 1 contains the MEPS 2006 Condition-Event Frequency table. This table contains unweighted and weighted counts of records on the MEPS 2006 event files, HC-102A through HC-102H, for each of the condition, procedure, and clinical classification codes contained on the MEPS 2006 Condition file, HC-104. Attachment 1 contains a crosswalk of the clinical classification codes to ICD-9-CM codes**.**

Analysts should use the clinical classification codes listed in the Conditions PUF document (HC-104) and the Appendix to the Event Files (HC-102I) document when analyzing MEPS conditions data. Although there is a list of clinical classification codes and labels on the Healthcare Cost and Utilization Project (HCUP) Web site, if updates to these codes and/or labels are made on the HCUP Web site after the release of the 2006 MEPS PUFs, these updates will not be reflected in the 2006 MEPS data.

Note that, for conditions related to certain medical events, the ICD-9-CM codes on the Conditions file are also released in the Prescribed Medicines, Emergency Room Visits, Office-based Medical Provider Visits, Outpatient Department Visits, and Inpatient Hospital Stays Event Files. ICD-9-CM codes are collapsed into broader codes to ensure confidentiality. Because of this collapsing, it is possible for there to be duplicate ICD-9-CM condition or procedure codes linked to a single medical event when different fully-specified codes are collapsed into the same code. For more information on ICD-9-CM codes, see the HC-104 documentation.

2.6   2006 Utilization and Expenditures Summary Table

Table 2 contains the MEPS 2006 Utilization and Expenditures Summary table. This table contains statistics for all of the utilization and expenditure variables contained on the MEPS 2006 Full Year Use and Expenditure Data file, HC-105. For each of these variables, the following statistics are provided from the HC-105 file, and from the corresponding event-level file(s) HC-102A through HC-102H:

Number of persons with positive person-level weight (PERWT06F) and with value GT 0 for that variable

Weighted sum of the variable

Weighted mean of the variable

The table also includes the technical specifications used to construct each of the person-level HC-105 variables from the event-level files.

3.0 Merging/Linking MEPS Data Files

This section provides information on using each of the two HC-102I files, RXLK and CLNK, to link with the files contained in MEPS releases HC-104 and HC-102A through HC-102H. The linking procedure is described using several examples of deriving MEPS-based estimates. Also included in this section are several caveats related to using the RXLK and CLNK files.

3.1 Example A: Using the CLNK (HC-102IF1) and RXLK (HC-102IF2) Files with the Medical Conditions File (HC-104), the Prescribed Medicines and Office-Based Medical Provider Visits Event Files (HC-102A and HC-102G)

This example calculates the total expenditures for prescribed medicines associated with office-based medical provider visits for asthma, using these files: the condition file (HC-104), the CLNK file (HC-102IF1), the office-based medical provider visit event file (HC-102G), the RXLK file (HC-102IF2), and the prescribed medicines event file (HC-102A). It includes the following major steps:

1. From HC-104 file select only records with condition coded as asthma.

2. Use the CLNK file to obtain unique record IDs of events which are linked to each of the selected asthma condition records.

3. From the HC-102G file, select only records for non-telephone office-based medical provider visits for persons with a positive weight.

4. Using the selected record IDs obtained from the CLNK file with the selected HC-102G records, identify only those visits which were for asthma.

5. Use the RXLK file with the selected visit records which were for asthma, to obtain unique record IDs of prescribed medicine records from file HC-102A linked to those visits.

6. Using these record IDs, obtain the linked records from the HC-102A file and calculate the weighted mean of the expenditure variable.

Attachment 2 contains a copy of the SAS job for this example.

3.2   Example B: Using the CLNK File (HC-102IF1) with the Medical Conditions File (HC-104) and the Prescribed Medicines Event File (HC-102A)

This example calculates the total expenditure for prescribed medicines associated with asthma, using the condition file (HC-104), the CLNK file (HC-102IF1) and the prescribed medicines event file (HC-102A). It includes the following major steps:

     1.   From HC-104 file select only records with condition coded as asthma.

     2.   Use the CLNK file to obtain unique record IDs of events which are linked to each of the asthma condition records.

     3.   Using these record IDs, obtain linked records from the HC-102A file and calculate the weighted mean of the expenditure variable.

Attachment 2 contains a copy of the SAS job for this example.

3.3   Example C: Using the CLNK File with the Medical Conditions File (HC-104) and Office-Based Medical Provider Visits Event File (HC-102G)

This example calculates the total expenditures for office-based medical provider visits associated with asthma, using the condition file (HC-104), the CLNK file (HC-102IF1) and the office-based medical provider visits event file (HC-102G). It includes the following major steps:

     1.   From HC-104 file select only records with condition coded as asthma.

     2.   Use the CLNK file to obtain unique record IDs of events which are linked to each of the asthma condition records.

     3.   From the HC-102G file, select only records for non-telephone office-based medical provider visits for persons with a positive weight.

     4.   Using the selected record IDs obtained from the CLNK file, with the selected HC-102G records, identify only those visits which were for asthma and calculate the weighted mean of the expenditure variable.

Attachment 2 contains a copy of the SAS job for this example.

3.4   Limitations/Caveats of the CLNK File

When using the CLNK file, analysts should keep in mind that (1) conditions are self-reported and (2) there may be multiple conditions associated with an event. Users should also note that not all events link to the condition file.

3.5 Limitations/Caveats of the RXLK File

When using the RXLK file, analysts should keep in mind that one event record can link to more than one prescribed medicine record. Conversely, a prescribed medicine record may link to more than one event record in the same event file and/or more than one event record in other event files. When this occurs, it is up to the analyst to determine how the prescribed medicine expenditures should be allocated among those medical events.

3.6 National Health Interview Survey

Data from this file can be used alone or in conjunction with other files for different analytic purposes. Each MEPS panel can also be linked back to the previous years' National Health Interview Survey public use data files. For information on obtaining MEPS/NHIS link files please see www.meps.ahrq.gov/data_stats/more_info_download_data_files.jsp.

3.7 Pooling Annual Files

To facilitate analysis of subpopulations and/or low prevalence events, it may be desirable to pool together more than one year of data to yield sample sizes large enough to generate reliable estimates. For more details on pooling MEPS data files see www.meps.ahrq.gov/data_stats/download_data_files_detail.jsp?cboPufNumber=HC-036.

Starting in Panel 9, values for DUPERSID from previous panels will occasionally be re-used. Therefore, it is necessary to use the panel variable (PANEL) in combination with DUPERSID to ensure unique person-level identifiers across panels. Creating unique records in this manner is advised when pooling MEPS data across multiple annual files that have one or more identical values for DUPERSID.

3.8 Using MEPS Data for Trend Analysis

MEPS began in 1996, and the utility of the survey for analyzing health care trends expands with each additional year of data. However, it is important to consider a variety of factors when examining trends over time using MEPS. Statistical significance tests should be conducted to assess the likelihood that observed trends may be attributable to sampling variation. The length of time being analyzed should also be considered. In particular, large shifts in survey estimates over short periods of time (e.g. from one year to the next) that are statistically significant should be interpreted with caution, unless they are attributable to known factors such as changes in public policy, economic conditions, or MEPS survey methodology. Looking at changes over longer periods of time can provide a more complete picture of underlying trends. Analysts may wish to consider using techniques to smooth or stabilize analyses of trends using MEPS data such as comparing pooled time periods (e.g. 1996-97 versus 2005-06), working with moving averages, or using modeling techniques with several consecutive years of MEPS data to test the fit of specified patterns over time. Finally, researchers should be aware of the impact of multiple comparisons on Type I error. Without making appropriate allowance for multiple

comparisons, undertaking numerous statistical significance tests of trends increases the likelihood of inappropriately concluding that a change has taken place.

3.9   Longitudinal Analysis

MEPS Panel Longitudinal Weight files containing estimation variables to facilitate longitudinal analysis are available for downloading in the data section of the MEPS Web site.

Attachment 1:
Clinical Classification Code to ICD-9-CM Code Crosswalk

Appendix A - Clinical Classification Software-DIAGNOSES (January 1980 through September 2006)[1]

1   Tuberculosis

01000	01001	01002	01003	01004	01005	01006	01010	01011	01012	01013	01014
01015	01016	01080	01081	01082	01083	01084	01085	01086	01090	01091	01092
01093	01094	01095	01096	01100	01101	01102	01103	01104	01105	01106	01110
01111	01112	01113	01114	01115	01116	01120	01121	01122	01123	01124	01125
01126	01130	01131	01132	01133	01134	01135	01136	01140	01141	01142	01143
01144	01145	01146	01150	01151	01152	01153	01154	01155	01156	01160	01161
01162	01163	01164	01165	01166	01170	01171	01172	01173	01174	01175	01176
01180	01181	01182	01183	01184	01185	01186	01190	01191	01192	01193	01194
01195	01196	01200	01201	01202	01203	01204	01205	01206	01210	01211	01212
01213	01214	01215	01216	01220	01221	01222	01223	01224	01225	01226	01230
01231	01232	01233	01234	01235	01236	01280	01281	01282	01283	01284	01285
01286	01300	01301	01302	01303	01304	01305	01306	01310	01311	01312	01313
01314	01315	01316	01320	01321	01322	01323	01324	01325	01326	01330	01331
01332	01333	01334	01335	01336	01340	01341	01342	01343	01344	01345	01346
01350	01351	01352	01353	01354	01355	01356	01360	01361	01362	01363	01364
01365	01366	01380	01381	01382	01383	01384	01385	01386	01390	01391	01392
01393	01394	01395	01396	01400	01401	01402	01403	01404	01405	01406	01480
01481	01482	01483	01484	01485	01486	01500	01501	01502	01503	01504	01505
01506	01510	01511	01512	01513	01514	01515	01516	01520	01521	01522	01523
01524	01525	01526	01550	01551	01552	01553	01554	01555	01556	01560	01561
01562	01563	01564	01565	01566	01570	01571	01572	01573	01574	01575	01576
01580	01581	01582	01583	01584	01585	01586	01590	01591	01592	01593	01594
01595	01596	01600	01601	01602	01603	01604	01605	01606	01610	01611	01612
01613	01614	01615	01616	01620	01621	01622	01623	01624	01625	01626	01630
01631	01632	01633	01634	01635	01636	01640	01641	01642	01643	01644	01645
01646	01650	01651	01652	01653	01654	01655	01656	01660	01661	01662	01663
01664	01665	01666	01670	01671	01672	01673	01674	01675	01676	01690	01691
01692	01693	01694	01695	01696	01700	01701	01702	01703	01704	01705	01706
01710	01711	01712	01713	01714	01715	01716	01720	01721	01722	01723	01724
01725	01726	01730	01731	01732	01733	01734	01735	01736	01740	01741	01742
01743	01744	01745	01746	01750	01751	01752	01753	01754	01755	01756	01760
01761	01762	01763	01764	01765	01766	01770	01771	01772	01773	01774	01775
01776	01780	01781	01782	01783	01784	01785	01786	01790	01791	01792	01793
01794	01795	01796	01800	01801	01802	01803	01804	01805	01806	01880	01881
01882	01883	01884	01885	01886	01890	01891	01892	01893	01894	01895	01896
1370	1371	1372	1373	1374	V1201						

2   Septicemia (except in labor)

0031	0202	0223	0362	0380	0381	03810	03811	03819	0382	0383	03840
03841	03842	03843	03844	03849	0388	0389	0545	7907			

3   Bacterial infection; unspecified site

0200	0208	0209	0218	0219	0228	0229	0230	0231	0232	0233	0238
0239	024	025	0260	0269	0270	0271	0272	0278	0279	0300	0301
0302	0303	0308	0309	0312	0318	0319	03289	0329	0330	0331	0338

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[1] Revised 11/18/05

0339   0341   0363   03681   03689   0369   037   0392   0393   0394   0398   0399
0400   0401   0402   0403   04081   04082   04089   0410   04100   04101   04102   04103
04104   04105   04109   0411   04110   04111   04119   0412   0413   0414   0415   0416
0417   0418   04181   04182   04183   04184   04185   04186   04189   0419   390   3929
7953   79531   79539   V090   V091   V092   V093   V094   V0950   V0951   V096   V0970
V0971   V0980   V0981   V0990   V0991

4   Mycoses

1100   1101   1102   1103   1104   1105   1106   1108   1109   1110   1111   1112
1113   1118   1119   1120   1121   1122   1123   1125   11282   11284   11285   11289
1129   1141   1143   1149   11500   11509   11510   11519   11590   11599   1160   1161
1162   1170   1171   1172   1173   1174   1175   1176   1177   1178   1179   118

5   HIV infection

042   0420   0421   0422   0429   0430   0431   0432   0433   0439   0440   0449
07953   27910   27919   79571   7958   V08

6   Hepatitis

0700   0701   0702   07020   07021   07022   07023   0703   07030   07031   07032   07033
0704   07041   07042   07043   07044   07049   0705   07051   07052   07053   07054   07059
0706   07070   07071   0709   57140   57141   57149   5731   5732   5733

7   Viral infection

0500   0501   0502   0509   0510   0511   0512   0519   0527   0528   0529   05310
05311   05312   05313   05319   05371   05379   0538   0539   0540   05410   05411   05412
05413   05419   0542   0546   05471   05473   05479   0548   0549   05579   0558   0559
05600   05609   05679   0568   0569   0570   0578   0579   0600   0601   0609   061
0650   0651   0652   0653   0654   0658   0659   0660   0661   0663   0664   06640
06641   06642   06649   0668   0669   071   0720   0723   07271   07272   07279   0728
0729   0737   0738   0739   0740   0741   0743   0748   075   0780   0781   07810
07811   07819   0782   0783   0784   0785   0786   0787   07881   07882   07888   07889
0790   0791   0792   0793   0794   07950   07951   07952   07959   0796   0798   07981
07982   07988   07989   0799   07998   07999   7908

8   Other infections; including parasitic

080   0810   0811   0812   0819   0820   0821   0822   0823   08240   08241   08249
0828   0829   0831   0832   0838   0839   0840   0841   0842   0843   0844   0845
0846   0847   0848   0849   0850   0851   0852   0853   0854   0855   0859   0860
0861   0862   0863   0864   0865   0869   0870   0871   0879   0880   0888   08881
08882   08889   0889   1000   10089   1009   101   1020   1021   1022   1023   1024
1025   1026   1027   1028   1029   1030   1031   1032   1033   1039   1040   1048
1049   1200   1201   1202   1203   1208   1209   1210   1211   1212   1213   1214
1215   1216   1218   1219   1220   1221   1222   1223   1224   1225   1226   1227
1228   1229   1230   1231   1232   1233   1234   1235   1236   1238   1239   124
1250   1251   1252   1253   1254   1255   1256   1257   1259   1260   1261   1262
1263   1268   1269   1270   1271   1272   1273   1274   1275   1276   1277   1278
1279   1280   1281   1288   1289   129   1305   1307   1308   1309   13100   13101
13102   13103   13109   1318   1319   1320   1321   1322   1323   1329   1330   1338
1339   1340   1341   1342   1348   1349   135   1360   1361   1362   1364   1365
1368   1369   1398   V120   V1200   V1203   V1209

9   Sexually transmitted infections (not HIV or hepatitis)

0900	0901	0902	0903	09040	09041	09042	09049	0905	0906	0907	0909
0910	0911	0912	0913	0914	09150	09151	09152	09161	09162	09169	0917
09181	09182	09189	0919	0920	0929	0930	0931	09320	09321	09322	09323
09324	09381	09382	09389	0939	0940	0941	0942	0943	09481	09482	09483
09484	09485	09486	09487	09489	0949	0950	0951	0952	0953	0954	0955
0956	0957	0958	0959	096	0970	0971	0979	0980	09810	09811	09812
09813	09814	09815	09816	09817	09819	0982	09830	09831	09832	09833	09834
09835	09836	09837	09839	09840	09841	09842	09843	09849	09850	09851	09852
09853	09859	0986	0987	09881	09882	09883	09884	09885	09886	09889	0990
0991	0992	0993	0994	09940	09941	09949	09950	09951	09952	09953	09954
09955	09956	09959	0998	0999							

10   Immunizations and screening for infectious disease

7955	7956	V010	V011	V012	V013	V014	V015	V016	V017	V0171	V0179
V018	V0181	V0182	V0183	V0184	V0189	V019	V020	V021	V022	V023	V024
V025	V0251	V0252	V0259	V026	V0260	V0261	V0262	V0269	V027	V028	V029
V030	V031	V032	V033	V034	V035	V036	V037	V038	V0381	V0382	V0389
V039	V040	V041	V042	V043	V044	V045	V046	V047	V048	V0481	V0482
V0489	V050	V051	V052	V053	V054	V058	V059	V060	V061	V062	V063
V064	V065	V066	V068	V069	V286	V712	V7182	V7183	V730	V731	V732
V733	V734	V735	V736	V738	V7388	V7389	V739	V7398	V7399	V740	V741
V742	V743	V744	V745	V746	V748	V749	V750	V751	V752	V753	V754
V755	V756	V757	V758	V759							

11   Cancer of head and neck

1400	1401	1403	1404	1405	1406	1408	1409	1410	1411	1412	1413
1414	1415	1416	1418	1419	1420	1421	1422	1428	1429	1430	1431
1438	1439	1440	1441	1448	1449	1450	1451	1452	1453	1454	1455
1456	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468
1469	1470	1471	1472	1473	1478	1479	1480	1481	1482	1483	1488
1489	1490	1491	1498	1499	1600	1601	1602	1603	1604	1605	1608
1609	1610	1611	1612	1613	1618	1619	1950	2300	2310	V1001	V1002
V1021											

12   Cancer of esophagus

1500	1501	1502	1503	1504	1505	1508	1509	2301	V1003

13   Cancer of stomach

1510	1511	1512	1513	1514	1515	1516	1518	1519	2302	V1004

14   Cancer of colon

1530	1531	1532	1533	1534	1535	1536	1537	1538	1539	1590	2303
V1005										

15   Cancer of rectum and anus

1540	1541	1542	1543	1548	2304	2305	2306	V1006

16   **Cancer of liver and intrahepatic bile duct**

1550   1551   1552   2308   V1007

17   **Cancer of pancreas**

1570   1571   1572   1573   1574   1578   1579

18   **Cancer of other GI organs; peritoneum**

1520   1521   1522   1523   1528   1529   1560   1561   1562   1568   1569   1580
1588   1589   1591   1598   1599   2307   2309   V1000   V1009

19   **Cancer of bronchus; lung**

1622   1623   1624   1625   1628   1629   2312   V1011

20   **Cancer; other respiratory and intrathoracic**

1620   1630   1631   1638   1639   1650   1658   1659   2311   2318   2319   V1012
V1020   V1022

21   **Cancer of bone and connective tissue**

1700   1701   1702   1703   1704   1705   1706   1707   1708   1709   1710   1712
1713   1714   1715   1716   1717   1718   1719

22   **Melanomas of skin**

1720   1721   1722   1723   1724   1725   1726   1727   1728   1729   V1082

23   **Other non-epithelial cancer of skin**

1730   1731   1732   1733   1734   1735   1736   1737   1738   1739   2320   2321
2322   2323   2324   2325   2326   2327   2328   2329   V1083

24   **Cancer of breast**

1740   1741   1742   1743   1744   1745   1746   1748   1749   1750   1759   2330
V103

25   **Cancer of uterus**

179   1820   1821   1828   2332   V1042

26   **Cancer of cervix**

1800   1801   1808   1809   2331   7950   V1041

27   **Cancer of ovary**

1830   V1043

28   Cancer of other female genital organs

181   1832   1833   1834   1835   1838   1839   1840   1841   1842   1843   1844
1848   1849   2333   V1040   V1044

29   Cancer of prostate

185   2334   V1046

30   Cancer of testis

1860   1869   V1047

31   Cancer of other male genital organs

1871   1872   1873   1874   1875   1876   1877   1878   1879   2335   2336   V1045
V1048   V1049

32   Cancer of bladder

1880   1881   1882   1883   1884   1885   1886   1887   1888   1889   2337   V1051

33   Cancer of kidney and renal pelvis

1890   1891   V1052

34   Cancer of other urinary organs

1892   1893   1894   1898   1899   2339   V1050   V1059

35   Cancer of brain and nervous system

1910   1911   1912   1913   1914   1915   1916   1917   1918   1919   1920   1921
1922   1923   1928   1929   V1085   V1086

36   Cancer of thyroid

193   V1087

37   Hodgkin`s disease

20100   20101   20102   20103   20104   20105   20106   20107   20108   20110   20111   20112
20113   20114   20115   20116   20117   20118   20120   20121   20122   20123   20124   20125
20126   20127   20128   20140   20141   20142   20143   20144   20145   20146   20147   20148
20150   20151   20152   20153   20154   20155   20156   20157   20158   20160   20161   20162
20163   20164   20165   20166   20167   20168   20170   20171   20172   20173   20174   20175
20176   20177   20178   20190   20191   20192   20193   20194   20195   20196   20197   20198
V1072

38   Non-Hodgkin`s lymphoma

20000	20001	20002	20003	20004	20005	20006	20007	20008	20010	20011	20012
20013	20014	20015	20016	20017	20018	20020	20021	20022	20023	20024	20025
20026	20027	20028	20080	20081	20082	20083	20084	20085	20086	20087	20088
20200	20201	20202	20203	20204	20205	20206	20207	20208	20210	20211	20212
20213	20214	20215	20216	20217	20218	20220	20221	20222	20223	20224	20225
20226	20227	20228	20280	20281	20282	20283	20284	20285	20286	20287	20288
20290	20291	20292	20293	20294	20295	20296	20297	20298	V1071	V1079	

39   Leukemias

20240	20241	20242	20243	20244	20245	20246	20247	20248	2031	20310	20311
2040	20400	20401	2041	20410	20411	2042	20420	20421	2048	20480	20481
2049	20490	20491	2050	20500	20501	2051	20510	20511	2052	20520	20521
2053	20530	20531	2058	20580	20581	2059	20590	20591	2060	20600	20601
2061	20610	20611	2062	20620	20621	2068	20680	20681	2069	20690	20691
2070	20700	20701	2071	20710	20711	2072	20720	20721	2078	20780	20781
2080	20800	20801	2081	20810	20811	2082	20820	20821	2088	20880	20881
2089	20890	20891	V1060	V1061	V1062	V1063	V1069				

40   Multiple myeloma

2030	20300	20301	2038	20380	20381

41   Cancer; other and unspecified primary

1640	1641	1642	1643	1648	1649	1760	1761	1762	1763	1764	1765
1768	1769	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
1940	1941	1943	1944	1945	1946	1948	1949	1951	1952	1953	1954
1955	1958	20230	20231	20232	20233	20234	20235	20236	20237	20238	20250
20251	20252	20253	20254	20255	20256	20257	20258	20260	20261	20262	20263
20264	20265	20266	20267	20268	2340	2348	2349	7951	V1029	V1081	V1084
V1088	V1089	V109	V711								

42   Secondary malignancies

1960	1961	1962	1963	1965	1966	1968	1969	1970	1971	1972	1973
1974	1975	1976	1977	1978	1980	1981	1982	1983	1984	1985	1986
1987	19881	19882	19889								

43   Malignant neoplasm without specification of site

1990	1991

44   Neoplasms of unspecified nature or uncertain behavior

2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361
2362	2363	2364	2365	2366	2367	23690	23691	23699	2370	2371	2372
2373	2374	2375	2376	2377	23770	23771	23772	2379	2380	2381	2382
2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394
2395	2396	2397	2398	2399							

45   Maintenance chemotherapy; radiotherapy

V580	V581	V5811	V5812	V661	V662	V671	V672

46 **Benign neoplasm of uterus**

| 2180 | 2181 | 2182 | 2189 | 2190 | 2191 | 2198 | 2199 | | | | |

47 **Other and unspecified benign neoplasm**

2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111
2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123
2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135
2136	2137	2138	2139	2140	2141	2142	2143	2144	2148	2149	2150
2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163
2164	2165	2166	2167	2168	2169	217	220	2210	2211	2212	2218
2219	2220	2221	2222	2223	2224	2228	2229	2230	2231	2232	2233
22381	22389	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248
2249	2250	2251	2252	2253	2254	2258	2259	226	2270	2271	2273
2274	2275	2276	2278	2279	22800	22801	22802	22803	22804	22809	2281
2290	2298	2299	V1272								

48 **Thyroid disorders**

2400	2409	2410	2411	2419	24200	24201	24210	24211	24220	24221	24230
24231	24240	24241	24280	24281	24290	24291	243	2440	2441	2442	2443
2448	2449	2450	2451	2452	2453	2454	2458	2459	2460	2461	2462
2463	2468	2469	7945								

49 **Diabetes mellitus without complication**

| 25000 | 25001 | 7902 | 79021 | 79022 | 79029 | 7915 | 7916 | V4585 | V5391 | V6546 | |

50 **Diabetes mellitus with complications**

25002	25003	25010	25011	25012	25013	25020	25021	25022	25023	25030	25031
25032	25033	25040	25041	25042	25043	25050	25051	25052	25053	25060	25061
25062	25063	25070	25071	25072	25073	25080	25081	25082	25083	25090	25091
25092	25093										

51 **Other endocrine disorders**

2510	2511	2512	2513	2514	2515	2518	2519	2520	25200	25201	25202
25208	2521	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537
2538	2539	2540	2541	2548	2549	2550	2551	25510	25511	25512	25513
25514	2552	2553	2554	2555	2556	2558	2559	2560	2561	2562	2563
2564	2568	2569	2570	2571	2572	2578	2579	2580	2581	2588	2589
2590	2591	2592	2593	2594	2595	2598	2599	7946			

52 **Nutritional deficiencies**

260	261	262	2630	2631	2632	2638	2639	2640	2641	2642	2643
2644	2645	2646	2647	2648	2649	2650	2651	2652	2660	2661	2662
2669	267	2680	2681	2682	2689	2690	2691	2692	2693	2698	2699
7994	V121										

53 **Disorders of lipid metabolism**

| 2720 | 2721 | 2722 | 2723 | 2724 | | | | | | | |

54   **Gout and other crystal arthropathies**

2740	27410	27411	27419	27481	27482	27489	2749	71210	71211	71212	71213
71214	71215	71216	71217	71218	71219	71220	71221	71222	71223	71224	71225
71226	71227	71228	71229	71230	71231	71232	71233	71234	71235	71236	71237
71238	71239	71280	71281	71282	71283	71284	71285	71286	71287	71288	71289
71290	71291	71292	71293	71294	71295	71296	71297	71298	71299		

55   **Fluid and electrolyte disorders**

2760	2761	2762	2763	2764	2765	27650	27651	27652	2766	2767	2768
2769											

56   **Cystic fibrosis**

27700   27701   27702   27703   27709

57   **Immunity disorders**

27900	27901	27902	27903	27904	27905	27906	27909	27911	27912	27913	2792
2793	2794	2798	2799								

58   **Other nutritional; endocrine; and metabolic disorders**

2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711
2712	2713	2714	2718	2719	2725	2726	2727	2728	2729	2730	2731
2732	2733	2734	2738	2739	2750	2751	2752	2753	2754	27540	27541
27542	27549	2758	2759	2771	2772	2773	2774	2775	2776	2777	2778
27781	27782	27784	27785	27786	27787	27789	2779	2780	27800	27801	27802
2781	2782	2783	2784	2788	7831	7832	78321	78322	7833	7834	78340
78341	78342	78343	7835	7837	7839	7947	7957	79579	V122	V850	V8521
V8522	V8523	V8524	V8525	V8530	V8531	V8532	V8533	V8534	V8535	V8536	V8537
V8538	V8539	V854									

59   **Deficiency and other anemia**

2800	2801	2808	2809	2810	2811	2812	2813	2814	2818	2819	2820
2821	2822	2823	2824	28249	2827	2828	2829	2830	2831	28310	28311
28319	2832	2839	2840	2848	2849	2850	28521	28522	28529	2858	2859

60   **Acute posthemorrhagic anemia**

2851

61   **Sickle cell anemia**

28241   28242   2825   28260   28261   28262   28263   28264   28268   28269

62   **Coagulation and hemorrhagic disorders**

2860	2861	2862	2863	2864	2865	2866	2867	2869	2870	2871	2872
2873	28730	28731	28732	28733	28739	2874	2875	2878	2879	28981	28982
7827											

63   Diseases of white blood cells

2880   2881   2882   2883   2888   2889

64   Other hematologic conditions

2890   2894   28950   28951   28952   28959   2896   2897   2898   28989   2899   7900
79001   79009   V123   V582

76   Meningitis (except that caused by tuberculosis or sexually transmitted disease)

00321   0360   0470   0471   0478   0479   0490   0491   0530   05472   0721   10081
11283   1142   11501   11511   11591   3200   3201   3202   3203   3207   3208   32081
32082   32089   3209   3210   3211   3212   3213   3214   3218   3220   3221   3222
3229

77   Encephalitis (except that caused by tuberculosis or sexually transmitted disease)

0361   0462   0498   0499   0520   0543   0550   05601   0620   0621   0622   0623
0624   0625   0628   0629   0630   0631   0632   0638   0639   064   0662   0722
1300   1390   3230   3231   3232   3234   3235   3236   3237   3238   3239

78   Other CNS infection and poliomyelitis

04500   04501   04502   04503   04510   04511   04512   04513   04520   04521   04522   04523
04590   04591   04592   04593   0460   0461   0463   0468   0469   048   138   3240
3241   3249   326   V1202

79   Parkinson`s disease

3320

80   Multiple sclerosis

340

81   Other hereditary and degenerative nervous system conditions

3300   3301   3302   3303   3308   3309   3313   3314   3317   33181   33189   3319
3330   3331   3332   3333   3334   3335   3336   3337   33381   33382   33383   33384
33389   33390   33391   33392   33393   33399   3340   3341   3342   3343   3344   3348
3349   3350   33510   33511   33519   33520   33521   33522   33523   33524   33529   3358
3359   3360   3361   3362   3363   3368   3369   3370   3371   3373   3379

82   Paralysis

3420   34200   34201   34202   3421   34210   34211   34212   34280   34281   34282   3429
34290   34291   34292   3430   3431   3432   3433   3434   3438   3439   3440   34400
34401   34402   34403   34404   34409   3441   3442   3443   34430   34431   34432   3444
34440   34441   34442   3445   34460   3448   34481   34489   3449   7814

83   Epilepsy; convulsions

3450   34500   34501   3451   34510   34511   3452   3453   3454   34540   34541   3455
34550   34551   3456   34560   34561   3457   34570   34571   3458   34580   34581   3459
34590   34591   7803   78031   78039

84   Headache; including migraine

3460	34600	34601	3461	34610	34611	3462	34620	34621	3468	34680	34681
3469	34690	34691	7840								

85   Coma; stupor; and brain damage

3481	7800	78001	78003	78009

86   Cataract

36600	36601	36602	36603	36604	36609	36610	36611	36612	36613	36614	36615
36616	36617	36618	36619	36620	36621	36622	36623	36630	36631	36632	36633
36634	36641	36642	36643	36644	36645	36646	36650	36651	36652	36653	3668
3669	V431										

87   Retinal detachments; defects; vascular occlusion; and retinopathy

36100	36101	36102	36103	36104	36105	36106	36107	36110	36111	36112	36113
36114	36119	3612	36130	36131	36132	36133	36181	36189	3619	36201	36202
36203	36204	36205	36206	36207	36210	36211	36212	36213	36214	36215	36216
36217	36218	36221	36229	36230	36231	36232	36233	36234	36235	36236	36237
36240	36241	36242	36243	36250	36251	36252	36253	36254	36255	36256	36257
36260	36261	36262	36263	36264	36265	36266	36270	36271	36272	36273	36274
36275	36276	36277	36281	36282	36283	36284	36285	36289	3629		

88   Glaucoma

36500	36501	36502	36503	36504	36510	36511	36512	36513	36514	36515	36520
36521	36522	36523	36524	36531	36532	36541	36542	36543	36544	36551	36552
36559	36560	36561	36562	36563	36564	36565	36581	36582	36583	36589	3659

89   Blindness and vision defects

3670	3671	36720	36721	36722	36731	36732	3674	36751	36752	36753	36781
36789	3679	36800	36801	36802	36803	36810	36811	36812	36813	36814	36815
36816	3682	36830	36831	36832	36833	36834	36840	36841	36842	36843	36844
36845	36846	36847	36851	36852	36853	36854	36855	36859	36860	36861	36862
36863	36869	3688	3689	36900	36901	36902	36903	36904	36905	36906	36907
36908	36910	36911	36912	36913	36914	36915	36916	36917	36918	36920	36921
36922	36923	36924	36925	3693	3694	36960	36961	36962	36963	36964	36965
36966	36967	36968	36969	36970	36971	36972	36973	36974	36975	36976	3698
3699	V410										

90   Inflammation; infection of eye (except that caused by tuberculosis or sexually transmitted disease)

0213	03281	05320	05321	05322	05329	05440	05441	05442	05443	05444	05449
05571	0760	0761	0769	0770	0771	0772	0773	0774	0778	0779	07798
07799	11502	11512	11592	1301	1302	1391	36000	36001	36002	36003	36004
36011	36012	36013	36014	36019	36300	36301	36303	36304	36305	36306	36307
36308	36310	36311	36312	36313	36314	36315	36320	36321	36322	36400	36401
36402	36403	36404	36405	36410	36411	36421	36422	36423	36424	3643	37020
37021	37022	37023	37024	37031	37032	37033	37034	37035	37040	37044	37049
37050	37052	37054	37055	37059	3708	3709	37200	37201	37202	37203	37204

37205	37210	37211	37212	37213	37214	37215	37220	37221	37222	37230	37231
37233	37239	37300	37301	37302	37311	37312	37313	37331	37332	37333	37334
3734	3735	3736	3738	3739	37500	37501	37502	37503	37530	37531	37532
37533	37541	37542	37543	37600	37601	37602	37603	37604	37610	37611	37612
37613	37730	37731	37732	37733	37734	37739	37900	37901	37902	37903	37904
37905	37906	37907	37909								

91   Other eye disorders

36020	36021	36023	36024	36029	36030	36031	36032	36033	36034	36040	36041
36042	36043	36044	36050	36051	36052	36053	36054	36055	36059	36060	36061
36062	36063	36064	36065	36069	36081	36089	3609	36330	36331	36332	36333
36334	36335	36340	36341	36342	36343	36350	36351	36352	36353	36354	36355
36356	36357	36361	36362	36363	36370	36371	36372	3638	3639	36441	36442
36451	36452	36453	36454	36455	36456	36457	36459	36460	36461	36462	36463
36464	36470	36471	36472	36473	36474	36475	36476	36477	3648	3649	37000
37001	37002	37003	37004	37005	37006	37007	37060	37061	37062	37063	37064
37100	37101	37102	37103	37104	37105	37110	37111	37112	37113	37114	37115
37116	37120	37121	37122	37123	37124	37130	37131	37132	37133	37140	37141
37142	37143	37144	37145	37146	37148	37149	37150	37151	37152	37153	37154
37155	37156	37157	37158	37160	37161	37162	37170	37171	37172	37173	37181
37182	37189	3719	37240	37241	37242	37243	37244	37245	37250	37251	37252
37253	37254	37255	37256	37261	37262	37263	37264	37271	37272	37273	37274
37275	3728	37281	37289	3729	3732	37400	37401	37402	37403	37404	37405
37410	37411	37412	37413	37414	37420	37421	37422	37423	37430	37431	37432
37433	37434	37441	37443	37444	37445	37446	37450	37451	37452	37453	37454
37455	37456	37481	37482	37483	37484	37485	37486	37487	37489	3749	37511
37512	37513	37514	37515	37516	37520	37521	37522	37551	37552	37553	37554
37555	37556	37557	37561	37569	37581	37589	3759	37621	37622	37630	37631
37632	37633	37634	37635	37636	37640	37641	37642	37643	37644	37645	37646
37647	37650	37651	37652	3766	37681	37682	37689	3769	37700	37701	37702
37703	37704	37710	37711	37712	37713	37714	37715	37716	37721	37722	37723
37724	37741	37742	37749	37751	37752	37753	37754	37761	37762	37763	37771
37772	37773	37775	3779	37800	37801	37802	37803	37804	37805	37806	37807
37808	37810	37811	37812	37813	37814	37815	37816	37817	37818	37820	37821
37822	37823	37824	37830	37831	37832	37833	37834	37835	37840	37841	37842
37843	37844	37845	37850	37851	37852	37853	37854	37855	37856	37860	37861
37862	37863	37871	37872	37873	37881	37882	37883	37884	37885	37886	37887
3789	37911	37912	37913	37914	37915	37916	37919	37921	37922	37923	37924
37925	37926	37929	37931	37932	37933	37934	37939	37940	37941	37942	37943
37945	37946	37949	37950	37951	37952	37953	37954	37955	37956	37957	37958
37959	3798	37990	37991	37992	37993	37999	78193	V411	V425	V430	V456
V4561	V4569	V522	V531	V720							

92   Otitis media and related conditions

0552	38100	38101	38102	38103	38104	38105	38106	38110	38119	38120	38129
3813	3814	38150	38151	38152	38160	38161	38162	38163	3817	38181	38189
3819	38200	38201	38202	3821	3822	3823	3824	3829	38300	38301	38302
3831	38320	38321	38322	38330	38331	38332	38333	38381	38389	3839	38420
38421	38422	38423	38424	38425	38481	38482	3849	38500	38501	38502	38503
38509	38510	38511	38512	38513	38519	38521	38522	38523	38524	3870	3871
3872	3878	3879									

93   Conditions associated with dizziness or vertigo

38600	38601	38602	38603	38604	38610	38611	38612	38619	3862	38630	38631
38632	38633	38634	38635	38640	38641	38642	38643	38648	38650	38651	38652
38653	38654	38655	38656	38658	3868	3869	7804				

94   Other ear and sense organ disorders

38000	38001	38002	38003	38010	38011	38012	38013	38014	38015	38016	38021
38022	38023	38030	38031	38032	38039	3804	38050	38051	38052	38053	38081
38089	3809	38400	38401	38409	3841	38530	38531	38532	38533	38535	38582
38583	38589	3859	38800	38801	38802	38810	38811	38812	3882	38830	38831
38832	38840	38841	38842	38843	38844	3885	38860	38861	38869	38870	38871
38872	3888	3889	38900	38901	38902	38903	38904	38908	38910	38911	38912
38914	38918	3892	3897	3898	3899	V412	V413	V532	V721		

95   Other nervous system disorders

325	3321	33720	33721	33722	33729	3410	3411	3418	3419	34461	347
34700	34701	34710	34711	3480	3482	3483	34830	34831	34839	3484	3485
3488	3489	3492	34981	34982	34989	3499	3501	3502	3508	3509	3510
3511	3518	3519	3520	3521	3522	3523	3524	3525	3526	3529	3530
3531	3532	3533	3534	3535	3536	3538	3539	3540	3541	3542	3543
3544	3545	3548	3549	3550	3551	3552	3553	3554	3555	3556	3557
35571	35579	3558	3559	3560	3561	3562	3563	3564	3568	3569	3570
3571	3572	3573	3574	3575	3576	3577	3578	35781	35782	35789	3579
3580	35800	35801	3581	3582	3588	3589	3590	3591	3592	3593	3594
3595	3596	3598	35981	35989	3599	7810	7811	7812	7813	7817	7818
7820	7843	7845	78460	78461	78469	7920	7930	79400	79401	79402	79409
79410	79411	79412	79413	79414	79415	79416	79417	79419	7961	V124	V1240
V1241	V1242	V1249	V415	V452	V484	V485	V493	V530	V5301	V5302	V5309

96   Heart valve disorders

3940	3941	3942	3949	3950	3951	3952	3959	3960	3961	3962	3963
3968	3969	3970	3971	3979	4240	4241	4242	4243	42490	42491	42499
7852	7853	V422	V433								

97   Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by tuberculosis or sexually transmitted disease)

03282	03640	03641	03642	03643	07420	07421	07422	07423	11281	11503	11504
11513	11514	11593	11594	1303	3910	3911	3912	3918	3919	3920	393
3980	39890	39899	4200	42090	42091	42099	4210	4211	4219	4220	42290
42291	42292	42293	42299	4230	4231	4232	4238	4239	4250	4251	4252
4253	4254	4255	4257	4258	4259	4290					

98   Essential hypertension

4011	4019

99   Hypertension with complications and secondary hypertension

4010	40200	40201	40210	40211	40290	40291	4030	40300	40301	4031	40310
40311	4039	40390	40391	4040	40400	40401	40402	40403	4041	40410	40411
40412	40413	4049	40490	40491	40492	40493	40501	40509	40511	40519	40591

40599   4372

100   Acute myocardial infarction

4100   41000   41001   41002   4101   41010   41011   41012   4102   41020   41021   41022
4103   41030   41031   41032   4104   41040   41041   41042   4105   41050   41051   41052
4106   41060   41061   41062   4107   41070   41071   41072   4108   41080   41081   41082
4109   41090   41091   41092

101   Coronary atherosclerosis and other heart disease

4110   4111   4118   41181   41189   412   4130   4131   4139   4140   41400   41401
41403   41406   4148   4149   V4581   V4582

102   Nonspecific chest pain

78650   78651   78659

103   Pulmonary heart disease

4150   4151   41519   4160   4161   4168   4169   4170   4171   4178   4179

104   Other and ill-defined heart disease

41410   41411   41412   41419   4291   4292   4293   4295   4296   42971   42979   42981
42982   42989   4299

105   Conduction disorders

4260   42610   42611   42612   42613   4262   4263   4264   42650   42651   42652   42653
42654   4266   4267   42681   42689   4269   V450   V4500   V4501   V4502   V4509   V533
V5331   V5332   V5339

106   Cardiac dysrhythmias

4270   4271   4272   42731   42732   42760   42761   42769   42781   42789   4279   7850
7851

107   Cardiac arrest and ventricular fibrillation

42741   42742   4275

108   Congestive heart failure; nonhypertensive

39891   4280   4281   42820   42821   42822   42823   42830   42831   42832   42833   42840
42841   42842   42843   4289

109   Acute cerebrovascular disease

430   431   4320   4321   4329   43301   43311   43321   43331   43381   43391   4340
43400   43401   4341   43410   43411   4349   43490   43491   436

110   Occlusion or stenosis of precerebral arteries

4330   43300   4331   43310   4332   43320   4333   43330   4338   43380   4339   43390

111   Other and ill-defined cerebrovascular disease

4370   4371   4373   4374   4375   4376   4377   4378   4379

112   Transient cerebral ischemia

4350   4351   4352   4353   4358   4359

113   Late effects of cerebrovascular disease

438   4380   43810   43811   43812   43819   43820   43821   43822   43830   43831   43832
43840   43841   43842   43850   43851   43852   43853   4386   4387   43881   43882   43883
43884   43885   43889   4389

114   Peripheral and visceral atherosclerosis

4400   4401   4402   44020   44021   44022   44023   44029   4408   4409   4439   5570
5571   5579

115   Aortic; peripheral; and visceral artery aneurysms

4410   44100   44101   44102   44103   4411   4412   4413   4414   4415   4416   4417
4419   4420   4421   4422   4423   44281   44282   44283   44284   44289   4429   44321
44322   44323   44324   44329

116   Aortic and peripheral arterial embolism or thrombosis

4440   4441   44421   44422   44481   44489   4449   44501   44502   44581   44589

117   Other circulatory disease

42682   4430   4431   44381   44382   44389   4460   4461   4462   44620   44621   44629
4463   4464   4465   4466   4467   4470   4471   4472   4473   4474   4475   4476
4478   4479   4480   4481   4489   4580   4581   4588   4589   4590   45989   4599
7859   79430   79431   79439   7962   V125   V1250   V1259   V151   V421   V432   V4321
V4322   V434   V717

118   Phlebitis; thrombophlebitis and thromboembolism

4510   45111   45119   4512   45181   45182   45183   45184   45189   4519   452   4530
4531   4532   4533   45340   45341   45342   4538   4539   V1251   V1252

119   Varicose veins of lower extremity

4540   4541   4542   4548   4549

120   Hemorrhoids

4550   4551   4552   4553   4554   4555   4556   4557   4558   4559

121   Other diseases of veins and lymphatics

4563   4564   4565   4566   4568   4570   4571   4572   4578   4579   4591   45910
45911   45912   45913   45919   4592   45930   45931   45932   45933   45939   45981

122   **Pneumonia (except that caused by tuberculosis or sexually transmitted disease)**

00322	0203	0204	0205	0212	0221	0310	0391	0521	0551	0730	0830
1124	1140	1144	1145	11505	11515	11595	1304	1363	4800	4801	4802
4803	4808	4809	481	4820	4821	4822	4823	48230	48231	48232	48239
4824	48240	48241	48249	4828	48281	48282	48283	48284	48289	4829	483
4830	4831	4838	4841	4843	4845	4846	4847	4848	485	486	5130
5171											

123   **Influenza**

4870	4871	4878

124   **Acute and chronic tonsillitis**

463	4740	47400	47401	47402	47410	47411	47412	4742	4748	4749	475

125   **Acute bronchitis**

4660	4661	46611	46619

126   **Other upper respiratory infections**

0320	0321	0322	0323	0340	460	4610	4611	4612	4613	4618	4619
462	4640	46400	46401	46410	46411	46420	46421	46430	46431	4644	46450
46451	4650	4658	4659	4730	4731	4732	4733	4738	4739		

127   **Chronic obstructive pulmonary disease and bronchiectasis**

490	4910	4911	4912	49120	49121	49122	4918	4919	4920	4928	494
4940	4941	496									

128   **Asthma**

49300	49301	49302	49310	49311	49312	49320	49321	49322	49381	49382	49390
49391	49392										

129   **Aspiration pneumonitis; food/vomitus**

5070

130   **Pleurisy; pneumothorax; pulmonary collapse**

5100	5109	5110	5111	5118	5119	5120	5128	5180	5181	5182

131   **Respiratory failure; insufficiency; arrest (adult)**

5173	5185	51881	51882	51883	51884	7991	V461	V4611	V4612	V4613	V4614
V462										

132   **Lung disease due to external agents**

4950	4951	4952	4953	4954	4955	4956	4957	4958	4959	500	501
502	503	504	505	5060	5061	5062	5063	5064	5069	5071	5078
5080	5081	5088	5089								

133   Other lower respiratory disease

5131	514	515	5160	5161	5162	5163	5168	5169	5172	5178	5183
5184	51889	5194	5198	5199	7825	78600	78601	78602	78603	78604	78605
78606	78607	78609	7862	7863	7864	78652	7866	7867	7868	7869	7931
7942	V126	V1260	V1261	V1269	V426						

134   Other upper respiratory disease

470	4710	4711	4718	4719	4720	4721	4722	4760	4761	4770	4772
4778	4779	4780	4781	47820	47821	47822	47824	47825	47826	47829	47830
47831	47832	47833	47834	4784	4785	4786	47870	47871	47874	47875	47879
4788	4789	5191	5192	5193	7841	78440	78441	78449	7847	7848	7849
7861	V414	V440	V550								

135   Intestinal infection

0010	0011	0019	0020	0021	0022	0023	0029	0030	00320	00329	0038
0039	0040	0041	0042	0043	0048	0049	0050	0051	0052	0053	0054
0058	00581	00589	0059	0060	0061	0062	0063	0064	0065	0066	0068
0069	0070	0071	0072	0073	0074	0075	0078	0079	0080	00800	00801
00802	00803	00804	00809	0081	0082	0083	00841	00842	00843	00844	00845
00846	00847	00849	0085	0086	00861	00862	00863	00864	00865	00866	00867
00869	0088	0090	0091	0092	0093	0211	0222				

136   Disorders of teeth and jaw

5200	5201	5202	5203	5204	5205	5206	5207	5208	5209	5210	52100
52101	52102	52103	52104	52105	52106	52107	52108	52109	5211	52110	52111
52112	52113	52114	52115	5212	52120	52121	52122	52123	52124	52125	5213
52130	52131	52132	52133	52134	52135	5214	52140	52141	52142	52149	5215
5216	5217	5218	5219	5220	5221	5222	5223	5224	5225	5226	5227
5228	5229	5230	5231	5232	52320	52321	52322	52323	52324	52325	5233
5234	5235	5236	5238	5239	5240	52400	52401	52402	52403	52404	52405
52406	52407	52409	5241	52410	52411	52412	52419	5242	52420	52421	52422
52423	52424	52425	52426	52427	52428	52429	5243	52430	52431	52432	52433
52434	52435	52436	52437	52439	5244	5245	52450	52451	52452	52453	52454
52455	52456	52457	52459	5246	52460	52461	52462	52463	52464	52469	52470
52471	52472	52473	52474	52475	52476	52479	5248	52481	52482	52489	5249
5250	5251	52510	52511	52512	52513	52519	5252	52520	52521	52522	52523
52524	52525	52526	5253	52540	52541	52542	52543	52544	52550	52551	52552
52553	52554	5258	5259	5260	5261	5262	5263	5264	5265	52681	52689
5269	V523	V534	V585	V722							

137   Diseases of mouth; excluding dental

5270	5271	5272	5273	5274	5275	5276	5277	5278	5279	5280	5281
5282	5283	5284	5285	5286	5287	52871	52872	52879	5288	5289	5290
5291	5292	5293	5294	5295	5296	5298	5299	7924			

138   Esophageal disorders

4561	45621	5300	5301	53010	53011	53012	53019	5302	53020	53021	5303
5304	5305	5306	5308	53081	53083	53084	53085	53089	5309		

139   Gastroduodenal ulcer (except hemorrhage)

53110	53111	53130	53131	53150	53151	53170	53171	53190	53191	53210	53211
53230	53231	53250	53251	53270	53271	53290	53291	53310	53311	53330	53331
53350	53351	53370	53371	53390	53391	53410	53411	53430	53431	53450	53451
53470	53471	53490	53491	V1271							

40   Gastritis and duodenitis

5350	53500	53501	5351	53510	53511	5352	53520	53521	5353	53530	53531
5354	53540	53541	5355	53550	53551	5356	53560	53561			

141   Other disorders of stomach and duodenum

5360	5361	5362	5363	5368	5369	5370	5371	5372	5373	5374	5375
5376	53781	53782	53783	53784	53789	5379					

142   Appendicitis and other appendiceal conditions

5400	5401	5409	541	542	5430	5439

143   Abdominal hernia

55000	55001	55002	55003	55010	55011	55012	55013	55090	55091	55092	55093
55100	55101	55102	55103	5511	55120	55121	55129	5513	5518	5519	55200
55201	55202	55203	5521	55220	55221	55229	5523	5528	5529	55300	55301
55302	55303	5531	55320	55321	55329	5533	5538	5539			

144   Regional enteritis and ulcerative colitis

5550	5551	5552	5559	556	5560	5561	5562	5563	5564	5565	5566
5568	5569										

145   Intestinal obstruction without hernia

5600	5601	5602	56030	56031	56039	56081	56089	5609

146   Diverticulosis and diverticulitis

56200	56201	56202	56203	56210	56211	56212	56213

147   Anal and rectal conditions

5646	5650	5651	566	5690	5691	5692	56941	56942	56949

148   Peritonitis and intestinal abscess

03283	5670	5671	5672	56721	56722	56723	56729	56738	56739	5678	56781
56782	56789	5679	5695								

149   Biliary tract disease

57400	57401	57410	57411	57420	57421	57430	57431	57440	57441	57450	57451
57460	57461	57470	57471	57480	57481	57490	57491	5750	5751	57510	57511
57512	5752	5753	5754	5755	5756	5758	5759	5760	5761	5762	5763
5764	5765	5768	5769	7933							

150   Liver disease; alcohol-related

5710   5711   5712   5713

151   Other liver diseases

570   5715   5716   5718   5719   5720   5721   5722   5723   5724   5728   5730
5734   5738   5739   7824   7891   7895   7904   7905   7948   V427

152   Pancreatic disorders (not diabetes)

5770   5771   5772   5778   5779   5794

153   Gastrointestinal hemorrhage

4560   45620   5307   53082   53100   53101   53120   53121   53140   53141   53160   53161
53200   53201   53220   53221   53240   53241   53260   53261   53300   53301   53320   53321
53340   53341   53360   53361   53400   53401   53420   53421   53440   53441   53460   53461
5693   5780   5781   5789

154   Noninfectious gastroenteritis

5589

155   Other gastrointestinal disorders

5581   5582   5640   56400   56401   56402   56409   5641   5645   5647   5648   56481
56489   5649   5680   56881   56882   56889   5689   56981   56982   56983   56984   56985
56986   56989   5699   5790   5791   5792   5798   5799   7871   7872   7873   7874
7875   7876   7877   7879   78791   78799   7892   7893   78930   78931   78932   78933
78934   78935   78936   78937   78939   7894   78940   78941   78942   78943   78944   78945
78946   78947   78949   7899   7921   7934   7936   V127   V1270   V1279   V416   V441
V442   V443   V444   V453   V473   V535   V551   V552   V553   V554

156   Nephritis; nephrosis; renal sclerosis

5800   5804   58081   58089   5809   5810   5811   5812   5813   58181   58189   5819
5820   5821   5822   5824   58281   58289   5829   5830   5831   5832   5834   5836
5837   58381   58389   5839   587

157   Acute and unspecified renal failure

5845   5846   5847   5848   5849   586

158   Chronic renal failure

585   5853   5854   5855   5856   5859   7925   V420   V451   V560   V561   V562
V5631   V5632   V568

159   Urinary tract infections

03284   59000   59001   59010   59011   5902   5903   59080   59081   5909   5950   5951
5952   5953   5954   59581   59582   59589   5959   5970   59780   59781   59789   59800
59801   5990

160 Calculus of urinary tract

| 5920 | 5921 | 5929 | 5940 | 5941 | 5942 | 5948 | 5949 | 7880 | V1301 |

161 Other diseases of kidney and ureters

5851	5852	5880	5881	5888	58881	58889	5889	5890	5891	5899	591
5930	5931	5932	5933	5934	5935	5936	5937	59370	59371	59372	59373
59381	59382	59389	5939

162 Other diseases of bladder and urethra

5960	5961	5962	5963	5964	5965	59651	59652	59653	59654	59655	59659
5966	5967	5968	5969	5981	5982	5988	5989	5991	5992	5993	5994
5995	59981	59982	59983	59984

163 Genitourinary symptoms and ill-defined conditions

5996	59960	59969	5997	5998	59989	5999	7881	7882	78820	78821	78829
7883	78830	78831	78832	78833	78834	78835	78836	78837	78838	78839	7884
78841	78842	78843	7885	7886	78861	78862	78863	78869	7887	7888	7889
7910	7911	7912	7913	7914	7917	7919	7935	7944	V130	V1300	V1302
V1303	V1309	V417	V435	V445	V4450	V4451	V4452	V4459	V446	V474	V475
V536	V555	V556

164 Hyperplasia of prostate

| 600 | 6000 | 60000 | 60001 | 6001 | 60010 | 60011 | 6002 | 60020 | 60021 | 6003 | 6009 |
| 60090 | 60091 |

165 Inflammatory conditions of male genital organs

| 6010 | 6011 | 6012 | 6013 | 6014 | 6018 | 6019 | 6031 | 6040 | 60490 | 60491 | 60499 |
| 6071 | 6072 | 6080 | 6084 |

166 Other male genital disorders

6020	6021	6022	6023	6028	6029	6030	6038	6039	605	6060	6061
6068	6069	6070	6073	60781	60782	60783	60784	60785	60789	6079	6081
6082	6083	60881	60882	60883	60884	60885	60886	60887	60889	6089	7922

167 Nonmalignant breast conditions

| 6100 | 6101 | 6102 | 6103 | 6104 | 6108 | 6109 | 6110 | 6111 | 6112 | 6113 | 6114 |
| 6115 | 6116 | 61171 | 61172 | 61179 | 6118 | 6119 | 7938 | 79380 | 79381 | 79389 |

168 Inflammatory diseases of female pelvic organs

| 6140 | 6141 | 6142 | 6143 | 6144 | 6145 | 6146 | 6147 | 6148 | 6149 | 6150 | 6151 |
| 6159 | 6160 | 61610 | 61611 | 6162 | 6163 | 6164 | 61650 | 61651 | 6168 | 6169 |

169 Endometriosis

| 6170 | 6171 | 6172 | 6173 | 6174 | 6175 | 6176 | 6178 | 6179 |

170   Prolapse of female genital organs

6180   61800   61801   61802   61803   61804   61805   61809   6181   6182   6183   6184
6185   6186   6187   6188   61881   61882   61883   61889   6189

171   Menstrual disorders

6253   6260   6261   6262   6263   6264   6265   6266   6268   6269

172   Ovarian cyst

6200   6201   6202

173   Menopausal disorders

25631   25639   6270   6271   6272   6273   6274   6278   6279   V074

174   Female infertility

6280   6281   6282   6283   6284   6288   6289

175   Other female genital disorders

6190   6191   6192   6198   6199   6203   6204   6205   6206   6207   6208   6209
6210   6211   6212   6213   62130   62131   62132   62133   6214   6215   6216   6217
6218   6219   6220   6221   62210   62211   62212   6222   6223   6224   6225   6226
6227   6228   6229   6230   6231   6232   6233   6234   6235   6236   6237   6238
6239   6240   6241   6242   6243   6244   6245   6246   6248   6249   6250   6251
6252   6254   6255   6256   6258   6259   6267   6290   6291   62920   62921   62922
62923   6298   6299   79500   79501   79502   79503   79504   79505   79508   79509   V132
V1321   V1329   V557   V723

176   Contraceptive and procreative management

V157   V2501   V2502   V2503   V2509   V251   V252   V253   V2540   V2541   V2542   V2543
V2549   V255   V258   V259   V260   V261   V262   V2621   V2622   V2629   V263   V2631
V2632   V2633   V264   V2651   V2652   V268   V269   V455   V4551   V4552   V4559

177   Spontaneous abortion

63400   63401   63402   63410   63411   63412   63420   63421   63422   63430   63431   63432
63440   63441   63442   63450   63451   63452   63460   63461   63462   63470   63471   63472
63480   63481   63482   63490   63491   63492

178   Induced abortion

63500   63501   63502   63510   63511   63512   63520   63521   63522   63530   63531   63532
63540   63541   63542   63550   63551   63552   63560   63561   63562   63570   63571   63572
63580   63581   63582   63590   63591   63592   63600   63601   63602   63610   63611   63612
63620   63621   63622   63630   63631   63632   63640   63641   63642   63650   63651   63652
63660   63661   63662   63670   63671   63672   63680   63681   63682   63690   63691   63692
63700   63701   63702   63710   63711   63712   63720   63721   63722   63730   63731   63732
63740   63741   63742   63750   63751   63752   63760   63761   63762   63770   63771   63772
63780   63781   63782   63790   63791   63792   6380   6381   6382   6383   6384   6385
6386   6387   6388   6389

179   Postabortion complications

6390   6391   6392   6393   6394   6395   6396   6398   6399

180   Ectopic pregnancy

6330   63300   63301   6331   63310   63311   6332   63320   63321   6338   63380   63381
6339   63390   63391

181   Other complications of pregnancy

630   631   632   64300   64301   64303   64310   64311   64313   64320   64321   64323
64380   64381   64383   64390   64391   64393   64600   64601   64603   64610   64611   64612
64613   64614   64620   64621   64622   64623   64624   64630   64631   64633   64640   64641
64642   64643   64644   64650   64651   64652   64653   64654   64660   64661   64662   64663
64664   64670   64671   64673   64680   64681   64682   64683   64684   64690   64691   64693
64700   64701   64702   64703   64704   64710   64711   64712   64713   64714   64720   64721
64722   64723   64724   64730   64731   64732   64733   64734   64740   64741   64742   64743
64744   64750   64751   64752   64753   64754   64760   64761   64762   64763   64764   64780
64781   64782   64783   64784   64790   64791   64792   64793   64794   64810   64811   64812
64813   64814   64820   64821   64822   64823   64824   64830   64831   64832   64833   64834
64840   64841   64842   64843   64844   64850   64851   64852   64853   64854   64860   64861
64862   64863   64864   64870   64871   64872   64873   64874   64890   64891   64892   64893
64894

182   Hemorrhage during pregnancy; abruptio placenta; placenta previa

64000   64001   64003   64080   64081   64083   64090   64091   64093   64100   64101   64103
64110   64111   64113   64120   64121   64123   64130   64131   64133   64180   64181   64183
64190   64191   64193

183   Hypertension complicating pregnancy; childbirth and the puerperium

64200   64201   64202   64203   64204   64210   64211   64212   64213   64214   64220   64221
64222   64223   64224   64230   64231   64232   64233   64234   64240   64241   64242   64243
64244   64250   64251   64252   64253   64254   64260   64261   64262   64263   64264   64270
64271   64272   64273   64274   64290   64291   64292   64293   64294

184   Early or threatened labor

64400   64403   64410   64413   64420   64421

185   Prolonged pregnancy

64500   64501   64503   64510   64511   64513   64520   64521   64523

186   Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium

64800   64801   64802   64803   64804   64880   64881   64882   64883   64884

187   Malposition; malpresentation

65200   65201   65203   65210   65211   65213   65220   65221   65223   65230   65231   65233
65240   65241   65243   65250   65251   65253   65260   65261   65263   65270   65271   65273
65280   65281   65283   65290   65291   65293   66000   66001   66003

188   Fetopelvic disproportion; obstruction

65300   65301   65303   65310   65311   65313   65320   65321   65323   65330   65331   65333
65340   65341   65343   65350   65351   65353   65360   65361   65363   65370   65371   65373
65380   65381   65383   65390   65391   65393   66010   66011   66013   66020   66021   66023
66030   66031   66033   66040   66041   66043   66050   66051   66053   66060   66061   66063
66070   66071   66073   66080   66081   66083   66090   66091   66093

189   Previous C-section

65420   65421   65423

190   Fetal distress and abnormal forces of labor

65630   65631   65633   66100   66101   66103   66110   66111   66113   66120   66121   66123
66130   66131   66133   66140   66141   66143   66190   66191   66193   66200   66201   66203
66210   66211   66213   66220   66221   66223   66230   66231   66233

191   Polyhydramnios and other problems of amniotic cavity

65700   65701   65703   65800   65801   65803   65810   65811   65813   65820   65821   65823
65830   65831   65833   65840   65841   65843   65880   65881   65883   65890   65891   65893
77984   7923

192   Umbilical cord complication

66300   66301   66303   66310   66311   66313   66320   66321   66323   66330   66331   66333
66340   66341   66343   66350   66351   66353   66360   66361   66363   66380   66381   66383
66390   66391   66393

193   OB-related trauma to perineum and vulva

66400   66401   66404   66410   66411   66414   66420   66421   66424   66430   66431   66434
66440   66441   66444   66450   66451   66454   66480   66481   66484   66490   66491   66494

194   Forceps delivery

66950   66951

195   Other complications of birth; puerperium affecting management of mother

65103   65113   65123   65130   65131   65133   65140   65141   65143   65150   65151   65153
65160   65161   65163   65183   65193   65400   65401   65402   65403   65404   65410   65411
65412   65413   65414   65430   65431   65432   65433   65434   65440   65441   65442   65443
65444   65450   65451   65452   65453   65454   65460   65461   65462   65463   65464   65470
65471   65472   65473   65474   65480   65481   65482   65483   65484   65490   65491   65492
65493   65494   65500   65501   65503   65510   65511   65513   65520   65521   65523   65530
65531   65533   65540   65541   65543   65550   65551   65553   65560   65561   65563   65570
65571   65573   65580   65581   65583   65590   65591   65593   65600   65601   65603   65610
65611   65613   65620   65621   65623   65640   65641   65643   65650   65651   65653   65660
65661   65663   65670   65671   65673   65680   65681   65683   65690   65691   65693   65900
65901   65903   65910   65911   65913   65920   65921   65923   65930   65931   65933   65940
65941   65943   65950   65951   65953   65960   65961   65963   65970   65971   65973   65980
65981   65983   65990   65991   65993   66500   66501   66503   66510   66511   66512   66514
66520   66522   66524   66530   66531   66534   66540   66541   66544   66550   66551   66554
66560   66561   66564   66570   66571   66572   66574   66580   66581   66582   66583   66584

66590 66591 66592 66593 66594 66600 66602 66604 66610 66612 66614 66620
66622 66624 66630 66632 66634 66700 66702 66704 66710 66712 66714 66800
66801 66802 66803 66804 66810 66811 66812 66813 66814 66820 66821 66822
66823 66824 66880 66881 66882 66883 66884 66890 66891 66892 66893 66894
66900 66901 66902 66903 66904 66910 66911 66912 66913 66914 66920 66921
66922 66923 66924 66930 66932 66934 66940 66941 66942 66943 66944 66960
66961 66970 66971 66980 66981 66982 66983 66984 66990 66991 66992 66993
66994 67000 67002 67004 67100 67101 67102 67103 67104 67110 67111 67112
67113 67114 67120 67121 67122 67123 67124 67130 67131 67133 67140 67142
67144 67150 67151 67152 67153 67154 67180 67181 67182 67183 67184 67190
67191 67192 67193 67194 67200 67202 67204 67300 67301 67302 67303 67304
67310 67311 67312 67313 67314 67320 67321 67322 67323 67324 67330 67331
67332 67333 67334 67380 67381 67382 67383 67384 67400 67401 67402 67403
67404 67410 67412 67414 67420 67422 67424 67430 67432 67434 67440 67442
67444 67450 67451 67452 67453 67454 67480 67482 67484 67490 67492 67494
67500 67501 67502 67503 67504 67510 67511 67512 67513 67514 67520 67521
67522 67523 67524 67580 67581 67582 67583 67584 67590 67591 67592 67593
67594 67600 67601 67602 67603 67604 67610 67611 67612 67613 67614 67620
67621 67622 67623 67624 67630 67631 67632 67633 67634 67640 67641 67642
67643 67644 67650 67651 67652 67653 67654 67660 67661 67662 67663 67664
67680 67681 67682 67683 67684 67690 67691 67692 67693 67694 677   V230
V231   V232   V233   V234   V2341 V2349 V235   V237   V238   V2381 V2382 V2383
V2384 V2389 V239

196   Normal pregnancy and/or delivery

650   65100 65101 65110 65111 65120 65121 65170 65171 65173 65180 65181
65190 65191 V220   V221   V222   V240   V241   V242   V270   V271   V272   V273
V274   V275   V276   V277   V279   V724   V7242

197   Skin and subcutaneous tissue infections

0201   0210   0220   0311   03285 035   0390   6800   6801   6802   6803   6804
6805   6806   6807   6808   6809   68100 68101 68102 68110 68111 6819   6820
6821   6822   6823   6824   6825   6826   6827   6828   6829   684   6850   6851
6860   68600 68601 68609 6861   6868   6869

198   Other inflammatory condition of skin

690   69010 69011 69012 69018 6908   69276 69277 6940   6941   6942   6943
6944   6945   69460 69461 6948   6949   6950   6951   6952   6953   6954   69581
69589 6959   6960   6961   6962   6963   6964   6965   6968   6970   6971   6978
6979   6980   6981   6982   6983   6984   6988   6989

199   Chronic ulcer of skin

7070   70700 70701 70702 70703 70704 70705 70706 70707 70709 7071   70710
70711 70712 70713 70714 70715 70719 7078   7079

200   Other skin disorders

69275 700   7010   7011   7012   7013   7014   7015   7018   7019   702   7020
7021   70211 70219 7028   7030   7038   7039   70400 70401 70402 70409 7041
7042   7043   7048   7049   7050   7051   70521 70522 70581 70582 70583 70589
7059   7060   7061   7062   7063   7068   7069   7090   70900 70901 70909 7091
7092   7093   7094   7098   7099   7808   7821   7822   V133   V423

201 Infective arthritis and osteomyelitis (except that caused by tuberculosis or sexually transmitted disease)

00323	00324	0261	03682	05671	71100	71101	71102	71103	71104	71105	71106
71107	71108	71109	71110	71111	71112	71113	71114	71115	71116	71117	71118
71119	71120	71121	71122	71123	71124	71125	71126	71127	71128	71129	71130
71131	71132	71133	71134	71135	71136	71137	71138	71139	71140	71141	71142
71143	71144	71145	71146	71147	71148	71149	71150	71151	71152	71153	71154
71155	71156	71157	71158	71159	71160	71161	71162	71163	71164	71165	71166
71167	71168	71169	71170	71171	71172	71173	71174	71175	71176	71177	71178
71179	71180	71181	71182	71183	71184	71185	71186	71187	71188	71189	71190
71191	71192	71193	71194	71195	71196	71197	71198	71199	73000	73001	73002
73003	73004	73005	73006	73007	73008	73009	73010	73011	73012	73013	73014
73015	73016	73017	73018	73019	73020	73021	73022	73023	73024	73025	73026
73027	73028	73029	73030	73031	73032	73033	73034	73035	73036	73037	73038
73039	73070	73071	73072	73073	73074	73075	73076	73077	73078	73079	73080
73081	73082	73083	73084	73085	73086	73087	73088	73089	73090	73091	73092
73093	73094	73095	73096	73097	73098	73099					

202 Rheumatoid arthritis and related disease

7140	7141	7142	71430	71431	71432	71433	7144	71481	71489	7149	7200

203 Osteoarthritis

71500	71504	71509	71510	71511	71512	71513	71514	71515	71516	71517	71518
71520	71521	71522	71523	71524	71525	71526	71527	71528	71530	71531	71532
71533	71534	71535	71536	71537	71538	71580	71589	71590	71591	71592	71593
71594	71595	71596	71597	71598	V134						

204 Other non-traumatic joint disorders

7130	7131	7132	7133	7134	7135	7136	7137	7138	71600	71601	71602
71603	71604	71605	71606	71607	71608	71609	71620	71621	71622	71623	71624
71625	71626	71627	71628	71629	71630	71631	71632	71633	71634	71635	71636
71637	71638	71639	71640	71641	71642	71643	71644	71645	71646	71647	71648
71649	71650	71651	71652	71653	71654	71655	71656	71657	71658	71659	71660
71661	71662	71663	71664	71665	71666	71667	71668	71680	71681	71682	71683
71684	71685	71686	71687	71688	71689	71690	71691	71692	71693	71694	71695
71696	71697	71698	71699	71810	71811	71812	71813	71814	71815	71817	71818
71819	71820	71821	71822	71823	71824	71825	71826	71827	71828	71829	71850
71851	71852	71853	71854	71855	71856	71857	71858	71859	71860	71865	71870
71871	71872	71873	71874	71875	71876	71877	71878	71879	71880	71881	71882
71883	71884	71885	71886	71887	71888	71889	71890	71891	71892	71893	71894
71895	71897	71898	71899	71900	71901	71902	71903	71904	71905	71906	71907
71908	71909	71910	71911	71912	71913	71914	71915	71916	71917	71918	71919
71920	71921	71922	71923	71924	71925	71926	71927	71928	71929	71930	71931
71932	71933	71934	71935	71936	71937	71938	71939	71940	71941	71942	71943
71944	71945	71946	71947	71948	71949	71950	71951	71952	71953	71954	71955
71956	71957	71958	71959	71960	71961	71962	71963	71964	71965	71966	71967
71968	71969	7197	71970	71975	71976	71977	71978	71979	71980	71981	71982
71983	71984	71985	71986	71987	71988	71989	71990	71991	71992	71993	71994
71995	71996	71997	71998	71999							

205   **Spondylosis; intervertebral disc disorders; other back problems**

7201	7202	72081	72089	7209	7210	7211	7212	7213	72141	72142	7215
7216	7217	7218	72190	72191	7220	72210	72211	7222	72230	72231	72232
72239	7224	72251	72252	7226	72270	72271	72272	72273	72280	72281	72282
72283	72290	72291	72292	72293	7230	7231	7232	7233	7234	7235	7236
7237	7238	7239	72400	72401	72402	72409	7241	7242	7243	7244	7245
7246	72470	72471	72479	7248	7249						

206   **Osteoporosis**

73300	73301	73302	73303	73309

207   **Pathological fracture**

7331	73310	73311	73312	73313	73314	73315	73316	73319	73393	73394	73395

208   **Acquired foot deformities**

7271	734	7350	7351	7352	7353	7354	7355	7358	7359	73670	73671
73672	73673	73674	73675	73676	73679					

209   **Other acquired deformities**

71840	71841	71842	71843	71844	71845	71846	71847	71848	71849	73600	73601
73602	73603	73604	73605	73606	73607	73609	7361	73620	73621	73622	73629
73630	73631	73632	73639	73641	73642	7365	7366	73681	73689	7369	7370
73710	73711	73712	73719	73720	73721	73722	73729	73733	73734	73739	73740
73741	73742	73743	7378	7379	7380	7381	73810	73811	73812	73819	7382
7383	7384	7385	7386	7387	7388	7389					

210   **Systemic lupus erythematosus and connective tissue disorders**

7100	7101	7102	7103	7104	7108	7109

211   **Other connective tissue disease**

32752	56731	7105	725	7260	72610	72611	72612	72619	7262	72630	72631
72632	72633	72639	7264	7265	72660	72661	72662	72663	72664	72665	72669
72670	72671	72672	72673	72679	7268	72690	72691	72700	72701	72702	72703
72704	72705	72706	72709	7272	7273	72740	72741	72742	72743	72749	72750
72751	72759	72760	72761	72762	72763	72764	72765	72766	72767	72768	72769
72781	72782	72783	72789	7279	7280	72810	72811	72812	72813	72819	7282
7283	7284	7285	7286	72871	72879	72881	72882	72883	72884	72885	72886
72887	72888	72889	7289	7290	7291	7292	72930	72931	72939	7294	7295
7296	72981	72982	72989	7299	7819	78191	78192	78194	78199	7937	V135
V436	V4360	V4361	V4362	V4363	V4364	V4365	V4366	V4369	V437	V454	V481
V482	V483	V490	V491	V492	V495	V4960	V4961	V4962	V4963	V4964	V4965
V4966	V4967	V4970	V4971	V4972	V4973	V4974	V4975	V4976	V4977	V537	

212   **Other bone disease and musculoskeletal deformities**

7310	7311	7312	7318	7320	7321	7322	7323	7324	7325	7326	7327
7328	7329	73320	73321	73322	73329	7333	73340	73341	73342	73343	73344
73349	7335	7336	7337	73381	73382	73390	73391	73392	73399	73730	73731
73732	7390	7391	7392	7393	7394	7395	7396	7397	7398	7399	V424

V486   V487   V494

213   Cardiac and circulatory congenital anomalies

7450   74510   74511   74512   74519   7452   7453   7454   7455   74560   74561   74569
7457   7458   7459   74600   74601   74602   74609   7461   7462   7463   7464   7465
7466   7467   74681   74682   74683   74684   74685   74686   74687   74689   7469   7470
74710   74711   74720   74721   74722   74729   7473   74740   74741   74742   74749   7475
7476   74760   74761   74762   74763   74764   74769   74781   74782   74783   74789   7479

214   Digestive congenital anomalies

7500   75010   75011   75012   75013   75015   75016   75019   75021   75022   75023   75024
75025   75026   75027   75029   7503   7504   7505   7506   7507   7508   7509   7510
7511   7512   7513   7514   7515   75160   75161   75162   75169   7517   7518   7519

215   Genitourinary congenital anomalies

7520   75210   75211   75219   7522   7523   75240   75241   75242   75249   7525   75251
75252   7526   75261   75262   75263   75264   75265   75269   7527   7528   75281   75289
7529   7530   7531   75310   75311   75312   75313   75314   75315   75316   75317   75319
7532   75320   75321   75322   75323   75329   7533   7534   7535   7536   7537   7538
7539   V1361

216   Nervous system congenital anomalies

7400   7401   7402   74100   74101   74102   74103   74190   74191   74192   74193   7420
7421   7422   7423   7424   74251   74253   74259   7428   7429

217   Other congenital anomalies

74300   74303   74306   74310   74311   74312   74320   74321   74322   74330   74331   74332
74333   74334   74335   74336   74337   74339   74341   74342   74343   74344   74345   74346
74347   74348   74349   74351   74352   74353   74354   74355   74356   74357   74358   74359
74361   74362   74363   74364   74365   74366   74369   7438   7439   74400   74401   74402
74403   74404   74405   74409   7441   74421   74422   74423   74424   74429   7443   74441
74442   74443   74446   74447   74449   7445   74481   74482   74483   74484   74489   7449
7480   7481   7482   7483   7484   7485   74860   74861   74869   7488   7489   74900
74901   74902   74903   74904   74910   74911   74912   74913   74914   74920   74921   74922
74923   74924   74925   7540   7541   7542   75430   75431   75432   75433   75435   75440
75441   75442   75443   75444   75450   75451   75452   75453   75459   75460   75461   75462
75469   75470   75471   75479   75481   75482   75489   75500   75501   75502   75510   75511
75512   75513   75514   75520   75521   75522   75523   75524   75525   75526   75527   75528
75529   75530   75531   75532   75533   75534   75535   75536   75537   75538   75539   7554
75550   75551   75552   75553   75554   75555   75556   75557   75558   75559   75560   75561
75562   75563   75564   75565   75566   75567   75569   7558   7559   7560   75610   75611
75612   75613   75614   75615   75616   75617   75619   7562   7563   7564   75650   75651
75652   75653   75654   75655   75656   75659   7566   7567   75670   75671   75679   75681
75682   75683   75689   7569   7570   7571   7572   75731   75732   75733   75739   7574
7575   7576   7578   7579   7580   7581   7582   7583   75831   75832   75833   75839
7584   7585   7586   7587   7588   75881   75889   7589   7590   7591   7592   7593
7594   7595   7596   7597   7598   75981   75982   75983   75989   7599   7952   V136
V1369

218   Liveborn

V300	V3000	V3001	V301	V302	V310	V3100	V3101	V311	V312	V320	V3200
V3201	V321	V322	V330	V3300	V3301	V331	V332	V340	V3400	V3401	V341
V342	V350	V3500	V3501	V351	V352	V360	V3600	V3601	V361	V362	V370
V3700	V3701	V371	V372	V390	V3900	V3901	V391	V392			

219   Short gestation; low birth weight; and fetal growth retardation

7640	76400	76401	76402	76403	76404	76405	76406	76407	76408	76409	7641
76410	76411	76412	76413	76414	76415	76416	76417	76418	76419	7642	76420
76421	76422	76423	76424	76425	76426	76427	76428	76429	7649	76490	76491
76492	76493	76494	76495	76496	76497	76498	76499	7650	76500	76501	76502
76503	76504	76505	76506	76507	76508	76509	7651	76510	76511	76512	76513
76514	76515	76516	76517	76518	76519	76520	76521	76522	76523	76524	76525
76526	76527	76528	76529	V2130	V2131	V2132	V2133	V2134	V2135		

220   Intrauterine hypoxia and birth asphyxia

7680	7681	7682	7683	7684	7685	7686	7689

221   Respiratory distress syndrome

769

222   Hemolytic jaundice and perinatal jaundice

7730	7731	7732	7733	7734	7735	7740	7741	7742	77430	77431	77439
7744	7745	7746	7747								

223   Birth trauma

7670	7671	76711	76719	7672	7673	7674	7675	7676	7677	7678	7679

224   Other perinatal conditions

7600	7601	7602	7603	7604	7605	7606	76070	76071	76072	76073	76074
76075	76076	76077	76078	76079	7608	7609	7610	7611	7612	7613	7614
7615	7616	7617	7618	7619	7620	7621	7622	7623	7624	7625	7626
7627	7628	7629	7630	7631	7632	7633	7634	7635	7636	7637	7638
76381	76382	76383	76384	76389	7639	7660	7661	7662	76621	76622	7700
7701	77010	77011	77012	77013	77014	77015	77016	77017	77018	7702	7703
7704	7705	7706	7707	7708	77081	77082	77083	77084	77085	77086	77089
7709	7710	7711	7712	7713	7714	7715	7716	7717	7718	77181	77182
77183	77189	7720	7721	77210	77211	77212	77213	77214	7722	7723	7724
7725	7726	7728	7729	7750	7751	7752	7753	7754	7755	7756	7757
7758	7759	7760	7761	7762	7763	7764	7765	7766	7767	7768	7769
7771	7772	7773	7774	7775	7776	7778	7779	7780	7781	7782	7783
7784	7785	7786	7787	7788	7789	7790	7791	7792	7793	7794	7795
7796	7797	7798	77981	77982	77983	77989	7799	78091	78092	V137	V502

225   Joint disorders and dislocations; trauma-related

71610	71611	71612	71613	71614	71615	71616	71617	71618	71619	7170	7171
7172	7173	71740	71741	71742	71743	71749	7175	7176	7177	71781	71782
71783	71784	71785	71789	7179	71800	71801	71802	71803	71804	71805	71807

71808	71809	71830	71831	71832	71833	71834	71835	71836	71837	71838	71839
8300	8301	83100	83101	83102	83103	83104	83109	83110	83111	83112	83113
83114	83119	83200	83201	83202	83203	83204	83209	83210	83211	83212	83213
83214	83219	83300	83301	83302	83303	83304	83305	83309	83310	83311	83312
83313	83314	83315	83319	83400	83401	83402	83410	83411	83412	83500	83501
83502	83503	83510	83511	83512	83513	8360	8361	8362	8363	8364	83650
83651	83652	83653	83654	83659	83660	83661	83662	83663	83664	83669	8370
8371	83800	83801	83802	83803	83804	83805	83806	83809	83810	83811	83812
83813	83814	83815	83816	83819	83900	83901	83902	83903	83904	83905	83906
83907	83908	83910	83911	83912	83913	83914	83915	83916	83917	83918	83920
83921	83930	83931	83940	83941	83942	83949	83950	83951	83952	83959	83961
83969	83971	83979	8398	8399	9056						

226   Fracture of neck of femur (hip)

82000	82001	82002	82003	82009	82010	82011	82012	82013	82019	82020	82021
82022	82030	82031	82032	8208	8209	9053	V5413	V5423			

227   Spinal cord injury

80600	80601	80602	80603	80604	80605	80606	80607	80608	80609	80610	80611
80612	80613	80614	80615	80616	80617	80618	80619	80620	80621	80622	80623
80624	80625	80626	80627	80628	80629	80630	80631	80632	80633	80634	80635
80636	80637	80638	80639	8064	8065	80660	80661	80662	80669	80670	80671
80672	80679	8068	8069	9072	95200	95201	95202	95203	95204	95205	95206
95207	95208	95209	95210	95211	95212	95213	95214	95215	95216	95217	95218
95219	9522	9523	9524	9528	9529						

228   Skull and face fractures

80000	80001	80002	80003	80004	80005	80006	80009	80050	80051	80052	80053
80054	80055	80056	80059	80100	80101	80102	80103	80104	80105	80106	80109
80150	80151	80152	80153	80154	80155	80156	80159	8020	8021	80220	80221
80222	80223	80224	80225	80226	80227	80228	80229	80230	80231	80232	80233
80234	80235	80236	80237	80238	80239	8024	8025	8026	8027	8028	8029
80300	80301	80302	80303	80304	80305	80306	80309	80350	80351	80352	80353
80354	80355	80356	80359	80400	80401	80402	80403	80404	80405	80406	80409
80450	80451	80452	80453	80454	80455	80456	80459	9050			

229   Fracture of upper limb

81000	81001	81002	81003	81010	81011	81012	81013	81100	81101	81102	81103
81109	81110	81111	81112	81113	81119	81200	81201	81202	81203	81209	81210
81211	81212	81213	81219	81220	81221	81230	81231	81240	81241	81242	81243
81244	81249	81250	81251	81252	81253	81254	81259	81300	81301	81302	81303
81304	81305	81306	81307	81308	81310	81311	81312	81313	81314	81315	81316
81317	81318	81320	81321	81322	81323	81330	81331	81332	81333	81340	81341
81342	81343	81344	81345	81350	81351	81352	81353	81354	81380	81381	81382
81383	81390	81391	81392	81393	81400	81401	81402	81403	81404	81405	81406
81407	81408	81409	81410	81411	81412	81413	81414	81415	81416	81417	81418
81419	81500	81501	81502	81503	81504	81509	81510	81511	81512	81513	81514
81519	81600	81601	81602	81603	81610	81611	81612	81613	8170	8171	8180
8181	8190	8191	9052	V5410	V5411	V5412	V5420	V5421	V5422		

230 Fracture of lower limb

82100	82101	82110	82111	82120	82121	82122	82123	82129	82130	82131	82132
82133	82139	8220	8221	82300	82301	82302	82310	82311	82312	82320	82321
82322	82330	82331	82332	82340	82341	82342	82380	82381	82382	82390	82391
82392	8240	8241	8242	8243	8244	8245	8246	8247	8248	8249	8250
8251	82520	82521	82522	82523	82524	82525	82529	82530	82531	82532	82533
82534	82535	82539	8260	8261	8270	8271	9054	V5414	V5415	V5416	V5424
V5425	V5426										

231 Other fractures

80500	80501	80502	80503	80504	80505	80506	80507	80508	80510	80511	80512
80513	80514	80515	80516	80517	80518	8052	8053	8054	8055	8056	8057
8058	8059	80700	80701	80702	80703	80704	80705	80706	80707	80708	80709
80710	80711	80712	80713	80714	80715	80716	80717	80718	80719	8072	8073
8074	8075	8076	8080	8081	8082	8083	80841	80842	80843	80849	80851
80852	80853	80859	8088	8089	8090	8091	8280	8281	8290	8291	9051
9055	V540	V5401	V5402	V5409	V5417	V5419	V5427	V5429	V664	V674	

232 Sprains and strains

8400	8401	8402	8403	8404	8405	8406	8407	8408	8409	8410	8411
8412	8413	8418	8419	84200	84201	84202	84209	84210	84211	84212	84213
84219	8430	8431	8438	8439	8440	8441	8442	8443	8448	8449	84500
84501	84502	84503	84509	84510	84511	84512	84513	84519	8460	8461	8462
8463	8468	8469	8470	8471	8472	8473	8474	8479	8480	8481	8482
8483	84840	84841	84842	84849	8485	8488	8489	9057			

233 Intracranial injury

80010	80011	80012	80013	80014	80015	80016	80019	80020	80021	80022	80023
80024	80025	80026	80029	80030	80031	80032	80033	80034	80035	80036	80039
80040	80041	80042	80043	80044	80045	80046	80049	80060	80061	80062	80063
80064	80065	80066	80069	80070	80071	80072	80073	80074	80075	80076	80079
80080	80081	80082	80083	80084	80085	80086	80089	80090	80091	80092	80093
80094	80095	80096	80099	80110	80111	80112	80113	80114	80115	80116	80119
80120	80121	80122	80123	80124	80125	80126	80129	80130	80131	80132	80133
80134	80135	80136	80139	80140	80141	80142	80143	80144	80145	80146	80149
80160	80161	80162	80163	80164	80165	80166	80169	80170	80171	80172	80173
80174	80175	80176	80179	80180	80181	80182	80183	80184	80185	80186	80189
80190	80191	80192	80193	80194	80195	80196	80199	80310	80311	80312	80313
80314	80315	80316	80319	80320	80321	80322	80323	80324	80325	80326	80329
80330	80331	80332	80333	80334	80335	80336	80339	80340	80341	80342	80343
80344	80345	80346	80349	80360	80361	80362	80363	80364	80365	80366	80369
80370	80371	80372	80373	80374	80375	80376	80379	80380	80381	80382	80383
80384	80385	80386	80389	80390	80391	80392	80393	80394	80395	80396	80399
80410	80411	80412	80413	80414	80415	80416	80419	80420	80421	80422	80423
80424	80425	80426	80429	80430	80431	80432	80433	80434	80435	80436	80439
80440	80441	80442	80443	80444	80445	80446	80449	80460	80461	80462	80463
80464	80465	80466	80469	80470	80471	80472	80473	80474	80475	80476	80479
80480	80481	80482	80483	80484	80485	80486	80489	80490	80491	80492	80493
80494	80495	80496	80499	8500	8501	85011	85012	8502	8503	8504	8505
8509	85100	85101	85102	85103	85104	85105	85106	85109	85110	85111	85112
85113	85114	85115	85116	85119	85120	85121	85122	85123	85124	85125	85126
85129	85130	85131	85132	85133	85134	85135	85136	85139	85140	85141	85142

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85143   85144   85145   85146   85149   85150   85151   85152   85153   85154   85155   85156
85159   85160   85161   85162   85163   85164   85165   85166   85169   85170   85171   85172
85173   85174   85175   85176   85179   85180   85181   85182   85183   85184   85185   85186
85189   85190   85191   85192   85193   85194   85195   85196   85199   85200   85201   85202
85203   85204   85205   85206   85209   85210   85211   85212   85213   85214   85215   85216
85219   85220   85221   85222   85223   85224   85225   85226   85229   85230   85231   85232
85233   85234   85235   85236   85239   85240   85241   85242   85243   85244   85245   85246
85249   85250   85251   85252   85253   85254   85255   85256   85259   85300   85301   85302
85303   85304   85305   85306   85309   85310   85311   85312   85313   85314   85315   85316
85319   85400   85401   85402   85403   85404   85405   85406   85409   85410   85411   85412
85413   85414   85415   85416   85419   9070
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234   Crushing injury or internal injury

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8600    8601    8602    8603    8604    8605    86100   86101   86102   86103   86110   86111
86112   86113   86120   86121   86122   86130   86131   86132   8620    8621    86221   86222
86229   86231   86232   86239   8628    8629    8630    8631    86320   86321   86329   86330
86331   86339   86340   86341   86342   86343   86344   86345   86346   86349   86350   86351
86352   86353   86354   86355   86356   86359   86380   86381   86382   86383   86384   86385
86389   86390   86391   86392   86393   86394   86395   86399   86400   86401   86402   86403
86404   86405   86409   86410   86411   86412   86413   86414   86415   86419   86500   86501
86502   86503   86504   86509   86510   86511   86512   86513   86514   86519   86600   86601
86602   86603   86610   86611   86612   86613   8670    8671    8672    8673    8674    8675
8676    8677    8678    8679    86800   86801   86802   86803   86804   86809   86810   86811
86812   86813   86814   86819   8690    8691    90000   90001   90002   90003   9001    90081
90082   90089   9009    9010    9011    9012    9013    90140   90141   90142   90181   90182
90183   90189   9019    9020    90210   90211   90219   90220   90221   90222   90223   90224
90225   90226   90227   90229   90231   90232   90233   90234   90239   90240   90241   90242
90249   90250   90251   90252   90253   90254   90255   90256   90259   90281   90282   90287
90289   9029    90300   90301   90302   9031    9032    9033    9034    9035    9038    9039
9040    9041    9042    9043    90440   90441   90442   90450   90451   90452   90453   90454
9046    9047    9048    9049    9064    9080    9081    9082    9083    9084    925     9251
9252    9260    92611   92612   92619   9268    9269    92700   92701   92702   92703   92709
92710   92711   92720   92721   9273    9278    9279    92800   92801   92810   92811   92820
92821   9283    9288    9289    9290    9299
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235   Open wounds of head; neck; and trunk

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8700    8701    8702    8703    8704    8708    8709    8710    8711    8712    8713    8714
8715    8716    8717    8719    87200   87201   87202   87210   87211   87212   87261   87262
87263   87264   87269   87271   87272   87273   87274   87279   8728    8729    8730    8731
87320   87321   87322   87323   87329   87330   87331   87332   87333   87339   87340   87341
87342   87343   87344   87349   87350   87351   87352   87353   87354   87359   87360   87361
87362   87363   87364   87365   87369   87370   87371   87372   87373   87374   87375   87379
8738    8739    87400   87401   87402   87410   87411   87412   8742    8743    8744    8745
8748    8749    8750    8751    8760    8761    8770    8771    8780    8781    8782    8783
8784    8785    8786    8787    8788    8789    8790    8791    8792    8793    8794    8795
8796    8797    8798    8799    9060
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236   Open wounds of extremities

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88000   88001   88002   88003   88009   88010   88011   88012   88013   88019   88020   88021
88022   88023   88029   88100   88101   88102   88110   88111   88112   88120   88121   88122
8820    8821    8822    8830    8831    8832    8840    8841    8842    8850    8851    8860
8861    8870    8871    8872    8873    8874    8875    8876    8877    8900    8901    8902
8910    8911    8912    8920    8921    8922    8930    8931    8932    8940    8941    8942
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8950   8951   8960   8961   8962   8963   8970   8971   8972   8973   8974   8975
8976   8977   9058   9059   9061

237   Complication of device; implant or graft

41402 41404 41405 41407 44030 44031 44032 56960 56961 56969 99600 99601
99602 99603 99604 99609 9961   9962   99630 99631 99632 99639 9964   99640
99641 99642 99643 99644 99645 99646 99647 99649 99651 99652 99653 99654
99655 99656 99657 99659 9966   99660 99661 99662 99663 99664 99665 99666
99667 99668 99669 9967   99670 99671 99672 99673 99674 99675 99676 99677
99678 99679 99680 99681 99682 99683 99684 99685 99686 99687 99689 99690
99691 99692 99693 99694 99695 99696 99699

238   Complications of surgical procedures or medical care

27783 3490   3491   41511 4294   4582   45821 45829 5121   5190   51900 51901
51902 51909 53086 53087 53640 53641 53642 53649 5642   5643   5644   5696
56962 5793   9093   9954   99586 9970   99700 99701 99702 99709 9971   9972
9973   9974   9975   99760 99761 99762 99769 99771 99772 99779 9979   99791
99799 9980   9981   99811 99812 99813 9982   9983   99831 99832 9984   9985
99851 99859 9986   9987   9988   99881 99882 99883 99889 9989   9990   9991
9992   9993   9994   9995   9996   9997   9998   9999

239   Superficial injury; contusion

9062   9063   9100   9101   9102   9103   9104   9105   9106   9107   9108   9109
9110   9111   9112   9113   9114   9115   9116   9117   9118   9119   9120   9121
9122   9123   9124   9125   9126   9127   9128   9129   9130   9131   9132   9133
9134   9135   9136   9137   9138   9139   9140   9141   9142   9143   9144   9145
9146   9147   9148   9149   9150   9151   9152   9153   9154   9155   9156   9157
9158   9159   9160   9161   9162   9163   9164   9165   9166   9167   9168   9169
9170   9171   9172   9173   9174   9175   9176   9177   9178   9179   9180   9181
9182   9189   9190   9191   9192   9193   9194   9195   9196   9197   9198   9199
920   9210   9211   9212   9213   9219   9220   9221   9222   9223   92231 92232
92233 9224   9228   9229   92300 92301 92302 92303 92309 92310 92311 92320
92321 9233   9238   9239   92400 92401 92410 92411 92420 92421 9243   9244
9245   9248   9249

240   Burns

9065   9066   9067   9068   9069   9400   9401   9402   9403   9404   9405   9409
94100 94101 94102 94103 94104 94105 94106 94107 94108 94109 94110 94111
94112 94113 94114 94115 94116 94117 94118 94119 94120 94121 94122 94123
94124 94125 94126 94127 94128 94129 94130 94131 94132 94133 94134 94135
94136 94137 94138 94139 94140 94141 94142 94143 94144 94145 94146 94147
94148 94149 94150 94151 94152 94153 94154 94155 94156 94157 94158 94159
94200 94201 94202 94203 94204 94205 94209 94210 94211 94212 94213 94214
94215 94219 94220 94221 94222 94223 94224 94225 94229 94230 94231 94232
94233 94234 94235 94239 94240 94241 94242 94243 94244 94245 94249 94250
94251 94252 94253 94254 94255 94259 94300 94301 94302 94303 94304 94305
94306 94309 94310 94311 94312 94313 94314 94315 94316 94319 94320 94321
94322 94323 94324 94325 94326 94329 94330 94331 94332 94333 94334 94335
94336 94339 94340 94341 94342 94343 94344 94345 94346 94349 94350 94351
94352 94353 94354 94355 94356 94359 94400 94401 94402 94403 94404 94405
94406 94407 94408 94410 94411 94412 94413 94414 94415 94416 94417 94418
94420 94421 94422 94423 94424 94425 94426 94427 94428 94430 94431 94432

94433 94434 94435 94436 94437 94438 94440 94441 94442 94443 94444 94445
94446 94447 94448 94450 94451 94452 94453 94454 94455 94456 94457 94458
94500 94501 94502 94503 94504 94505 94506 94509 94510 94511 94512 94513
94514 94515 94516 94519 94520 94521 94522 94523 94524 94525 94526 94529
94530 94531 94532 94533 94534 94535 94536 94539 94540 94541 94542 94543
94544 94545 94546 94549 94550 94551 94552 94553 94554 94555 94556 94559
9460 9461 9462 9463 9464 9465 9470 9471 9472 9473 9474 9478
9479 94800 94810 94811 94820 94821 94822 94830 94831 94832 94833 94840
94841 94842 94843 94844 94850 94851 94852 94853 94854 94855 94860 94861
94862 94863 94864 94865 94866 94870 94871 94872 94873 94874 94875 94876
94877 94880 94881 94882 94883 94884 94885 94886 94887 94888 94890 94891
94892 94893 94894 94895 94896 94897 94898 94899 9490 9491 9492 9493
9494 9495

241   Poisoning by psychotropic agents

9690 9691 9692 9693 9694 9695 9696 9697 9698 9699

242   Poisoning by other medications and drugs

9090 9095 9600 9601 9602 9603 9604 9605 9606 9607 9608 9609
9610 9611 9612 9613 9614 9615 9616 9617 9618 9619 9620 9621
9622 9623 9624 9625 9626 9627 9628 9629 9630 9631 9632 9633
9634 9635 9638 9639 9640 9641 9642 9643 9644 9645 9646 9647
9648 9649 96500 96501 96502 96509 9651 9654 9655 9656 96561 96569
9657 9658 9659 9660 9661 9662 9663 9664 9670 9671 9672 9673
9674 9675 9676 9678 9679 9680 9681 9682 9683 9684 9685 9686
9687 9689 9700 9701 9708 9709 9710 9711 9712 9713 9719 9720
9721 9722 9723 9724 9725 9726 9727 9728 9729 9730 9731 9732
9733 9734 9735 9736 9738 9739 9740 9741 9742 9743 9744 9745
9746 9747 9750 9751 9752 9753 9754 9755 9756 9757 9758 9760
9761 9762 9763 9764 9765 9766 9767 9768 9769 9770 9771 9772
9773 9774 9778 9779 9780 9781 9782 9783 9784 9785 9786 9788
9789 9790 9791 9792 9793 9794 9795 9796 9797 9799 9952

243   Poisoning by nonmedicinal substances

9091 9800 9801 9802 9803 9808 9809 981 9820 9821 9822 9823
9824 9828 9830 9831 9832 9839 9840 9841 9848 9849 9850 9851
9852 9853 9854 9855 9856 9858 9859 986 9870 9871 9872 9873
9874 9875 9876 9877 9878 9879 9880 9881 9882 9888 9889 9890
9891 9892 9893 9894 9895 9896 9897 9898 98981 98982 98983 98984
98989 9899

244   Other injuries and conditions due to external causes

7960 7990 79901 79902 9071 9073 9074 9075 9079 9085 9086 9089
9092 9094 9099 9300 9301 9302 9308 9309 931 932 9330 9331
9340 9341 9348 9349 9350 9351 9352 936 937 938 9390 9391
9392 9393 9399 9500 9501 9502 9503 9509 9510 9511 9512 9513
9514 9515 9516 9517 9518 9519 9530 9531 9532 9533 9534 9535
9538 9539 9540 9541 9548 9549 9550 9551 9552 9553 9554 9555
9556 9557 9558 9559 9560 9561 9562 9563 9564 9565 9568 9569
9570 9571 9578 9579 9580 9581 9582 9583 9584 9585 9586 9587
9588 9590 95901 95909 9591 95911 95912 95913 95914 95919 9592 9593
9594 9595 9596 9597 9598 9599 990 9910 9911 9912 9913 9914

9915	9916	9918	9919	9920	9921	9922	9923	9924	9925	9926	9927
9928	9929	9930	9931	9932	9933	9934	9938	9939	9940	9941	9942
9943	9944	9945	9946	9947	9948	9949	9951	9955	99550	99551	99552
99553	99554	99555	99559	99580	99581	99582	99583	99584	99585	99589	99590
99591	99592	99593	99594	V155	V156	V1588	V713	V714	V715	V716	

245   Syncope

7802

246   Fever of unknown origin

7806

247   Lymphadenitis

2891	2892	2893	683	7856

248   Gangrene

44024	7854

249   Shock

78550	78551	78552	78559

250   Nausea and vomiting

7870	78701	78702	78703

251   Abdominal pain

7890	78900	78901	78902	78903	78904	78905	78906	78907	78909	78960	78961
78962	78963	78964	78965	78966	78967	78969					

252   Malaise and fatigue

7807	78071	78079

253   Allergic reactions

4771	5186	5583	6910	6918	6920	6921	6922	6923	6924	6925	6926
69270	69271	69272	69273	69274	69279	69281	69282	69283	69284	69289	6929
6930	6931	6938	6939	7080	7081	7082	7083	7084	7085	7088	7089
9950	9953	99560	99561	99562	99563	99564	99565	99566	99567	99568	99569
9957	V071	V140	V141	V142	V143	V144	V145	V146	V147	V148	V149
V150	V1501	V1502	V1503	V1504	V1505	V1506	V1507	V1508	V1509	V727	

254   Rehabilitation care; fitting of prostheses; and adjustment of devices

V520	V521	V524	V528	V529	V538	V570	V571	V572	V5721	V5722	V573
V574	V5781	V5789	V579	V5882							

255   Administrative/social admission

V200	V201	V202	V600	V601	V602	V603	V604	V605	V606	V608	V609

V610	V611	V6110	V6111	V6112	V6120	V6121	V6122	V6129	V613	V6141	V6149
V616	V617	V618	V619	V620	V621	V622	V623	V624	V625	V626	V6281
V6282	V6283	V6289	V629	V630	V631	V632	V638	V639	V650	V651	V6511
V6519	V652	V653	V654	V6540	V6541	V6542	V6543	V6544	V6545	V6549	V655
V658	V659	V680	V681	V682	V6881	V6889	V689				

256   Medical examination/evaluation

V290	V291	V292	V293	V298	V299	V700	V703	V704	V705	V706	V707
V708	V709	V718	V719	V7231	V7232	V725	V726	V728	V7281	V7282	V7283
V7284	V7285	V7286	V729								

257   Other aftercare

V51	V539	V5390	V5399	V548	V5481	V5489	V549	V558	V559	V583	V584
V5841	V5842	V5843	V5844	V5849	V5861	V5862	V5863	V5864	V5865	V5866	V5867
V5869	V5871	V5872	V5873	V5874	V5875	V5876	V5877	V5878	V588	V5881	V5883
V5889	V589	V660	V665	V666	V667	V669	V670	V6700	V6701	V6709	V6751
V6759	V676	V679									

258   Other screening for suspected conditions (not mental disorders or infectious disease)

V280	V281	V282	V283	V284	V285	V288	V289	V7181	V7189	V7240	V7241
V760	V761	V7610	V7611	V7612	V7619	V762	V763	V7641	V7642	V7643	V7644
V7645	V7646	V7647	V7649	V7650	V7651	V7652	V768	V7681	V7689	V769	V770
V771	V772	V773	V774	V775	V776	V777	V778	V779	V7791	V7799	V780
V781	V782	V783	V788	V789	V800	V801	V802	V803	V810	V811	V812
V813	V814	V815	V816	V820	V821	V822	V823	V824	V825	V826	V828
V8281	V8289	V829									

259   Residual codes; unclassified

3020	32700	32701	32709	32710	32711	32712	32713	32714	32719	32720	32721
32722	32723	32724	32725	32726	32727	32729	32740	32741	32742	32743	32744
32749	32751	32759	3278	78002	7801	78050	78051	78052	78053	78054	78055
78056	78057	78058	78059	7809	78093	78094	78095	78099	7815	7816	7823
78261	78262	7828	7829	7830	7836	7842	7901	7903	7906	7909	79091
79092	79093	79094	79095	79099	7929	7932	7939	7949	7954	7963	7964
7965	7966	7969	7980	7981	7982	7989	7992	7993	7998	79981	79989
7999	V070	V072	V073	V0731	V0739	V078	V079	V1053	V131	V138	V139
V152	V153	V1581	V1584	V1585	V1586	V1587	V1589	V159	V160	V161	V162
V163	V164	V1640	V1641	V1642	V1643	V1649	V165	V1651	V1659	V166	V167
V168	V169	V170	V171	V172	V173	V174	V175	V176	V177	V178	V1781
V1789	V180	V181	V182	V183	V184	V185	V186	V1861	V1869	V187	V188
V189	V190	V191	V192	V193	V194	V195	V196	V197	V198	V210	V211
V212	V218	V219	V418	V419	V428	V4281	V4282	V4283	V4284	V4289	V429
V438	V4381	V4382	V4383	V4389	V447	V448	V449	V4571	V4572	V4573	V4574
V4575	V4576	V4577	V4578	V4579	V4583	V4584	V4589	V460	V468	V469	V470
V471	V472	V479	V480	V488	V489	V498	V4981	V4982	V4983	V4984	V4989
V499	V500	V501	V503	V5041	V5042	V5049	V508	V509	V590	V5901	V5902
V5909	V591	V592	V593	V594	V595	V596	V5970	V5971	V5972	V5973	V5974
V598	V599	V615	V640	V6400	V6401	V6402	V6403	V6404	V6405	V6406	V6407
V6408	V6409	V641	V642	V643	V644	V6441	V6442	V6443	V690	V691	V692
V693	V694	V695	V698	V699	V8301	V8302	V8381	V8389	V8401	V8402	V8403
V8404	V8409	V848	V851								

650   Adjustment disorder

| 3090 | 3091 | 30922 | 30923 | 30924 | 30928 | 30929 | 3093 | 3094 | 30982 | 30983 | 30989 |
| 3099 | | | | | | | | | | | |

651   Anxiety disorder

29384	30000	30001	30002	30009	30010	30020	30021	30022	30023	30029	3003
3005	30089	3009	3080	3081	3082	3083	3084	3089	30981	3130	3131
31321	31322	3133	31382	31383							

652   Attention-deficit, conduct, and disruptive behavior disorder

Conduct disorder

| 31200 | 31201 | 31202 | 31203 | 31210 | 31211 | 31212 | 31213 | 31220 | 31221 | 31222 | 31223 |
| 3124 | 3128 | 31281 | 31282 | 31289 | 3129 | | | | | | |

Oppositional defiant disorder

31381

Attention deficit disorder / Attention deficit hyperactivity disorder

| 31400 | 31401 | 3141 | 3142 | 3148 | 3149 |

653   Delirium, dementia, and amnestic and other cognitive disorders

2900	29010	29011	29012	29013	29020	29021	2903	29040	29041	29042	29043
2908	2909	2930	2931	2940	2941	29410	29411	2948	2949	3100	3102
3108	3109	3310	3311	33111	33119	3312	33182	797			

654   Developmental disorders

Communication disorders

| 3070 | 3079 | 31531 | 31539 | V401 |

Developmental disabilities

| 31501 | 31502 | 31509 | 31532 | 3155 | 3158 |

Intellectual disabilities

| 317 | 3180 | 3181 | 3182 | 319 |

Learning disorders

| 31500 | 3151 | 3152 | 3159 | V400 |

Motor skill disorders

3154

655   Disorders usually diagnosed in infancy, childhood, or adolescence

Elimination disorders

3076   3077

Other disorders of infancy, childhood or adolescence

3073   30921   31323   31389   3139

Pervasive developmental disorders

29900   29901   29910   29911   29980   29981   29990   29991

Tic disorders

30720   30721   30722   30723

656   Impulse control disorders, NEC

31230   31231   31232   31233   31234   31235   31239

657   Mood disorders

Bipolar disorders

29600   29601   29602   29603   29604   29605   29606   29610   29611   29612   29613   29614
29615   29616   29640   29641   29642   29643   29644   29645   29646   29650   29651   29652
29653   29654   29655   29656   29660   29661   29662   29663   29664   29665   29666   2967
29680   29681   29682   29689   29690   29699

Depressive disorders

29383   29620   29621   29622   29623   29624   29625   29626   29630   29631   29632   29633
29634   29635   29636   3004   311

658   Personality disorders

3010   30110   30111   30112   30113   30120   30121   30122   3013   3014   30150   30151 30159
3016   3017   30181   30182   30183   30184   30189   3019

659   Schizophrenia and other psychotic disorders

29381   29382   29500   29501   29502   29503   29504   29505   29510   29511   29512   29513
29514   29515   29520   29521   29522   29523   29524   29525   29530   29531   29532   29533
29534   29535   29540   29541   29542   29543   29544   29545   29550   29551   29552   29553
29554   29555   29560   29561   29562   29563   29564   29565   29570   29571   29572   29573
29574   29575   29580   29581   29582   29583   29584   29585   29590   29591   29592   29593
29594   29595   2970   2971   2972   2973   2978   2979   2980   2981   2982   2983
2984   2988   2989

660   Substance-related disorders

Alcohol-related disorders

2910   2911   2912   2913   2914   2915   2918   29181   29182   29189   2919

30300   30301   30302   30303   30390   30391   30392   30393   30500   30501   30502
30503

Substance-related disorders

2920   29211   29212   2922   29281   29282   29283   29284   29285   29289   2929   30400
30401   30402   30403   30410   30411   30412   30413   30420   30421   30422   30423   30430
30431   30432   30433   30440   30441   30442   30443   30450   30451   30452   30453   30460
30461   30462   30463   30470   30471   30472   30473   30480   30481   30482   30483   30490
30491   30492   30493   30520   30521   30522   30523   30530   30531   30532   30533   30540
30541   30542   30543   30550   30551   30552   30553   30560   30561   30562   30563   30570
30571   30572   30573   30580   30581   30582   30583   30590   30591   30592   30593   64830
64831   64832   64833   64834   65550   65551   65553   76072   76073   76075   7795   96500
96501   96502   96509   V6542

661   Miscellaneous mental disorders

Dissociative disorders

30012   30013   30014   30015   3006

Eating disorders

3071   30750   30751   30752   30753   30754   30759

Factitious disorders

30016   30019

Mental disorders due to general medical condition not elsewhere classified

29389   2939   3101

Other miscellaneous mental conditions

316   64840   64841   64842   64843   64844   V402   V403   V409   V673

Psychogenic disorders

3060   3061   3062   3063   3064   30650   30652   30653   30659   3066   3067   3068
3069

Sexual and gender identify disorders

3021   3022   3023   3024   30250   30251   30252   30253   3026   30270   30271   30272
30273   30274   30275   30276   30279   30281   30282   30283   30284   30285   30289   3029
30651

Sleep disorders

30740   30741   30742   30743   30744   30745   30746   30747   30748   30749

Somatoform disorders

30011   3007   30081   30082   30780   30781   30789

662   **Suicide and intentional self-inflicted injury**

V6284	E9500	E9501	E9502	E9503	E9504	E9505	E9506	E9507	E9508	E9509	E9510
E9511	E9518	E9520	E9521	E9528	E9529	E9530	E9531	E9538	E9539	E954	E9550
E9551	E9552	E9553	E9554	E9555	E9556	E9557	E9559	E956	E9570	E9571	E9572
E9579	E9580	E9581	E9582	E9583	E9584	E9585	E9586	E9587	E9588	E9589	E959

663   **Screening and history of mental health and substance abuse codes**

Mental health disorder related codes

33392	V110	V111	V112	V118	V119	V154	V1541	V1542	V1549	V1582	V663 V701
V702	V7101	V7102	V7109	V790	V792	V793	V798	V799			

Substance-related disorder codes

3051	30510	30511	30512	30513	3575	4255	5353	5710	5711	5712	5713
76071	7903	V113	V791								

2601   **E Codes: Cut/pierce**

E9200	E9201	E9202	E9203	E9204	E9205	E9208	E9209	E956	E966	E974	E986

2602   **E Codes: Drowning/submersion**

E8300	E8301	E8302	E8303	E8304	E8305	E8306	E8308	E8309	E8320	E8321	E8322
E8323	E8324	E8325	E8326	E8328	E8329	E9100	E9101	E9102	E9103	E9104	E9108
E9109	E954	E964	E984								

2603   **E Codes: Fall**

E8800	E8801	E8809	E8810	E8811	E882	E8830	E8831	E8832	E8839	E8840	E8841
E8842	E8843	E8844	E8845	E8846	E8849	E885	E8850	E8851	E8852	E8853	E8854
E8859	E8860	E8869	E888	E8880	E8881	E8888	E8889	E9570	E9571	E9572	E9579
E9681	E9870	E9871	E9872	E9879							

2604   **E Codes: Fire/burn**

E8900	E8901	E8902	E8903	E8908	E8909	E8910	E8911	E8912	E8913	E8918	E8919
E892	E8930	E8931	E8932	E8938	E8939	E894	E895	E896	E897	E8980	E8981
E899	E9240	E9241	E9242	E9248	E9249	E9581	E9582	E9587	E961	E9680	E9683
E9793	E9881	E9882	E9887								

2605   **E Codes: Firearm**

E9220	E9221	E9222	E9223	E9228	E9229	E9550	E9551	E9552	E9553	E9554	E9650
E9651	E9652	E9653	E9654	E970	E9794	E9850	E9851	E9852	E9853	E9854	

2606   **E Codes: Machinery**

E9190	E9191	E9192	E9193	E9194	E9195	E9196	E9197	E9198	E9199

2607   **E Codes: Motor vehicle traffic (MVT)**

E8100	E8101	E8102	E8103	E8104	E8105	E8106	E8107	E8108	E8109	E8110	E8111
E8112	E8113	E8114	E8115	E8116	E8117	E8118	E8119	E8120	E8121	E8122	E8123

E8124 E8125 E8126 E8127 E8128 E8129 E8130 E8131 E8132 E8133 E8134 E8135
E8136 E8137 E8138 E8139 E8140 E8141 E8142 E8143 E8144 E8145 E8146 E8147
E8148 E8149 E8150 E8151 E8152 E8153 E8154 E8155 E8156 E8157 E8158 E8159
E8160 E8161 E8162 E8163 E8164 E8165 E8166 E8167 E8168 E8169 E8170 E8171
E8172 E8173 E8174 E8175 E8176 E8177 E8178 E8179 E8180 E8181 E8182 E8183
E8184 E8185 E8186 E8187 E8188 E8189 E8190 E8191 E8192 E8193 E8194 E8195
E8196 E8197 E8198 E8199 E9585 E9685 E9885

2608   E Codes: Pedal cyclist; not MVT

E8003 E8013 E8023 E8033 E8043 E8053 E8063 E8073 E8206 E8216 E8226 E8236
E8246 E8256 E8261 E8269

2609   E Codes: Pedestrian; not MVT

E8002 E8012 E8022 E8032 E8042 E8052 E8062 E8072 E8207 E8217 E8227 E8237
E8247 E8257 E8260 E8270 E8280 E8290

2610   E Codes: Transport; not MVT

E8000 E8001 E8008 E8009 E8010 E8011 E8018 E8019 E8020 E8021 E8028 E8029
E8030 E8031 E8038 E8039 E8040 E8041 E8048 E8049 E8050 E8051 E8058 E8059
E8060 E8061 E8068 E8069 E8070 E8071 E8078 E8079 E8200 E8201 E8202 E8203
E8204 E8205 E8208 E8209 E8210 E8211 E8212 E8213 E8214 E8215 E8218 E8219
E8220 E8221 E8222 E8223 E8224 E8225 E8228 E8229 E8230 E8231 E8232 E8233
E8234 E8235 E8238 E8239 E8240 E8241 E8242 E8243 E8244 E8245 E8248 E8249
E8250 E8251 E8252 E8253 E8254 E8255 E8258 E8259 E8262 E8263 E8264 E8268
E8272 E8273 E8274 E8278 E8279 E8282 E8284 E8288 E8289 E8294 E8298 E8299
E8310 E8311 E8312 E8313 E8314 E8315 E8316 E8318 E8319 E8330 E8331 E8332
E8333 E8334 E8335 E8336 E8338 E8339 E8340 E8341 E8342 E8343 E8344 E8345
E8346 E8348 E8349 E8350 E8351 E8352 E8353 E8354 E8355 E8356 E8358 E8359
E8360 E8361 E8362 E8363 E8364 E8365 E8366 E8368 E8369 E8370 E8371 E8372
E8373 E8374 E8375 E8376 E8378 E8379 E8380 E8381 E8382 E8383 E8384 E8385
E8386 E8388 E8389 E8400 E8401 E8402 E8403 E8404 E8405 E8406 E8407 E8408
E8409 E8410 E8411 E8412 E8413 E8414 E8415 E8416 E8417 E8418 E8419 E8426
E8427 E8428 E8429 E8430 E8431 E8432 E8433 E8434 E8435 E8436 E8437 E8438
E8439 E8440 E8441 E8442 E8443 E8444 E8445 E8446 E8447 E8448 E8449 E8450
E8458 E8459 E9586 E9886

2611   E Codes: Natural/environment

E9000 E9001 E9009 E9010 E9011 E9018 E9019 E9020 E9021 E9022 E9028 E9029
E903 E9040 E9041 E9042 E9043 E9049 E9050 E9051 E9052 E9053 E9054 E9055
E9056 E9057 E9058 E9059 E9060 E9061 E9062 E9063 E9064 E9065 E9068 E9069
E907 E908 E9080 E9081 E9082 E9083 E9084 E9088 E9089 E909 E9090 E9091
E9092 E9093 E9094 E9098 E9099 E9280 E9281 E9282 E9583 E9883

2612   E Codes: Overexertion

E927

2613   E Codes: Poisoning

E8500 E8501 E8502 E8503 E8504 E8505 E8506 E8507 E8508 E8509 E851 E8520
E8521 E8522 E8523 E8524 E8525 E8528 E8529 E8530 E8531 E8532 E8538 E8539
E8540 E8541 E8542 E8543 E8548 E8550 E8551 E8552 E8553 E8554 E8555 E8556

E8558   E8559   E856   E857   E8580   E8581   E8582   E8583   E8584   E8585   E8586   E8587
E8588   E8589   E8600   E8601   E8602   E8603   E8604   E8608   E8609   E8610   E8611   E8612
E8613   E8614   E8615   E8616   E8619   E8620   E8621   E8622   E8623   E8624   E8629   E8630
E8631   E8632   E8633   E8634   E8635   E8636   E8637   E8638   E8639   E8640   E8641   E8642
E8643   E8644   E8650   E8651   E8652   E8653   E8654   E8655   E8658   E8659   E8660   E8661
E8662   E8663   E8664   E8665   E8666   E8667   E8668   E8669   E867   E8680   E8681   E8682
E8683   E8688   E8689   E8690   E8691   E8692   E8693   E8694   E8698   E8699   E9500   E9501
E9502   E9503   E9504   E9505   E9506   E9507   E9508   E9509   E9510   E9511   E9518   E9520
E9521   E9528   E9529   E9620   E9621   E9622   E9629   E972   E9800   E9801   E9802   E9803
E9804   E9805   E9806   E9807   E9808   E9809   E9810   E9811   E9818   E9820   E9821   E9828
E9829

2614   E Codes: Struck by; against

E916   E9170   E9171   E9172   E9173   E9174   E9175   E9176   E9177   E9178   E9179   E9600
E9682   E973   E975

2615   E Codes: Suffocation

E911   E912   E9130   E9131   E9132   E9133   E9138   E9139   E9284   E9285   E9530   E9531
E9538   E9539   E963   E9830   E9831   E9838   E9839

2616   E Codes: Adverse effects of medical care

E8700   E8701   E8702   E8703   E8704   E8705   E8706   E8707   E8708   E8709   E8710   E8711
E8712   E8713   E8714   E8715   E8716   E8717   E8718   E8719   E8720   E8721   E8722   E8723
E8724   E8725   E8726   E8728   E8729   E8730   E8731   E8732   E8733   E8734   E8735   E8736
E8738   E8739   E8740   E8741   E8742   E8743   E8744   E8745   E8748   E8749   E8750   E8751
E8752   E8758   E8759   E8760   E8761   E8762   E8763   E8764   E8765   E8768   E8769   E8780
E8781   E8782   E8783   E8784   E8785   E8786   E8788   E8789   E8790   E8791   E8792   E8793
E8794   E8795   E8796   E8797   E8798   E8799

2617   E Codes: Adverse effects of medical drugs

E9300   E9301   E9302   E9303   E9304   E9305   E9306   E9307   E9308   E9309   E9310   E9311
E9312   E9313   E9314   E9315   E9316   E9317   E9318   E9319   E9320   E9321   E9322   E9323
E9324   E9325   E9326   E9327   E9328   E9329   E9330   E9331   E9332   E9333   E9334   E9335
E9338   E9339   E9340   E9341   E9342   E9343   E9344   E9345   E9346   E9347   E9348   E9349
E9350   E9351   E9352   E9353   E9354   E9355   E9356   E9357   E9358   E9359   E9360   E9361
E9362   E9363   E9364   E9370   E9371   E9372   E9373   E9374   E9375   E9376   E9378   E9379
E9380   E9381   E9382   E9383   E9384   E9385   E9386   E9387   E9389   E9390   E9391   E9392
E9393   E9394   E9395   E9396   E9397   E9398   E9399   E9400   E9401   E9408   E9409   E9410
E9411   E9412   E9413   E9419   E9420   E9421   E9422   E9423   E9424   E9425   E9426   E9427
E9428   E9429   E9430   E9431   E9432   E9433   E9434   E9435   E9436   E9438   E9439   E9440
E9441   E9442   E9443   E9444   E9445   E9446   E9447   E9450   E9451   E9452   E9453   E9454
E9455   E9456   E9457   E9458   E9460   E9461   E9462   E9463   E9464   E9465   E9466   E9467
E9468   E9469   E9470   E9471   E9472   E9473   E9474   E9478   E9479   E9480   E9481   E9482
E9483   E9484   E9485   E9486   E9488   E9489   E9490   E9491   E9492   E9493   E9494   E9495
E9496   E9497   E9499

2618   E Codes: Other specified and classifiable

E846   E847   E848   E914   E915   E918   E9210   E9211   E9218   E9219   E9224   E9225
E9230   E9231   E9232   E9238   E9239   E9250   E9251   E9252   E9258   E9259   E9260   E9261
E9262   E9263   E9264   E9265   E9268   E9269   E9283   E9290   E9291   E9292   E9293   E9294
E9295   E9555   E9556   E9557   E9559   E9580   E9584   E9601   E9655   E9656   E9657   E9658

E9659 E9670 E9671 E9672 E9673 E9674 E9675 E9676 E9677 E9678 E9679 E9684
E9686 E9687 E971 E978 E9790 E9791 E9792 E9795 E9796 E9797 E9798 E9799
E9855 E9856 E9857 E9880 E9884 E9900 E9909 E9910 E9911 E9912 E9913 E9919
E992 E993 E994 E996 E9970 E9971 E9972 E9990 E9991

2619   E Codes: Other specified; NEC

E9288 E9298 E9588 E959 E9688 E969 E977 E9888 E989 E995 E9978 E998
E999

2620   E Codes: Unspecified

E887 E9289 E9299 E9589 E9689 E976 E9889 E9979

2621   E Codes: Place of occurrence

E8490 E8491 E8492 E8493 E8494 E8495 E8496 E8497 E8498 E8499

Attachment 2:
Sample SAS Jobs for Linking Example

```
NOTE: Copyright (c) 2002-2003 by SAS Institute Inc., Cary, NC, USA.
NOTE: SAS (r) 9.1 (TS1M3)
NOTE: This session is executing on the XP_PRO  platform.




NOTE: SAS 9.1.3 Service Pack 4




NOTE: SAS initialization used:
      real time           5.59 seconds
      cpu time            1.26 seconds




NOTE: AUTOEXEC processing beginning; file is I:\WW3\APPLIC~1\SAS\FOUNDA~1.3\sas\autoexec.sas.




NOTE: AUTOEXEC processing completed.

1    OPTIONS LS=132 PS=59;
2
3    TITLE1 "HC-102I";
4    TITLE2 "Sample SAS Job for Example A";
5
6    LIBNAME IN "C:\Data";
NOTE: Libref IN was successfully assigned as follows:
      Engine:        V9
      Physical Name: C:\Data
7
8    *********************************************************************************************************
9    * Calculate the expenditures for prescribed medicines associated with medical visits for asthma.
10   ********************************************************************************************************;
11
12   PROC FORMAT;
13     VALUE EVENTYPE
14        1 = "1 MVIS"
15        2 = "2 OPAT"
16        3 = "3 EROM"
17        4 = "4 STAZ"
18        5 = "5 DVIS"
19        6 = "6 OMED"
20        7 = "7 HVIS"
21        8 = "8 PMED";
NOTE: Format EVENTYPE has been output.
22
23   RUN;

NOTE: PROCEDURE FORMAT used (Total process time):
      real time           0.09 seconds
      cpu time            0.00 seconds




24
25   *------------------------------------------------------------------------------------
26   * Get condition records coded as asthma.
27   *-----------------------------------------------------------------------------------;
28   DATA ASCONDS;
29     SET IN.H104 (KEEP=CONDIDX CCCODEX);
30     IF CCCODEX="128";
31
32   RUN;

NOTE: There were 105166 observations read from the data set IN.H104.
NOTE: The data set WORK.ASCONDS has 1990 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time           0.26 seconds
      cpu time            0.12 seconds



33
```

```
34   *--------------------------------------------------------------------------------------
35   * Get the events linked to each of the asthma condition records.
36   *-------------------------------------------------------------------------------------;
37   PROC SORT DATA=ASCONDS; BY CONDIDX; RUN;

NOTE: There were 1990 observations read from the data set WORK.ASCONDS.
NOTE: The data set WORK.ASCONDS has 1990 observations and 2 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.06 seconds
      cpu time            0.03 seconds


38
39   proc print data=asconds (obs=50);
40     title3 "sample print of work.asconds - sorted by condidx";
41     title4 "COND (H104) records where cccodex=128";
42   run;

NOTE: There were 50 observations read from the data set WORK.ASCONDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.12 seconds
      cpu time            0.00 seconds


43
44   PROC SORT DATA=IN.H102IF1 OUT=CLNK; BY CONDIDX; RUN;

NOTE: There were 350780 observations read from the data set IN.H102IF1.
NOTE: The data set WORK.CLNK has 350780 observations and 6 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           1.95 seconds
      cpu time            0.85 seconds


45
46   DATA ASCLNKS;
47     MERGE CLNK   (IN=INCLNK   KEEP=CONDIDX EVNTIDX EVENTYPE)
48           ASCONDS(IN=INASCOND KEEP=CONDIDX);
49     BY CONDIDX;
50     IF INCLNK & INASCOND;
51   RUN;

NOTE: There were 350780 observations read from the data set WORK.CLNK.
NOTE: There were 1990 observations read from the data set WORK.ASCONDS.
NOTE: The data set WORK.ASCLNKS has 7984 observations and 3 variables.
NOTE: DATA statement used (Total process time):
      real time           1.43 seconds
      cpu time            0.39 seconds


52
53   proc print data=asclnks (obs=75);
54     by condidx;
55     id condidx;
56     format eventype eventype.;
57     title3 "sample print of work.asclnks - sorted by condidx";
58     title4 "events linked to asthma condition records";
59   run;

NOTE: There were 75 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.07 seconds
      cpu time            0.01 seconds

60
61   PROC SORT DATA=ASCLNKS; BY EVNTIDX; RUN;

NOTE: There were 7984 observations read from the data set WORK.ASCLNKS.
NOTE: The data set WORK.ASCLNKS has 7984 observations and 3 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.04 seconds
      cpu time            0.01 seconds
```

```
62
63   proc print data=asclnks (obs=50);
64     format eventype eventype.;
65     title3 "sample print of work.asclnks - sorted by evntidx";
66   run;

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


67
68   DATA ASCLNKS;
69     SET ASCLNKS (KEEP=EVNTIDX EVENTYPE);
70     BY EVNTIDX;
71     IF FIRST.EVNTIDX;
72   RUN;

NOTE: There were 7984 observations read from the data set WORK.ASCLNKS.
NOTE: The data set WORK.ASCLNKS has 7978 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


73
74   proc print data=asclnks (obs=50);
75     title3 "sample print of unique evntidxs from work.asclnks";
76     format eventype eventype.;
77   run;

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds


78
79   *------------------------------------------------------------------------------------------
80   * Get non-telephone office based visits (i.e. MVIS events) for persons with positive weights.
81   *-----------------------------------------------------------------------------------------;
82   DATA MVIS;
83     SET IN.H102G (KEEP=EVNTIDX PERWT06F SEETLKPV);
84     IF PERWT06F > 0 & SEETLKPV NE 2;
85   RUN;

NOTE: There were 155502 observations read from the data set IN.H102G.
NOTE: The data set WORK.MVIS has 151007 observations and 3 variables.
NOTE: DATA statement used (Total process time):
      real time           1.28 seconds
      cpu time            0.26 seconds


86
87   PROC SORT DATA=MVIS; BY EVNTIDX; RUN;

NOTE: There were 151007 observations read from the data set WORK.MVIS.
NOTE: The data set WORK.MVIS has 151007 observations and 3 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.21 seconds
      cpu time            0.17 seconds


88
89   *------------------------------------------------------------------------------------------
90   * Identify MVIS events which were for asthma.
91   *-----------------------------------------------------------------------------------------;
92   DATA ASMVIS;
93     MERGE ASCLNKS (IN=INASCLNK)
```

```
94          MVIS    (IN=INMVIS KEEP=EVNTIDX);
95    BY EVNTIDX;
96    IF INASCLNK & INMVIS;
97  RUN;

NOTE: There were 7978 observations read from the data set WORK.ASCLNKS.
NOTE: There were 151007 observations read from the data set WORK.MVIS.
NOTE: The data set WORK.ASMVIS has 2320 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time           0.18 seconds
      cpu time            0.18 seconds


98
99  proc print data=asmvis (obs=50);
100   format eventype eventype.;
101   title3 "sample print of work.asmvis";
102   title4 "unique evntidxs from work.asclnks that are non-telephone MVIS (HC-102G) events";
103 run;

NOTE: There were 50 observations read from the data set WORK.ASMVIS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.28 seconds
      cpu time            0.01 seconds


104
105 *------------------------------------------------------------------------------------
106 * Get PMED IDs linked to the MVIS events which were for asthma.
107 *----------------------------------------------------------------------------------;
108 PROC SORT DATA=IN.H102IF2 OUT=RXLK; BY EVNTIDX; RUN;

NOTE: There were 61068 observations read from the data set IN.H102IF2.
NOTE: The data set WORK.RXLK has 61068 observations and 6 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.14 seconds
      cpu time            0.10 seconds


109
110 proc print data=rxlk (obs=140);
111   by evntidx;
112   id evntidx;
113   var linkidx eventype;
114   format eventype eventype.;
115   title3 "sample print of work.rxlk - sorted by evntidx";
116   title4 "Rx+event link file records (HC-102IF2)";
117 run;

NOTE: There were 140 observations read from the data set WORK.RXLK.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


118
119 DATA PMEDIDS;
120   MERGE RXLK  (IN=INRXLK KEEP=EVNTIDX LINKIDX EVENTYPE)
121         ASMVIS(IN=INASMVIS KEEP=EVNTIDX);
122   BY EVNTIDX;
123   IF INRXLK & INASMVIS;
124 RUN;

NOTE: There were 61068 observations read from the data set WORK.RXLK.
NOTE: There were 2320 observations read from the data set WORK.ASMVIS.
NOTE: The data set WORK.PMEDIDS has 2353 observations and 3 variables.
NOTE: DATA statement used (Total process time):
      real time           0.06 seconds
      cpu time            0.06 seconds


125
```

```
126  proc print data=pmedids (obs=50);
127    by evntidx;
128    id evntidx;
129    format eventype eventype.;
130    title3 "sample print of work.pmedids - sorted by evntidx";
131    title4 "work.rxlk records for evntidxs in work.asmvis";
132  run;

NOTE: There were 50 observations read from the data set WORK.PMEDIDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


133
134  PROC SORT DATA=PMEDIDS; BY LINKIDX; RUN;

NOTE: There were 2353 observations read from the data set WORK.PMEDIDS.
NOTE: The data set WORK.PMEDIDS has 2353 observations and 3 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds


135
136  proc print data=pmedids (obs=50);
137    format eventype eventype.;
138    title3 "sample print of work.pmedids - sorted by linkidx";
139  run;

NOTE: There were 50 observations read from the data set WORK.PMEDIDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


140
141  DATA PMEDIDS;
142    SET PMEDIDS (KEEP=LINKIDX);
143    BY LINKIDX;
144    IF FIRST.LINKIDX;
145  RUN;

NOTE: There were 2353 observations read from the data set WORK.PMEDIDS.
NOTE: The data set WORK.PMEDIDS has 2240 observations and 1 variables.
NOTE: DATA statement used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


146
147  proc print data=pmedids (obs=50);
148    title3 "sample print of unique linkidxs in work.pmedids";
149  run;

NOTE: There were 50 observations read from the data set WORK.PMEDIDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.00 seconds
      cpu time            0.00 seconds


150
151  *------------------------------------------------------------------------------------------
152  * Get PMED records linked to MVIS events which were for asthma.
153  *-----------------------------------------------------------------------------------------;
154  PROC SORT DATA=IN.H102A OUT=PMED; BY LINKIDX; RUN;

NOTE: There were 341994 observations read from the data set IN.H102A.
NOTE: The data set WORK.PMED has 341994 observations and 13 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           16.06 seconds
      cpu time            2.84 seconds
```

```
155
156  DATA MVPMEDS;
157    MERGE PMED (KEEP=LINKIDX RXRECIDX  RXXP06X PERWT06F RXNAME)
158         PMEDIDS (IN=A);
159    BY LINKIDX;
160    IF A;
161  RUN;

NOTE: There were 341994 observations read from the data set WORK.PMED.
NOTE: There were 2240 observations read from the data set WORK.PMEDIDS.
NOTE: The data set WORK.MVPMEDS has 6040 observations and 5 variables.
NOTE: DATA statement used (Total process time):
      real time           0.42 seconds
      cpu time            0.42 seconds


162
163  proc print data=mvpmeds (obs=200);
164    var rxrecidx rxname RXXP06X  PERWT06F;
165    by linkidx;
166    id linkidx;
167    title3 "sample print of work.mvpmeds";
168    title4 "PMED (HC-102A) records for unique linkidxs in work.pmedids";
169  run;

NOTE: There were 200 observations read from the data set WORK.MVPMEDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


170
171  PROC MEANS DATA=MVPMEDS N SUM;
172    VAR RXXP06X;
173    TITLE3 "Total Rx expenditures associated with medical visits (excluding telephone) for asthma";
174  RUN;

NOTE: There were 6040 observations read from the data set WORK.MVPMEDS.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.15 seconds
      cpu time            0.03 seconds


175
176  PROC MEANS DATA=MVPMEDS  N SUM;
177    VAR RXXP06X;
178    WEIGHT PERWT06F;
179    TITLE3 "Total Rx expenditures associated with medical visits (excluding telephone) for asthma";
180    TITLE5 "Weighted";
181  RUN;

NOTE: There were 6040 observations read from the data set WORK.MVPMEDS.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.03 seconds
      cpu time            0.01 seconds
```

Sample SAS Job for Example A
sample print of work.asconds - sorted by condidx
COND (H104) records where cccodex=128

Obs	CCCODEX	CONDIDX
1	128	300180180093
2	128	300230580049
3	128	300400300014
4	128	300490270010
5	128	300600350034
6	128	300610290019
7	128	300680130051
8	128	300830210012
9	128	300910450025
10	128	301170420016
11	128	301320230021
12	128	301470290031
13	128	302050190018
14	128	302050330038
15	128	302050330050
16	128	302070200083
17	128	302170520040
18	128	302560570015
19	128	302740680016
20	128	302850140023
21	128	302920640046
22	128	302950160019
23	128	302950230018
24	128	302980530024
25	128	303290290060
26	128	303350230045
27	128	303510370015
28	128	303600490028
29	128	303670100066
30	128	303730200010
31	128	303760240088
32	128	303760240204
33	128	303780330060
34	128	303780400075
35	128	303930110039
36	128	304140140175
37	128	304220290013
38	128	304220360012
39	128	304250390016
40	128	304280150074
41	128	304540490089
42	128	304550430109
43	128	304570200013
44	128	304620150092
45	128	304620270080
46	128	304710110124
47	128	304740470017
48	128	304840230070
49	128	305110240030
50	128	305260250057

               Sample SAS Job for Example A
       sample print of work.asclnks - sorted by condidx
          events linked to asthma condition records

          CONDIDX   EVNTIDX   EVENTYPE

        300180180093   300180180418   8 PMED
                         300180180521   8 PMED
                         300180180610   1 MVIS

        300230580049   300230580090   3 EROM
                         300230580103   3 EROM
                         300230580110   3 EROM
                         300230580141   1 MVIS
                         300230580158   8 PMED

        300400300014   300400300031   3 EROM
                         300400300048   8 PMED
                         300400300055   8 PMED
                         300400300062   8 PMED

        300600350034   300600350206   1 MVIS

        300610290019   300610290292   1 MVIS
                         300610290305   1 MVIS
                         300610290312   1 MVIS
                         300610290336   8 PMED
                         300610290350   8 PMED
                         300610290367   8 PMED
                         300610290374   8 PMED
                         300610290398   8 PMED
                         300610290418   1 MVIS
                         300610290456   8 PMED

        300680130051   300680130196   8 PMED
                         300680130209   8 PMED
                         300680130230   8 PMED
                         300680130247   8 PMED

        300910450025   300910450099   8 PMED
                         300910450102   8 PMED
                         300910450164   8 PMED
                         300910450171   8 PMED

        301170420016   301170420048   8 PMED
                         301170420062   8 PMED

        301320230021   301320230287   8 PMED
                         301320230383   8 PMED
                         301320230390   8 PMED
                         301320230472   8 PMED
                         301320230489   8 PMED

        301470290031   301470290097   1 MVIS
                         301470290100   1 MVIS

                  Sample SAS Job for Example A
           sample print of work.asclnks - sorted by condidx
              events linked to asthma condition records

              CONDIDX   EVNTIDX   EVENTYPE

          301470290031   301470290124   8 PMED

          302050190018   302050190016   8 PMED
                           302050190023   8 PMED

          302050330038   302050330054   1 MVIS
                           302050330078   3 EROM
                           302050330092   8 PMED
                           302050330112   8 PMED

          302050330050   302050330085   8 PMED

          302070200083   302070200148   8 PMED
                           302070200155   8 PMED

          302170520040   302170520033   8 PMED

          302560570015   302560570125   8 PMED

          302920640046   302920640123   1 MVIS
                           302920640130   8 PMED
                           302920640147   8 PMED

          302950230018   302950230057   8 PMED
                           302950230115   8 PMED

          303290290060   303290290117   8 PMED
                           303290290148   8 PMED

          303350230045   303350230445   8 PMED
                           303350230558   8 PMED
                           303350230572   1 MVIS
                           303350230589   1 MVIS
                           303350230596   1 MVIS
                           303350230623   8 PMED
                           303350230630   8 PMED
                           303350230661   8 PMED
                           303350230678   8 PMED
                           303350230705   8 PMED
                           303350230729   8 PMED
                           303350230801   8 PMED
                           303350230825   8 PMED
                           303350230849   8 PMED

          303510370015   303510370359   8 PMED
                           303510370366   8 PMED

                 Sample SAS Job for Example A
       sample print of work.asclnks - sorted by evntidx

       Obs   EVNTIDX   EVENTYPE   CONDIDX

         1   300180180418   8 PMED   300180180093
         2   300180180521   8 PMED   300180180093
         3   300180180610   1 MVIS   300180180093
         4   300230580090   3 EROM   300230580049
         5   300230580103   3 EROM   300230580049
         6   300230580110   3 EROM   300230580049
         7   300230580141   1 MVIS   300230580049
         8   300230580158   8 PMED   300230580049
         9   300400300031   3 EROM   300400300014
        10   300400300048   8 PMED   300400300014
        11   300400300055   8 PMED   300400300014
        12   300400300062   8 PMED   300400300014
        13   300600350206   1 MVIS   300600350034
        14   300610290292   1 MVIS   300610290019
        15   300610290305   1 MVIS   300610290019
        16   300610290312   1 MVIS   300610290019
        17   300610290336   8 PMED   300610290019
        18   300610290350   8 PMED   300610290019
        19   300610290367   8 PMED   300610290019
        20   300610290374   8 PMED   300610290019
        21   300610290398   8 PMED   300610290019
        22   300610290418   1 MVIS   300610290019
        23   300610290456   8 PMED   300610290019
        24   300680130196   8 PMED   300680130051
        25   300680130209   8 PMED   300680130051
        26   300680130230   8 PMED   300680130051
        27   300680130247   8 PMED   300680130051
        28   300910450099   8 PMED   300910450025
        29   300910450102   8 PMED   300910450025
        30   300910450164   8 PMED   300910450025
        31   300910450171   8 PMED   300910450025
        32   301170420048   8 PMED   301170420016
        33   301170420062   8 PMED   301170420016
        34   301320230287   8 PMED   301320230021
        35   301320230383   8 PMED   301320230021
        36   301320230390   8 PMED   301320230021
        37   301320230472   8 PMED   301320230021
        38   301320230489   8 PMED   301320230021
        39   301470290097   1 MVIS   301470290031
        40   301470290100   1 MVIS   301470290031
        41   301470290124   8 PMED   301470290031
        42   302050190016   8 PMED   302050190018
        43   302050190023   8 PMED   302050190018
        44   302050330054   1 MVIS   302050330038
        45   302050330078   3 EROM   302050330038
        46   302050330085   8 PMED   302050330050
        47   302050330092   8 PMED   302050330038
        48   302050330112   8 PMED   302050330038
        49   302070200148   8 PMED   302070200083
        50   302070200155   8 PMED   302070200083

```
        Obs      EVNTIDX       EVENTYPE

          1    300180180418    8 PMED
          2    300180180521    8 PMED
          3    300180180610    1 MVIS
          4    300230580090    3 EROM
          5    300230580103    3 EROM
          6    300230580110    3 EROM
          7    300230580141    1 MVIS
          8    300230580158    8 PMED
          9    300400300031    3 EROM
         10    300400300048    8 PMED
         11    300400300055    8 PMED
         12    300400300062    8 PMED
         13    300600350206    1 MVIS
         14    300610290292    1 MVIS
         15    300610290305    1 MVIS
         16    300610290312    1 MVIS
         17    300610290336    8 PMED
         18    300610290350    8 PMED
         19    300610290367    8 PMED
         20    300610290374    8 PMED
         21    300610290398    8 PMED
         22    300610290418    1 MVIS
         23    300610290456    8 PMED
         24    300680130196    8 PMED
         25    300680130209    8 PMED
         26    300680130230    8 PMED
         27    300680130247    8 PMED
         28    300910450099    8 PMED
         29    300910450102    8 PMED
         30    300910450164    8 PMED
         31    300910450171    8 PMED
         32    301170420048    8 PMED
         33    301170420062    8 PMED
         34    301320230287    8 PMED
         35    301320230383    8 PMED
         36    301320230390    8 PMED
         37    301320230472    8 PMED
         38    301320230489    8 PMED
         39    301470290097    1 MVIS
         40    301470290100    1 MVIS
         41    301470290124    8 PMED
         42    302050190016    8 PMED
         43    302050190023    8 PMED
         44    302050330054    1 MVIS
         45    302050330078    3 EROM
         46    302050330085    8 PMED
         47    302050330092    8 PMED
         48    302050330112    8 PMED
         49    302070200148    8 PMED
         50    302070200155    8 PMED
```

                 Sample SAS Job for Example A
                 sample print of work.asmvis
     unique evntidxs from work.asclnks that are non-telephone MVIS (HC-102G) events

                    Obs   EVNTIDX   EVENTYPE

                      1   300180180610   1 MVIS
                      2   300230580141   1 MVIS
                      3   300600350206   1 MVIS
                      4   300610290292   1 MVIS
                      5   300610290305   1 MVIS
                      6   300610290312   1 MVIS
                      7   301470290097   1 MVIS
                      8   301470290100   1 MVIS
                      9   302050330054   1 MVIS
                     10   302920640123   1 MVIS
                     11   303350230572   1 MVIS
                     12   303350230589   1 MVIS
                     13   303670100336   1 MVIS
                     14   303760240669   1 MVIS
                     15   303760240683   1 MVIS
                     16   303760240690   1 MVIS
                     17   303760240703   1 MVIS
                     18   303760240710   1 MVIS
                     19   303760240734   1 MVIS
                     20   303780330350   1 MVIS
                     21   303780330367   1 MVIS
                     22   303780330381   1 MVIS
                     23   303780330398   1 MVIS
                     24   303780330401   1 MVIS
                     25   303780400158   1 MVIS
                     26   303780400223   1 MVIS
                     27   304140140813   1 MVIS
                     28   304140140820   1 MVIS
                     29   304140140837   1 MVIS
                     30   304140140844   1 MVIS
                     31   304140140851   1 MVIS
                     32   304140140868   1 MVIS
                     33   304140141501   1 MVIS
                     34   304140141518   1 MVIS
                     35   304140141525   1 MVIS
                     36   304140141532   1 MVIS
                     37   304140141549   1 MVIS
                     38   304140141690   1 MVIS
                     39   304140141703   1 MVIS
                     40   304140141710   1 MVIS
                     41   304140141727   1 MVIS
                     42   304140141734   1 MVIS
                     43   304140141741   1 MVIS
                     44   304140141758   1 MVIS
                     45   304140141765   1 MVIS
                     46   304140141772   1 MVIS
                     47   304140141789   1 MVIS
                     48   304220360147   1 MVIS
                     49   304250390218   1 MVIS
                     50   304280150687   1 MVIS

                      Sample SAS Job for Example A
                sample print of work.rxlk - sorted by evntidx
                  Rx+event link file records (HC-102IF2)

            EVNTIDX   LINKIDX   EVENTYPE

        300020190021   300020190045   3 EROM
                         300020190052   3 EROM
                         300020190069   3 EROM
                         300020190076   3 EROM
                         300020190083   3 EROM
                         300020190090   3 EROM

        300020190110   300020190189   1 MVIS
                         300020190196   1 MVIS
                         300020190209   1 MVIS
                         300020190216   1 MVIS
                         300020190223   1 MVIS

        300040270167   300040270181   1 MVIS

        300040270201   300040270225   1 MVIS
                         300040270232   1 MVIS

        300050150559   300050150686   1 MVIS
                         300050150693   1 MVIS
                         300050150706   1 MVIS
                         300050150713   1 MVIS
                         300050150720   1 MVIS
                         300050150737   1 MVIS
                         300050150744   1 MVIS
                         300050150751   1 MVIS
                         300050150768   1 MVIS
                         300050150775   1 MVIS

        300060360081   300060360098   2 OPAT

        300080830080   300080830100   1 MVIS
                         300080830117   1 MVIS

        300080830097   300080830100   1 MVIS
                         300080830117   1 MVIS

        300090130169   300090130203   1 MVIS

        300090130258   300090130272   1 MVIS

        300100100332   300100100363   1 MVIS

        300110100771   300110101161   1 MVIS
                         300110101178   1 MVIS

        300110100795   300110101161   1 MVIS
                         300110101178   1 MVIS

                Sample SAS Job for Example A
         sample print of work.rxlk - sorted by evntidx
           Rx+event link file records (HC-102IF2)

         EVNTIDX   LINKIDX   EVENTYPE

     300110100808   300110101161   1 MVIS
                      300110101178   1 MVIS

     300110100815   300110101161   1 MVIS
                      300110101178   1 MVIS

     300110100822   300110101161   1 MVIS
                      300110101178   1 MVIS

     300110101003   300110101185   1 MVIS

     300110101109   300110101192   3 EROM
                      300110101205   3 EROM

     300110101116   300110101161   3 EROM
                      300110101178   3 EROM
                      300110101185   3 EROM
                      300110101212   3 EROM
                      300110101229   3 EROM
                      300110101236   3 EROM
                      300110101243   3 EROM
                      300110101250   3 EROM
                      300110101267   3 EROM
                      300110101274   3 EROM
                      300110101281   3 EROM

     300110101123   300110101281   4 STAZ

     300130290174   300130290181   1 MVIS

     300130290201   300130290249   5 DVIS

     300160270162   300160270193   1 MVIS

     300160270179   300160270206   1 MVIS

     300160270186   300160270213   5 DVIS
                      300160270220   5 DVIS
                      300160270237   5 DVIS
                      300160270244   5 DVIS

     300160270268   300160270302   1 MVIS

     300170230131   300170230179   2 OPAT

     300170230237   300170230244   1 MVIS

     300170470179   300170470186   1 MVIS

Sample SAS Job for Example A
sample print of work.rxlk - sorted by evntidx
Rx+event link file records (HC-102IF2)

EVNTIDX	LINKIDX	EVENTYPE
300170470193	300170470206	3 EROM
300180180590	300180180843	3 EROM
300180180665	300180180867	1 MVIS
300200190054	300200190061	1 MVIS
300200310094	300200310107	1 MVIS
300200310121	300200310138	1 MVIS
	300200310145	1 MVIS
300200310152	300200310190	1 MVIS
300200490048	300200490055	1 MVIS
300210180201	300210180218	1 MVIS
	300210180225	1 MVIS
	300210180232	1 MVIS
300230410103	300230410110	1 MVIS
	300230410127	1 MVIS
300230580110	300230580158	3 EROM
300230580141	300230580165	1 MVIS
300250110050	300250110067	1 MVIS
300260210032	300260210049	1 MVIS
	300260210056	1 MVIS
300260420035	300260420042	1 MVIS
300270110015	300270110039	1 MVIS
300270130020	300270130037	4 STAZ
300280150332	300280150387	1 MVIS
	300280150394	1 MVIS
300280150452	300280150534	1 MVIS
300280150510	300280150541	1 MVIS
	300280150558	1 MVIS
	300280150565	1 MVIS
300280220205	300280220274	1 MVIS

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              Sample SAS Job for Example A
         sample print of work.rxlk - sorted by evntidx
            Rx+event link file records (HC-102IF2)

EVNTIDX	LINKIDX	EVENTYPE
300280220212	300280220281	1 MVIS
300280220363	300280220630	1 MVIS
300280220476	300280220647	4 STAZ
300280390387	300280390414	1 MVIS
300280390438	300280390490	1 MVIS
	300280390503	1 MVIS
300280460116	300280460154	1 MVIS
300320170391	300320170411	1 MVIS
300320170473	300320170548	1 MVIS
	300320170555	1 MVIS
	300320170562	1 MVIS
	300320170579	1 MVIS
	300320170586	1 MVIS
	300320170593	1 MVIS
	300320170606	1 MVIS
300320170613	300320170637	1 MVIS
300320310113	300320310120	1 MVIS
300340260019	300340260026	1 MVIS
300340340183	300340340227	1 MVIS
	300340340234	1 MVIS
300360250228	300360250259	1 MVIS
	300360250266	1 MVIS
300370170926	300370171070	4 STAZ
	300370171094	4 STAZ
300370240039	300370240053	1 MVIS
	300370240060	1 MVIS
300380271006	300380271082	1 MVIS
	300380271099	1 MVIS
300380271044	300380271102	1 MVIS
300400160048	300400160062	3 EROM
300400300031	300400300048	3 EROM

                     Sample SAS Job for Example A
               sample print of work.rxlk - sorted by evntidx
                  Rx+event link file records (HC-102IF2)

          EVNTIDX   LINKIDX   EVENTYPE

       300400300031   300400300055   3 EROM
                        300400300062   3 EROM

       300410130222   300410130253   1 MVIS

       300410130284   300410130335   1 MVIS
                        300410130342   1 MVIS

       300410130304   300410130359   1 MVIS

       300420180111   300420180128   1 MVIS

       300420180142   300420180313   1 MVIS

       300430120071   300430120095   5 DVIS
                        300430120108   5 DVIS

       300430290184   300430290228   1 MVIS

                  Sample SAS Job for Example A
        sample print of work.pmedids - sorted by evntidx
         work.rxlk records for evntidxs in work.asmvis

              EVNTIDX   EVENTYPE   LINKIDX

           300230580141   1 MVIS   300230580165

           300600350206   1 MVIS   300600350244

           301470290097   1 MVIS   301470290117
                            1 MVIS   301470290124

           302050330054   1 MVIS   302050330085

           302920640123   1 MVIS   302920640130
                            1 MVIS   302920640147

           303350230572   1 MVIS   303350230616
                            1 MVIS   303350230623

           303780330350   1 MVIS   303780330425

           303780330398   1 MVIS   303780330449
                            1 MVIS   303780330456
                            1 MVIS   303780330463

           303780330401   1 MVIS   303780330470

           303780400158   1 MVIS   303780400172
                            1 MVIS   303780400189
                            1 MVIS   303780400196

           303780400223   1 MVIS   303780400247
                            1 MVIS   303780400254

           304140140813   1 MVIS   304140141309
                            1 MVIS   304140141316
                            1 MVIS   304140141323
                            1 MVIS   304140141330
                            1 MVIS   304140141347
                            1 MVIS   304140141354
                            1 MVIS   304140141361
                            1 MVIS   304140141378
                            1 MVIS   304140141385
                            1 MVIS   304140141392
                            1 MVIS   304140141405
                            1 MVIS   304140141412
                            1 MVIS   304140141429

           304140141501   1 MVIS   304140141885
                            1 MVIS   304140141892
                            1 MVIS   304140141905
                            1 MVIS   304140141912
                            1 MVIS   304140141929

                      Sample SAS Job for Example A
              sample print of work.pmedids - sorted by evntidx
               work.rxlk records for evntidxs in work.asmvis

              EVNTIDX   EVENTYPE   LINKIDX

         304140141501   1 MVIS   304140141936
                             1 MVIS   304140141943
                             1 MVIS   304140141950
                             1 MVIS   304140141967
                             1 MVIS   304140141974
                             1 MVIS   304140141981
                             1 MVIS   304140141998
                             1 MVIS   304140142004
                             1 MVIS   304140142011

         304140141690   1 MVIS   304140141892
                             1 MVIS   304140141905
                             1 MVIS   304140141912
                             1 MVIS   304140141943

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    Obs      EVNTIDX       EVENTYPE       LINKIDX

     1     300230580141     1 MVIS     300230580165
     2     300600350206     1 MVIS     300600350244
     3     301470290097     1 MVIS     301470290117
     4     301470290097     1 MVIS     301470290124
     5     302050330054     1 MVIS     302050330085
     6     302920640123     1 MVIS     302920640130
     7     302920640123     1 MVIS     302920640147
     8     303350230572     1 MVIS     303350230616
     9     303350230572     1 MVIS     303350230623
    10     303780330350     1 MVIS     303780330425
    11     303780330398     1 MVIS     303780330449
    12     303780330398     1 MVIS     303780330456
    13     303780330398     1 MVIS     303780330463
    14     303780330401     1 MVIS     303780330470
    15     303780400158     1 MVIS     303780400172
    16     303780400158     1 MVIS     303780400189
    17     303780400158     1 MVIS     303780400196
    18     303780400223     1 MVIS     303780400247
    19     303780400223     1 MVIS     303780400254
    20     304140140813     1 MVIS     304140141309
    21     304140140813     1 MVIS     304140141316
    22     304140140813     1 MVIS     304140141323
    23     304140140813     1 MVIS     304140141330
    24     304140140813     1 MVIS     304140141347
    25     304140140813     1 MVIS     304140141354
    26     304140140813     1 MVIS     304140141361
    27     304140140813     1 MVIS     304140141378
    28     304140140813     1 MVIS     304140141385
    29     304140140813     1 MVIS     304140141392
    30     304140140813     1 MVIS     304140141405
    31     304140140813     1 MVIS     304140141412
    32     304140140813     1 MVIS     304140141429
    33     304140141501     1 MVIS     304140141885
    34     304140141501     1 MVIS     304140141892
    35     304140141690     1 MVIS     304140141892
    36     304140141501     1 MVIS     304140141905
    37     304140141690     1 MVIS     304140141905
    38     304140141501     1 MVIS     304140141912
    39     304140141690     1 MVIS     304140141912
    40     304140141501     1 MVIS     304140141929
    41     304140141501     1 MVIS     304140141936
    42     304140141501     1 MVIS     304140141943
    43     304140141690     1 MVIS     304140141943
    44     304140141501     1 MVIS     304140141950
    45     304140141690     1 MVIS     304140141950
    46     304140141501     1 MVIS     304140141967
    47     304140141690     1 MVIS     304140141967
    48     304140141501     1 MVIS     304140141974
    49     304140141501     1 MVIS     304140141981
    50     304140141501     1 MVIS     304140141998
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        Obs      LINKIDX


          1     300230580165
          2     300600350244
          3     301470290117
          4     301470290124
          5     302050330085
          6     302920640130
          7     302920640147
          8     303350230616
          9     303350230623
         10     303780330425
         11     303780330449
         12     303780330456
         13     303780330463
         14     303780330470
         15     303780400172
         16     303780400189
         17     303780400196
         18     303780400247
         19     303780400254
         20     304140141309
         21     304140141316
         22     304140141323
         23     304140141330
         24     304140141347
         25     304140141354
         26     304140141361
         27     304140141378
         28     304140141385
         29     304140141392
         30     304140141405
         31     304140141412
         32     304140141429
         33     304140141885
         34     304140141892
         35     304140141905
         36     304140141912
         37     304140141929
         38     304140141936
         39     304140141943
         40     304140141950
         41     304140141967
         42     304140141974
         43     304140141981
         44     304140141998
         45     304140142004
         46     304140142011
         47     304140142035
         48     305110240177
         49     305110240184
         50     305110240191
```

                         Sample SAS Job for Example A
                         sample print of work.mvpmeds
                  PMED (HC-102A) records for unique linkidxs in work.pmedids

```
   LINKIDX        RXRECIDX        RXNAME                              RXXP06X       PERWT06F

300230580165    300230580165001  SINGULAIR                            92.12      4647.878284

300600350244    300600350244001  AMOXICILLIN (RASPBERRY-STRAWBERRY)   12.18      5451.825282

301470290117    301470290117001  AZITHROMYCIN                         30.64      4964.901754

301470290124    301470290124001  BRETHINE                             44.75      4964.901754

302050330085    302050330085001  PULMICORT RESPULES (5X6)            300.88      4355.758139

302920640130    302920640130001  ALBUTEROL SULFATE (VIAL)             25.58      1436.909526

302920640147    302920640147001  PULMICORT RESPULES (5X6)            304.70      1436.909526

303350230616    303350230616001  ZITHROMAX                            34.22      8363.548295

303350230623    303350230623001  METHYLPREDNISOLONE                    8.66      8363.548295
                303350230623002  METHYLPREDNISOLONE                    8.66      8363.548295

303780330425    303780330425001  PREDNISONE (PEPPERMINT-VANILLA)      26.41     15296.326798
                303780330425002  PREDNISONE (PEPPERMINT-VANILLA)      26.41     15296.326798

303780330449    303780330449001  RESPI-TANN (DYE-FREE,CHERRY)         55.65     15296.326798

303780330456    303780330456001  HALOBETASOL                         108.99     15296.326798

303780330463    303780330463001  CORTANE-B                            62.15     15296.326798

303780330470    303780330470001  HISDEC                                5.69     15296.326798

303780400172    303780400172001  HISDEC                                8.82     10940.657155

303780400189    303780400189001  ALBUTEROL INHALER                    20.29     10940.657155
                303780400189002  ALBUTEROL INHALER                    20.29     10940.657155

303780400196    303780400196001  FLOVENT                             134.00     10940.657155
                303780400196002  FLOVENT                             134.00     10940.657155

303780400247    303780400247001  PREDNISONE (PEPPERMINT-VANILLA)      26.41     10940.657155

303780400254    303780400254001  SINGULAIR                            93.76     10940.657155

304140141309    304140141309001  APAP/HYDROCODONE BITARTRATE          55.79      4183.222652
                304140141309002  APAP/HYDROCODONE BITARTRATE          55.79      4183.222652
                304140141309003  APAP/HYDROCODONE BITARTRATE          55.79      4183.222652
                304140141309004  APAP/HYDROCODONE BITARTRATE          55.79      4183.222652
                304140141309005  APAP/HYDROCODONE BITARTRATE          55.79      4183.222652
                304140141309006  APAP/HYDROCODONE BITARTRATE          55.79      4183.222652
```

                          Sample SAS Job for Example A
                          sample print of work.mvpmeds
                    PMED (HC-102A) records for unique linkidxs in work.pmedids

   LINKIDX   RXRECIDX   RXNAME   RXXP06X   PERWT06F

304140141316   304140141316001   NAPROXEN   5.05   4183.222652
                 304140141316002   NAPROXEN   5.05   4183.222652
                 304140141316003   NAPROXEN   5.05   4183.222652
                 304140141316004   NAPROXEN   5.05   4183.222652
                 304140141316005   NAPROXEN   5.05   4183.222652
                 304140141316006   NAPROXEN   5.05   4183.222652

304140141323   304140141323001   ALBUTEROL   14.67   4183.222652
                 304140141323002   ALBUTEROL   14.67   4183.222652
                 304140141323003   ALBUTEROL   14.67   4183.222652
                 304140141323004   ALBUTEROL   14.67   4183.222652
                 304140141323005   ALBUTEROL   14.67   4183.222652
                 304140141323006   ALBUTEROL   14.67   4183.222652

304140141330   304140141330001   GEN ROBITUSSIN   9.99   4183.222652
                 304140141330002   GEN ROBITUSSIN   9.99   4183.222652
                 304140141330003   GEN ROBITUSSIN   9.99   4183.222652
                 304140141330004   GEN ROBITUSSIN   9.99   4183.222652
                 304140141330005   GEN ROBITUSSIN   9.99   4183.222652
                 304140141330006   GEN ROBITUSSIN   9.99   4183.222652

304140141347   304140141347001   FENTANYL   53.41   4183.222652
                 304140141347002   FENTANYL   53.41   4183.222652
                 304140141347003   FENTANYL   53.41   4183.222652
                 304140141347004   FENTANYL   53.41   4183.222652
                 304140141347005   FENTANYL   53.41   4183.222652
                 304140141347006   FENTANYL   53.41   4183.222652

304140141354   304140141354001   OXYCONTIN   3.31   4183.222652
                 304140141354002   OXYCONTIN   198.49   4183.222652
                 304140141354003   OXYCONTIN   693.44   4183.222652
                 304140141354004   OXYCONTIN   3.31   4183.222652
                 304140141354005   OXYCONTIN   693.44   4183.222652
                 304140141354006   OXYCONTIN   3.31   4183.222652

304140141361   304140141361001   HYDROCHLOROTHIAZIDE   6.70   4183.222652
                 304140141361002   HYDROCHLOROTHIAZIDE   6.70   4183.222652
                 304140141361003   HYDROCHLOROTHIAZIDE   6.70   4183.222652
                 304140141361004   HYDROCHLOROTHIAZIDE   6.70   4183.222652
                 304140141361005   HYDROCHLOROTHIAZIDE   6.70   4183.222652
                 304140141361006   HYDROCHLOROTHIAZIDE   6.70   4183.222652

304140141378   304140141378001   POTASSIUM   8.26   4183.222652
                 304140141378002   POTASSIUM   8.26   4183.222652
                 304140141378003   POTASSIUM   8.26   4183.222652
                 304140141378004   POTASSIUM   8.26   4183.222652
                 304140141378005   POTASSIUM   8.26   4183.222652
                 304140141378006   POTASSIUM   8.26   4183.222652

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-102A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP06X	PERWT06F
304140141385	304140141385001	DICAL-D	24.80	4183.222652
	304140141385002	DICAL-D	24.80	4183.222652
	304140141385003	DICAL-D	24.80	4183.222652
	304140141385004	DICAL-D	24.80	4183.222652
	304140141385005	DICAL-D	24.80	4183.222652
	304140141385006	DICAL-D	24.80	4183.222652
304140141392	304140141392001	ATENOLOL	6.30	4183.222652
304140141405	304140141405001	OXYCONTIN	693.44	4183.222652
	304140141405002	OXYCONTIN	5.87	4183.222652
	304140141405003	OXYCONTIN	693.44	4183.222652
	304140141405004	OXYCONTIN	5.87	4183.222652
	304140141405005	OXYCONTIN	5.87	4183.222652
	304140141405006	OXYCONTIN	5.87	4183.222652
304140141412	304140141412001	LIPITOR	212.51	4183.222652
	304140141412002	LIPITOR	212.51	4183.222652
	304140141412003	LIPITOR	212.51	4183.222652
	304140141412004	LIPITOR	212.51	4183.222652
	304140141412005	LIPITOR	212.51	4183.222652
	304140141412006	LIPITOR	212.51	4183.222652
304140141429	304140141429001	BUMEX	54.01	4183.222652
	304140141429002	BUMEX	54.01	4183.222652
	304140141429003	BUMEX	54.01	4183.222652
	304140141429004	BUMEX	54.01	4183.222652
	304140141429005	BUMEX	54.01	4183.222652
	304140141429006	BUMEX	54.01	4183.222652
304140141885	304140141885001	VICODIN	9.75	4183.222652
	304140141885002	VICODIN	9.75	4183.222652
	304140141885003	VICODIN	9.75	4183.222652
	304140141885004	VICODIN	9.75	4183.222652
	304140141885005	VICODIN	9.75	4183.222652
304140141892	304140141892001	NAPROXEN	35.78	4183.222652
	304140141892002	NAPROXEN	35.78	4183.222652
	304140141892003	NAPROXEN	35.78	4183.222652
	304140141892004	NAPROXEN	35.78	4183.222652
	304140141892005	NAPROXEN	35.78	4183.222652
304140141905	304140141905001	ALBUTEROL	10.38	4183.222652
	304140141905002	ALBUTEROL	10.38	4183.222652
304140141912	304140141912001	GEN ROBITUSSIN	9.99	4183.222652
	304140141912002	GEN ROBITUSSIN	9.99	4183.222652
304140141929	304140141929001	FENTANYL PATCH	65.95	4183.222652

                          Sample SAS Job for Example A
                          sample print of work.mvpmeds
                   PMED (HC-102A) records for unique linkidxs in work.pmedids

    LINKIDX   RXRECIDX   RXNAME   RXXP06X   PERWT06F

304140141929   304140141929002   FENTANYL PATCH   65.95   4183.222652
                304140141929003   FENTANYL PATCH   65.95   4183.222652
                304140141929004   FENTANYL PATCH   65.95   4183.222652
                304140141929005   FENTANYL PATCH   65.95   4183.222652

304140141936   304140141936001   HYDROCHLOROTHIAZIDE   8.00   4183.222652
                304140141936002   HYDROCHLOROTHIAZIDE   8.00   4183.222652
                304140141936003   HYDROCHLOROTHIAZIDE   8.00   4183.222652
                304140141936004   HYDROCHLOROTHIAZIDE   8.00   4183.222652
                304140141936005   HYDROCHLOROTHIAZIDE   8.00   4183.222652

304140141943   304140141943001   POTASSIUM   8.26   4183.222652
                304140141943002   POTASSIUM   8.26   4183.222652
                304140141943003   POTASSIUM   8.26   4183.222652
                304140141943004   POTASSIUM   8.26   4183.222652
                304140141943005   POTASSIUM   8.26   4183.222652

304140141950   304140141950001   CALCIUM   2.98   4183.222652
                304140141950002   CALCIUM   2.98   4183.222652
                304140141950003   CALCIUM   2.98   4183.222652
                304140141950004   CALCIUM   2.98   4183.222652
                304140141950005   CALCIUM   2.98   4183.222652

304140141967   304140141967001   BUMEX   54.01   4183.222652
                304140141967002   BUMEX   54.01   4183.222652
                304140141967003   BUMEX   54.01   4183.222652
                304140141967004   BUMEX   54.01   4183.222652
                304140141967005   BUMEX   54.01   4183.222652

304140141974   304140141974001   ASPIRIN   2.26   4183.222652
                304140141974002   ASPIRIN   2.26   4183.222652
                304140141974003   ASPIRIN   2.26   4183.222652
                304140141974004   ASPIRIN   2.26   4183.222652
                304140141974005   ASPIRIN   2.26   4183.222652

304140141981   304140141981001   OXYCONTIN   3.31   4183.222652
                304140141981002   OXYCONTIN   198.49   4183.222652
                304140141981003   OXYCONTIN   693.44   4183.222652
                304140141981004   OXYCONTIN   198.49   4183.222652
                304140141981005   OXYCONTIN   3.31   4183.222652

304140141998   304140141998001   LIPITOR   212.51   4183.222652
                304140141998002   LIPITOR   212.51   4183.222652
                304140141998003   LIPITOR   212.51   4183.222652
                304140141998004   LIPITOR   212.51   4183.222652
                304140141998005   LIPITOR   212.51   4183.222652

304140142004   304140142004001   ATENOLOL   6.30   4183.222652
                304140142004002   ATENOLOL   6.30   4183.222652

                       Sample SAS Job for Example A
                       sample print of work.mvpmeds
              PMED (HC-102A) records for unique linkidxs in work.pmedids

   LINKIDX   RXRECIDX   RXNAME   RXXP06X   PERWT06F

304140142004   304140142004003   ATENOLOL   6.30   4183.222652
                304140142004004   ATENOLOL   6.30   4183.222652
                304140142004005   ATENOLOL   6.30   4183.222652

304140142011   304140142011001   BENADRYL   3.71   4183.222652
                304140142011002   BENADRYL   3.71   4183.222652

304140142035   304140142035001   INDERAL LA   64.11   4183.222652
                304140142035002   INDERAL LA   64.11   4183.222652
                304140142035003   INDERAL LA   64.11   4183.222652
                304140142035004   INDERAL LA   64.11   4183.222652
                304140142035005   INDERAL LA   64.11   4183.222652

305110240177   305110240177001   LEVAQUIN   122.83   7058.848102
                305110240177002   LEVAQUIN   122.83   7058.848102

305110240184   305110240184001   NYSTATIN   131.31   7058.848102

305110240191   305110240191001   TUSSIONEX   26.93   7058.848102

305110240204   305110240204001   PREDNISONE   2.08   7058.848102

305110240211   305110240211001   ZYRTEC   63.10   7058.848102

305110240273   305110240273001   NEXIUM   45.00   7058.848102
                305110240273002   NEXIUM   45.00   7058.848102

305540110670   305540110670001   APAP/OXYCODONE   178.78   5433.128858
                305540110670002   APAP/OXYCODONE   214.16   5433.128858
                305540110670003   APAP/OXYCODONE   178.78   5433.128858
                305540110670004   APAP/OXYCODONE   214.16   5433.128858
                305540110670005   APAP/OXYCODONE   214.16   5433.128858
                305540110670006   APAP/OXYCODONE   214.16   5433.128858

305540110687   305540110687001   CORTANE-B   32.10   5433.128858
                305540110687002   CORTANE-B   38.17   5433.128858
                305540110687003   CORTANE-B   72.45   5433.128858
                305540110687004   CORTANE-B   115.26   5433.128858

305540110930   305540110930001   APAP/OXYCODONE   45.78   5433.128858
                305540110930002   APAP/OXYCODONE   178.78   5433.128858
                305540110930003   APAP/OXYCODONE   43.85   5433.128858
                305540110930004   APAP/OXYCODONE   45.78   5433.128858
                305540110930005   APAP/OXYCODONE   43.85   5433.128858

305540110954   305540110954001   PREVACID   138.00   5433.128858
                305540110954002   PREVACID   138.00   5433.128858
                305540110954003   PREVACID   138.00   5433.128858
                305540110954004   PREVACID   138.00   5433.128858

                              HC-102I   13:16 Friday, September 19, 2008 21
                      Sample SAS Job for Example A
                      sample print of work.mvpmeds
                PMED (HC-102A) records for unique linkidxs in work.pmedids
```

```
  LINKIDX           RXRECIDX          RXNAME                          RXXP06X         PERWT06F


305540110954      305540110954005   PREVACID                         138.00         5433.128858


305540110961      305540110961001   DIOVAN HCT (CAPLET)              122.26         5433.128858
                  305540110961002   DIOVAN HCT (CAPLET)              122.26         5433.128858
                  305540110961003   DIOVAN HCT (CAPLET)              122.26         5433.128858
                  305540110961004   DIOVAN HCT (CAPLET)              122.26         5433.128858
                  305540110961005   DIOVAN HCT (CAPLET)              122.26         5433.128858


305540110978      305540110978001   VERAPAMIL HCL (FILM-COATED)       17.24         5433.128858
                  305540110978002   VERAPAMIL HCL (FILM-COATED)       17.24         5433.128858
                  305540110978003   VERAPAMIL HCL (FILM-COATED)       17.24         5433.128858
                  305540110978004   VERAPAMIL HCL (FILM-COATED)       17.24         5433.128858
                  305540110978005   VERAPAMIL HCL (FILM-COATED)       17.24         5433.128858
```

Sample SAS Job for Example A
Total Rx expenditures associated with medical visits (excluding telephone) for asthma

The MEANS Procedure

Analysis Variable : RXXP06X SUM OF PAYMENTS RXSF06X-RXOU06X(IMPUTED)

```
          N            Sum
     -------------------
        6040       421540.16
     -------------------
```

Sample SAS Job for Example A
Total Rx expenditures associated with medical visits (excluding telephone) for asthma

Weighted

The MEANS Procedure

Analysis Variable : RXXP06X SUM OF PAYMENTS RXSF06X-RXOU06X(IMPUTED)

```
        N           Sum
   -------------------
     6040     3521652073
   -------------------
```

```
NOTE: Copyright (c) 2002-2003 by SAS Institute Inc., Cary, NC, USA.
NOTE: SAS (r) 9.1 (TS1M3)
NOTE: This session is executing on the XP_PRO  platform.



NOTE: SAS 9.1.3 Service Pack 4



NOTE: SAS initialization used:
      real time           4.95 seconds
      cpu time            1.17 seconds



NOTE: AUTOEXEC processing beginning; file is I:\WW3\APPLIC~1\SAS\FOUNDA~1.3\sas\autoexec.sas.


NOTE: AUTOEXEC processing completed.

1    OPTIONS LS=132 PS=59;
2
3    TITLE1 "HC-102I";
4    TITLE2 "Sample SAS Job for Example B";
5
6    LIBNAME IN "C:\Data";
NOTE: Libref IN was successfully assigned as follows:
      Engine:        V9
      Physical Name: C:\Data
7
8    ******************************************************************************************
9    * Calculate the expenditures for prescribed medicines associated with asthma.
10   ******************************************************************************************;
11   PROC FORMAT;
12     VALUE EVENTYPE
13       1 = "1 MVIS"
14       2 = "2 OPAT"
15       3 = "3 EROM"
16       4 = "4 STAZ"
17       5 = "5 DVIS"
18       6 = "6 OMED"
19       7 = "7 HVIS"
20       8 = "8 PMED";
NOTE: Format EVENTYPE has been output.
21   RUN;

NOTE: PROCEDURE FORMAT used (Total process time):
      real time           0.09 seconds
      cpu time            0.00 seconds



22
23   *---------------------------------------------------------------------------------------
24   * Get condition records coded as asthma.
25   *--------------------------------------------------------------------------------------;
26   DATA ASCONDS;
27     SET IN.H104 (KEEP=CONDIDX CCCODEX);
28     IF CCCODEX="128";
29   RUN;

NOTE: There were 105166 observations read from the data set IN.H104.
NOTE: The data set WORK.ASCONDS has 1990 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time           0.26 seconds
      cpu time            0.09 seconds



30
31   *-------------------------------------------------------------------------
32   * Get the events linked to each of the asthma condition records.
33   *------------------------------------------------------------------------;
34   PROC SORT DATA=ASCONDS; BY CONDIDX; RUN;
```

```
NOTE: There were 1990 observations read from the data set WORK.ASCONDS.
NOTE: The data set WORK.ASCONDS has 1990 observations and 2 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.04 seconds
      cpu time            0.01 seconds


35
36   proc print data=asconds (obs=50);
37     title3 "sample print of work.asconds - sorted by condidx";
38     title4 "COND (H104) records where cccodex=128";
39   run;

NOTE: There were 50 observations read from the data set WORK.ASCONDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.11 seconds
      cpu time            0.00 seconds


40
41   PROC SORT DATA=IN.H102IF1 OUT=CLNK; BY CONDIDX; RUN;

NOTE: There were 350780 observations read from the data set IN.H102IF1.
NOTE: The data set WORK.CLNK has 350780 observations and 6 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           5.79 seconds
      cpu time            1.10 seconds


42
43   DATA ASCLNKS;
44     MERGE CLNK   (IN=INCLNK   KEEP=CONDIDX EVNTIDX EVENTYPE)
45           ASCONDS(IN=INASCOND KEEP=CONDIDX);
46     BY CONDIDX;
47     IF INCLNK & INASCOND;
48   RUN;

NOTE: There were 350780 observations read from the data set WORK.CLNK.
NOTE: There were 1990 observations read from the data set WORK.ASCONDS.
NOTE: The data set WORK.ASCLNKS has 7984 observations and 3 variables.
NOTE: DATA statement used (Total process time):
      real time           1.59 seconds
      cpu time            0.39 seconds


49
50   proc print data=asclnks (obs=75);
51     by condidx;
52     id condidx;
53     format eventype eventype.;
54     title3 "sample print of work.asclnks - sorted by condidx";
55     title4 "events linked to asthma condition records";
56   run;

NOTE: There were 75 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.07 seconds
      cpu time            0.00 seconds


57
58   PROC SORT DATA=ASCLNKS; BY EVNTIDX; RUN;

NOTE: There were 7984 observations read from the data set WORK.ASCLNKS.
NOTE: The data set WORK.ASCLNKS has 7984 observations and 3 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.03 seconds
      cpu time            0.01 seconds


59
```

```
60   proc print data=asclnks (obs=50);
61     format eventype eventype.;
62     title3 "sample print of work.asclnks - sorted by evntidx";
63   run;

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds


64
65   DATA ASCLNKS;
66     SET ASCLNKS (KEEP=EVNTIDX EVENTYPE);
67     BY EVNTIDX;
68     IF FIRST.EVNTIDX;
69   RUN;

NOTE: There were 7984 observations read from the data set WORK.ASCLNKS.
NOTE: The data set WORK.ASCLNKS has 7978 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds


70
71   proc print data=asclnks (obs=50);
72     format eventype eventype.;
73     title3 "sample print of unique evntidxs from work.asclnks";
74   run;

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


75
76   *--------------------------------------------------------------------------------
77   * Get PMED records linked to asthma condition records.
78   *-------------------------------------------------------------------------------;
79   PROC SORT DATA=IN.H102A OUT=PMED; BY LINKIDX; RUN;

NOTE: There were 341994 observations read from the data set IN.H102A.
NOTE: The data set WORK.PMED has 341994 observations and 13 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time          24.48 seconds
      cpu time            3.79 seconds


80
81   DATA ASPMEDS;
82     MERGE PMED (KEEP=LINKIDX RXRECIDX RXNAME RXXP06X  PERWT06F)
83           ASCLNKS (IN=INASCLNK KEEP=EVNTIDX RENAME=(EVNTIDX=LINKIDX));
84     BY LINKIDX;
85     IF INASCLNK & PERWT06F>0;
86   RUN;

NOTE: There were 341994 observations read from the data set WORK.PMED.
NOTE: There were 7978 observations read from the data set WORK.ASCLNKS.
NOTE: The data set WORK.ASPMEDS has 11833 observations and 5 variables.
NOTE: DATA statement used (Total process time):
      real time           0.67 seconds
      cpu time            0.48 seconds


87
88   proc print data=aspmeds (obs=300);
89     by linkidx;
90     id linkidx;
91     var rxrecidx rxname RXXP06X  PERWT06F;
92     title3 "sample print of work.aspmeds";
```

```
93    title4 "PMED (HC-102A) records which link to condition records coded as asthma";
94    run;

NOTE: There were 300 observations read from the data set WORK.ASPMEDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds


95
96    PROC MEANS DATA=ASPMEDS N SUM;
97      VAR RXXP06X;
98      TITLE3 "Total Rx expenditures associated with asthma";
99    RUN;

NOTE: There were 11833 observations read from the data set WORK.ASPMEDS.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.14 seconds
      cpu time            0.03 seconds


100
101   PROC MEANS DATA=ASPMEDS N SUM;
102     VAR RXXP06X;
103     WEIGHT PERWT06F;
104     TITLE3 "Total Rx expenditures associated with asthma";
105     TITLE5 "Weighted";
106   RUN;

NOTE: There were 11833 observations read from the data set WORK.ASPMEDS.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.03 seconds
      cpu time            0.00 seconds
```

                        Sample SAS Job for Example B
              sample print of work.asconds - sorted by condidx
                   COND (H104) records where cccodex=128

                     Obs   CCCODEX   CONDIDX

                      1   128   300180180093
                      2   128   300230580049
                      3   128   300400300014
                      4   128   300490270010
                      5   128   300600350034
                      6   128   300610290019
                      7   128   300680130051
                      8   128   300830210012
                      9   128   300910450025
                     10   128   301170420016
                     11   128   301320230021
                     12   128   301470290031
                     13   128   302050190018
                     14   128   302050330038
                     15   128   302050330050
                     16   128   302070200083
                     17   128   302170520040
                     18   128   302560570015
                     19   128   302740680016
                     20   128   302850140023
                     21   128   302920640046
                     22   128   302950160019
                     23   128   302950230018
                     24   128   302980530024
                     25   128   303290290060
                     26   128   303350230045
                     27   128   303510370015
                     28   128   303600490028
                     29   128   303670100066
                     30   128   303730200010
                     31   128   303760240088
                     32   128   303760240204
                     33   128   303780330060
                     34   128   303780400075
                     35   128   303930110039
                     36   128   304140140175
                     37   128   304220290013
                     38   128   304220360012
                     39   128   304250390016
                     40   128   304280150074
                     41   128   304540490089
                     42   128   304550430109
                     43   128   304570200013
                     44   128   304620150092
                     45   128   304620270080
                     46   128   304710110124
                     47   128   304740470017
                     48   128   304840230070
                     49   128   305110240030
                     50   128   305260250057

Sample SAS Job for Example B
sample print of work.asclnks - sorted by condidx
events linked to asthma condition records

CONDIDX	EVNTIDX	EVENTYPE
300180180093	300180180418	8 PMED
	300180180521	8 PMED
	300180180610	1 MVIS
300230580049	300230580090	3 EROM
	300230580103	3 EROM
	300230580110	3 EROM
	300230580141	1 MVIS
	300230580158	8 PMED
300400300014	300400300031	3 EROM
	300400300048	8 PMED
	300400300055	8 PMED
	300400300062	8 PMED
300600350034	300600350206	1 MVIS
300610290019	300610290292	1 MVIS
	300610290305	1 MVIS
	300610290312	1 MVIS
	300610290336	8 PMED
	300610290350	8 PMED
	300610290367	8 PMED
	300610290374	8 PMED
	300610290398	8 PMED
	300610290418	1 MVIS
	300610290456	8 PMED
300680130051	300680130196	8 PMED
	300680130209	8 PMED
	300680130230	8 PMED
	300680130247	8 PMED
300910450025	300910450099	8 PMED
	300910450102	8 PMED
	300910450164	8 PMED
	300910450171	8 PMED
301170420016	301170420048	8 PMED
	301170420062	8 PMED
301320230021	301320230287	8 PMED
	301320230383	8 PMED
	301320230390	8 PMED
	301320230472	8 PMED
	301320230489	8 PMED
301470290031	301470290097	1 MVIS
	301470290100	1 MVIS

                  Sample SAS Job for Example B
        sample print of work.asclnks - sorted by condidx
          events linked to asthma condition records

        CONDIDX   EVNTIDX   EVENTYPE

    301470290031   301470290124   8 PMED

    302050190018   302050190016   8 PMED
                    302050190023   8 PMED

    302050330038   302050330054   1 MVIS
                    302050330078   3 EROM
                    302050330092   8 PMED
                    302050330112   8 PMED

    302050330050   302050330085   8 PMED

    302070200083   302070200148   8 PMED
                    302070200155   8 PMED

    302170520040   302170520033   8 PMED

    302560570015   302560570125   8 PMED

    302920640046   302920640123   1 MVIS
                    302920640130   8 PMED
                    302920640147   8 PMED

    302950230018   302950230057   8 PMED
                    302950230115   8 PMED

    303290290060   303290290117   8 PMED
                    303290290148   8 PMED

    303350230045   303350230445   8 PMED
                    303350230558   8 PMED
                    303350230572   1 MVIS
                    303350230589   1 MVIS
                    303350230596   1 MVIS
                    303350230623   8 PMED
                    303350230630   8 PMED
                    303350230661   8 PMED
                    303350230678   8 PMED
                    303350230705   8 PMED
                    303350230729   8 PMED
                    303350230801   8 PMED
                    303350230825   8 PMED
                    303350230849   8 PMED

    303510370015   303510370359   8 PMED
                    303510370366   8 PMED

Obs	EVNTIDX	EVENTYPE	CONDIDX
1	300180180418	8 PMED	300180180093
2	300180180521	8 PMED	300180180093
3	300180180610	1 MVIS	300180180093
4	300230580090	3 EROM	300230580049
5	300230580103	3 EROM	300230580049
6	300230580110	3 EROM	300230580049
7	300230580141	1 MVIS	300230580049
8	300230580158	8 PMED	300230580049
9	300400300031	3 EROM	300400300014
10	300400300048	8 PMED	300400300014
11	300400300055	8 PMED	300400300014
12	300400300062	8 PMED	300400300014
13	300600350206	1 MVIS	300600350034
14	300610290292	1 MVIS	300610290019
15	300610290305	1 MVIS	300610290019
16	300610290312	1 MVIS	300610290019
17	300610290336	8 PMED	300610290019
18	300610290350	8 PMED	300610290019
19	300610290367	8 PMED	300610290019
20	300610290374	8 PMED	300610290019
21	300610290398	8 PMED	300610290019
22	300610290418	1 MVIS	300610290019
23	300610290456	8 PMED	300610290019
24	300680130196	8 PMED	300680130051
25	300680130209	8 PMED	300680130051
26	300680130230	8 PMED	300680130051
27	300680130247	8 PMED	300680130051
28	300910450099	8 PMED	300910450025
29	300910450102	8 PMED	300910450025
30	300910450164	8 PMED	300910450025
31	300910450171	8 PMED	300910450025
32	301170420048	8 PMED	301170420016
33	301170420062	8 PMED	301170420016
34	301320230287	8 PMED	301320230021
35	301320230383	8 PMED	301320230021
36	301320230390	8 PMED	301320230021
37	301320230472	8 PMED	301320230021
38	301320230489	8 PMED	301320230021
39	301470290097	1 MVIS	301470290031
40	301470290100	1 MVIS	301470290031
41	301470290124	8 PMED	301470290031
42	302050190016	8 PMED	302050190018
43	302050190023	8 PMED	302050190018
44	302050330054	1 MVIS	302050330038
45	302050330078	3 EROM	302050330038
46	302050330085	8 PMED	302050330050
47	302050330092	8 PMED	302050330038
48	302050330112	8 PMED	302050330038
49	302070200148	8 PMED	302070200083
50	302070200155	8 PMED	302070200083

              Sample SAS Job for Example B
        sample print of unique evntidxs from work.asclnks

                Obs   EVNTIDX   EVENTYPE

                  1   300180180418   8 PMED
                  2   300180180521   8 PMED
                  3   300180180610   1 MVIS
                  4   300230580090   3 EROM
                  5   300230580103   3 EROM
                  6   300230580110   3 EROM
                  7   300230580141   1 MVIS
                  8   300230580158   8 PMED
                  9   300400300031   3 EROM
                 10   300400300048   8 PMED
                 11   300400300055   8 PMED
                 12   300400300062   8 PMED
                 13   300600350206   1 MVIS
                 14   300610290292   1 MVIS
                 15   300610290305   1 MVIS
                 16   300610290312   1 MVIS
                 17   300610290336   8 PMED
                 18   300610290350   8 PMED
                 19   300610290367   8 PMED
                 20   300610290374   8 PMED
                 21   300610290398   8 PMED
                 22   300610290418   1 MVIS
                 23   300610290456   8 PMED
                 24   300680130196   8 PMED
                 25   300680130209   8 PMED
                 26   300680130230   8 PMED
                 27   300680130247   8 PMED
                 28   300910450099   8 PMED
                 29   300910450102   8 PMED
                 30   300910450164   8 PMED
                 31   300910450171   8 PMED
                 32   301170420048   8 PMED
                 33   301170420062   8 PMED
                 34   301320230287   8 PMED
                 35   301320230383   8 PMED
                 36   301320230390   8 PMED
                 37   301320230472   8 PMED
                 38   301320230489   8 PMED
                 39   301470290097   1 MVIS
                 40   301470290100   1 MVIS
                 41   301470290124   8 PMED
                 42   302050190016   8 PMED
                 43   302050190023   8 PMED
                 44   302050330054   1 MVIS
                 45   302050330078   3 EROM
                 46   302050330085   8 PMED
                 47   302050330092   8 PMED
                 48   302050330112   8 PMED
                 49   302070200148   8 PMED
                 50   302070200155   8 PMED

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-102A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP06X	PERWT06F
300180180418	300180180418001	ALBUTEROL	40.35	12968.377500
300180180521	300180180521001	ALBUTEROL	40.35	12968.377500
	300180180521002	ALBUTEROL	40.35	12968.377500
	300180180521003	ALBUTEROL	40.35	12968.377500
	300180180521004	ALBUTEROL	40.35	12968.377500
	300180180521005	ALBUTEROL	40.35	12968.377500
	300180180521006	ALBUTEROL	40.35	12968.377500
300230580158	300230580158001	ALBUTEROL INHALER	20.29	4647.878284
300400300048	300400300048001	TYLENOL W/CODEINE	16.87	12833.583932
300400300055	300400300055001	ADVAIR	156.28	12833.583932
300400300062	300400300062001	ALBUTEROL INHALER	20.29	12833.583932
300610290336	300610290336001	ADVAIR DISKUS 500/50	221.50	15210.808650
300610290350	300610290350001	PREDNISONE	24.61	15210.808650
300610290367	300610290367001	LEVAQUIN (FILM-COATED)	149.65	15210.808650
	300610290367002	LEVAQUIN (FILM-COATED)	142.74	15210.808650
300610290374	300610290374001	VERAPAMIL HCL (WHITE)	20.53	15210.808650
300610290398	300610290398001	RANITIDINE HCL (USP,FILM-COATED)	5.66	15210.808650
300610290456	300610290456001	ADVAIR DISKUS 500/50	221.50	15210.808650
300680130196	300680130196001	ALBUTEROL	21.41	9848.748255
300680130209	300680130209001	NEBULIZER	77.38	9848.748255
300680130230	300680130230001	NEBULIZER	77.38	9848.748255
	300680130230002	NEBULIZER	77.38	9848.748255
300680130247	300680130247001	ALBUTEROL	21.41	9848.748255
300910450099	300910450099001	ADVAIR DISKUS 250/50	128.25	11450.817965
300910450102	300910450102001	ALBUTEROL INHALER	39.85	11450.817965
300910450164	300910450164001	ADVAIR DISKUS 250/50	156.99	11450.817965
300910450171	300910450171001	ALBUTEROL INHALER	39.85	11450.817965
301170420048	301170420048001	MONTELUKAST	20.99	5319.852372

```
                   Sample SAS Job for Example B
                   sample print of work.aspmeds
          PMED (HC-102A) records which link to condition records coded as asthma


   LINKIDX         RXRECIDX         RXNAME                        RXXP06X          PERWT06F

301170420062    301170420062001    MONTELUKAST                    34.50        5319.852372
                301170420062002    MONTELUKAST                    34.50        5319.852372
                301170420062003    MONTELUKAST                    34.50        5319.852372

301320230287    301320230287001    ADVAIR DISKUS 500/50           40.00       11412.095230

301320230383    301320230383001    ALBUTEROL                      58.00       11412.095230
                301320230383002    ALBUTEROL                      58.00       11412.095230
                301320230383003    ALBUTEROL                      58.00       11412.095230
                301320230383004    ALBUTEROL                      58.00       11412.095230
                301320230383005    ALBUTEROL                      58.00       11412.095230
                301320230383006    ALBUTEROL                      58.00       11412.095230

301320230390    301320230390001    ADVAIR DISKUS 500/50           40.00       11412.095230
                301320230390002    ADVAIR DISKUS 500/50           50.00       11412.095230
                301320230390003    ADVAIR DISKUS 500/50           40.00       11412.095230
                301320230390004    ADVAIR DISKUS 500/50           50.00       11412.095230
                301320230390005    ADVAIR DISKUS 500/50           50.00       11412.095230
                301320230390006    ADVAIR DISKUS 500/50           50.00       11412.095230

301320230472    301320230472001    ALBUTEROL                      58.00       11412.095230
                301320230472002    ALBUTEROL                      58.00       11412.095230
                301320230472003    ALBUTEROL                      58.00       11412.095230
                301320230472004    ALBUTEROL                      58.00       11412.095230
                301320230472005    ALBUTEROL                      58.00       11412.095230

301320230489    301320230489001    ADVAIR DISKUS 500/50           50.00       11412.095230
                301320230489002    ADVAIR DISKUS 500/50           50.00       11412.095230
                301320230489003    ADVAIR DISKUS 500/50           50.00       11412.095230
                301320230489004    ADVAIR DISKUS 500/50           40.00       11412.095230
                301320230489005    ADVAIR DISKUS 500/50           40.00       11412.095230

301470290124    301470290124001    BRETHINE                       44.75        4964.901754

302050190016    302050190016001    SINGULAIR                     268.62        4031.282387

302050190023    302050190023001    ADVAIR                         60.00        4031.282387

302050330085    302050330085001    PULMICORT RESPULES (5X6)      300.88        4355.758139

302050330092    302050330092001    ALBUTEROL SULFATE (VIAL)       72.60        4355.758139

302050330112    302050330112001    SINGULAIR                      93.18        4355.758139

302070200148    302070200148001    ALBUTEROL                      42.82       10908.320492

302070200155    302070200155001    ADVAIR                         60.00       10908.320492

302170520033    302170520033001    ALBUTEROL INHALER              20.00        5816.613473
```

                        Sample SAS Job for Example B
                        sample print of work.aspmeds
                PMED (HC-102A) records which link to condition records coded as asthma

    LINKIDX   RXRECIDX   RXNAME   RXXP06X   PERWT06F

302560570125   302560570125001   ALBUTEROL INHALER   20.29   3765.112064
                302560570125002   ALBUTEROL INHALER   20.29   3765.112064
                302560570125003   ALBUTEROL INHALER   20.29   3765.112064

302920640130   302920640130001   ALBUTEROL SULFATE (VIAL)   25.58   1436.909526

302920640147   302920640147001   PULMICORT RESPULES (5X6)   304.70   1436.909526

302950230057   302950230057001   ALBUTEROL   22.21   1393.187889

302950230115   302950230115001   ALBUTEROL   20.00   1393.187889
                302950230115002   ALBUTEROL   20.00   1393.187889

303290290117   303290290117001   ALBUTEROL   21.41   10369.068910
                303290290117002   ALBUTEROL   21.41   10369.068910
                303290290117003   ALBUTEROL   21.41   10369.068910
                303290290117004   ALBUTEROL   21.41   10369.068910
                303290290117005   ALBUTEROL   21.41   10369.068910
                303290290117006   ALBUTEROL   21.41   10369.068910
                303290290117007   ALBUTEROL   21.41   10369.068910
                303290290117008   ALBUTEROL   21.41   10369.068910

303290290148   303290290148001   ALBUTEROL   21.41   10369.068910
                303290290148002   ALBUTEROL   21.41   10369.068910

303350230445   303350230445001   SINGULAIR   50.00   8363.548295

303350230558   303350230558001   METHYLPREDNISOLONE   8.66   8363.548295

303350230623   303350230623001   METHYLPREDNISOLONE   8.66   8363.548295
                303350230623002   METHYLPREDNISOLONE   8.66   8363.548295

303350230630   303350230630001   LEVAQUIN   122.83   8363.548295

303350230661   303350230661001   ZYRTEC-D   50.00   8363.548295
                303350230661002   ZYRTEC-D   50.00   8363.548295

303350230678   303350230678001   ACCOLATE   60.00   8363.548295
                303350230678002   ACCOLATE   60.00   8363.548295

303350230705   303350230705001   ADVAIR DISKUS   50.00   8363.548295
                303350230705002   ADVAIR DISKUS   50.00   8363.548295

303350230729   303350230729001   SINGULAIR   50.00   8363.548295
                303350230729002   SINGULAIR   50.00   8363.548295

303350230801   303350230801001   ACCOLATE   60.00   8363.548295

303350230825   303350230825001   ADVAIR   60.00   8363.548295

                         Sample SAS Job for Example B
                         sample print of work.aspmeds
                 PMED (HC-102A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP06X	PERWT06F
303350230849	303350230849001	SINGULAIR	268.62	8363.548295
303510370359	303510370359001	ALLEGRA	63.33	28465.212955
303510370366	303510370366001	ACCOLATE	91.78	28465.212955
303510370373	303510370373001	ADVAIR 100/50	131.26	28465.212955
303510370506	303510370506001	ALLEGRA	63.33	28465.212955
	303510370506002	ALLEGRA	63.33	28465.212955
	303510370506003	ALLEGRA	63.33	28465.212955
	303510370506004	ALLEGRA	63.33	28465.212955
303510370513	303510370513001	ADVAIR 100/50	131.26	28465.212955
	303510370513002	ADVAIR 100/50	131.26	28465.212955
	303510370513003	ADVAIR 100/50	131.26	28465.212955
	303510370513004	ADVAIR 100/50	131.26	28465.212955
	303510370513005	ADVAIR 100/50	131.26	28465.212955
303510370520	303510370520001	ALBUTEROL	26.49	28465.212955
303600490508	303600490508001	SINGULAIR	101.59	12279.713756
303600490515	303600490515001	XOPENEX (PF)	206.87	12279.713756
303600490522	303600490522001	PULMICORT RESPULES (5X6)	292.41	12279.713756
303730200785	303730200785001	SINGULAIR	50.00	9373.619859
303760241004	303760241004001	PULMICORT RESPULES (5X6)	136.31	11627.747676
303760241326	303760241326001	PULMICORT RESPULES (5X6)	136.31	11627.747676
303760241333	303760241333001	ALBUTEROL SULFATE	7.05	11627.747676
303760241782	303760241782001	ALBUTEROL INHALER	39.85	11627.747676
303760241802	303760241802001	ALBUTEROL	8.20	11627.747676
	303760241802002	ALBUTEROL	8.20	11627.747676
303780330312	303780330312001	FLOVENT	134.00	15296.326798
303780330329	303780330329001	DUONEB	101.89	15296.326798
303780330425	303780330425001	PREDNISONE (PEPPERMINT-VANILLA)	26.41	15296.326798
	303780330425002	PREDNISONE (PEPPERMINT-VANILLA)	26.41	15296.326798
303780330449	303780330449001	RESPI-TANN (DYE-FREE,CHERRY)	55.65	15296.326798

                        Sample SAS Job for Example B
                        sample print of work.aspmeds
                 PMED (HC-102A) records which link to condition records coded as asthma

     LINKIDX   RXRECIDX   RXNAME   RXXP06X   PERWT06F

303780330470   303780330470001   HISDEC   5.69   15296.326798

303780330494   303780330494001   FLOVENT   134.00   15296.326798
                  303780330494002   FLOVENT   134.00   15296.326798
                  303780330494003   FLOVENT   134.00   15296.326798
                  303780330494004   FLOVENT   134.00   15296.326798

303780330507   303780330507001   SINGULAIR   92.12   15296.326798
                  303780330507002   SINGULAIR   92.12   15296.326798
                  303780330507003   SINGULAIR   92.12   15296.326798
                  303780330507004   SINGULAIR   92.12   15296.326798

303780330514   303780330514001   DUONEB   101.89   15296.326798
                  303780330514002   DUONEB   101.89   15296.326798

303780330545   303780330545001   FLOVENT   134.00   15296.326798
                  303780330545002   FLOVENT   134.00   15296.326798
                  303780330545003   FLOVENT   134.00   15296.326798
                  303780330545004   FLOVENT   134.00   15296.326798
                  303780330545005   FLOVENT   134.00   15296.326798

303780330552   303780330552001   SINGULAIR   92.12   15296.326798
                  303780330552002   SINGULAIR   92.12   15296.326798
                  303780330552003   SINGULAIR   92.12   15296.326798
                  303780330552004   SINGULAIR   92.12   15296.326798
                  303780330552005   SINGULAIR   92.12   15296.326798

303780400189   303780400189001   ALBUTEROL INHALER   20.29   10940.657155
                  303780400189002   ALBUTEROL INHALER   20.29   10940.657155

303780400196   303780400196001   FLOVENT   134.00   10940.657155
                  303780400196002   FLOVENT   134.00   10940.657155

303780400247   303780400247001   PREDNISONE (PEPPERMINT-VANILLA)   26.41   10940.657155

303780400254   303780400254001   SINGULAIR   93.76   10940.657155

303780400285   303780400285001   FLOVENT   134.00   10940.657155
                  303780400285002   FLOVENT   134.00   10940.657155
                  303780400285003   FLOVENT   134.00   10940.657155
                  303780400285004   FLOVENT   134.00   10940.657155

303780400292   303780400292001   ALBUTEROL INHALER   20.29   10940.657155
                  303780400292002   ALBUTEROL INHALER   20.29   10940.657155

303780400312   303780400312001   FLOVENT   134.00   10940.657155
                  303780400312002   FLOVENT   134.00   10940.657155
                  303780400312003   FLOVENT   134.00   10940.657155
                  303780400312004   FLOVENT   134.00   10940.657155

```
                    Sample SAS Job for Example B
                    sample print of work.aspmeds
           PMED (HC-102A) records which link to condition records coded as asthma


   LINKIDX         RXRECIDX        RXNAME                          RXXP06X        PERWT06F


303780400312    303780400312005   FLOVENT                          134.00      10940.657155

303780400329    303780400329001   SINGULAIR                        100.07      10940.657155
                303780400329002   SINGULAIR                         93.76      10940.657155
                303780400329003   SINGULAIR                         93.76      10940.657155
                303780400329004   SINGULAIR                        100.07      10940.657155
                303780400329005   SINGULAIR                        100.07      10940.657155

304140141905    304140141905001   ALBUTEROL                         10.38       4183.222652
                304140141905002   ALBUTEROL                         10.38       4183.222652

304220360161    304220360161001   ALBUTEROL                         23.87       9512.286566

304220360178    304220360178001   FEXOFENADINE HCL (FILM-COATED)    70.00       9512.286566

304220360192    304220360192001   ADVAIR DISKUS 250/50             165.46       9512.286566

304220360205    304220360205001   ALBUTEROL INHALER                 39.85       9512.286566

304220360250    304220360250001   ADVAIR DISKUS 250/50             165.46       9512.286566

304250390181    304250390181001   PROAIR HFA                        36.72       9947.658537

304250390198    304250390198001   SINGULAIR                         60.00       9947.658537

304250390201    304250390201001   ALBUTEROL                         21.41       9947.658537
                304250390201002   ALBUTEROL                         21.41       9947.658537
                304250390201003   ALBUTEROL                         21.41       9947.658537
                304250390201004   ALBUTEROL                         21.41       9947.658537
                304250390201005   ALBUTEROL                         21.41       9947.658537
                304250390201006   ALBUTEROL                         21.41       9947.658537

304250390270    304250390270001   PROAIR HFA                        36.72       9947.658537
                304250390270002   PROAIR HFA                        36.72       9947.658537
                304250390270003   PROAIR HFA                        36.72       9947.658537

304280150803    304280150803001   UNIPHYL                           76.67       2041.042916

304280150810    304280150810001   ACCOLATE                          91.78       2041.042916

304540490171    304540490171001   SINGULAIR                        115.00       7360.381187
                304540490171002   SINGULAIR                        115.00       7360.381187
                304540490171003   SINGULAIR                        115.00       7360.381187

304550430330    304550430330001   SINGULAIR                        313.62      15036.548864
                304550430330002   SINGULAIR                        313.62      15036.548864

304550430347    304550430347001   ZYRTEC                           250.21      15036.548864
                304550430347002   ZYRTEC                           250.21      15036.548864
```

                       Sample SAS Job for Example B
                       sample print of work.aspmeds
            PMED (HC-102A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP06X	PERWT06F
304550430354	304550430354001	ALBUTEROL	10.08	15036.548864
	304550430354002	ALBUTEROL	10.08	15036.548864
304550430436	304550430436001	SINGULAIR	313.62	15036.548864
	304550430436002	SINGULAIR	313.62	15036.548864
304550430443	304550430443001	FLOVENT HFA	75.39	15036.548864
304550430450	304550430450001	ZYRTEC	250.21	15036.548864
304550430467	304550430467001	ALBUTEROL	13.30	15036.548864
	304550430467002	ALBUTEROL	13.30	15036.548864
304570200190	304570200190001	ALBUTEROL	29.79	11350.343698
	304570200190002	ALBUTEROL	29.79	11350.343698
	304570200190003	ALBUTEROL	29.79	11350.343698
304620270136	304620270136001	ALBUTEROL INHALER	20.29	2468.223760
	304620270136002	ALBUTEROL INHALER	20.29	2468.223760
	304620270136003	ALBUTEROL INHALER	20.29	2468.223760
304710110277	304710110277001	ADVAIR DISKUS 250/50	167.16	21312.814106
	304710110277002	ADVAIR DISKUS 250/50	167.16	21312.814106
	304710110277003	ADVAIR DISKUS 250/50	167.16	21312.814106
	304710110277004	ADVAIR DISKUS 250/50	167.16	21312.814106
304710110284	304710110284001	ALBUTEROL INHALER	20.29	21312.814106
304840230176	304840230176001	ALBUTEROL INHALER	39.85	9631.606717
304840230183	304840230183001	BANOPHEN	13.60	9631.606717
305110240177	305110240177001	LEVAQUIN	122.83	7058.848102
	305110240177002	LEVAQUIN	122.83	7058.848102
305110240184	305110240184001	NYSTATIN	131.31	7058.848102
305110240191	305110240191001	TUSSIONEX	26.93	7058.848102
305110240204	305110240204001	PREDNISONE	2.08	7058.848102
305110240211	305110240211001	ZYRTEC	63.10	7058.848102
305110240228	305110240228001	NITROFURANTOIN MONOHYDRATE/MACROCRY	17.72	7058.848102
305110240273	305110240273001	NEXIUM	45.00	7058.848102
	305110240273002	NEXIUM	45.00	7058.848102
305350110091	305350110091001	XOPENEX (PF)	193.05	21980.022493

                          Sample SAS Job for Example B
                          sample print of work.aspmeds
                PMED (HC-102A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP06X	PERWT06F
305460360485	305460360485001	ALBUTEROL	12.00	880.195850
305490400160	305490400160001	SINGULAIR	96.46	2498.826598
	305490400160002	SINGULAIR	96.46	2498.826598
	305490400160003	SINGULAIR	96.46	2498.826598
305490400177	305490400177001	ADVAIR 250/50	156.72	2498.826598
	305490400177002	ADVAIR 250/50	156.72	2498.826598
305540110581	305540110581001	ALBUTEROL	9.14	5433.128858
305540110721	305540110721001	SINGULAIR (UNIT OF USE)	94.64	5433.128858
	305540110721002	SINGULAIR (UNIT OF USE)	94.62	5433.128858
	305540110721003	SINGULAIR (UNIT OF USE)	94.64	5433.128858
	305540110721004	SINGULAIR (UNIT OF USE)	94.62	5433.128858
	305540110721005	SINGULAIR (UNIT OF USE)	94.62	5433.128858
	305540110721006	SINGULAIR (UNIT OF USE)	99.26	5433.128858
305540110776	305540110776001	ALBUTEROL	9.14	5433.128858
	305540110776002	ALBUTEROL	9.15	5433.128858
	305540110776003	ALBUTEROL	9.15	5433.128858
	305540110776004	ALBUTEROL	9.15	5433.128858
	305540110776005	ALBUTEROL	9.15	5433.128858
	305540110776006	ALBUTEROL	9.15	5433.128858
	305540110776007	ALBUTEROL	9.15	5433.128858
	305540110776008	ALBUTEROL	9.85	5433.128858
	305540110776009	ALBUTEROL	9.14	5433.128858
	305540110776010	ALBUTEROL	9.14	5433.128858
	305540110776011	ALBUTEROL	9.85	5433.128858
	305540110776012	ALBUTEROL	9.85	5433.128858
305540110783	305540110783001	ADVAIR DISKUS 500/50	228.88	5433.128858
	305540110783002	ADVAIR DISKUS 500/50	228.88	5433.128858
	305540110783003	ADVAIR DISKUS 500/50	228.88	5433.128858
	305540110783004	ADVAIR DISKUS 500/50	231.64	5433.128858
	305540110783005	ADVAIR DISKUS 500/50	231.64	5433.128858
	305540110783006	ADVAIR DISKUS 500/50	231.64	5433.128858
305540110947	305540110947001	SINGULAIR (UNIT OF USE)	94.62	5433.128858
	305540110947002	SINGULAIR (UNIT OF USE)	94.62	5433.128858
	305540110947003	SINGULAIR (UNIT OF USE)	94.62	5433.128858
	305540110947004	SINGULAIR (UNIT OF USE)	94.62	5433.128858
	305540110947005	SINGULAIR (UNIT OF USE)	94.62	5433.128858
305540110992	305540110992001	ALBUTEROL	20.29	5433.128858
	305540110992002	ALBUTEROL	20.29	5433.128858
	305540110992003	ALBUTEROL	20.29	5433.128858
	305540110992004	ALBUTEROL	20.29	5433.128858
	305540110992005	ALBUTEROL	20.29	5433.128858

                         Sample SAS Job for Example B
                         sample print of work.aspmeds
             PMED (HC-102A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP06X	PERWT06F
305540111008	305540111008001	ADVAIR DISKUS 500/50	231.64	5433.128858
	305540111008002	ADVAIR DISKUS 500/50	231.64	5433.128858
	305540111008003	ADVAIR DISKUS 500/50	231.64	5433.128858
	305540111008004	ADVAIR DISKUS 500/50	231.64	5433.128858
	305540111008005	ADVAIR DISKUS 500/50	231.64	5433.128858
306360110037	306360110037001	AZITHROMYCIN	35.05	32183.001677
	306360110037002	AZITHROMYCIN	35.05	32183.001677
306360110044	306360110044001	BRONCHO SALINE	8.01	32183.001677
	306360110044002	BRONCHO SALINE	8.01	32183.001677
306460410116	306460410116001	ALBUTEROL	19.88	879.246999
	306460410116002	ALBUTEROL	19.88	879.246999
	306460410116003	ALBUTEROL	19.88	879.246999
	306460410116004	ALBUTEROL	19.88	879.246999
306460410123	306460410123001	FLOVENT	82.79	879.246999
	306460410123002	FLOVENT	82.79	879.246999
	306460410123003	FLOVENT	82.79	879.246999
	306460410123004	FLOVENT	82.79	879.246999
306460410130	306460410130001	NASONEX (SCENT-FREE MIST)	75.00	879.246999
	306460410130002	NASONEX (SCENT-FREE MIST)	75.00	879.246999
	306460410130003	NASONEX (SCENT-FREE MIST)	75.00	879.246999
	306460410130004	NASONEX (SCENT-FREE MIST)	75.00	879.246999
306460410154	306460410154001	ALBUTEROL	19.88	879.246999
	306460410154002	ALBUTEROL	19.88	879.246999
	306460410154003	ALBUTEROL	19.88	879.246999
	306460410154004	ALBUTEROL	19.88	879.246999
306460410161	306460410161001	FLOVENT	82.79	879.246999
	306460410161002	FLOVENT	82.79	879.246999
	306460410161003	FLOVENT	82.79	879.246999
306670130108	306670130108001	COMBIVENT	99.53	9908.423151
306670130115	306670130115001	ADVAIR 250/50	160.83	9908.423151
306670130153	306670130153001	COMBIVENT	99.53	9908.423151
	306670130153002	COMBIVENT	99.53	9908.423151
	306670130153003	COMBIVENT	99.53	9908.423151

Sample SAS Job for Example B
Total Rx expenditures associated with asthma

The MEANS Procedure

Analysis Variable : RXXP06X SUM OF PAYMENTS RXSF06X-RXOU06X(IMPUTED)

```
        N           Sum
   --------------------
   11833       950523.19
   --------------------
```

                    Sample SAS Job for Example B
                 Total Rx expenditures associated with asthma

                              Weighted

                        The MEANS Procedure

       Analysis Variable : RXXP06X SUM OF PAYMENTS RXSF06X-RXOU06X(IMPUTED)

                     N   Sum

                 11833   8762417566

```
NOTE: Copyright (c) 2002-2003 by SAS Institute Inc., Cary, NC, USA.
NOTE: SAS (r) 9.1 (TS1M3)
NOTE: This session is executing on the XP_PRO  platform.



NOTE: SAS 9.1.3 Service Pack 4



NOTE: SAS initialization used:
      real time           4.98 seconds
      cpu time            1.15 seconds



NOTE: AUTOEXEC processing beginning; file is I:\WW3\APPLIC~1\SAS\FOUNDA~1.3\sas\autoexec.sas.


NOTE: AUTOEXEC processing completed.

1    OPTIONS LS=132 PS=59;
2
3    TITLE1 "HC-102I";
4    TITLE2 "Sample SAS Job for Example C";
5
6    LIBNAME IN "C:\Data";
NOTE: Libref IN was successfully assigned as follows:
      Engine:        V9
      Physical Name: C:\Data
7
8    ************************************************************************************************
9    *  Calculate the expenditures for medical visits associated with asthma.
10   ************************************************************************************************;
11   PROC FORMAT;
12     VALUE EVENTYPE
13        1 = "1 MVIS"
14        2 = "2 OPAT"
15        3 = "3 EROM"
16        4 = "4 STAZ"
17        5 = "5 DVIS"
18        6 = "6 OMED"
19        7 = "7 HVIS"
20        8 = "8 PMED";
NOTE: Format EVENTYPE has been output.
21   RUN;

NOTE: PROCEDURE FORMAT used (Total process time):
      real time           0.07 seconds
      cpu time            0.00 seconds



22
23   *----------------------------------------------------------------------------------------
24   * Get conditions records coded as asthma.
25   *---------------------------------------------------------------------------------------;
26   DATA ASCONDS;
27     SET IN.H104 (KEEP=CONDIDX CCCODEX);
28     IF CCCODEX="128";
29   RUN;

NOTE: There were 105166 observations read from the data set IN.H104.
NOTE: The data set WORK.ASCONDS has 1990 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time           1.07 seconds
      cpu time            0.17 seconds



30
31   *-----------------------------------------------------------------------------------------
32   * Get the events linked to each of the asthma condition records.
33   *----------------------------------------------------------------------------------------;
34   PROC SORT DATA=ASCONDS; BY CONDIDX; RUN;
```

```
NOTE: There were 1990 observations read from the data set WORK.ASCONDS.
NOTE: The data set WORK.ASCONDS has 1990 observations and 2 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.04 seconds
      cpu time            0.01 seconds


35
36  proc print data=asconds (obs=50);
37    title3 "sample print of work.asconds - sorted by condidx";
38    title4 "COND (H104) records where cccodex=128";
39  run;

NOTE: There were 50 observations read from the data set WORK.ASCONDS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.12 seconds
      cpu time            0.03 seconds


40
41  PROC SORT DATA=IN.H102IF1 OUT=CLNK; BY CONDIDX; RUN;

NOTE: There were 350780 observations read from the data set IN.H102IF1.
NOTE: The data set WORK.CLNK has 350780 observations and 6 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           7.46 seconds
      cpu time            1.07 seconds


42
43  DATA ASCLNKS;
44    MERGE CLNK   (IN=INCLNK   KEEP=CONDIDX EVNTIDX EVENTYPE)
45          ASCONDS(IN=INASCOND KEEP=CONDIDX);
46    BY CONDIDX;
47    IF INCLNK & INASCOND;
48  RUN;

NOTE: There were 350780 observations read from the data set WORK.CLNK.
NOTE: There were 1990 observations read from the data set WORK.ASCONDS.
NOTE: The data set WORK.ASCLNKS has 7984 observations and 3 variables.
NOTE: DATA statement used (Total process time):
      real time           1.84 seconds
      cpu time            0.40 seconds


49
50  proc print data=asclnks (obs=75);
51    by condidx;
52    id condidx;
53    format eventype eventype.;
54    title3 "sample print of work.asclnks - sorted by condidx";
55    title4 "events linked to asthma condition records";
56  run;

NOTE: There were 75 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.06 seconds
      cpu time            0.01 seconds


57
58  PROC SORT DATA=ASCLNKS; BY EVNTIDX; RUN;

NOTE: There were 7984 observations read from the data set WORK.ASCLNKS.
NOTE: The data set WORK.ASCLNKS has 7984 observations and 3 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds


59
```

```
60   proc print data=asclnks (obs=50);
61     format eventype eventype.;
62     title3 "sample print of work.asclnks - sorted by evntidx";
63   run;

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds


64
65   DATA ASCLNKS;
66     SET ASCLNKS (KEEP=EVNTIDX EVENTYPE);
67     BY EVNTIDX;
68     IF FIRST.EVNTIDX;
69   RUN;

NOTE: There were 7984 observations read from the data set WORK.ASCLNKS.
NOTE: The data set WORK.ASCLNKS has 7978 observations and 2 variables.
NOTE: DATA statement used (Total process time):
      real time           0.03 seconds
      cpu time            0.03 seconds


70
71   proc print data=asclnks (obs=50);
72     format eventype eventype.;
73     title3 "sample print of unique evntidxs from work.asclnks";
74   run;

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


75
76   *------------------------------------------------------------------------------------------
77   * Get non-telephone office based visits (i.e. MVIS events) for persons with positive weights.
78   *------------------------------------------------------------------------------------------;
79   DATA MVIS;
80     SET IN.H102G (KEEP=EVNTIDX PERWT06F SEETLKPV OBXP06X);
81     IF PERWT06F > 0 & SEETLKPV NE 2;
82   RUN;

NOTE: There were 155502 observations read from the data set IN.H102G.
NOTE: The data set WORK.MVIS has 151007 observations and 4 variables.
NOTE: DATA statement used (Total process time):
      real time           1.64 seconds
      cpu time            0.45 seconds


83
84   PROC SORT DATA=MVIS; BY EVNTIDX; RUN;

NOTE: There were 151007 observations read from the data set WORK.MVIS.
NOTE: The data set WORK.MVIS has 151007 observations and 4 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.29 seconds
      cpu time            0.28 seconds


85
86   *------------------------------------------------------------------------------------
87   * Identify MVIS events which were for asthma.
88   *------------------------------------------------------------------------------------;
89   DATA ASMVIS;
90     MERGE ASCLNKS (IN=INASCLNK)
91           MVIS     (IN=INMVIS);
92     BY EVNTIDX;
93     IF INASCLNK & INMVIS;
```

```
94   RUN;

NOTE: There were 7978 observations read from the data set WORK.ASCLNKS.
NOTE: There were 151007 observations read from the data set WORK.MVIS.
NOTE: The data set WORK.ASMVIS has 2320 observations and 5 variables.
NOTE: DATA statement used (Total process time):
      real time           0.21 seconds
      cpu time            0.20 seconds


95
96   proc print data=asmvis (obs=50);
97     format eventype eventype.;
98     title3 "sample print of work.asmvis";
99     title4 "unique evntidxs from work.asclnks that are non-telephone MVIS (HC-102G) events";
100  run;

NOTE: There were 50 observations read from the data set WORK.ASMVIS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.01 seconds
      cpu time            0.00 seconds


101
102  PROC MEANS DATA=ASMVIS N SUM;
103    VAR OBXP06X;
104    TITLE3 "Total medical visit expenditures (excluding telephone) associated with asthma";
105  RUN;

NOTE: There were 2320 observations read from the data set WORK.ASMVIS.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.10 seconds
      cpu time            0.03 seconds


106
107  PROC MEANS DATA=ASMVIS N SUM;
108    VAR OBXP06X;
109    WEIGHT PERWT06F;
110    TITLE3 "Total medical visit expenditures (excluding telephone) associated with asthma";
111    TITLE5 "Weighted";
112  RUN;

NOTE: There were 2320 observations read from the data set WORK.ASMVIS.
NOTE: PROCEDURE MEANS used (Total process time):
      real time           0.03 seconds
      cpu time            0.00 seconds
```

                  Sample SAS Job for Example C
        sample print of work.asconds - sorted by condidx
            COND (H104) records where cccodex=128

            Obs   CCCODEX   CONDIDX

              1   128   300180180093
              2   128   300230580049
              3   128   300400300014
              4   128   300490270010
              5   128   300600350034
              6   128   300610290019
              7   128   300680130051
              8   128   300830210012
              9   128   300910450025
             10   128   301170420016
             11   128   301320230021
             12   128   301470290031
             13   128   302050190018
             14   128   302050330038
             15   128   302050330050
             16   128   302070200083
             17   128   302170520040
             18   128   302560570015
             19   128   302740680016
             20   128   302850140023
             21   128   302920640046
             22   128   302950160019
             23   128   302950230018
             24   128   302980530024
             25   128   303290290060
             26   128   303350230045
             27   128   303510370015
             28   128   303600490028
             29   128   303670100066
             30   128   303730200010
             31   128   303760240088
             32   128   303760240204
             33   128   303780330060
             34   128   303780400075
             35   128   303930110039
             36   128   304140140175
             37   128   304220290013
             38   128   304220360012
             39   128   304250390016
             40   128   304280150074
             41   128   304540490089
             42   128   304550430109
             43   128   304570200013
             44   128   304620150092
             45   128   304620270080
             46   128   304710110124
             47   128   304740470017
             48   128   304840230070
             49   128   305110240030
             50   128   305260250057

Sample SAS Job for Example C
sample print of work.asclnks - sorted by condidx
events linked to asthma condition records

```
    CONDIDX         EVNTIDX        EVENTYPE


 300180180093    300180180418     8 PMED
                 300180180521     8 PMED
                 300180180610     1 MVIS


 300230580049    300230580090     3 EROM
                 300230580103     3 EROM
                 300230580110     3 EROM
                 300230580141     1 MVIS
                 300230580158     8 PMED


 300400300014    300400300031     3 EROM
                 300400300048     8 PMED
                 300400300055     8 PMED
                 300400300062     8 PMED


 300600350034    300600350206     1 MVIS


 300610290019    300610290292     1 MVIS
                 300610290305     1 MVIS
                 300610290312     1 MVIS
                 300610290336     8 PMED
                 300610290350     8 PMED
                 300610290367     8 PMED
                 300610290374     8 PMED
                 300610290398     8 PMED
                 300610290418     1 MVIS
                 300610290456     8 PMED


 300680130051    300680130196     8 PMED
                 300680130209     8 PMED
                 300680130230     8 PMED
                 300680130247     8 PMED


 300910450025    300910450099     8 PMED
                 300910450102     8 PMED
                 300910450164     8 PMED
                 300910450171     8 PMED


 301170420016    301170420048     8 PMED
                 301170420062     8 PMED


 301320230021    301320230287     8 PMED
                 301320230383     8 PMED
                 301320230390     8 PMED
                 301320230472     8 PMED
                 301320230489     8 PMED


 301470290031    301470290097     1 MVIS
                 301470290100     1 MVIS
```

                    Sample SAS Job for Example C
          sample print of work.asclnks - sorted by condidx
            events linked to asthma condition records

              CONDIDX   EVNTIDX   EVENTYPE

           301470290031   301470290124   8 PMED

           302050190018   302050190016   8 PMED
                            302050190023   8 PMED

           302050330038   302050330054   1 MVIS
                            302050330078   3 EROM
                            302050330092   8 PMED
                            302050330112   8 PMED

           302050330050   302050330085   8 PMED

           302070200083   302070200148   8 PMED
                            302070200155   8 PMED

           302170520040   302170520033   8 PMED

           302560570015   302560570125   8 PMED

           302920640046   302920640123   1 MVIS
                            302920640130   8 PMED
                            302920640147   8 PMED

           302950230018   302950230057   8 PMED
                            302950230115   8 PMED

           303290290060   303290290117   8 PMED
                            303290290148   8 PMED

           303350230045   303350230445   8 PMED
                            303350230558   8 PMED
                            303350230572   1 MVIS
                            303350230589   1 MVIS
                            303350230596   1 MVIS
                            303350230623   8 PMED
                            303350230630   8 PMED
                            303350230661   8 PMED
                            303350230678   8 PMED
                            303350230705   8 PMED
                            303350230729   8 PMED
                            303350230801   8 PMED
                            303350230825   8 PMED
                            303350230849   8 PMED

           303510370015   303510370359   8 PMED
                            303510370366   8 PMED

```
        Obs      EVNTIDX        EVENTYPE      CONDIDX

         1    300180180418    8 PMED      300180180093
         2    300180180521    8 PMED      300180180093
         3    300180180610    1 MVIS      300180180093
         4    300230580090    3 EROM      300230580049
         5    300230580103    3 EROM      300230580049
         6    300230580110    3 EROM      300230580049
         7    300230580141    1 MVIS      300230580049
         8    300230580158    8 PMED      300230580049
         9    300400300031    3 EROM      300400300014
        10    300400300048    8 PMED      300400300014
        11    300400300055    8 PMED      300400300014
        12    300400300062    8 PMED      300400300014
        13    300600350206    1 MVIS      300600350034
        14    300610290292    1 MVIS      300610290019
        15    300610290305    1 MVIS      300610290019
        16    300610290312    1 MVIS      300610290019
        17    300610290336    8 PMED      300610290019
        18    300610290350    8 PMED      300610290019
        19    300610290367    8 PMED      300610290019
        20    300610290374    8 PMED      300610290019
        21    300610290398    8 PMED      300610290019
        22    300610290418    1 MVIS      300610290019
        23    300610290456    8 PMED      300610290019
        24    300680130196    8 PMED      300680130051
        25    300680130209    8 PMED      300680130051
        26    300680130230    8 PMED      300680130051
        27    300680130247    8 PMED      300680130051
        28    300910450099    8 PMED      300910450025
        29    300910450102    8 PMED      300910450025
        30    300910450164    8 PMED      300910450025
        31    300910450171    8 PMED      300910450025
        32    301170420048    8 PMED      301170420016
        33    301170420062    8 PMED      301170420016
        34    301320230287    8 PMED      301320230021
        35    301320230383    8 PMED      301320230021
        36    301320230390    8 PMED      301320230021
        37    301320230472    8 PMED      301320230021
        38    301320230489    8 PMED      301320230021
        39    301470290097    1 MVIS      301470290031
        40    301470290100    1 MVIS      301470290031
        41    301470290124    8 PMED      301470290031
        42    302050190016    8 PMED      302050190018
        43    302050190023    8 PMED      302050190018
        44    302050330054    1 MVIS      302050330038
        45    302050330078    3 EROM      302050330038
        46    302050330085    8 PMED      302050330050
        47    302050330092    8 PMED      302050330038
        48    302050330112    8 PMED      302050330038
        49    302070200148    8 PMED      302070200083
        50    302070200155    8 PMED      302070200083
```

                              Sample SAS Job for Example C
                    sample print of unique evntidxs from work.asclnks

                        Obs   EVNTIDX   EVENTYPE

                          1   300180180418   8 PMED
                          2   300180180521   8 PMED
                          3   300180180610   1 MVIS
                          4   300230580090   3 EROM
                          5   300230580103   3 EROM
                          6   300230580110   3 EROM
                          7   300230580141   1 MVIS
                          8   300230580158   8 PMED
                          9   300400300031   3 EROM
                         10   300400300048   8 PMED
                         11   300400300055   8 PMED
                         12   300400300062   8 PMED
                         13   300600350206   1 MVIS
                         14   300610290292   1 MVIS
                         15   300610290305   1 MVIS
                         16   300610290312   1 MVIS
                         17   300610290336   8 PMED
                         18   300610290350   8 PMED
                         19   300610290367   8 PMED
                         20   300610290374   8 PMED
                         21   300610290398   8 PMED
                         22   300610290418   1 MVIS
                         23   300610290456   8 PMED
                         24   300680130196   8 PMED
                         25   300680130209   8 PMED
                         26   300680130230   8 PMED
                         27   300680130247   8 PMED
                         28   300910450099   8 PMED
                         29   300910450102   8 PMED
                         30   300910450164   8 PMED
                         31   300910450171   8 PMED
                         32   301170420048   8 PMED
                         33   301170420062   8 PMED
                         34   301320230287   8 PMED
                         35   301320230383   8 PMED
                         36   301320230390   8 PMED
                         37   301320230472   8 PMED
                         38   301320230489   8 PMED
                         39   301470290097   1 MVIS
                         40   301470290100   1 MVIS
                         41   301470290124   8 PMED
                         42   302050190016   8 PMED
                         43   302050190023   8 PMED
                         44   302050330054   1 MVIS
                         45   302050330078   3 EROM
                         46   302050330085   8 PMED
                         47   302050330092   8 PMED
                         48   302050330112   8 PMED
                         49   302070200148   8 PMED
                         50   302070200155   8 PMED

                   Sample SAS Job for Example C
                   sample print of work.asmvis
unique evntidxs from work.asclnks that are non-telephone MVIS (HC-102G) events

        Obs   EVNTIDX   EVENTYPE   SEETLKPV   OBXP06X   PERWT06F

         1   300180180610   1 MVIS   1   76.00   12968.38
         2   300230580141   1 MVIS   1   80.33   4647.88
         3   300600350206   1 MVIS   1   88.00   5451.83
         4   300610290292   1 MVIS   1   71.43   15210.81
         5   300610290305   1 MVIS   1   82.50   15210.81
         6   300610290312   1 MVIS   1   38.63   15210.81
         7   301470290097   1 MVIS   1   34.21   4964.90
         8   301470290100   1 MVIS   1   32.23   4964.90
         9   302050330054   1 MVIS   1   42.00   4355.76
        10   302920640123   1 MVIS   1   71.97   1436.91
        11   303350230572   1 MVIS   1   24.00   8363.55
        12   303350230589   1 MVIS   1   83.00   8363.55
        13   303670100336   1 MVIS   1   27.03   3728.65
        14   303760240669   1 MVIS   1   55.00   11627.75
        15   303760240683   1 MVIS   1   55.00   11627.75
        16   303760240690   1 MVIS   1   89.00   11627.75
        17   303760240703   1 MVIS   1   55.00   11627.75
        18   303760240710   1 MVIS   1   106.00   11627.75
        19   303760240734   1 MVIS   1   55.00   11627.75
        20   303780330350   1 MVIS   1   40.70   15296.33
        21   303780330367   1 MVIS   1   29.67   15296.33
        22   303780330381   1 MVIS   1   567.11   15296.33
        23   303780330398   1 MVIS   1   76.53   15296.33
        24   303780330401   1 MVIS   1   264.70   15296.33
        25   303780400158   1 MVIS   1   40.70   10940.66
        26   303780400223   1 MVIS   1   55.38   10940.66
        27   304140140813   1 MVIS   1   82.21   4183.22
        28   304140140820   1 MVIS   1   0.00   4183.22
        29   304140140837   1 MVIS   1   76.50   4183.22
        30   304140140844   1 MVIS   1   0.00   4183.22
        31   304140140851   1 MVIS   1   64.00   4183.22
        32   304140140868   1 MVIS   1   55.63   4183.22
        33   304140141501   1 MVIS   1   64.00   4183.22
        34   304140141518   1 MVIS   1   100.17   4183.22
        35   304140141525   1 MVIS   1   0.00   4183.22
        36   304140141532   1 MVIS   1   55.63   4183.22
        37   304140141549   1 MVIS   1   150.51   4183.22
        38   304140141690   1 MVIS   1   7.23   4183.22
        39   304140141703   1 MVIS   1   236.43   4183.22
        40   304140141710   1 MVIS   1   0.00   4183.22
        41   304140141727   1 MVIS   1   5.49   4183.22
        42   304140141734   1 MVIS   1   182.02   4183.22
        43   304140141741   1 MVIS   1   55.63   4183.22
        44   304140141758   1 MVIS   1   0.00   4183.22
        45   304140141765   1 MVIS   1   128.39   4183.22
        46   304140141772   1 MVIS   1   64.00   4183.22
        47   304140141789   1 MVIS   1   55.63   4183.22
        48   304220360147   1 MVIS   1   112.38   9512.29
        49   304250390218   1 MVIS   1   60.00   9947.66
        50   304280150687   1 MVIS   1   81.58   2041.04

                        Sample SAS Job for Example C
     Total medical visit expenditures (excluding telephone) associated with asthma

                             The MEANS Procedure

        Analysis Variable : OBXP06X SUM OF OBSF06X - OBOT06X (IMPUTED)

                         N   Sum

                     2320   257001.56

Sample SAS Job for Example C
Total medical visit expenditures (excluding telephone) associated with asthma

Weighted

The MEANS Procedure

Analysis Variable : OBXP06X SUM OF OBSF06X - OBOT06X (IMPUTED)

```
        N             Sum
-------------------
      2320      1993563032
-------------------
```