

**MEPS HC-152I:  
Appendix to MEPS 2012 Event Files  
HC-152A - HC-152H  
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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. In 2006, the NHIS implemented a new sample design, which included Asian persons in addition to households with Black and Hispanic persons in the oversampling of minority populations. MEPS further oversamples additional policy relevant subgroups such as 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. (MEPS HC) and Research Triangle Institute (MEPS MPC). 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: [meps.ahrq.gov](http://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-152I, which is the Appendix to MEPS releases HC-152A through HC-152H. This release contains two data files, both of which are provided in ASCII (with related SAS, SPSS, and Stata programming statements and data user information) and SAS versions: 1) the condition-event link file; and 2) the prescribed medicines-event link file. Also included in this release is a PDF file of the condition-event frequency table. Note that, as of 2008, Table 2, a utilization and expenditures summary table, is no longer available.

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 T. Ezzati-Rice, et al., 1998-2007 and S. Cohen, 1996. For information on the MEPS MPC design, see S. Cohen, 1998. These 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: [meps.ahrq.gov](http://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 2012 event-level data files. File 1, the H152IF1 or CLNK file, is used for linking the MEPS Conditions file with the MEPS event files; File 2, the H152IF2 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:

<b>Identifier</b>	<b>Description</b>
Name	Variable name (maximum of 8 characters)
Description	Variable descriptor (maximum 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 (H152IF1) or the CLNK file, contains the variables needed to link each record on the MEPS 2012 Conditions file, HC-154, with one or more records on the MEPS 2012 event files, HC-152A through HC-152H. 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 2012 Conditions file, HC-154. 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 2012 event files, HC-152B through HC-152H. (EVNTIDX is not included on the 2012 Prescribed Medicines event file, HC-152A; 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-152G
- 2 = OPAT – outpatient department visit event contained on MEPS release HC-152F
- 3 = EROM – emergency room visit event contained on MEPS release HC-152E
- 4 = STAZ – inpatient hospital stay event contained on MEPS release HC-152D
- 7 = HVIS – home health visit event contained on MEPS release HC-152H
- 8 = PMED – prescribed medicines event contained on MEPS release HC-152A

PANEL is a constructed variable used to specify the panel number for the interview in which the condition was reported. PANEL will indicate either Panel 16 or Panel 17.

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

File 2 (H152IF2) or the RXLK file, contains the variables needed to link each record on the MEPS 2012 Prescribed Medicines file, HC-152A, with one or more records on the MEPS 2012 event files, HC-152B and HC-152D through HC-152G. 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 2012 event files, HC-152B through HC-152G. 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-152A that 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-152A 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-152G
- 2 = OPAT – outpatient department visit event contained on MEPS release HC-152F
- 3 = EROM – emergency room visit event contained on MEPS release HC-152E
- 4 = STAZ – inpatient hospital stay event contained on MEPS release HC-152D
- 5 = DVIS – dental visit event contained on MEPS release HC-152B

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 not 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.

PANEL is a constructed variable used to specify the panel number for the interview in which the condition was reported. PANEL will indicate either Panel 16 or Panel 17.

## **2.5 2012 Condition-Event Frequency Table**

Table 1 contains the MEPS 2012 Condition-Event Frequency table. This table contains unweighted and weighted counts of records on the MEPS 2012 event files, HC-152A through HC-152H, for each of the condition, procedure, and clinical classification codes contained on the MEPS 2012 Conditions file, HC-154. 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-154) and the Appendix to the Event Files (HC-152I) 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 2012 MEPS PUFs, these updates will not be reflected in the 2012 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-154 documentation.

### **3.0 Merging/Linking MEPS Data Files**

This section provides information on using each of the two HC-152I files, RXLK and CLNK, to link with the files contained in MEPS releases HC-154 and HC-152A through HC-152H. 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-152IF1) and RXLK (HC-152IF2) Files with the Medical Conditions File (HC-154), the Prescribed Medicines and Office-Based Medical Provider Visits Event Files (HC-152A and HC-152G)**

This example calculates the total expenditures for prescribed medicines associated with office-based medical provider visits for asthma, using these files: the Conditions file (HC-154), the CLNK file (HC-152IF1), the office-based medical provider visit event file (HC-152G), the RXLK file (HC-152IF2), and the prescribed medicines event file (HC-152A). It includes the following major steps:

1. From HC-154 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-152G 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-152G 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-152A linked to those visits.

6. Using these record IDs, obtain the linked records from the HC-152A 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-152IF1) with the Medical Conditions File (HC-154) and the Prescribed Medicines Event File (HC-152A)**

This example calculates the total expenditure for prescribed medicines associated with asthma, using the Conditions file (HC-154), the CLNK file (HC-152IF1) and the prescribed medicines event file (HC-152A). It includes the following major steps:

1. From HC-154 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-152A 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 (HC-152IF1) with the Medical Conditions File (HC-154) and Office-Based Medical Provider Visits Event File (HC-152G)**

This example calculates the total expenditures for office-based medical provider visits associated with asthma, using the Conditions file (HC-154), the CLNK file (HC-152IF1) and the office-based medical provider visits event file (HC-152G). It includes the following major steps:

1. From HC-154 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-152G 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-152G 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 Conditions 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 [meps.ahrq.gov/data\\_stats/more\\_info\\_download\\_data\\_files.jsp](https://meps.ahrq.gov/data_stats/more_info_download_data_files.jsp).

### **3.7 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 evaluate, smooth, or stabilize analyses of trends using MEPS data such as comparing pooled time periods (e.g. 1996-97 versus 2011-12), 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 concluding that a change has taken place when one has not.

### **3.8 Longitudinal Analysis**

Panel-specific longitudinal files are available for downloading in the data section of the MEPS Web site. For each panel, the longitudinal file comprises MEPS survey data obtained in Rounds 1 through 5 of the panel and can be used to analyze changes over a two-year period. Variables in the file pertaining to survey administration, demographics, employment, health status, disability days, quality of care, patient satisfaction, health insurance, and medical care use and expenditures were obtained from the MEPS full-year Consolidated files from the two years covered by that panel.

**Attachment 1:**

**Clinical Classification Code to ICD-9-CM Code Crosswalk**

## Appendix A - Clinical Classification Software-DIAGNOSES (January 1980 through September 2012)

The following tables list the ICD-9-CM condition and V codes that have been aggregated for each clinical classification category. These clinical classification categories were generated using Clinical Classification Software provided on the Healthcare Cost and Utilization Project (HCUP) website. For each clinical classification category, one or more ICD-9-CM and/or V code is listed.

<b>1</b>	<b>Tuberculosis</b>											
	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						
<b>2</b>	<b>Septicemia (except in labor)</b>											
	0031	0202	0223	0362	0380	0381	03810	03811	03812	03819	0382	0383
	03840	03841	03842	03843	03844	03849	0388	0389	0545	449	77181	7907
	99591	99592										

<b>3</b>	<b>Bacterial infection; unspecified site</b>										
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
0339	0341	0363	03681	03689	0369	037	0392	0393	0394	0398	0399
0400	0401	0402	0403	04042	04081	04082	04089	0410	04100	04101	04102
04103	04104	04105	04109	0411	04110	04111	04112	04119	0412	0413	04142
04143	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	V097	V0971	V0980	V0981	V0990	V0991				
<b>4</b>	<b>Mycoses</b>										
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
<b>5</b>	<b>HIV infection</b>										
042	0420	0421	0422	0429	0430	0431	0432	0433	0439	0440	0449
07953	27910	27919	79571	7958	V08						
<b>6</b>	<b>Hepatitis</b>										
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	57142	57149	5731	5732	5733	
<b>7</b>	<b>Viral infection</b>										
0500	0501	0502	0509	0510	05101	05102	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	05810	05811
05812	05881	05882	05889	05900	05901	05909	05910	05911	05912	05919	05920
05921	05922	0598	0599	0600	0601	0650	0651	0652	0653	0654	0658
0659	0660	0661	0663	0664	06640	0609	061	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	07812	07819	0782
0783	0784	0785	0786	0787	07881	07882	07888	07889	0790	0791	0792
0793	0794	07950	07951	07952	07959	0796	0798	07981	07982	07983	07988
07989	0799	07998	07999	7908							
<b>8</b>	<b>Other infections; including parasitic</b>										
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	13621	13629
1364	1365	1368	1369	1398	V120	V1200	V1203	V1204	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	79505	79515	79519	79675	79679		

**10 Immunizations and screening for infectious disease**

79551	79552	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	V0253	V0254	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
V731	V732	V733	V734	V735	V736	V738	V7381	V7388	V7389	V739	V7398
V730	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		
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**13 Cancer of stomach**

1510	1511	1512	1513	1514	1515	1516	1518	1519	20923	2302	V1004
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**14 Cancer of colon**

1530	1531	1532	1533	1534	1535	1536	1537	1538	1539	1590	20910
20911	20912	20913	20914	20915	20916	2303	V1005				

**15 Cancer of rectum and anus**

1540	1541	1542	1543	1548	20917	2304	2305	2306	79670	79671	79672
79673	79674	79676	V1006								

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

1550	1551	1552	2308	V1007							
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<b>17</b>	<b>Cancer of pancreas</b>	1570	1571	1572	1573	1574	1578	1579					
<b>18</b>	<b>Cancer of other GI organs; peritoneum</b>	1520	1521	1522	1523	1528	1529	1560	1561	1562	1568	1569	1580
		1588	1589	1591	1598	1599	20900	20901	20902	20903	2307	2309	V1000
		V1009											
<b>19</b>	<b>Cancer of bronchus; lung</b>	1622	1623	1624	1625	1628	1629	20921	2312	V1011			
<b>20</b>	<b>Cancer; other respiratory and intrathoracic</b>	1620	1630	1631	1638	1639	1650	1658	1659	2311	2318	2319	V1012
		V1020	V1022										
<b>21</b>	<b>Cancer of bone and connective tissue</b>	1700	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	1712
		1713	1714	1715	1716	1717	1718	1719					
<b>22</b>	<b>Melanomas of skin</b>	1720	1721	1722	1723	1724	1725	1726	1727	1728	1729	V1082	
<b>23</b>	<b>Other non-epithelial cancer of skin</b>	17300	17301	17302	17309	17310	17311	17312	17319	17320	17321	17322	17329
		17332	17339	17340	17341	17342	17349	17350	17351	17352	17359	17360	17361
		17362	17369	17370	17371	17372	17379	17380	17381	17382	17389	17390	17391
		17392	17399	20931	20932	20933	20934	20935	20936	2320	2321	2322	2323
		2324	2325	2326	2327	2328	2329	V1083					
<b>24</b>	<b>Cancer of breast</b>	1740	1741	1742	1743	1744	1745	1746	1748	1749	1750	1759	2330
		V103											
<b>25</b>	<b>Cancer of uterus</b>	179	1820	1821	1828	2332	V1042						
<b>26</b>	<b>Cancer of cervix</b>	1800	1801	1808	1809	2331	7950	V1041					
<b>27</b>	<b>Cancer of ovary</b>	1830	V1043										
<b>28</b>	<b>Cancer of other female genital organs</b>	181	1832	1833	1834	1835	1838	1839	1840	1841	1842	1843	1844
		1848	1849	2333	23330	23331	23332	23339	79516	V1040	V1044		
<b>29</b>	<b>Cancer of prostate</b>	185	2334	V1046									
<b>30</b>	<b>Cancer of testis</b>	1860	1869	V1047									
<b>31</b>	<b>Cancer of other male genital organs</b>	1871	1872	1873	1874	1875	1876	1877	1878	1879	2335	2336	V1045



V1048 V1049

<b>32</b>	<b>Cancer of bladder</b>	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	2337	V1051
<b>33</b>	<b>Cancer of kidney and renal pelvis</b>	1890	1891	20924	V1052	V1053							
<b>34</b>	<b>Cancer of other urinary organs</b>	1892	1893	1894	1898	1899	2339	V1050	V1059				
<b>35</b>	<b>Cancer of brain and nervous system</b>	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
		1922	1923	1928	1929	V1085	V1086						
<b>36</b>	<b>Cancer of thyroid</b>	193	25802	25803	V1087								
<b>37</b>	<b>Hodgkin`s disease</b>	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											
<b>38</b>	<b>Non-Hodgkin`s lymphoma</b>	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	20030	20031	20032	20033	20034	20035	20036	20038	20041
		20042	20043	20044	20045	20046	20047	20048	20051	20052	20053	20054	20055
		20056	20057	20058	20060	20061	20062	20064	20065	20066	20067	20068	20070
		20071	20072	20073	20074	20075	20076	20077	20078	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	20270	20271	20272	20273
		20274	20275	20276	20277	20278	20280	20281	20282	20283	20284	20285	20286
		20287	20288	20290	20291	20292	20293	20294	20295	20296	20297	20298	V1071
		V1079											
<b>39</b>	<b>Leukemias</b>	20240	20241	20242	20243	20244	20245	20246	20247	20248	2031	20310	20311
		20312	2040	20400	20401	20402	2041	20410	20411	20412	2042	20420	20421
		20422	2048	20480	20481	20482	2049	20490	20491	20492	2050	20500	20501
		2051	20510	20511	20512	2052	20520	20521	2053	20530	20531	2058	20580
		20581	20582	2059	20590	20591	2060	20600	20601	20602	2061	20610	20611
		20612	2062	20620	20621	20622	2068	20680	20681	20682	2069	20690	20691
		20692	2070	20700	20701	20702	2071	20710	20711	20712	2072	20720	20721
		20722	2078	20780	20781	20782	2080	20800	20801	2081	20810	20811	20812
		2082	20820	20821	20822	2088	20880	20881	20882	2089	20890	20891	20892
		V1060	V1061	V1062	V1063	V1069							

<b>40</b>	<b>Multiple myeloma</b>											
	2030	20300	20301	20302	2038	20380	20381					
<b>41</b>	<b>Cancer; other and unspecified primary</b>											
	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	20922	20925	20926	20927	2340	2348	2349
	7951	79511	79512	79513	V1029	V1081	V1084	V1088	V1089	V109	V1091	V711
<b>42</b>	<b>Secondary malignancies</b>											
	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	20971	20972	20973	20974	51181	78951		
<b>43</b>	<b>Malignant neoplasm without specification of site</b>											
	1990	1991	1992	20920	20929	20930	20970	20975	20979			
<b>44</b>	<b>Neoplasms of unspecified nature or uncertain behavior</b>											
	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	23773	23779	2379	2380
	2381	2382	2383	2384	2385	2386	2387	23877	2388	2389	2390	2391
	2392	2393	2394	2395	2396	2397	2398	23981	23989	2399		
<b>45</b>	<b>Maintenance chemotherapy; radiotherapy</b>											
	V580	V581	V5811	V5812	V661	V662	V671	V672				
<b>46</b>	<b>Benign neoplasm of uterus</b>											
	2180	2181	2182	2189	2190	2191	2198	2199				
<b>47</b>	<b>Other and unspecified benign neoplasm</b>											
	20940	20941	20942	20943	20950	20951	20952	20953	20954	20955	20956	20957
	20960	20961	20962	20963	20964	20965	20966	20967	20969	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											
<b>48</b>	<b>Thyroid disorders</b>											
	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								

<b>49</b>	<b>Diabetes mellitus without complication</b>											
	24900	25000	25001	7902	79021	79022	79029	7915	7916	V4585	V5391	V6546
<b>50</b>	<b>Diabetes mellitus with complications</b>											
	24901	24910	24911	24920	24921	24930	24931	24940	24941	24950	24951	24960
	24961	24970	24971	24980	24981	24990	24991	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			
<b>51</b>	<b>Other endocrine disorders</b>											
	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	25541	25542	2555	2556	2558	2559	2560	2561
	2562	2563	2564	2568	2569	2570	2571	2572	2578	2579	2580	25801
	2581	2588	2589	2590	2591	2592	2593	2594	2595	25950	25951	25952
	2598	2599	7946									
<b>52</b>	<b>Nutritional deficiencies</b>											
	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										
<b>53</b>	<b>Disorders of lipid metabolism</b>											
	2720	2721	2722	2723	2724							
<b>54</b>	<b>Gout and other crystal arthropathies</b>											
	2740	27403	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	
<b>55</b>	<b>Fluid and electrolyte disorders</b>											
	2760	2761	2762	2763	2764	2765	27650	27651	27652	2766	27669	2767
	2768	2769	9951									
<b>56</b>	<b>Cystic fibrosis</b>											
	27700	27701	27702	27703	27709							
<b>57</b>	<b>Immunity disorders</b>											
	27900	27901	27902	27903	27904	27905	27906	27909	27911	27912	27913	2792
	2793	2794	27949	2798	2799							
<b>58</b>	<b>Other nutritional; endocrine; and metabolic disorders</b>											
	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	27503	27509	27542	27549	2758	2759
	2751	2752	2753	2754	27540	27541	2771	2772	2773	2774	2775	2776
	2777	2778	27781	27782	27784	27785	27786	27787	27789	2779	2780	27800
	27801	27802	27803	2781	2782	2783	2784	2788	7831	7832	78321	78322
	7833	7834	78340	78341	78342	78343	7835	7837	7839	7947	7957	79579

	V1229	V850	V8521	V8522	V8523	V8524	V8525	V8530	V8531	V8532	V8533	V8534
	V8535	V8536	V8537	V8538	V8539	V854	V8541	V8542	V8543	V8544	V8545	
<b>59</b>	<b>Deficiency and other anemia</b>											
	2800	2801	2808	2809	2810	2811	2812	2813	2814	2818	2819	2820
	2821	2822	2823	2824	28240	28243	28245	28246	28247	28249	2827	2828
	2829	2830	2831	28310	28311	28319	2832	2839	2840	28411	28412	28419
	2848	28481	28489	2849	2850	28521	28522	28529	2858	2859		
<b>60</b>	<b>Acute posthemorrhagic anemia</b>											
	2851											
<b>61</b>	<b>Sickle cell anemia</b>											
	28241	28242	2825	28260	28261	28262	28263	28264	28268	28269		
<b>62</b>	<b>Coagulation and hemorrhagic disorders</b>											
	2860	2861	2862	2863	2864	28653	2866	2867	2869	2870	2871	2872
	2873	28730	28731	28732	28733	28739	2874	28749	2875	2878	2879	28981
	28982	28984	7827									
<b>63</b>	<b>Diseases of white blood cells</b>											
	2880	2881	2882	2883	28866	2888	2889					
<b>64</b>	<b>Other hematologic conditions</b>											
	2890	2894	28950	28951	28952	28959	2896	2897	2898	28989	2899	7900
	79001	79009	V123	V582								
<b>76</b>	<b>Meningitis (except that caused by tuberculosis or sexually transmitted disease)</b>											
	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											
<b>77</b>	<b>Encephalitis (except that caused by tuberculosis or sexually transmitted disease)</b>											
	0361	0462	0498	0499	0520	0543	0550	05601	05821	05829	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											
<b>78</b>	<b>Other CNS infection and poliomyelitis</b>											
	04500	04501	04502	04503	04510	04511	04512	04513	04520	04521	04522	04523
	04590	04591	04592	04593	0460	0461	04611	04619	0463	04671	04672	04679
	0468	0469	048	138	3240	3241	3249	326	V1202			
<b>79</b>	<b>Parkinson`s disease</b>											
	3320											
<b>80</b>	<b>Multiple sclerosis</b>											
	340											
<b>81</b>	<b>Other hereditary and degenerative nervous system conditions</b>											
	3300	3301	3302	3303	3308	3309	3313	3314	3315	3316	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	33700	33701
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	78072	

**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**

33900	33901	33902	33903	33904	33905	33909	33910	33911	33912	33920	33921
33922	3393	33941	33942	33943	33944	33981	33982	33983	33984	33985	33989
3460	34600	34601	34602	34603	3461	34612	34613	34610	34611	3462	34620
34621	34622	34623	34630	34631	34632	34633	34640	34642	34643	34651	34652
34653	34670	34671	34672	34673	3468	34680	34681	34682	34683	3469	34690
34691	7840										

**85 Coma; stupor; and brain damage**

3481	7800	78001	78003	78009							
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**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	36222	36223	36224	36225	36226	36227	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	36506	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	36570	36571	36572	36573
36574	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	37206	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	36481	36482
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	37234	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	37927	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	38845	3885	38860	38861	38869	38870
38871	38872	3888	3889	38900	38901	38902	38903	38904	38905	38906	38908
38910	38911	38912	38913	38914	38918	3892	38921	38922	3897	3898	3899
V412	V413	V4985	V532	V721							

**95 Other nervous system disorders**

325	3321	32702	32715	32730	32731	32732	32733	32734	32735	32736	32737
32739	32753	33183	33720	33721	33722	33729	3410	3411	3418	3419	34461
347	34700	34701	34710	34711	3480	3482	3483	34830	34831	34839	3484
3485	3488	34881	34882	34889	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	35830	35839	3588
3589	3590	3591	3592	35921	35922	35923	35924	35929	3593	3594	3595
3596	35971	35979	3598	35981	35989	3599	7810	7811	7812	7813	7817
7818	7820	7843	7845	78451	78452	78459	78460	78461	78469	7920	7930
79400	79401	79402	79409	79410	79411	79412	79413	79414	79415	79416	79417
79419	7961	79951	79952	79953	79954	79955	79959	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	42511	42518
	4252	4253	4254	4255	4257	4258	4259	4290				
<b>98</b>	<b>Essential hypertension</b>											
	4011	4019										
<b>99</b>	<b>Hypertension with complications and secondary hypertension</b>											
	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										
<b>100</b>	<b>Acute myocardial infarction</b>											
	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								
<b>101</b>	<b>Coronary atherosclerosis and other heart disease</b>											
	4110	4111	4118	41181	41189	412	4130	4131	4139	4140	41400	41401
	41406	4148	4149	V4581	V4582							
<b>102</b>	<b>Nonspecific chest pain</b>											
	78650	78651	78659									
<b>103</b>	<b>Pulmonary heart disease</b>											
	4150	4151	41512	41513	41519	4160	4161	4162	4168	4169	4170	4171
	4178	4179										
<b>104</b>	<b>Other and ill-defined heart disease</b>											
	41410	41411	41412	41419	4291	4292	4293	4295	4296	42971	42979	42981
	42982	42989	4299									
<b>105</b>	<b>Conduction disorders</b>											
	4260	42610	42611	42612	42613	4262	4263	4264	42650	42651	42652	42653
	42654	4266	4267	42681	42682	42689	4269	V450	V4500	V4501	V4502	V4509
	V533	V5331	V5332	V5339								
<b>106</b>	<b>Cardiac dysrhythmias</b>											
	4270	4271	4272	42731	42732	42760	42761	42769	42781	42789	4279	7850
	7851											
<b>107</b>	<b>Cardiac arrest and ventricular fibrillation</b>											
	42741	42742	4275									
<b>108</b>	<b>Congestive heart failure; nonhypertensive</b>											
	39891	4280	4281	42820	42821	42822	42823	42830	42831	42832	42833	42840
	42841	42842	42843	4289								
<b>109</b>	<b>Acute cerebrovascular disease</b>											
	34660	34661	34662	34663	430	431	4320	4321	4329	43301	43311	43321
	43331	43381	43391	4340	43400	43401	4341	43410	43411	4349	43490	43491
	436											



<b>110</b>	<b>Occlusion or stenosis of precerebral arteries</b>											
	4330	43300	4331	43310	4332	43320	4333	43330	4338	43380	4339	43390
<b>111</b>	<b>Other and ill-defined cerebrovascular disease</b>											
	4370	4371	4373	4374	4375	4376	4377	4378	4379			
<b>112</b>	<b>Transient cerebral ischemia</b>											
	4350	4351	4352	4353	4358	4359						
<b>113</b>	<b>Late effects of cerebrovascular disease</b>											
	438	4380	43810	43811	43812	43813	43814	43819	43820	43821	43822	43830
	43831	43832	43840	43841	43842	43850	43851	43852	43853	4386	4387	43881
	43882	43883	43884	43885	43889	4389						
<b>114</b>	<b>Peripheral and visceral atherosclerosis</b>											
	4400	4401	4402	44020	44021	44022	44023	44029	4404	4408	4409	4439
	5570	5571	5579									
<b>115</b>	<b>Aortic; peripheral; and visceral artery aneurysms</b>											
	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	44770	44771	44772	44773				
<b>116</b>	<b>Aortic and peripheral arterial embolism or thrombosis</b>											
	44409	4441	44421	44422	44481	44489	4449	44501	44502	44581	44589	
<b>117</b>	<b>Other circulatory disease</b>											
	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	V1253	V1254	V1259	V151	V421	V432
	V4321	V4322	V434	V717								
<b>118</b>	<b>Phlebitis; thrombophlebitis and thromboembolism</b>											
	4510	45111	45119	4512	45181	45182	45183	45184	45189	4519	452	4530
	4531	4532	4533	45340	45341	45342	45351	45352	4536	45371	45372	45373
	45374	45375	45376	45377	45379	4538	45382	45386	45387	4539	V1251	V1252
	V1255											
<b>119</b>	<b>Varicose veins of lower extremity</b>											
	4540	4541	4542	4548	4549							
<b>120</b>	<b>Hemorrhoids</b>											
	4550	4551	4552	4553	4554	4555	4556	4557	4558	4559		
<b>121</b>	<b>Other diseases of veins and lymphatics</b>											
	4563	4564	4565	4566	4568	4570	4571	4572	4578	4579	4591	45910
	45911	45912	45913	45919	4592	45930	45931	45932	45933	45939	45981	
<b>122</b>	<b>Pneumonia (except that caused by tuberculosis or sexually transmitted disease)</b>											
	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											
<b>123</b>	<b>Influenza</b>											
	4870	4871	4878	488	4880	48801	48802	48809	4881	48811	48812	48819
	48881	48882	48889									
<b>124</b>	<b>Acute and chronic tonsillitis</b>											
	463	4740	47400	47401	47402	47410	47411	47412	4742	4748	4749	475
<b>125</b>	<b>Acute bronchitis</b>											
	4660	4661	46611	46619								
<b>126</b>	<b>Other upper respiratory infections</b>											
	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		
<b>127</b>	<b>Chronic obstructive pulmonary disease and bronchiectasis</b>											
	490	4910	4911	4912	49120	49121	49122	4918	4919	4920	4928	494
	4940	4941	496									
<b>128</b>	<b>Asthma</b>											
	49300	49301	49302	49310	49311	49312	49320	49321	49322	49381	49382	49390
	49391	49392										
<b>129</b>	<b>Aspiration pneumonitis; food/vomitus</b>											
	5070											
<b>130</b>	<b>Pleurisy; pneumothorax; pulmonary collapse</b>											
	5100	5109	5110	5111	5118	5119	5120	51281	51282	51283	51284	51289
	5180	5181	5182									
<b>131</b>	<b>Respiratory failure; insufficiency; arrest (adult)</b>											
	5173	51851	51852	51853	51881	51882	51883	51884	7991	V461	V4611	V4612
	V4613	V4614	V462									
<b>132</b>	<b>Lung disease due to external agents</b>											
	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	5082	5088	5089							
<b>133</b>	<b>Other lower respiratory disease</b>											
	5131	514	515	5160	5161	5162	51630	51631	51632	51633	51634	51635
	51636	51637	5164	5165	51661	51662	51663	51664	51669	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	79311	79319	7942	V126	V1260	V1261	V1269	V426			
<b>134</b>	<b>Other upper respiratory disease</b>											
	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	78442	78443	78444	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 52571 52572 52573 52579 5258 5259 5260 5261 5262 5263  
5264 5265 52681 52689 5269 78492 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

**140 Gastritis and duodenitis**

5350 53500 53501 5351 53510 53511 5352 53520 53521 5353 5354 53540  
53541 5355 53550 53551 5356 53560 53561 53571

**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

<b>143</b>	<b>Abdominal hernia</b>											
	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			
<b>144</b>	<b>Regional enteritis and ulcerative colitis</b>											
	5550	5551	5552	5559	556	5560	5561	5562	5563	5564	5565	5566
	5568	5569										
<b>145</b>	<b>Intestinal obstruction without hernia</b>											
	5600	5601	5602	56030	56031	56032	56039	56081	56089	5609		
<b>146</b>	<b>Diverticulosis and diverticulitis</b>											
	56200	56201	56202	56203	56210	56211	56212	56213				
<b>147</b>	<b>Anal and rectal conditions</b>											
	5646	5650	5651	566	5690	5691	5692	56941	56942	56943	56944	56949
<b>148</b>	<b>Peritonitis and intestinal abscess</b>											
	03283	5670	5671	5672	56721	56722	56723	56729	56738	56739	5678	56781
	56782	56789	5679	5695								
<b>149</b>	<b>Biliary tract disease</b>											
	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							
<b>150</b>	<b>Liver disease; alcohol-related</b>											
	5710	5711	5712	5713								
<b>151</b>	<b>Other liver diseases</b>											
	570	5715	5716	5718	5719	5720	5721	5722	5723	5724	5728	5730
	5734	5738	5739	7824	7891	7895	7904	7905	7948	V427		
<b>152</b>	<b>Pancreatic disorders (not diabetes)</b>											
	5770	5771	5772	5778	5779	5794						
<b>153</b>	<b>Gastrointestinal hemorrhage</b>											
	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								
<b>154</b>	<b>Noninfectious gastroenteritis</b>											
	55841	55842	5589									
<b>155</b>	<b>Other gastrointestinal disorders</b>											
	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	56987	56989	5699	5790	5791	5792	5798	5799	7871	7872	78722
	78723	78724	78729	7873	7874	7875	7876	78761	78762	78763	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	V5350	V5351	V5359	V551	V552	V553	V554			
<b>156</b>	<b>Nephritis; nephrosis; renal sclerosis</b>											
	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							
<b>157</b>	<b>Acute and unspecified renal failure</b>											
	5845	5846	5847	5848	5849	586						
<b>158</b>	<b>Chronic renal failure</b>											
	585	5851	5852	5853	5854	5855	5856	5859	7925	V420	V451	V4512
	V560	V561	V562	V5631	V5632	V568						
<b>159</b>	<b>Urinary tract infections</b>											
	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										
<b>160</b>	<b>Calculus of urinary tract</b>											
	5920	5921	5929	5940	5941	5942	5948	5949	7880	V1301		
<b>161</b>	<b>Other diseases of kidney and ureters</b>											
	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										
<b>162</b>	<b>Other diseases of bladder and urethra</b>											
	5960	5961	5962	5963	5964	5965	59651	59652	59653	59654	59655	59659
	5966	5967	5969	5981	5982	5988	5989	5991	5992	5993	5994	5995
	59981	59982	59983	59984								
<b>163</b>	<b>Genitourinary symptoms and ill-defined conditions</b>											
	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									
<b>164</b>	<b>Hyperplasia of prostate</b>											
	600	6000	60000	60001	6001	60010	60011	6002	60020	60021	6003	6009
	60090	60091										
<b>165</b>	<b>Inflammatory conditions of male genital organs</b>											
	6010	6011	6012	6013	6014	6018	6019	6031	6040	60490	60491	60499
	6071	6072	6080	6084								
<b>166</b>	<b>Other male genital disorders</b>											
	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

<b>167</b>	<b>Nonmalignant breast conditions</b>											
	6100	6101	6102	6103	6104	6108	6109	6110	6111	6112	6113	6114
	6115	6116	61171	61172	61179	6118	61181	61182	61183	61189	6119	6120
	6121	7938	79380	79381	79389							
<b>168</b>	<b>Inflammatory diseases of female pelvic organs</b>											
	6140	6141	6142	6143	6144	6145	6146	6147	6148	6149	6150	6151
	6159	6160	61610	61611	6162	6163	6164	61650	61651	6168	6169	62571
<b>169</b>	<b>Endometriosis</b>											
	6170	6171	6172	6173	6174	6175	6176	6178	6179			
<b>170</b>	<b>Prolapse of female genital organs</b>											
	6180	61800	61801	61802	61803	61804	61805	61809	6181	6182	6183	6184
	6185	6186	6187	6188	61881	61882	61883	61889	6189			
<b>171</b>	<b>Menstrual disorders</b>											
	6253	6260	6261	6262	6263	6264	6265	6266	6268	6269		
<b>172</b>	<b>Ovarian cyst</b>											
	6200	6201	6202									
<b>173</b>	<b>Menopausal disorders</b>											
	25631	25639	6270	6271	6272	6273	6274	6278	6279	V074		
<b>174</b>	<b>Female infertility</b>											
	6280	6281	6282	6283	6284	6288	6289					
<b>175</b>	<b>Other female genital disorders</b>											
	6190	6191	6192	6198	6199	6203	6204	6205	6206	6207	6208	6209
	6210	6211	6212	6213	62130	62131	62132	62133	62134	62135	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	62401	62402	62409	6241	6242	6243	6244	6245
	6246	6248	6249	6250	6251	6252	6254	6255	6256	62570	62579	6258
	6259	6267	6290	6291	62920	62921	62922	62923	6298	6299	79500	79501
	79502	79503	79504	79507	79508	79509	V132	V1321	V1322	V1323	V1234	V1329
	V557	V723										
<b>176</b>	<b>Contraceptive and procreative management</b>											
	V157	V2501	V2502	V2503	V2509	V251	V2511	V2513	V252	V253	V2540	V2541
	V2542	V2543	V2549	V255	V258	V259	V260	V261	V262	V2621	V2622	V2629
	V263	V2631	V2632	V2633	V264	V2641	V2642	V2649	V2651	V2652	V268	V2681
	V2682	V2689	V269	V455	V4551	V4552	V4559					
<b>177</b>	<b>Spontaneous abortion</b>											
	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						
<b>178</b>	<b>Induced abortion</b>											
	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									
<b>179</b>	<b>Postabortion complications</b>											
	6390	6391	6392	6393	6394	6395	6396	6398	6399			
<b>180</b>	<b>Ectopic pregnancy</b>											
	6330	63300	63301	6331	63310	63311	6332	63320	63321	6338	63380	63381
	6339	63390	63391									
<b>181</b>	<b>Other complications of pregnancy</b>											
	630	6318	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	V2342	V2387									
<b>182</b>	<b>Hemorrhage during pregnancy; abruptio placenta; placenta previa</b>											
	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									
<b>183</b>	<b>Hypertension complicating pregnancy; childbirth and the puerperium</b>											
	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			
<b>184</b>	<b>Early or threatened labor</b>											
	64400	64403	64410	64413	64420	64421						
<b>185</b>	<b>Prolonged pregnancy</b>											
	64500	64501	64503	64510	64511	64513	64520	64521	64523			
<b>186</b>	<b>Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium</b>											
	64800	64801	64802	64803	64804	64880	64881	64882	64883	64884		
<b>187</b>	<b>Malposition; malpresentation</b>											
	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			

<b>188</b>	<b>Fetopelvic disproportion; obstruction</b>											
	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	67810	67811	67813
<b>189</b>	<b>Previous C-section</b>											
	65420	65421	65423									
<b>190</b>	<b>Fetal distress and abnormal forces of labor</b>											
	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			
<b>191</b>	<b>Polyhydramnios and other problems of amniotic cavity</b>											
	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										
<b>192</b>	<b>Umbilical cord complication</b>											
	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									
<b>193</b>	<b>OB-related trauma to perineum and vulva</b>											
	66400	66401	66404	66410	66411	66414	66420	66421	66424	66430	66431	66434
	66440	66441	66444	66450	66451	66454	66460	66461	66464	66480	66481	66484
	66490	66491	66494									
<b>194</b>	<b>Forceps delivery</b>											
	66950	66951										
<b>195</b>	<b>Other complications of birth; puerperium affecting management of mother</b>											
	64970	64971	64973	64981	64982	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	67010	67012	67014
67020	67022	67024	67030	67032	67034	67080	67082	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	67800	67801	67803	67900	67901	67902	67903	67904	67910
67911	67912	67913	67914	V230	V231	V232	V233	V234	V2341	V2349	V235
V237	V238	V2381	V2382	V2383	V2384	V2385	V2386	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	V9100	V9101	V9102	V9103	V9109
V9110	V9111	V9112	V9119	V9120	V9121	V9122	V9129	V9190	V9191	V9192	V9199

**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	69510	69512	69513	69514
69515	69519	6952	6953	6954	69550	69551	69552	69555	69556	69557	69558
69559	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	70720	70721	70722	70723	70724	70725
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	70441	70442	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

<b>201</b>	<b>Infective arthritis and osteomyelitis (except that caused by tuberculosis or sexually transmitted disease)</b>											
	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					
<b>202</b>	<b>Rheumatoid arthritis and related disease</b>											
	7140	7141	7142	71430	71431	71432	71433	7144	71481	71489	7149	7200
<b>203</b>	<b>Osteoarthritis</b>											
	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						
<b>204</b>	<b>Other non-traumatic joint disorders</b>											
	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	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								
<b>205</b>	<b>Spondylosis; intervertebral disc disorders; other back problems</b>											
	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							
<b>206</b>	<b>Osteoporosis</b>											
	73300	73301	73302	73303	73309							
<b>207</b>	<b>Pathological fracture</b>											
	7331	73310	73311	73312	73313	73314	73315	73316	73319	73393	73394	73395
	73396	73397	73398	V1351	V1352							
<b>208</b>	<b>Acquired foot deformities</b>											
	7271	734	7350	7351	7352	7353	7354	7355	7358	7359	73670	73671
	73672	73673	73674	73675	73676	73679						
<b>209</b>	<b>Other acquired deformities</b>											
	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					
<b>210</b>	<b>Systemic lupus erythematosus and connective tissue disorders</b>											
	7100	7101	7102	7103	7104	7108	7109					
<b>211</b>	<b>Other connective tissue disease</b>											
	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	72991	72992	7819	78191	78192	78194	78199
	7937	V135	V1359	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										
<b>212</b>	<b>Other bone disease and musculoskeletal deformities</b>											
	7310	7311	7312	7318	7320	7321	7322	7323	7324	7325	7326	7327
	7328	7329	73320	73321	73322	73329	7333	73340	73341	73342	73343	73344
	73345	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	V8821	V8822	V8829					
<b>213</b>	<b>Cardiac and circulatory congenital anomalies</b>											
	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	74732	74740	74741	74742	74749	7475

7476 74760 74761 74762 74763 74764 74769 74781 74782 74783 74789 7479  
V1365

**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  
V1367

**215 Genitourinary congenital anomalies**

7520 75210 75211 75219 7522 7523 75231 75232 75233 75234 75235 75236  
75239 75240 75241 75242 75243 75244 75245 75246 75247 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 V1362

**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 V1363

**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 75672 75673  
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 V1364 V1366 V1368 V1369

**218 Liveborn**

76520 76529 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	76521	76522	76523	76524	76525	76526
76527	76528	V2130	V2131	V2132	V2133	V2134	V2135				

**220 Intrauterine hypoxia and birth asphyxia**

7680	7681	7682	7683	7684	7685	7686	76870	76871	76872	76873	7689
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**221 Respiratory distress syndrome**

769
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**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
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**224 Other perinatal conditions**

04041	7600	7601	7602	7603	7604	7605	7606	76061	76062	76063	76064
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	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	77750	77751	77752
77753	7776	7778	7779	7780	7781	7782	7783	7784	7785	7786	7787
7788	7789	7790	7791	7792	7793	77931	77932	77933	7794	7795	7796
7797	7798	77981	77982	77983	77989	7799	78091	78092	7897	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						

<b>226</b>	<b>Fracture of neck of femur (hip)</b>											
	82000	82001	82002	82003	82009	82010	82011	82012	82013	82019	82020	82021
	82022	82030	82031	82032	8208	8209	9053	V5413	V5423			
<b>227</b>	<b>Spinal cord injury</b>											
	34939	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					
<b>228</b>	<b>Skull and face fractures</b>											
	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			
<b>229</b>	<b>Fracture of upper limb</b>											
	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	81347	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	
<b>230</b>	<b>Fracture of lower limb</b>											
	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										
<b>231</b>	<b>Other fractures</b>											
	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	80844	80849
	80851	80852	80853	80854	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
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	V1552					

**234 Crushing injury or internal injury**

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						

**235 Open wounds of head; neck; and trunk**

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							

**236 Open wounds of extremities**

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
8950	8951	8960	8961	8962	8963	8970	8971	8972	8973	8974	8975
8976	8977	9058	9059	9061							

**237 Complication of device; implant or graft**

27950	27951	27952	27953	41402	41403	41404	41405	41407	44030	44031	44032
56960	56961	56969	59682	59683	62931	62932	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	99688	99689	99690	99691	99692
99693	99694	99695	99696	99699	99931	99932	99933				

**238 Complications of surgical procedures or medical care**

27661	27783	27788	2853	28741	3490	3491	34931	41511	4294	4582	45821
45829	5121	5122	5190	51900	51901	51902	51909	53086	53087	53640	53641
53642	53649	53901	53909	53981	53989	5642	5643	5644	5696	56962	56971
56979	5793	59681	78062	78063	78066	9093	99524	9954	99586	9970	99700
99701	99702	99709	9971	9972	9973	99731	99732	99739	99741	99749	9975



99760	99761	99762	99769	99771	99772	99779	9979	99791	99799	99800	99801
99802	99809	9981	99811	99812	99813	9982	9983	99831	99832	99833	9984
9985	99851	99859	9986	9987	9988	99881	99882	99883	99889	9989	9990
9991	9992	9993	99934	99939	99941	99942	99949	99951	99952	9996	99960
99961	99962	99963	99969	9997	99970	99971	99972	99973	99974	99975	99976
99977	99978	99979	9998	99980	99981	99982	99983	99984	99985	99988	9999
V1553	V1580	V1583	V9001	V9009							

**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										

<b>241</b>	<b>Poisoning by psychotropic agents</b>											
	9690	96900	96902	96903	96904	96905	96909	9691	9692	9693	9694	9695
	9696	9697	96970	96971	96972	96973	96979	9698	9699			
<b>242</b>	<b>Poisoning by other medications and drugs</b>											
	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	97081	97089	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											
<b>243</b>	<b>Poisoning by nonmedicinal substances</b>											
	9091	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											
<b>244</b>	<b>Other injuries and conditions due to external causes</b>											
	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	9955	99550	99551	99552	99593
	99553	99554	99555	99559	99580	99581	99582	99583	99584	99585	99589	99590
	99594	V155	V1551	V1559	V156	V1588	V713	V714	V715	V716	V9010	V9011
	V9012	V902	V9031	V9032	V9033	V9039	V9081	V9083	V9089	V909		
<b>245</b>	<b>Syncope</b>											
	7802											
<b>246</b>	<b>Fever of unknown origin</b>											
	7806											

<b>247</b>	<b>Lymphadenitis</b>	2891	2892	2893	683	7856							
<b>248</b>	<b>Gangrene</b>	44024	7854										
<b>249</b>	<b>Shock</b>	78550	78551	78552	78559								
<b>250</b>	<b>Nausea and vomiting</b>	7870	78701	78702	78703								
<b>251</b>	<b>Abdominal pain</b>	7890	78900	78901	78902	78903	78904	78905	78906	78907	78909	78960	78961
		78962	78963	78964	78965	78966	78967	78969					
<b>252</b>	<b>Malaise and fatigue</b>	7807	78071	78079									
<b>253</b>	<b>Allergic reactions</b>	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	V1381	V140	V141	V142	V143	V144	V145	V146	V147	V148
		V149	V150	V1501	V1502	V1503	V1504	V1505	V1506	V1507	V1508	V1509	V727
<b>254</b>	<b>Rehabilitation care; fitting of prostheses; and adjustment of devices</b>	V520	V521	V524	V528	V529	V538	V570	V571	V572	V5721	V5722	V573
		V574	V5781	V5789	V579	V5882							
<b>255</b>	<b>Administrative/social admission</b>	V200	V201	V202	V2031	V2032	V600	V601	V602	V603	V604	V605	V606
		V608	V6081	V6089	V609	V610	V6101	V6102	V6103	V6104	V6105	V6106	V6107
		V6108	V611	V6110	V6111	V6112	V6120	V6121	V6122	V6123	V6124	V6125	V6129
		V613	V6141	V6142	V6149	V616	V617	V618	V619	V620	V621	V622	V6221
		V6222	V6229	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									
<b>256</b>	<b>Medical examination/evaluation</b>	V290	V291	V292	V293	V298	V299	V6801	V6809	V700	V703	V704	V705
		V706	V707	V708	V709	V718	V719	V7231	V7232	V725	V726	V7262	V7263
		V7269	V728	V7281	V7282	V7283	V7284	V7285	V7286	V729			
<b>257</b>	<b>Other aftercare</b>	V51	V510	V518	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							

<b>258</b>	<b>Other screening for suspected conditions (not mental disorders or infectious disease)</b>											
	79518	79677	79678	V280	V281	V282	V283	V284	V285	V288	V2882	V2889
	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	V8001
	V8009	V801	V802	V803	V810	V811	V812	V813	V814	V815	V816	V820
	V821	V822	V823	V824	V825	V826	V828	V8281	V8289	V829		

<b>259</b>	<b>Residual codes; unclassified</b>											
	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	78064	78065	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	79921	79922
	79923	79925	79929	7993	7998	79981	79882	79989	7999	V070	V072	V073
	V0731	V0739	V0751	V0752	V0759	V078	V079	V131	V1389	V139	V152	V1521
	V1522	V1529	V153	V1581	V1584	V1585	V1586	V1587	V1589	V159	V160	V161
	V162	V163	V164	V1640	V1641	V1642	V1643	V1649	V165	V1651	V1652	V1659
	V166	V167	V168	V169	V170	V171	V172	V173	V174	V1741	V1749	V175
	V176	V177	V178	V1781	V1789	V180	V181	V1811	V1819	V182	V183	V184
	V185	V186	V1861	V1869	V187	V188	V189	V190	V1911	V1919	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	V4986	V4987	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
	V8481	V8489	V851	V8701	V8702	V8709	V8711	V8712	V8719	V872	V8731	V8732
	V8739	V8741	V8742	V8743	V8744	V8745	V8746	V8749	V8801	V8802	V8803	V8811
	V8812	V8901	V8902	V8903	V8904	V8905	V8909					

<b>650</b>	<b>Adjustment disorder</b>											
	3090	3091	30922	30923	30924	30928	30929	3093	3094	30982	30983	30989
	3099											

<b>651</b>	<b>Anxiety disorder</b>											
	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							

<b>652</b>	<b>Attention-deficit, conduct, and disruptive behavior disorder</b>											
	<i>Conduct disorder</i>											
	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 amnesic and other cognitive disorders**

2900 29010 29011 29012 29013 29020 29021 2903 29040 29041 29042 29043  
2908 2909 2930 2931 2940 2941 29410 29411 29420 29421 2948 2949  
3100 3102 31081 31089 3109 3310 3311 33111 33119 3312 33182 797

**654 Developmental disorders**

*Communication disorders*

3070 3079 31531 31534 31535 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							
<b>658</b>	<b>Personality disorders</b>											
	3010	30110	30111	30112	30113	30120	30121	30122	3013	3014	30150	30151
	30159	3016	3017	30181	30182	30183	30184	30189	3019			
<b>659</b>	<b>Schizophrenia and other psychotic disorders</b>											
	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									
<b>660</b>	<b>Alcohol-related disorders</b>											
	2910	2911	2912	2913	2914	2915	2918	29181	29182	29189	2919	30300
	30301	30302	30303	30390	30391	30392	30393	30500	30501	30502	30503	76071
	9800											
<b>661</b>	<b>Substance-related disorders</b>											
	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								
<b>662</b>	<b>Suicide and intentional self-inflicted injury</b>											
	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
<b>663</b>	<b>Screening and history of mental health and substance abuse codes</b>											
	<i>Mental health disorder related codes</i>											
	33392	V110	V111	V112	V114	V118	V119	V154	V1541	V1542	V1549	V1582
	V6285	V663	V701	V702	V7101	V7102	V7109	V790	V792	V793	V798	V799
	<i>Substance-related disorder codes</i>											
	3051	30510	30511	30512	30513	3575	4255	5353	53530	53531	5710	5711
	5712	5713	7903	V113	V791							
<b>670</b>	<b>Miscellaneous disorders</b>											
	<i>Dissociative disorders</i>											
	30012	30013	30014	30015	3006							
	<i>Eating disorders</i>											
	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 V4031 V4039 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

**Attachment 2:**

**Sample SAS Jobs for Linking Example**



NOTE: Copyright (c) 2002-2010 by SAS Institute Inc., Cary, NC, USA.  
NOTE: SAS (r) Proprietary Software 9.3 (TS1M2)  
NOTE: This session is executing on the W32\_7PRO platform.

NOTE: Enhanced analytical products:

SAS/STAT 12.1, SAS/ETS 12.1, SAS/OR 12.1, SAS/IML 12.1, SAS/QC 12.1

NOTE: SAS initialization used:  
real time 4.64 seconds  
cpu time 0.32 seconds

NOTE: AUTOEXEC processing beginning; file is C:\Program Files\SAS\SASMISC\autoexec\_93.sas.

NOTE: DATA statement used (Total process time):  
real time 0.56 seconds  
cpu time 0.04 seconds

NOTE: AUTOEXEC processing completed.

```
1 ods rtf file = 'C:\Data\sampleA.rtf' bodytitle;
NOTE: Writing RTF Body file: C:\Data\sampleA.rtf
2
3 ods noproctitle;
4
5 OPTIONS LS=132 PS=59;
6
7 TITLE1 "HC-152I";
8 TITLE2 "Sample SAS Job for Example A";
9
10 LIBNAME IN "C:\Data";
```

NOTE: Directory for library IN contains files of mixed engine types.

NOTE: Libref IN was successfully assigned as follows:

Engine: V9  
Physical Name: C:\Data

```
11
12 *****
13 * Calculate the expenditures for prescribed medicines associated with medical visits for asthma.
14 *****;
15
16 PROC FORMAT;
17 VALUE EVENTYPE
18 1 = "1 MVIS"
19 2 = "2 OPAT"
20 3 = "3 EROM"
21 4 = "4 STAZ"
22 5 = "5 DVIS"
23 6 = "6 OMED"
24 7 = "7 HVIS"
25 8 = "8 PMED";
```

NOTE: Format EVENTYPE has been output.

26  
27           RUN;

NOTE: PROCEDURE FORMAT used (Total process time):  
real time           0.04 seconds  
cpu time            0.03 seconds

28  
29           \*-----  
30           \* Get condition records coded as asthma.  
31           \*-----;  
32           DATA ASCONDS;  
33            SET IN.H154 (KEEP=CONDIDX CCCODEX);  
34            IF CCCODEX="128";  
35  
36           RUN;

NOTE: There were 118850 observations read from the data set IN.H154.  
NOTE: The data set WORK.ASCONDS has 2515 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCONDS increased size by 90.00 percent.  
Compressed is 19 pages; un-compressed would require 10 pages.

NOTE: DATA statement used (Total process time):  
real time           1.59 seconds  
cpu time            0.03 seconds

37  
38           \*-----  
39           \* Get the events linked to each of the asthma condition records.  
40           \*-----;  
41           PROC SORT DATA=ASCONDS; BY CONDIDX; RUN;

NOTE: There were 2515 observations read from the data set WORK.ASCONDS.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.ASCONDS has 2515 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCONDS increased size by 90.00 percent.  
Compressed is 19 pages; un-compressed would require 10 pages.

NOTE: PROCEDURE SORT used (Total process time):  
real time           0.23 seconds  
cpu time            0.01 seconds

42  
43           proc print data=asconds (obs=50);  
44            title3 "sample print of work.asconds - sorted by condidx";  
45            title4 "COND (H154) records where cccodex=128";  
46           run;

NOTE: There were 50 observations read from the data set WORK.ASCONDS.  
NOTE: The PROCEDURE PRINT printed page 1.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time           0.62 seconds  
cpu time            0.06 seconds

```
47  
48 PROC SORT DATA=IN.H152IF1 OUT=CLNK; BY CONDIDX; RUN;
```

NOTE: There were 329484 observations read from the data set IN.H152IF1.  
NOTE: SAS threaded sort was used.  
NOTE: The data set WORK.CLNK has 329484 observations and 6 variables.  
NOTE: Compressing data set WORK.CLNK increased size by 5.91 percent.  
Compressed is 6233 pages; un-compressed would require 5885 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 2.11 seconds  
cpu time 0.74 seconds

```
49  
50 DATA ASCLNKS;  
51 MERGE CLNK (IN=INCLNK KEEP=CONDIDX EVNTIDX EVENTYPE)  
52 ASCONDS (IN=INASCOND KEEP=CONDIDX);  
53 BY CONDIDX;  
54 IF INCLNK & INASCOND;  
55 RUN;
```

NOTE: There were 329484 observations read from the data set WORK.CLNK.  
NOTE: There were 2515 observations read from the data set WORK.ASCONDS.  
NOTE: The data set WORK.ASCLNKS has 7010 observations and 3 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 26.79 percent.  
Compressed is 71 pages; un-compressed would require 56 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.20 seconds  
cpu time 0.20 seconds

```
56  
57 proc report data=asclnks(obs=75) nowd headskip;  
58 define condidx /'CONDIDX' order;  
59 define evntidx /'EVNTIDX';  
60 define eventype /'EVENTYPE';  
61 break after condidx / skip;  
62 format eventype eventype.;  
63 title3 "sample print of work.asclnks - sorted by condidx";  
64 title4 "events linked to asthma condition records";  
65 run;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 75 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE REPORT printed pages 2-3.  
NOTE: PROCEDURE REPORT used (Total process time):  
real time 0.73 seconds  
cpu time 0.06 seconds

```
66  
67 PROC SORT DATA=ASCLNKS; BY EVNTIDX; RUN;
```

NOTE: There were 7010 observations read from the data set WORK.ASCLNKS.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.ASCLNKS has 7010 observations and 3 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 26.79 percent.

Compressed is 71 pages; un-compressed would require 56 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
68  
69 proc print data=asclnks (obs=50);  
70 format eventype eventype.;  
71 title3 "sample print of work.asclnks - sorted by evntidx";  
72 run;
```

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE PRINT printed page 4.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
73  
74 DATA ASCLNKS;  
75 SET ASCLNKS (KEEP=EVNTIDX EVENTYPE);  
76 BY EVNTIDX;  
77 IF FIRST.EVNTIDX;  
78 RUN;
```

NOTE: There were 7010 observations read from the data set WORK.ASCLNKS.  
NOTE: The data set WORK.ASCLNKS has 6999 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 19.05 percent.  
Compressed is 50 pages; un-compressed would require 42 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
79  
80 proc print data=asclnks (obs=50);  
81 title3 "sample print of unique evntidxs from work.asclnks";  
82 format eventype eventype.;  
83 run;
```

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE PRINT printed page 5.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
84  
85 *-----  
86 * Get non-telephone office based visits (i.e. MVIS events) for persons with positive weights.  
87 *-----  
88 DATA MVIS;  
89 SET IN.H152G (KEEP=EVNTIDX PERWT12F SEETLKPV);  
90 IF PERWT12F > 0 & SEETLKPV NE 2;  
91 RUN;
```

NOTE: There were 144755 observations read from the data set IN.H152G.  
NOTE: The data set WORK.MVIS has 140703 observations and 3 variables.  
NOTE: Compressing data set WORK.MVIS increased size by 12.88 percent.  
Compressed is 1262 pages; un-compressed would require 1118 pages.  
NOTE: DATA statement used (Total process time):  
real time 4.03 seconds  
cpu time 0.21 seconds

92  
93 PROC SORT DATA=MVIS; BY EVNTIDX; RUN;

NOTE: There were 140703 observations read from the data set WORK.MVIS.  
NOTE: SAS threaded sort was used.  
NOTE: The data set WORK.MVIS has 140703 observations and 3 variables.  
NOTE: Compressing data set WORK.MVIS increased size by 12.88 percent.  
Compressed is 1262 pages; un-compressed would require 1118 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.19 seconds  
cpu time 0.20 seconds

94  
95 \*-----  
96 \* Identify MVIS events which were for asthma.  
97 \*-----;  
98 DATA ASMVIS;  
99 MERGE ASCLNKS (IN=INASCLNK)  
100 MVIS (IN=INMVIS KEEP=EVNTIDX);  
101 BY EVNTIDX;  
102 IF INASCLNK & INMVIS;  
103 RUN;

NOTE: There were 6999 observations read from the data set WORK.ASCLNKS.  
NOTE: There were 140703 observations read from the data set WORK.MVIS.  
NOTE: The data set WORK.ASMVIS has 1926 observations and 2 variables.  
NOTE: Compressing data set WORK.ASMVIS increased size by 25.00 percent.  
Compressed is 15 pages; un-compressed would require 12 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.07 seconds  
cpu time 0.07 seconds

104  
105 proc print data=asmvis (obs=50);  
106 format eventype eventype.;  
107 title3 "sample print of work.asmvis";  
108 title4 "unique evtidxs from work.asclnks that are non-telephone MVIS (HC-152G) events";  
109 run;

NOTE: There were 50 observations read from the data set WORK.ASMVIS.  
NOTE: The PROCEDURE PRINT printed page 6.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.00 seconds

```
110
111 *-----
112 * Get PMED IDs linked to the MVIS events which were for asthma.
113 *-----;
114 PROC SORT DATA=IN.H152IF2 OUT=RXLK; BY EVNTIDX; RUN;
```

NOTE: There were 59677 observations read from the data set IN.H152IF2.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.RXLK has 59677 observations and 6 variables.  
NOTE: Compressing data set WORK.RXLK increased size by 6.00 percent.  
Compressed is 1131 pages; un-compressed would require 1067 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.28 seconds  
cpu time 0.07 seconds

```
115
116 proc report data=rxlk (obs=140 keep=evntidx linkidx eventype) nowd headskip;
117   define evntidx /'EVNTIDX' order;
118   define linkidx /'LINKIDX';
119   define eventype /'EVENTYPE';
120   break after evntidx / skip;
121   format eventype eventype.;
122   title3 "sample print of work.rxlk - sorted by evntidx";
123   title4 "Rx+event link file records (HC-152IF2)";
124 run;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 140 observations read from the data set WORK.RXLK.  
NOTE: The PROCEDURE REPORT printed pages 7-11.  
NOTE: PROCEDURE REPORT used (Total process time):  
real time 0.03 seconds  
cpu time 0.04 seconds

```
125
126 DATA PMEDIDS;
127   MERGE RXLK (IN=INRXLK KEEP=EVNTIDX LINKIDX EVENTYPE)
128     ASMVIS (IN=INASMVIS KEEP=EVNTIDX);
129   BY EVNTIDX;
130   IF INRXLK & INASMVIS;
131 RUN;
```

NOTE: There were 59677 observations read from the data set WORK.RXLK.  
NOTE: There were 1926 observations read from the data set WORK.ASMVIS.  
NOTE: The data set WORK.PMEDIDS has 2114 observations and 3 variables.  
NOTE: Compressing data set WORK.PMEDIDS increased size by 27.78 percent.  
Compressed is 23 pages; un-compressed would require 18 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.04 seconds  
cpu time 0.03 seconds

```
132
133 proc report data=pmedids (obs=50) nowd headskip;
134   define evntidx /'EVNTIDX' order;
135   define linkidx /'LINKIDX';
```

```
136         define eventype /'EVENTYPE';
137         break after evtidx / skip;
138         format eventype eventype.;
139         title3 "sample print of work.pmedids - sorted by evtidx";
140         title4 "work.rxlk records for evtidxs in work.asmvis";
141         run;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 50 observations read from the data set WORK.PMEDIDS.  
NOTE: The PROCEDURE REPORT printed pages 12-13.  
NOTE: PROCEDURE REPORT used (Total process time):  
real time 0.02 seconds  
cpu time 0.03 seconds

```
142
143         PROC SORT DATA=PMEDIDS; BY LINKIDX; RUN;
```

NOTE: There were 2114 observations read from the data set WORK.PMEDIDS.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.PMEDIDS has 2114 observations and 3 variables.  
NOTE: Compressing data set WORK.PMEDIDS increased size by 27.78 percent.  
Compressed is 23 pages; un-compressed would require 18 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.00 seconds  
cpu time 0.01 seconds

```
144
145         proc print data=pmedids (obs=50);
146         format eventype eventype.;
147         title3 "sample print of work.pmedids - sorted by linkidx";
148         run;
```

NOTE: There were 50 observations read from the data set WORK.PMEDIDS.  
NOTE: The PROCEDURE PRINT printed page 14.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
149         DATA PMEDIDS;
150         SET PMEDIDS (KEEP=LINKIDX);
151         BY LINKIDX;
152         IF FIRST.LINKIDX;
153         RUN;
```

NOTE: Compression was disabled for data set WORK.PMEDIDS because compression overhead would increase the size of the data set.  
NOTE: There were 2114 observations read from the data set WORK.PMEDIDS.  
NOTE: The data set WORK.PMEDIDS has 2009 observations and 1 variables.  
NOTE: DATA statement used (Total process time):  
real time 0.01 seconds  
cpu time 0.00 seconds

155

```
156      proc print data=pmedids (obs=50);
157          title3 "sample print of unique linkidxs in work.pmedids";
158      run;
```

NOTE: There were 50 observations read from the data set WORK.PMEDIDS.  
NOTE: The PROCEDURE PRINT printed page 15.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.00 seconds  
cpu time 0.00 seconds

```
159
160      *-----
161      * Get PMED records linked to MVIS events which were for asthma.
162      *-----;
163      PROC SORT DATA=IN.H152A OUT=PMED; BY LINKIDX; RUN;
```

NOTE: There were 324744 observations read from the data set IN.H152A.  
NOTE: SAS threaded sort was used.  
NOTE: The data set WORK.PMED has 324744 observations and 74 variables.  
NOTE: Compressing data set WORK.PMED decreased size by 50.18 percent.  
Compressed is 6472 pages; un-compressed would require 12991 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 12.63 seconds  
cpu time 2.26 seconds

```
164
165      DATA MVPMEDS;
166          MERGE PMED (KEEP=LINKIDX RXRECIDX RXXP12X PERWT12F RXNAME)
167              PMEDIDS (IN=A);
168          BY LINKIDX;
169          IF A;
170      RUN;
```

NOTE: There were 324744 observations read from the data set WORK.PMED.  
NOTE: There were 2009 observations read from the data set WORK.PMEDIDS.  
NOTE: The data set WORK.MVPMEDS has 5534 observations and 5 variables.  
NOTE: Compressing data set WORK.MVPMEDS decreased size by 29.85 percent.  
Compressed is 47 pages; un-compressed would require 67 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.90 seconds  
cpu time 0.64 seconds

```
171
172      proc report data=mvpmeds (obs=200) nowd;
173          column LINKIDX RXRECIDX RXNAME RXXP12X PERWT12F;
174          define linkidx /'LINKIDX' order;
175          define rxrecidx /'RXRECIDX';
176          define rxname /'RXNAME';
177          define rxxp12x /'RXXP12X' display format=8.2;
178          define perwt12f /'PERWT12F' display format=8.2;
179          break after linkidx / skip;
180          title3 "sample print of work.mvpmeds";
181          title4 "PMED (HC-152A) records for unique linkidxs in work.pmedids";
182      run;
```



NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 200 observations read from the data set WORK.MVPMEDS.  
NOTE: The PROCEDURE REPORT printed pages 16-20.  
NOTE: PROCEDURE REPORT used (Total process time):  
real time 0.06 seconds  
cpu time 0.06 seconds

```
183
184 PROC MEANS DATA=MVPMEDS N SUM;
185 VAR RXXP12X;
186 TITLE3 "Total Rx expenditures associated with medical visits (excluding telephone) for asthma";
187 RUN;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 5534 observations read from the data set WORK.MVPMEDS.  
NOTE: The PROCEDURE MEANS printed page 21.  
NOTE: PROCEDURE MEANS used (Total process time):  
real time 0.18 seconds  
cpu time 0.03 seconds

```
188
189 PROC MEANS DATA=MVPMEDS N SUM;
190 VAR RXXP12X;
191 WEIGHT PERWT12F;
192 TITLE3 "Total Rx expenditures associated with medical visits (excluding telephone) for asthma";
193 TITLE5 "Weighted";
194 RUN;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 5534 observations read from the data set WORK.MVPMEDS.  
NOTE: The PROCEDURE MEANS printed page 22.  
NOTE: PROCEDURE MEANS used (Total process time):  
real time 0.02 seconds  
cpu time 0.03 seconds

```
195
196 ods rtf close;
197
```

NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414  
NOTE: The SAS System used:  
real time 34.21 seconds  
cpu time 5.63 seconds

**HC-152I**  
**Sample SAS Job for Example A**  
**sample print of work.asconds - sorted by condidx**  
**COND (H154) records where cccodex=128**

Obs	CONDIDX	CCCODEX
1	200111010041	128
2	200321020011	128
3	200331080011	128
4	200411050011	128
5	200461030011	128
6	200461060011	128
7	200481050011	128
8	200591010021	128
9	200591030011	128
10	200841020051	128
11	200941010021	128
12	200941020051	128
13	200961010081	128
14	200961030011	128
15	201091010021	128
16	201391010061	128
17	201501020021	128
18	201701040011	128
19	201731020021	128
20	201751010042	128
21	201791020011	128
22	201921020051	128
23	201991030011	128
24	202301020021	128
25	202301030011	128
26	202301050061	128
27	202541010021	128
28	202571010021	128
29	202621020042	128
30	202621060012	128
31	202631020011	128
32	202641010041	128
33	202641010061	128
34	202701050011	128
35	202781020011	128
36	202831040011	128
37	202831040021	128
38	202851010021	128
39	202851030012	128
40	202851040011	128
41	202941030011	128
42	202941040011	128
43	202971030011	128
44	203341010051	128
45	203411010021	128
46	203451020021	128
47	203451030011	128
48	203591010041	128
49	203661020011	128
50	203791010011	128

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Sample SAS Job for Example A

sample print of work.asclnks - sorted by condidx  
 events linked to asthma condition records

CONDIDX	EVNTIDX	EVENTYPE
200111010041	200111010011	1 MVIS
200111010041	200111010031	7 HVIS
200111010041	200111010041	7 HVIS
200111010041	200111010051	7 HVIS
200331080011	200331080021	8 PMED
200111010041	200411050011	1 MVIS
200111010041	200411050021	8 PMED
200111010041	200411050031	1 MVIS
200111010041	200411050041	8 PMED
200111010041	200411050081	8 PMED
200461030011	200461030021	8 PMED
200591010021	200591010131	8 PMED
200591030011	200591030041	8 PMED
200591030011	200591030051	8 PMED
200591030011	200591030151	8 PMED
200591030011	200591030161	8 PMED
200941010021	200941010021	8 PMED
200941010021	200941010031	8 PMED
200941010021	200941010271	8 PMED
200941020051	200941020171	1 MVIS
200941020051	200941020201	1 MVIS
200961010081	200961010401	1 MVIS
200961010081	200961010411	1 MVIS
200961010081	200961010421	1 MVIS
200961010081	200961010431	1 MVIS
200961030011	200961030041	8 PMED
201091010021	201091010011	1 MVIS
201091010021	201091010021	1 MVIS
201091010021	201091010031	1 MVIS
201091010021	201091010041	8 PMED
201391010061	201391010061	1 MVIS
201391010061	201391010071	1 MVIS
201391010061	201391010081	1 MVIS
201391010061	201391010091	2 OPAT
201391010061	201391010101	2 OPAT
201391010061	201391010141	8 PMED
201391010061	201391010211	8 PMED
201391010061	201391010251	8 PMED
201391010061	201391010321	8 PMED
201501020021	201501020111	1 MVIS
201501020021	201501020121	1 MVIS
201501020021	201501020131	1 MVIS
201501020021	201501020141	1 MVIS
201501020021	201501020151	1 MVIS
201501020021	201501020161	1 MVIS
201501020021	201501020171	1 MVIS
201501020021	201501020181	1 MVIS
201501020021	201501020221	8 PMED
201701040011	201701040011	3 EROM
201731020021	201731020151	8 PMED
201731020021	201731020261	8 PMED
201751010042	201751010072	8 PMED
201751010042	201751010092	1 MVIS
201751010042	201751010112	8 PMED
201791020011	201791020031	1 MVIS
201791020011	201791020041	8 PMED
201921020051	201921020081	1 MVIS
201991030011	201991030011	1 MVIS
201991030011	201991030031	8 PMED
202301050061	202301050111	1 MVIS
202301050061	202301050121	1 MVIS
202301050061	202301050181	8 PMED
202541010021	202541010101	8 PMED
202541010021	202541010111	8 PMED
202621020042	202621020042	8 PMED
202621020042	202621020052	8 PMED
202621020042	202621020082	8 PMED
202621020042	202621020102	3 EROM
202621020042	202621020112	4 STAZ

<b>CONDIDX</b>	<b>EVNTIDX</b>	<b>EVENTYPE</b>
202621020042	202621020142	1 MVIS
202621020042	202621020152	1 MVIS
202621020042	202621020212	8 PMED
202641010041	202641010041	4 STAZ
202641010041	202641010051	2 OPAT
202641010041	202641010061	2 OPAT

**HC-152I**  
**Sample SAS Job for Example A**  
**sample print of work.asclnks - sorted by evntidx**

Obs	CONDIDX	EVNTIDX	EVENTYPE
1	200111010041	200111010011	1 MVIS
2	200111010041	200111010031	7 HVIS
3	200111010041	200111010041	7 HVIS
4	200111010041	200111010051	7 HVIS
5	200331080011	200331080021	8 PMED
6	200411050011	200411050011	1 MVIS
7	200411050011	200411050021	8 PMED
8	200411050011	200411050031	1 MVIS
9	200411050011	200411050041	8 PMED
10	200411050011	200411050081	8 PMED
11	200461030011	200461030021	8 PMED
12	200591010021	200591010131	8 PMED
13	200591030011	200591030041	8 PMED
14	200591030011	200591030051	8 PMED
15	200591030011	200591030151	8 PMED
16	200591030011	200591030161	8 PMED
17	200941010021	200941010021	8 PMED
18	200941010021	200941010031	8 PMED
19	200941010021	200941010271	8 PMED
20	200941020051	200941020171	1 MVIS
21	200941020051	200941020201	1 MVIS
22	200961010081	200961010401	1 MVIS
23	200961010081	200961010411	1 MVIS
24	200961010081	200961010421	1 MVIS
25	200961010081	200961010431	1 MVIS
26	200961030011	200961030041	8 PMED
27	201091010021	201091010011	1 MVIS
28	201091010021	201091010021	1 MVIS
29	201091010021	201091010031	1 MVIS
30	201091010021	201091010041	8 PMED
31	201391010061	201391010061	1 MVIS
32	201391010061	201391010071	1 MVIS
33	201391010061	201391010081	1 MVIS
34	201391010061	201391010091	2 OPAT
35	201391010061	201391010101	2 OPAT
36	201391010061	201391010141	8 PMED
37	201391010061	201391010211	8 PMED
38	201391010061	201391010251	8 PMED
39	201391010061	201391010321	8 PMED
40	201501020021	201501020111	1 MVIS
41	201501020021	201501020121	1 MVIS
42	201501020021	201501020131	1 MVIS
43	201501020021	201501020141	1 MVIS
44	201501020021	201501020151	1 MVIS
45	201501020021	201501020161	1 MVIS
46	201501020021	201501020171	1 MVIS
47	201501020021	201501020181	1 MVIS
48	201501020021	201501020221	8 PMED
49	201701040011	201701040011	3 EROM
50	201731020021	201731020151	8 PMED

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Sample SAS Job for Example A

sample print of unique evntidxs from work.asclnks

Obs	EVNTIDX	EVENTYPE
1	200111010011	1 MVIS
2	200111010031	7 HVIS
3	200111010041	7 HVIS
4	200111010051	7 HVIS
5	200331080021	8 PMED
6	200411050011	1 MVIS
7	200411050021	8 PMED
8	200411050031	1 MVIS
9	200411050041	8 PMED
10	200411050081	8 PMED
11	200461030021	8 PMED
12	200591010131	8 PMED
13	200591030041	8 PMED
14	200591030051	8 PMED
15	200591030151	8 PMED
16	200591030161	8 PMED
17	200941010021	8 PMED
18	200941010031	8 PMED
19	200941010271	8 PMED
20	200941020171	1 MVIS
21	200941020201	1 MVIS
22	200961010401	1 MVIS
23	200961010411	1 MVIS
24	200961010421	1 MVIS
25	200961010431	1 MVIS
26	200961030041	8 PMED
27	201091010011	1 MVIS
28	201091010021	1 MVIS
29	201091010031	1 MVIS
30	201091010041	8 PMED
31	201391010061	1 MVIS
32	201391010071	1 MVIS
33	201391010081	1 MVIS
34	201391010091	2 OPAT
35	201391010101	2 OPAT
36	201391010141	8 PMED
37	201391010211	8 PMED
38	201391010251	8 PMED
39	201391010321	8 PMED
40	201501020111	1 MVIS
41	201501020121	1 MVIS
42	201501020131	1 MVIS
43	201501020141	1 MVIS
44	201501020151	1 MVIS
45	201501020161	1 MVIS
46	201501020171	1 MVIS
47	201501020181	1 MVIS
48	201501020221	8 PMED
49	201701040011	3 EROM
50	201731020151	8 PMED

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Sample SAS Job for Example A

sample print of work.asmvis

unique evntidxs from work.asclnks that are non-telephone MVIS (HC-152G) events

Obs	EVNTIDX	EVENTYPE
1	200111010011	1 MVIS
2	200411050011	1 MVIS
3	200411050031	1 MVIS
4	200941020171	1 MVIS
5	200941020201	1 MVIS
6	200961010401	1 MVIS
7	200961010411	1 MVIS
8	200961010421	1 MVIS
9	200961010431	1 MVIS
10	201091010011	1 MVIS
11	201091010021	1 MVIS
12	201091010031	1 MVIS
13	201391010061	1 MVIS
14	201391010071	1 MVIS
15	201391010081	1 MVIS
16	201501020111	1 MVIS
17	201501020121	1 MVIS
18	201501020131	1 MVIS
19	201501020141	1 MVIS
20	201501020151	1 MVIS
21	201501020161	1 MVIS
22	201501020171	1 MVIS
23	201501020181	1 MVIS
24	201751010092	1 MVIS
25	201791020031	1 MVIS
26	201921020081	1 MVIS
27	201991030011	1 MVIS
28	202301050111	1 MVIS
29	202301050121	1 MVIS
30	202621020142	1 MVIS
31	202621020152	1 MVIS
32	202831040011	1 MVIS
33	202831040021	1 MVIS
34	202851040081	1 MVIS
35	203341010011	1 MVIS
36	203341010021	1 MVIS
37	203341010261	1 MVIS
38	203411010121	1 MVIS
39	203451020101	1 MVIS
40	203661020101	1 MVIS
41	203951020051	1 MVIS
42	204621050011	1 MVIS
43	205071010011	1 MVIS
44	205081010061	1 MVIS
45	205331010011	1 MVIS
46	205411010041	1 MVIS
47	205411010051	1 MVIS
48	205411010061	1 MVIS
49	205411010071	1 MVIS
50	205411010081	1 MVIS

HC-152I

Sample SAS Job for Example A

sample print of work.rxlk - sorted by evtidx  
 Rx+event link file records (HC-152IF2)

EVNTIDX	LINKIDX	EVENTYPE
200051010011	200051010031	1 MVIS
200051010011	200051010041	1 MVIS
200051010021	200051010051	1 MVIS
200051010021	200051010061	1 MVIS
200051010021	200051010071	1 MVIS
200051010081	200051010111	1 MVIS
200051010081	200051010121	1 MVIS
200051010081	200051010131	1 MVIS
200101020011	200101020031	1 MVIS
200101040031	200101040041	1 MVIS
200151020021	200151020041	1 MVIS
200161010091	200161010111	5 DVIS
200161010091	200161010121	5 DVIS
200161010101	200161010131	5 DVIS
200161010101	200161010141	5 DVIS
200171030011	200171030021	1 MVIS
200201010021	200201010041	1 MVIS
200201010021	200201010051	1 MVIS
200201010091	200201010211	1 MVIS
200201010191	200201010221	4 STAZ
200201020011	200201020031	1 MVIS
200201020021	200201020041	1 MVIS
200201020061	200201020131	1 MVIS
200201020081	200201020141	1 MVIS
200201020081	200201020151	1 MVIS
200201020091	200201020161	1 MVIS
200201020121	200201020171	3 EROM
200201020121	200201020181	3 EROM
200201020191	200201020281	1 MVIS
200202010012	200202010032	3 EROM
200202010022	200202010042	3 EROM
200202010022	200202010052	3 EROM
200241010011	200241010031	1 MVIS
200241010061	200241010081	2 OPAT
200241020021	200241020051	1 MVIS
200241020111	200241020121	1 MVIS
200241030022	200241030042	1 MVIS
200241030022	200241030052	1 MVIS
200241030032	200241030042	1 MVIS
200241030082	200241030112	1 MVIS
200241030102	200241030122	1 MVIS
200251010011	200251010021	1 MVIS
200271010031	200271010051	1 MVIS
200271010031	200271010061	1 MVIS
200271010041	200271010071	1 MVIS
200271010161	200271010421	1 MVIS
200271010161	200271010431	1 MVIS
200271010351	200271010441	1 MVIS
200271010351	200271010451	1 MVIS
200271010561	200271010751	1 MVIS
200271010621	200271010761	1 MVIS
200271010621	200271010771	1 MVIS
200271020051	200271020561	1 MVIS
200271020181	200271020581	4 STAZ
200271020181	200271020591	4 STAZ
200271020271	200271020601	5 DVIS
200271020781	200271020891	1 MVIS
200301010041	200301010031	2 OPAT
200301010051	200301010061	1 MVIS
200301010051	200301010071	1 MVIS
200311020021	200311020031	1 MVIS
200311020211	200311020441	2 OPAT
200311020301	200311020451	1 MVIS
200311020311	200311020461	1 MVIS
200311020311	200311020471	1 MVIS
200311020321	200311020471	1 MVIS
200311020321	200311020481	1 MVIS
200311020321	200311020491	1 MVIS
200311020321	200311020501	1 MVIS



EVNTIDX	LINKIDX	EVENTYPE
200321030021	200321030031	1 MVIS
200341010011	200341010051	5 DVIS
200341010031	200341010061	1 MVIS
200341010031	200341010071	1 MVIS
200341010031	200341010081	1 MVIS
200341010031	200341010091	1 MVIS
200341010031	200341010101	1 MVIS
200341010141	200341010171	1 MVIS
200341010141	200341010181	1 MVIS
200341010141	200341010191	1 MVIS
200341010141	200341010201	1 MVIS
200341010141	200341010211	1 MVIS
200341010141	200341010221	1 MVIS
200341030011	200341030031	5 DVIS
200341030021	200341030041	1 MVIS
200341030051	200341030061	1 MVIS
200341030051	200341030071	1 MVIS
200341030051	200341030081	1 MVIS
200381010011	200381010021	1 MVIS
200401010041	200401010081	1 MVIS
200401010041	200401010091	1 MVIS
200401010061	200401010101	2 OPAT
200401010111	200401010271	1 MVIS
200401020021	200401020061	1 MVIS
200411020012	200411020022	1 MVIS
200411020012	200411020032	1 MVIS
200411040011	200411040021	1 MVIS
200411050011	200411050021	1 MVIS
200411050031	200411050041	1 MVIS
200421010011	200421010021	1 MVIS
200421010121	200421010181	1 MVIS
200421010121	200421010191	1 MVIS
200421010121	200421010201	1 MVIS
200421010121	200421010211	1 MVIS
200421010121	200421010221	1 MVIS
200421010131	200421010171	1 MVIS
200421010131	200421010231	1 MVIS
200441020081	200441020101	4 STAZ
200461020021	200461020031	1 MVIS
200461020051	200461020071	1 MVIS
200461030011	200461030021	1 MVIS
200461050021	200461050031	1 MVIS
200461060041	200461060061	1 MVIS
200461060041	200461060071	1 MVIS
200461060041	200461060081	1 MVIS
200461060041	200461060091	1 MVIS
200471010021	200471010081	1 MVIS
200471010061	200471010091	1 MVIS
200471010101	200471010301	5 DVIS
200481020011	200481020071	1 MVIS
200481020011	200481020081	1 MVIS
200493020083	200493020143	3 EROM
200493020103	200493020153	1 MVIS
200493020103	200493020163	1 MVIS
200501010021	200501010031	1 MVIS
200501020011	200501020151	1 MVIS
200511010011	200511010031	1 MVIS
200511010011	200511010041	1 MVIS
200531010011	200531010061	1 MVIS
200531010091	200531010131	1 MVIS
200531010101	200531010141	2 OPAT
200531010101	200531010151	2 OPAT
200541020051	200541020091	1 MVIS
200541020051	200541020101	1 MVIS
200541020051	200541020111	1 MVIS
200551030011	200551030021	1 MVIS
200551030011	200551030031	1 MVIS
200591010141	200591010231	3 EROM
200591030021	200591030031	1 MVIS
200591030121	200591030141	1 MVIS
200591040021	200591040041	1 MVIS

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Sample SAS Job for Example A

sample print of work.pmedids - sorted by evntidx  
work.rxlk records for evntidxs in work.asmvis

EVNTIDX	LINKIDX	EVENTYPE
200411050011	200411050021	1 MVIS
200411050031	200411050041	1 MVIS
200941020171	200941020261	1 MVIS
200941020201	200941020261	1 MVIS
200961010401	200961010541	1 MVIS
200961010401	200961010551	1 MVIS
200961010401	200961010561	1 MVIS
200961010401	200961010571	1 MVIS
200961010401	200961010581	1 MVIS
200961010401	200961010591	1 MVIS
201091010011	201091010041	1 MVIS
201391010061	201391010121	1 MVIS
201751010092	201751010112	1 MVIS
201791020031	201791020041	1 MVIS
201791020031	201791020051	1 MVIS
201991030011	201991030031	1 MVIS
201991030011	201991030041	1 MVIS
202301050111	202301050181	1 MVIS
202621020142	202621020212	1 MVIS
202831040011	202831040041	1 MVIS
202851040081	202851040101	1 MVIS
202851040081	202851040111	1 MVIS
203411010121	203411010261	1 MVIS
203451020101	203451020111	1 MVIS
203451020101	203451020121	1 MVIS
203661020101	203661020121	1 MVIS
203661020101	203661020131	1 MVIS
203951020051	203951020061	1 MVIS
204621050011	204621050021	1 MVIS
205071010011	205071010071	1 MVIS
205071010011	205071010081	1 MVIS
205071010011	205071010091	1 MVIS
205331010011	205331010021	1 MVIS
205331010011	205331010031	1 MVIS
205331010011	205331010041	1 MVIS
205411010041	205411010181	1 MVIS
205411010041	205411010191	1 MVIS
205411010041	205411010201	1 MVIS
205411010041	205411010211	1 MVIS
205411010041	205411010221	1 MVIS
205411010041	205411010231	1 MVIS
205411010041	205411010241	1 MVIS
205411010041	205411010251	1 MVIS
205411010041	205411010261	1 MVIS
205411010041	205411010271	1 MVIS
205411010041	205411010281	1 MVIS
205411010041	205411010291	1 MVIS
205411010041	205411010301	1 MVIS
205411010041	205411010311	1 MVIS
205411010041	205411010321	1 MVIS

HC-152I  
 Sample SAS Job for Example A  
 sample print of work.pmedids - sorted by linkidx

Obs	EVNTIDX	LINKIDX	EVENTYPE
1	200411050011	200411050021	1 MVIS
2	200411050031	200411050041	1 MVIS
3	200941020171	200941020261	1 MVIS
4	200941020201	200941020261	1 MVIS
5	200961010401	200961010541	1 MVIS
6	200961010401	200961010551	1 MVIS
7	200961010401	200961010561	1 MVIS
8	200961010401	200961010571	1 MVIS
9	200961010401	200961010581	1 MVIS
10	200961010401	200961010591	1 MVIS
11	201091010011	201091010041	1 MVIS
12	201391010061	201391010121	1 MVIS
13	201751010092	201751010112	1 MVIS
14	201791020031	201791020041	1 MVIS
15	201791020031	201791020051	1 MVIS
16	201991030011	201991030031	1 MVIS
17	201991030011	201991030041	1 MVIS
18	202301050111	202301050181	1 MVIS
19	202621020142	202621020212	1 MVIS
20	202831040011	202831040041	1 MVIS
21	202851040081	202851040101	1 MVIS
22	202851040081	202851040111	1 MVIS
23	203411010121	203411010261	1 MVIS
24	203451020101	203451020111	1 MVIS
25	203451020101	203451020121	1 MVIS
26	203661020101	203661020121	1 MVIS
27	203661020101	203661020131	1 MVIS
28	203951020051	203951020061	1 MVIS
29	204621050011	204621050021	1 MVIS
30	205071010011	205071010071	1 MVIS
31	205071010011	205071010081	1 MVIS
32	205071010011	205071010091	1 MVIS
33	205331010011	205331010021	1 MVIS
34	205331010011	205331010031	1 MVIS
35	205331010011	205331010041	1 MVIS
36	205411010041	205411010181	1 MVIS
37	205411010051	205411010181	1 MVIS
38	205411010041	205411010191	1 MVIS
39	205411010051	205411010191	1 MVIS
40	205411010041	205411010201	1 MVIS
41	205411010051	205411010201	1 MVIS
42	205411010041	205411010211	1 MVIS
43	205411010051	205411010211	1 MVIS
44	205411010041	205411010221	1 MVIS
45	205411010051	205411010221	1 MVIS
46	205411010041	205411010231	1 MVIS
47	205411010051	205411010231	1 MVIS
48	205411010041	205411010241	1 MVIS
49	205411010051	205411010241	1 MVIS
50	205411010041	205411010251	1 MVIS

**HC-152I**  
**Sample SAS Job for Example A**  
**sample print of unique linkidxs in work.pmedids**

Obs	LINKIDX
1	200411050021
2	200411050041
3	200941020261
4	200961010541
5	200961010551
6	200961010561
7	200961010571
8	200961010581
9	200961010591
10	201091010041
11	201391010121
12	201751010112
13	201791020041
14	201791020051
15	201991030031
16	201991030041
17	202301050181
18	202621020212
19	202831040041
20	202851040101
21	202851040111
22	203411010261
23	203451020111
24	203451020121
25	203661020121
26	203661020131
27	203951020061
28	204621050021
29	205071010071
30	205071010081
31	205071010091
32	205331010021
33	205331010031
34	205331010041
35	205411010181
36	205411010191
37	205411010201
38	205411010211
39	205411010221
40	205411010231
41	205411010241
42	205411010251
43	205411010261
44	205411010271
45	205411010281
46	205411010291
47	205411010301
48	205411010311
49	205411010321
50	205411010451

HC-152I  
Sample SAS Job for Example A  
sample print of work.mvpmeds  
PMED (HC-152A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
200411050021	200411050021001	NEBILIZER	127.89	8127.03
200411050041	200411050041001	ALBUTEROL	2.67	8127.03
200941020261	200941020261001	AMLODIPINE	9.64	6166.62
200941020261	200941020261002	AMLODIPINE	9.64	6166.62
200941020261	200941020261003	AMLODIPINE	9.64	6166.62
200941020261	200941020261004	AMLODIPINE	9.64	6166.62
200961010541	200961010541001	METOPROLOL	21.78	2297.49
200961010541	200961010541002	METOPROLOL	21.78	2297.49
200961010541	200961010541003	METOPROLOL	21.78	2297.49
200961010541	200961010541004	METOPROLOL	21.78	2297.49
200961010551	200961010551001	ENALAPRIL	4.88	2297.49
200961010551	200961010551002	ENALAPRIL	4.88	2297.49
200961010551	200961010551003	ENALAPRIL	4.88	2297.49
200961010551	200961010551004	ENALAPRIL	4.88	2297.49
200961010561	200961010561001	AGGRENOX	253.45	2297.49
200961010561	200961010561002	AGGRENOX	253.45	2297.49
200961010561	200961010561003	AGGRENOX	253.45	2297.49
200961010561	200961010561004	AGGRENOX	253.45	2297.49
200961010571	200961010571001	FENOFIBRATE	45.86	2297.49
200961010581	200961010581001	GEMFIBROZIL	13.66	2297.49
200961010591	200961010591001	METFORMIN	17.39	2297.49
200961010591	200961010591002	METFORMIN	17.39	2297.49
200961010591	200961010591003	METFORMIN	17.39	2297.49
200961010591	200961010591004	METFORMIN	17.39	2297.49
201091010041	201091010041001	VENTOLIN HFA	43.26	5956.03
201091010041	201091010041002	VENTOLIN HFA	43.26	5956.03
201091010041	201091010041003	VENTOLIN HFA	43.26	5956.03
201391010121	201391010121001	AZITHROMYCIN	5.01	8966.52
201751010112	201751010112001	AZITHROMYCIN	26.98	4636.78
201751010112	201751010112002	AZITHROMYCIN	26.98	4636.78
201791020041	201791020041001	PROAIR INHALER	41.82	18436.16
201791020051	201791020051001	CHANTIX	181.28	18436.16
201991030031	201991030031001	ADVAIR DISKUS	182.02	3526.80
201991030041	201991030041001	FLONASE	29.78	3526.80
202301050181	202301050181001	ALBUTEROL	0.00	2460.35
202301050181	202301050181002	ALBUTEROL	0.00	2460.35
202301050181	202301050181003	ALBUTEROL	0.00	2460.35
202301050181	202301050181004	ALBUTEROL	0.00	2460.35
202301050181	202301050181005	ALBUTEROL	0.00	2460.35
202301050181	202301050181006	ALBUTEROL	0.00	2460.35
202301050181	202301050181007	ALBUTEROL	0.00	2460.35
202301050181	202301050181008	ALBUTEROL	0.00	2460.35
202301050181	202301050181009	ALBUTEROL	0.00	2460.35
202301050181	202301050181010	ALBUTEROL	0.00	2460.35
202301050181	202301050181011	ALBUTEROL	0.00	2460.35
202301050181	202301050181012	ALBUTEROL	0.00	2460.35
202301050181	202301050181013	ALBUTEROL	0.00	2460.35
202301050181	202301050181014	ALBUTEROL	0.00	2460.35
202301050181	202301050181015	ALBUTEROL	0.00	2460.35
202621020212	202621020212001	ADVAIR	149.86	3241.64
202831040041	202831040041001	ALBUTEROL	61.41	2317.84
202851040101	202851040101001	MONTELUKAST	244.68	19783.69
202851040111	202851040111001	PROAIR HFA	43.74	19783.69
203411010261	203411010261001	ALBUTEROL	11.00	9581.70
203451020111	203451020111001	SERTRALINE	48.99	11600.60
203451020121	203451020121001	ADVAIR HFA	326.99	11600.60
203451020121	203451020121002	ADVAIR HFA	326.99	11600.60
203451020121	203451020121003	ADVAIR HFA	326.99	11600.60
203661020121	203661020121001	MONTELUKAST	10.00	4796.82
203661020131	203661020131001	SYMBICORT	249.24	4796.82
203661020131	203661020131002	SYMBICORT	249.24	4796.82
203661020131	203661020131003	SYMBICORT	249.24	4796.82
203661020131	203661020131004	SYMBICORT	249.24	4796.82
203951020061	203951020061001	ALBUTEROL SULFATE	19.75	4373.85
204621050021	204621050021001	PREDNISOLONE	5.00	2160.24
205071010071	205071010071001	ALBUTEROL INHALER	53.10	11747.34
205071010081	205071010081001	COUGH	2.25	11747.34
205071010091	205071010091001	MICROGESTIN	16.66	11747.34
205331010021	205331010021001	HYDROCHLOROT	4.00	8084.80

LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
205331010031	205331010031001	AMLODIPINE	16.32	8084.80
205331010041	205331010041001	HYDROCO/APAP	70.70	8084.80
205411010181	205411010181001	ONETOUCH	79.36	3051.60
205411010181	205411010181002	ONETOUCH	79.36	3051.60
205411010181	205411010181003	ONETOUCH	79.36	3051.60
205411010181	205411010181004	ONETOUCH	79.36	3051.60
205411010181	205411010181005	ONETOUCH	79.36	3051.60
205411010181	205411010181006	ONETOUCH	79.36	3051.60
205411010181	205411010181007	ONETOUCH	79.36	3051.60
205411010191	205411010191001	METOCLOPRAMIDE	24.24	3051.60
205411010191	205411010191002	METOCLOPRAMIDE	24.24	3051.60
205411010191	205411010191003	METOCLOPRAMIDE	24.24	3051.60
205411010191	205411010191004	METOCLOPRAMIDE	24.24	3051.60
205411010191	205411010191005	METOCLOPRAMIDE	24.24	3051.60
205411010191	205411010191006	METOCLOPRAMIDE	24.24	3051.60
205411010191	205411010191007	METOCLOPRAMIDE	24.24	3051.60
205411010201	205411010201001	ISOSORBIDE MONO	35.90	3051.60
205411010201	205411010201002	ISOSORBIDE MONO	35.90	3051.60
205411010201	205411010201003	ISOSORBIDE MONO	35.90	3051.60
205411010201	205411010201004	ISOSORBIDE MONO	35.90	3051.60
205411010201	205411010201005	ISOSORBIDE MONO	35.90	3051.60
205411010201	205411010201006	ISOSORBIDE MONO	35.90	3051.60
205411010201	205411010201007	ISOSORBIDE MONO	35.90	3051.60
205411010211	205411010211001	VITAMIN D	4.76	3051.60
205411010211	205411010211002	VITAMIN D	4.76	3051.60
205411010211	205411010211003	VITAMIN D	4.94	3051.60
205411010211	205411010211004	VITAMIN D	4.94	3051.60
205411010211	205411010211005	VITAMIN D	4.91	3051.60
205411010211	205411010211006	VITAMIN D	4.94	3051.60
205411010211	205411010211007	VITAMIN D	4.94	3051.60
205411010221	205411010221001	CARVEDILOL	119.99	3051.60
205411010221	205411010221002	CARVEDILOL	119.99	3051.60
205411010221	205411010221003	CARVEDILOL	119.99	3051.60
205411010221	205411010221004	CARVEDILOL	119.99	3051.60
205411010221	205411010221005	CARVEDILOL	119.99	3051.60
205411010221	205411010221006	CARVEDILOL	119.99	3051.60
205411010221	205411010221007	CARVEDILOL	119.99	3051.60
205411010231	205411010231001	COREG CR	168.36	3051.60
205411010231	205411010231002	COREG CR	168.36	3051.60
205411010231	205411010231003	COREG CR	168.36	3051.60
205411010231	205411010231004	COREG CR	168.36	3051.60
205411010231	205411010231005	COREG CR	168.36	3051.60
205411010231	205411010231006	COREG CR	168.36	3051.60
205411010231	205411010231007	COREG CR	168.36	3051.60
205411010241	205411010241001	STORE IRON	2.40	3051.60
205411010241	205411010241002	STORE IRON	2.40	3051.60
205411010241	205411010241003	STORE IRON	2.40	3051.60
205411010241	205411010241004	STORE IRON	2.40	3051.60
205411010241	205411010241005	STORE IRON	2.40	3051.60
205411010241	205411010241006	STORE IRON	2.40	3051.60
205411010241	205411010241007	STORE IRON	2.40	3051.60
205411010251	205411010251001	SPIRONOLACT	13.58	3051.60
205411010251	205411010251002	SPIRONOLACT	13.58	3051.60
205411010251	205411010251003	SPIRONOLACT	13.58	3051.60
205411010251	205411010251004	SPIRONOLACT	13.58	3051.60
205411010251	205411010251005	SPIRONOLACT	13.58	3051.60
205411010251	205411010251006	SPIRONOLACT	13.58	3051.60
205411010251	205411010251007	SPIRONOLACT	13.58	3051.60
205411010261	205411010261001	ALLOPURINOL	10.79	3051.60
205411010261	205411010261002	ALLOPURINOL	10.79	3051.60
205411010261	205411010261003	ALLOPURINOL	10.79	3051.60
205411010261	205411010261004	ALLOPURINOL	10.79	3051.60
205411010261	205411010261005	ALLOPURINOL	4.91	3051.60
205411010261	205411010261006	ALLOPURINOL	4.91	3051.60
205411010261	205411010261007	ALLOPURINOL	4.91	3051.60
205411010271	205411010271001	SIMVASTATIN	18.29	3051.60
205411010271	205411010271002	SIMVASTATIN	18.29	3051.60
205411010271	205411010271003	SIMVASTATIN	18.29	3051.60
205411010271	205411010271004	SIMVASTATIN	18.29	3051.60
205411010271	205411010271005	SIMVASTATIN	18.29	3051.60
205411010271	205411010271006	SIMVASTATIN	18.29	3051.60
205411010271	205411010271007	SIMVASTATIN	18.29	3051.60
205411010281	205411010281001	ACIDOPHILUS	6.19	3051.60
205411010281	205411010281002	ACIDOPHILUS	6.19	3051.60

LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
205411010281	205411010281003	ACIDOPHILUS	6.19	3051.60
205411010281	205411010281004	ACIDOPHILUS	6.19	3051.60
205411010281	205411010281005	ACIDOPHILUS	6.19	3051.60
205411010281	205411010281006	ACIDOPHILUS	6.19	3051.60
205411010281	205411010281007	ACIDOPHILUS	6.19	3051.60
205411010291	205411010291001	JANUVIA	233.71	3051.60
205411010291	205411010291002	JANUVIA	233.71	3051.60
205411010291	205411010291003	JANUVIA	233.71	3051.60
205411010291	205411010291004	JANUVIA	233.71	3051.60
205411010291	205411010291005	JANUVIA	233.71	3051.60
205411010291	205411010291006	JANUVIA	233.71	3051.60
205411010291	205411010291007	JANUVIA	233.71	3051.60
205411010301	205411010301001	METOLAZONE	20.85	3051.60
205411010301	205411010301002	METOLAZONE	20.85	3051.60
205411010301	205411010301003	METOLAZONE	20.85	3051.60
205411010301	205411010301004	METOLAZONE	20.85	3051.60
205411010301	205411010301005	METOLAZONE	20.85	3051.60
205411010301	205411010301006	METOLAZONE	20.85	3051.60
205411010301	205411010301007	METOLAZONE	20.85	3051.60
205411010311	205411010311001	COMBIVENT	274.99	3051.60
205411010311	205411010311002	COMBIVENT	274.99	3051.60
205411010311	205411010311003	COMBIVENT	274.99	3051.60
205411010311	205411010311004	COMBIVENT	274.99	3051.60
205411010311	205411010311005	COMBIVENT	274.99	3051.60
205411010311	205411010311006	COMBIVENT	274.99	3051.60
205411010311	205411010311007	COMBIVENT	274.99	3051.60
205411010321	205411010321001	FLUTICASONE	21.70	3051.60
205411010321	205411010321002	FLUTICASONE	21.70	3051.60
205411010321	205411010321003	FLUTICASONE	21.70	3051.60
205411010321	205411010321004	FLUTICASONE	21.70	3051.60
205411010321	205411010321005	FLUTICASONE	21.70	3051.60
205411010321	205411010321006	FLUTICASONE	21.70	3051.60
205411010321	205411010321007	FLUTICASONE	21.70	3051.60
205411010451	205411010451001	NOVOFINE	37.83	3051.60
205411010451	205411010451002	NOVOFINE	37.83	3051.60
205411010451	205411010451003	FREESTYLE	101.64	3051.60
205411010451	205411010451004	FREESTYLE	101.64	3051.60
205411010451	205411010451005	NOVOFINE	37.83	3051.60
205411010461	205411010461001	METOCLOPRAMIDE	14.99	3051.60
205411010461	205411010461002	METOCLOPRAMIDE	14.99	3051.60
205411010461	205411010461003	METOCLOPRAMIDE	14.99	3051.60
205411010461	205411010461004	METOCLOPRAMIDE	14.99	3051.60
205411010461	205411010461005	METOCLOPRAMIDE	14.99	3051.60
205411010471	205411010471001	JANUVIA	659.82	3051.60
205411010471	205411010471002	JANUVIA	659.82	3051.60
205411010471	205411010471003	JANUVIA	659.82	3051.60
205411010471	205411010471004	JANUVIA	659.82	3051.60
205411010471	205411010471005	JANUVIA	659.82	3051.60
205411010481	205411010481001	FERROUS SULF	15.75	3051.60
205411010481	205411010481002	FERROUS SULF	15.75	3051.60
205411010491	205411010491001	ISOSORBIDE MN	10.67	3051.60
205411010491	205411010491002	ISOSORBIDE MN	10.67	3051.60
205411010491	205411010491003	ISOSORBIDE MN	10.67	3051.60
205411010491	205411010491004	ISOSORBIDE MN	10.67	3051.60
205411010491	205411010491005	ISOSORBIDE MN	10.67	3051.60
205411010501	205411010501001	VITAMIN D	4.76	3051.60
205411010501	205411010501002	VITAMIN D	4.76	3051.60

HC-152I

Sample SAS Job for Example A

Total Rx expenditures associated with medical visits (excluding telephone) for asthma

Analysis Variable: RXXP12X SUM OF PAYMENTS RXSF12X-RXOU12X(IMPUTED)

N	Sum
5534	515610.96



HC-152I

Sample SAS Job for Example A

Total Rx expenditures associated with medical visits (excluding telephone) for asthma

Weighted

Analysis Variable: RXXP12X SUM OF PAYMENTS RXSF12X-RXOU12X(IMPUTED)

N	Sum
5534	4982195102

1  
August 24, 2014

The SAS System

22:38 Sunday,

NOTE: Copyright (c) 2002-2010 by SAS Institute Inc., Cary, NC, USA.  
NOTE: SAS (r) Proprietary Software 9.3 (TS1M2)  
NOTE: This session is executing on the W32\_7PRO platform.

NOTE: Enhanced analytical products:

SAS/STAT 12.1, SAS/ETS 12.1, SAS/OR 12.1, SAS/IML 12.1, SAS/QC 12.1

NOTE: SAS initialization used:  
real time 2.39 seconds  
cpu time 0.26 seconds

NOTE: AUTOEXEC processing beginning; file is C:\Program Files\SAS\SASMISC\autoexec\_93.sas.

NOTE: DATA statement used (Total process time):  
real time 0.04 seconds  
cpu time 0.04 seconds

NOTE: AUTOEXEC processing completed.

1 ods rtf file = 'C:\Data\sampleB.rtf' bodytitle;

NOTE: Writing RTF Body file: C:\Data\sampleB.rtf

2

3 ods noproctitle;

4

5 OPTIONS LS=132 PS=59;

6

7 TITLE1 "HC-152I";

8 TITLE2 "Sample SAS Job for Example B";

9

10 LIBNAME IN "C:\Data";

NOTE: Directory for library IN contains files of mixed engine types.

NOTE: Libref IN was successfully assigned as follows:

Engine: V9  
Physical Name: C:\Data

11

12 \*\*\*\*\*

13 \* Calculate the expenditures for prescribed medicines associated with asthma.

14 \*\*\*\*\*;

15 PROC FORMAT;

16 VALUE EVENTYPE

17 1 = "1 MVIS"

18 2 = "2 OPAT"

19 3 = "3 EROM"

20 4 = "4 STAZ"

21 5 = "5 DVIS"

22 6 = "6 OMED"

23 7 = "7 HVIS"

24 8 = "8 PMED";

NOTE: Format EVENTYPE has been output.

25 RUN;

NOTE: PROCEDURE FORMAT used (Total process time):  
real time 0.16 seconds  
cpu time 0.03 seconds

```
26  
27 *-----  
28 * Get condition records coded as asthma.  
29 *-----;  
30 DATA ASCONDS;  
31 SET IN.H154 (KEEP=CONDIDX CCCODEX);  
32 IF CCCODEX="128";  
33 RUN;
```

NOTE: There were 118850 observations read from the data set IN.H154.  
NOTE: The data set WORK.ASCONDS has 2515 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCONDS increased size by 90.00 percent.  
Compressed is 19 pages; un-compressed would require 10 pages.  
NOTE: DATA statement used (Total process time):  
real time 1.93 seconds  
cpu time 0.04 seconds

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

NOTE: There were 2515 observations read from the data set WORK.ASCONDS.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.ASCONDS has 2515 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCONDS increased size by 90.00 percent.  
Compressed is 19 pages; un-compressed would require 10 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.00 seconds  
cpu time 0.01 seconds

```
39  
40 proc print data=asconds (obs=50);  
41 title3 "sample print of work.asconds - sorted by condidx";  
42 title4 "COND (H154) records where cccodex=128";  
43 run;
```

NOTE: There were 50 observations read from the data set WORK.ASCONDS.  
NOTE: The PROCEDURE PRINT printed page 1.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.04 seconds  
cpu time 0.04 seconds

```
44  
45 PROC SORT DATA=IN.H152IF1 OUT=CLNK; BY CONDIDX; RUN;
```

NOTE: There were 329484 observations read from the data set IN.H152IF1.  
NOTE: SAS threaded sort was used.  
NOTE: The data set WORK.CLNK has 329484 observations and 6 variables.  
NOTE: Compressing data set WORK.CLNK increased size by 5.91 percent.  
Compressed is 6233 pages; un-compressed would require 5885 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 1.91 seconds  
cpu time 0.65 seconds

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

NOTE: There were 329484 observations read from the data set WORK.CLNK.  
NOTE: There were 2515 observations read from the data set WORK.ASCONDS.  
NOTE: The data set WORK.ASCLNKS has 7010 observations and 3 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 26.79 percent.  
Compressed is 71 pages; un-compressed would require 56 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.22 seconds  
cpu time 0.20 seconds

```
53  
54 proc report data=asclnks (obs=75) nowd headskip;  
55 define condidx /'CONDIDX' order;  
56 define EVNTIDX /'EVNTIDX';  
57 define EVENTYPE /'EVENTYPE';  
58 break after condidx / skip;  
59 format eventype eventype.;  
60 title3 "sample print of work.asclnks - sorted by condidx";  
61 title4 "events linked to asthma condition records";  
62 run;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 75 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE REPORT printed pages 2-3.  
NOTE: PROCEDURE REPORT used (Total process time):  
real time 0.05 seconds  
cpu time 0.03 seconds

```
63  
64 PROC SORT DATA=ASCLNKS; BY EVNTIDX; RUN;
```

NOTE: There were 7010 observations read from the data set WORK.ASCLNKS.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.ASCLNKS has 7010 observations and 3 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 26.79 percent.  
Compressed is 71 pages; un-compressed would require 56 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.01 seconds

cpu time 0.01 seconds

```
65
66   proc print data=asclnks (obs=50);
67       format eventype eventype.;
68       title3 "sample print of work.asclnks - sorted by evtidx";
69   run;
```

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE PRINT printed page 4.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
70
71   DATA ASCLNKS;
72       SET ASCLNKS (KEEP=EVNTIDX EVENTYPE);
73       BY EVNTIDX;
74       IF FIRST.EVNTIDX;
75   RUN;
```

NOTE: There were 7010 observations read from the data set WORK.ASCLNKS.  
NOTE: The data set WORK.ASCLNKS has 6999 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 19.05 percent.  
Compressed is 50 pages; un-compressed would require 42 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
76
77   proc print data=asclnks (obs=50);
78       format eventype eventype.;
79       title3 "sample print of unique evtidxs from work.asclnks";
80   run;
```

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE PRINT printed page 5.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
81
82   *-----
83   * Get PMED records linked to asthma condition records.
84   *-----;
85   PROC SORT DATA=IN.H152A OUT=PMED; BY LINKIDX; RUN;
```

NOTE: There were 324744 observations read from the data set IN.H152A.  
NOTE: SAS threaded sort was used.  
NOTE: The data set WORK.PMED has 324744 observations and 74 variables.  
NOTE: Compressing data set WORK.PMED decreased size by 50.18 percent.  
Compressed is 6472 pages; un-compressed would require 12991 pages.  
NOTE: PROCEDURE SORT used (Total process time):

```
real time      15.82 seconds
cpu time       2.59 seconds
```

```
86
87   DATA ASPMEDS;
88     MERGE PMED (KEEP=LINKIDX RXRECIDX RXNAME RXXP12X PERWT12F)
89       ASCLNKS (IN=INASCLNK KEEP=EVNTIDX RENAME=(EVNTIDX=LINKIDX));
90     BY LINKIDX;
91     IF INASCLNK & PERWT12F>0;
92   RUN;
```

NOTE: There were 324744 observations read from the data set WORK.PMED.  
NOTE: There were 6999 observations read from the data set WORK.ASCLNKS.  
NOTE: The data set WORK.ASPMEDS has 10318 observations and 5 variables.  
NOTE: Compressing data set WORK.ASPMEDS decreased size by 29.84 percent.  
Compressed is 87 pages; un-compressed would require 124 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.66 seconds  
cpu time 0.67 seconds

```
93
94   proc report data=aspmeds (obs=300) nowd headskip;
95     column LINKIDX RXRECIDX RXNAME RXXP12X PERWT12F;
96     define linkidx / 'LINKIDX' order;
97     define rxrecidx / 'RXRECIDX';
98     define rxname / 'RXNAME';
99     define rxxp12x / 'RXXP12X' display format=8.2;
100    define perwt12f / 'PERWT12F' display format=8.2;
101    break after linkidx / skip;
102    title3 "sample print of work.aspmeds";
103    title4 "PMED (HC-152A) records which link to condition records coded as asthma";
104  run;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 300 observations read from the data set WORK.ASPMEDS.  
NOTE: The PROCEDURE REPORT printed pages 6-14.  
NOTE: PROCEDURE REPORT used (Total process time):  
real time 0.07 seconds  
cpu time 0.07 seconds

```
105
106   PROC MEANS DATA=ASPMEDS N SUM;
107     VAR RXXP12X;
108     TITLE3 "Total Rx expenditures associated with asthma";
109  RUN;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 10318 observations read from the data set WORK.ASPMEDS.  
NOTE: The PROCEDURE MEANS printed page 15.  
NOTE: PROCEDURE MEANS used (Total process time):  
real time 0.02 seconds  
cpu time 0.03 seconds

```
110
111     PROC MEANS DATA=ASPMEDS N SUM;
112         VAR RXXP12X;
113         WEIGHT PERWT12F;
114         TITLE3 "Total Rx expenditures associated with asthma";
115         TITLE5 "Weighted";
116     RUN;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 10318 observations read from the data set WORK.ASPMEDS.  
NOTE: The PROCEDURE MEANS printed page 16.  
NOTE: PROCEDURE MEANS used (Total process time):

real time	0.01 seconds
cpu time	0.01 seconds

```
117
118     ods rtf close;
119
```

NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414  
NOTE: The SAS System used:

real time	25.98 seconds
cpu time	4.94 seconds

**HC-152I**  
**Sample SAS Job for Example B**  
**sample print of work.asconds - sorted by condidx**  
**COND (H154) records where cccodex=128**

Obs	CONDIDX	CCCODEX
1	200111010041	128
2	200321020011	128
3	200331080011	128
4	200411050011	128
5	200461030011	128
6	200461060011	128
7	200481050011	128
8	200591010021	128
9	200591030011	128
10	200841020051	128
11	200941010021	128
12	200941020051	128
13	200961010081	128
14	200961030011	128
15	201091010021	128
16	201391010061	128
17	201501020021	128
18	201701040011	128
19	201731020021	128
20	201751010042	128
21	201791020011	128
22	201921020051	128
23	201991030011	128
24	202301020021	128
25	202301030011	128
26	202301050061	128
27	202541010021	128
28	202571010021	128
29	202621020042	128
30	202621060012	128
31	202631020011	128
32	202641010041	128
33	202641010061	128
34	202701050011	128
35	202781020011	128
36	202831040011	128
37	202831040021	128
38	202851010021	128
39	202851030012	128
40	202851040011	128
41	202941030011	128
42	202941040011	128
43	202971030011	128
44	203341010051	128
45	203411010021	128
46	203451020021	128
47	203451030011	128
48	203591010041	128
49	203661020011	128
50	203791010011	128



HC-152I

Sample SAS Job for Example B

sample print of work.asclinks - sorted by condidx  
 events linked to asthma condition records

CONDIDX	EVNTIDX	EVENTYPE
200111010041	200111010011	1 MVIS
200111010041	200111010031	7 HVIS
200111010041	200111010041	7 HVIS
200111010041	200111010051	7 HVIS
200331080011	200331080021	8 PMED
200411050011	200411050011	1 MVIS
200411050011	200411050021	8 PMED
200411050011	200411050031	1 MVIS
200411050011	200411050041	8 PMED
200411050011	200411050081	8 PMED
200461030011	200461030021	8 PMED
200591010021	200591010131	8 PMED
200591030011	200591030041	8 PMED
200591030011	200591030051	8 PMED
200591030011	200591030151	8 PMED
200591030011	200591030161	8 PMED
200941010021	200941010021	8 PMED
200941010021	200941010031	8 PMED
200941010021	200941010271	8 PMED
200941020051	200941020171	1 MVIS
200941020051	200941020201	1 MVIS
200961010081	200961010401	1 MVIS
200961010081	200961010411	1 MVIS
200961010081	200961010421	1 MVIS
200961010081	200961010431	1 MVIS
200961030011	200961030041	8 PMED
201091010021	201091010011	1 MVIS
201091010021	201091010021	1 MVIS
201091010021	201091010031	1 MVIS
201091010021	201091010041	8 PMED
201391010061	201391010061	1 MVIS
201391010061	201391010071	1 MVIS
201391010061	201391010081	1 MVIS
201391010061	201391010091	2 OPAT
201391010061	201391010101	2 OPAT
201391010061	201391010141	8 PMED
201391010061	201391010211	8 PMED
201391010061	201391010251	8 PMED
201391010061	201391010321	8 PMED
201501020021	201501020111	1 MVIS
201501020021	201501020121	1 MVIS
201501020021	201501020131	1 MVIS
201501020021	201501020141	1 MVIS
201501020021	201501020151	1 MVIS
201501020021	201501020161	1 MVIS
201501020021	201501020171	1 MVIS
201501020021	201501020181	1 MVIS
201501020021	201501020221	8 PMED
201701040011	201701040011	3 EROM
201731020021	201731020151	8 PMED
201731020021	201731020261	8 PMED
201751010042	201751010072	8 PMED
201751010042	201751010092	1 MVIS
201751010042	201751010112	8 PMED
201791020011	201791020031	1 MVIS
201791020011	201791020041	8 PMED
201921020051	201921020081	1 MVIS
201991030011	201991030011	1 MVIS
201991030011	201991030031	8 PMED
202301050061	202301050111	1 MVIS
202301050061	202301050121	1 MVIS
202301050061	202301050181	8 PMED
202541010021	202541010101	8 PMED
202541010021	202541010111	8 PMED
202621020042	202621020042	8 PMED
202621020042	202621020052	8 PMED
202621020042	202621020082	8 PMED
202621020042	202621020102	3 EROM
202621020042	202621020112	4 STAZ

<b>CONDIDX</b>	<b>EVNTIDX</b>	<b>EVENTYPE</b>
202621020042	202621020142	1 MVIS
202621020042	202621020152	1 MVIS
202621020042	202621020212	8 PMED
202641010041	202641010041	4 STAZ
202641010041	202641010051	2 OPAT
202641010041	202641010061	2 OPAT

**HC-152I**  
**Sample SAS Job for Example B**  
**sample print of work.asclnks - sorted by evntidx**

Obs	CONDIDX	EVNTIDX	EVENTYPE
1	200111010041	200111010011	1 MVIS
2	200111010041	200111010031	7 HVIS
3	200111010041	200111010041	7 HVIS
4	200111010041	200111010051	7 HVIS
5	200331080011	200331080021	8 PMED
6	200411050011	200411050011	1 MVIS
7	200411050011	200411050021	8 PMED
8	200411050011	200411050031	1 MVIS
9	200411050011	200411050041	8 PMED
10	200411050011	200411050081	8 PMED
11	200461030011	200461030021	8 PMED
12	200591010021	200591010131	8 PMED
13	200591030011	200591030041	8 PMED
14	200591030011	200591030051	8 PMED
15	200591030011	200591030151	8 PMED
16	200591030011	200591030161	8 PMED
17	200941010021	200941010021	8 PMED
18	200941010021	200941010031	8 PMED
19	200941010021	200941010271	8 PMED
20	200941020051	200941020171	1 MVIS
21	200941020051	200941020201	1 MVIS
22	200961010081	200961010401	1 MVIS
23	200961010081	200961010411	1 MVIS
24	200961010081	200961010421	1 MVIS
25	200961010081	200961010431	1 MVIS
26	200961030011	200961030041	8 PMED
27	201091010021	201091010011	1 MVIS
28	201091010021	201091010021	1 MVIS
29	201091010021	201091010031	1 MVIS
30	201091010021	201091010041	8 PMED
31	201391010061	201391010061	1 MVIS
32	201391010061	201391010071	1 MVIS
33	201391010061	201391010081	1 MVIS
34	201391010061	201391010091	2 OPAT
35	201391010061	201391010101	2 OPAT
36	201391010061	201391010141	8 PMED
37	201391010061	201391010211	8 PMED
38	201391010061	201391010251	8 PMED
39	201391010061	201391010321	8 PMED
40	201501020021	201501020111	1 MVIS
41	201501020021	201501020121	1 MVIS
42	201501020021	201501020131	1 MVIS
43	201501020021	201501020141	1 MVIS
44	201501020021	201501020151	1 MVIS
45	201501020021	201501020161	1 MVIS
46	201501020021	201501020171	1 MVIS
47	201501020021	201501020181	1 MVIS
48	201501020021	201501020221	8 PMED
49	201701040011	201701040011	3 EROM
50	201731020021	201731020151	8 PMED

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Sample SAS Job for Example B

sample print of unique evntidxs from work.asclnks

Obs	EVNTIDX	EVENTYPE
1	200111010011	1 MVIS
2	200111010031	7 HVIS
3	200111010041	7 HVIS
4	200111010051	7 HVIS
5	200331080021	8 PMED
6	200411050011	1 MVIS
7	200411050021	8 PMED
8	200411050031	1 MVIS
9	200411050041	8 PMED
10	200411050081	8 PMED
11	200461030021	8 PMED
12	200591010131	8 PMED
13	200591030041	8 PMED
14	200591030051	8 PMED
15	200591030151	8 PMED
16	200591030161	8 PMED
17	200941010021	8 PMED
18	200941010031	8 PMED
19	200941010271	8 PMED
20	200941020171	1 MVIS
21	200941020201	1 MVIS
22	200961010401	1 MVIS
23	200961010411	1 MVIS
24	200961010421	1 MVIS
25	200961010431	1 MVIS
26	200961030041	8 PMED
27	201091010011	1 MVIS
28	201091010021	1 MVIS
29	201091010031	1 MVIS
30	201091010041	8 PMED
31	201391010061	1 MVIS
32	201391010071	1 MVIS
33	201391010081	1 MVIS
34	201391010091	2 OPAT
35	201391010101	2 OPAT
36	201391010141	8 PMED
37	201391010211	8 PMED
38	201391010251	8 PMED
39	201391010321	8 PMED
40	201501020111	1 MVIS
41	201501020121	1 MVIS
42	201501020131	1 MVIS
43	201501020141	1 MVIS
44	201501020151	1 MVIS
45	201501020161	1 MVIS
46	201501020171	1 MVIS
47	201501020181	1 MVIS
48	201501020221	8 PMED
49	201701040011	3 EROM
50	201731020151	8 PMED

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Sample SAS Job for Example B  
sample print of work.aspmeds

PMED (HC-152A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
200331080021	200331080021001	PROAIR HFA	84.50	6465.89
200331080021	200331080021002	PROAIR HFA	84.50	6465.89
200331080021	200331080021003	PROAIR HFA	84.50	6465.89
200411050021	200411050021001	NEBILIZER	127.89	8127.03
200411050041	200411050041001	ALBUTEROL	2.67	8127.03
200411050081	200411050081001	Q-PAP	5.82	8127.03
200461030021	200461030021001	ALBUTEROL	11.00	7657.12
200461030021	200461030021002	ALBUTEROL	11.00	7657.12
200591010131	200591010131001	PROAIR HFA	49.25	5515.79
200591010131	200591010131002	PROAIR HFA	49.25	5515.79
200591030041	200591030041001	FLOVENT HFA	153.32	8947.34
200591030051	200591030051001	PROAIR HFA	43.74	8947.34
200591030151	200591030151001	FLOVENT HFA	153.32	8947.34
200591030161	200591030161001	PROAIR HFA	43.74	8947.34
200941010021	200941010021001	ALBUTEROL	165.97	5054.55
200941010031	200941010031001	SYMBICORT	153.37	5054.55
200941010031	200941010031002	SYMBICORT	153.37	5054.55
200941010031	200941010031003	SYMBICORT	153.37	5054.55
200941010271	200941010271001	ALBUTEROL	61.41	5054.55
200961030041	200961030041001	PREDNISOLONE	36.99	2052.99
201091010041	201091010041001	VENTOLIN HFA	43.26	5956.03
201091010041	201091010041002	VENTOLIN HFA	43.26	5956.03
201091010041	201091010041003	VENTOLIN HFA	43.26	5956.03
201391010141	201391010141001	NASONEX	134.34	8966.52
201391010141	201391010141002	NASONEX	134.34	8966.52
201391010141	201391010141003	NASONEX	134.34	8966.52
201391010141	201391010141004	NASONEX	134.34	8966.52
201391010141	201391010141005	NASONEX	134.34	8966.52
201391010141	201391010141006	NASONEX	134.34	8966.52
201391010211	201391010211001	FEXOFENADINE	17.55	8966.52
201391010211	201391010211002	FEXOFENADINE	17.55	8966.52
201391010211	201391010211003	FEXOFENADINE	17.55	8966.52
201391010211	201391010211004	FEXOFENADINE	17.55	8966.52
201391010211	201391010211005	FEXOFENADINE	17.55	8966.52
201391010211	201391010211006	FEXOFENADINE	17.55	8966.52
201391010251	201391010251001	PROAIR HFA	383.18	8966.52
201391010251	201391010251002	PROAIR HFA	383.18	8966.52
201391010251	201391010251003	PROAIR HFA	383.18	8966.52
201391010251	201391010251004	PROAIR HFA	383.18	8966.52
201391010251	201391010251005	PROAIR HFA	383.18	8966.52
201391010251	201391010251006	PROAIR HFA	383.18	8966.52
201391010321	201391010321001	MONTELUKAST	30.35	8966.52
201391010321	201391010321002	MONTELUKAST	30.35	8966.52
201391010321	201391010321003	MONTELUKAST	30.35	8966.52
201391010321	201391010321004	MONTELUKAST	43.55	8966.52
201391010321	201391010321005	MONTELUKAST	43.55	8966.52
201391010321	201391010321006	MONTELUKAST	43.55	8966.52
201501020221	201501020221001	ADV AIR DISKUS	195.49	21334.65
201501020221	201501020221002	ADV AIR DISKUS	195.49	21334.65
201731020151	201731020151001	VENTOLIN HFA	35.00	11470.59
201731020151	201731020151002	VENTOLIN HFA	35.00	11470.59
201731020151	201731020151003	VENTOLIN HFA	35.00	11470.59
201731020151	201731020151004	VENTOLIN HFA	35.00	11470.59
201731020151	201731020151005	VENTOLIN HFA	35.00	11470.59
201731020151	201731020151006	VENTOLIN HFA	35.00	11470.59
201731020261	201731020261001	VENTOLIN HFA	35.00	11470.59
201731020261	201731020261002	VENTOLIN HFA	35.00	11470.59
201731020261	201731020261003	VENTOLIN HFA	35.00	11470.59
201751010072	201751010072001	FLOVENT HFA	221.68	4636.78
201751010072	201751010072002	FLOVENT HFA	221.68	4636.78
201751010112	201751010112001	AZITHROMYCIN	26.98	4636.78
201751010112	201751010112002	AZITHROMYCIN	26.98	4636.78
201791020041	201791020041001	PROAIR INHALER	41.82	18436.16
201991030031	201991030031001	ADV AIR DISKUS	182.02	3526.80
202301050181	202301050181001	ALBUTEROL	0.00	2460.35
202301050181	202301050181002	ALBUTEROL	0.00	2460.35
202301050181	202301050181003	ALBUTEROL	0.00	2460.35
202301050181	202301050181004	ALBUTEROL	0.00	2460.35
202301050181	202301050181005	ALBUTEROL	0.00	2460.35

LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
202301050181	202301050181006	ALBUTEROL	0.00	2460.35
202301050181	202301050181007	ALBUTEROL	0.00	2460.35
202301050181	202301050181008	ALBUTEROL	0.00	2460.35
202301050181	202301050181009	ALBUTEROL	0.00	2460.35
202301050181	202301050181010	ALBUTEROL	0.00	2460.35
202301050181	202301050181011	ALBUTEROL	0.00	2460.35
202301050181	202301050181012	ALBUTEROL	0.00	2460.35
202301050181	202301050181013	ALBUTEROL	0.00	2460.35
202301050181	202301050181014	ALBUTEROL	0.00	2460.35
202301050181	202301050181015	ALBUTEROL	0.00	2460.35
202541010101	202541010101001	QVAR	155.35	44344.95
202541010111	202541010111001	FLUTICASONE	26.85	44344.95
202621020042	202621020042001	ADVAIR	149.86	3241.64
202621020052	202621020052001	ALBUTEROL	11.00	3241.64
202621020082	202621020082001	SPIRIVA	250.56	3241.64
202621020212	202621020212001	ADVAIR	149.86	3241.64
202641010091	202641010091001	DEBILVISS NEBULIZER	12.98	8409.92
202641010101	202641010101001	PROAIR HFA	42.44	8409.92
202641010101	202641010101002	PROAIR HFA	119.34	8409.92
202641010101	202641010101003	PROAIR HFA	119.34	8409.92
202641010101	202641010101004	PROAIR HFA	42.44	8409.92
202641010101	202641010101005	PROAIR HFA	44.52	8409.92
202641010111	202641010111001	QVAR	150.40	8409.92
202641010111	202641010111002	QVAR	150.40	8409.92
202641010111	202641010111003	QVAR	150.40	8409.92
202641010111	202641010111004	QVAR	150.40	8409.92
202641010111	202641010111005	QVAR	156.08	8409.92
202641010131	202641010131001	ALBUTEROL	7.81	8409.92
202641010131	202641010131002	ALBUTEROL	7.81	8409.92
202641010131	202641010131003	ALBUTEROL	7.81	8409.92
202641010131	202641010131004	ALBUTEROL	40.69	8409.92
202641010131	202641010131005	ALBUTEROL	40.69	8409.92
202641010131	202641010131006	ALBUTEROL	40.69	8409.92
202641010151	202641010151001	THEOPHYLLINE	59.27	8409.92
202641010151	202641010151002	THEOPHYLLINE	59.27	8409.92
202641010151	202641010151003	THEOPHYLLINE	10.71	8409.92
202641010151	202641010151004	THEOPHYLLINE	10.71	8409.92
202641010151	202641010151005	THEOPHYLLINE	10.71	8409.92
202641010161	202641010161001	ADVAIR DISKU	242.96	8409.92
202641010161	202641010161002	ADVAIR DISKU	242.96	8409.92
202641010161	202641010161003	ADVAIR DISKU	242.96	8409.92
202641010161	202641010161004	ADVAIR DISKU	242.96	8409.92
202641010161	202641010161005	ADVAIR DISKU	242.96	8409.92
202641010161	202641010161006	ADVAIR DISKU	242.96	8409.92
202641010171	202641010171001	IPRATROPIUM	13.40	8409.92
202641010171	202641010171002	IPRATROPIUM	13.40	8409.92
202641010171	202641010171003	IPRATROPIUM	13.40	8409.92
202641010171	202641010171004	IPRATROPIUM	13.40	8409.92
202641010171	202641010171005	IPRATROPIUM	13.40	8409.92
202641010181	202641010181001	PREDNISONE	2.52	8409.92
202641010191	202641010191001	SPIRIVA	250.56	8409.92
202641010191	202641010191002	SPIRIVA	250.56	8409.92
202641010191	202641010191003	SPIRIVA	250.56	8409.92
202641010191	202641010191004	SPIRIVA	250.56	8409.92
202641010191	202641010191005	SPIRIVA	250.56	8409.92
202641010201	202641010201001	LEVOFLOXACIN	70.30	8409.92
202641010201	202641010201002	LEVOFLOXACIN	70.30	8409.92
202641010201	202641010201003	LEVOFLOXACIN	70.30	8409.92
202641010201	202641010201004	LEVOFLOXACIN	70.30	8409.92
202641010201	202641010201005	LEVOFLOXACIN	70.30	8409.92
202641010201	202641010201006	LEVOFLOXACIN	70.30	8409.92
202641010211	202641010211001	PROAIR HFA	44.52	8409.92
202641010211	202641010211002	PROAIR HFA	44.52	8409.92
202641010211	202641010211003	PROAIR HFA	44.52	8409.92
202641010211	202641010211004	PROAIR HFA	44.52	8409.92
202641010221	202641010221001	QVAR	150.40	8409.92
202641010221	202641010221002	QVAR	150.40	8409.92
202641010221	202641010221003	QVAR	150.40	8409.92
202641010221	202641010221004	QVAR	156.08	8409.92
202641010231	202641010231001	ALBUTEROL	7.81	8409.92
202641010231	202641010231002	ALBUTEROL	7.81	8409.92
202641010231	202641010231003	ALBUTEROL	40.69	8409.92
202641010231	202641010231004	ALBUTEROL	40.69	8409.92
202641010251	202641010251001	THEOPHYLLINE	30.13	8409.92

LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
202641010251	202641010251002	THEOPHYLLINE	30.13	8409.92
202641010251	202641010251003	THEOPHYLLINE	30.13	8409.92
202641010261	202641010261001	ADVAIR DISKU	252.63	8409.92
202641010261	202641010261002	ADVAIR DISKU	252.63	8409.92
202641010261	202641010261003	ADVAIR DISKU	252.63	8409.92
202641010261	202641010261004	ADVAIR DISKU	252.63	8409.92
202641010271	202641010271001	IPRATROPIUM	13.40	8409.92
202641010271	202641010271002	IPRATROPIUM	13.40	8409.92
202641010271	202641010271003	IPRATROPIUM	13.40	8409.92
202641010271	202641010271004	IPRATROPIUM	13.40	8409.92
202641010281	202641010281001	SPIRIVA	250.56	8409.92
202641010281	202641010281002	SPIRIVA	250.56	8409.92
202641010281	202641010281003	SPIRIVA	250.56	8409.92
202641010281	202641010281004	SPIRIVA	250.56	8409.92
202641010291	202641010291001	LEVOFLOXACIN	70.30	8409.92
202641010291	202641010291002	LEVOFLOXACIN	70.30	8409.92
202641010291	202641010291003	LEVOFLOXACIN	70.30	8409.92
202641010291	202641010291004	LEVOFLOXACIN	70.30	8409.92
202781020084	202781020084001	VENTOLIN HFA	40.07	3540.28
202781020084	202781020084002	VENTOLIN HFA	40.07	3540.28
202781020104	202781020104001	ADVAIR DISKU	242.96	3540.28
202831040041	202831040041001	ALBUTEROL	61.41	2317.84
202831040051	202831040051001	PREDNISOLONE	21.99	2317.84
202831040081	202831040081001	ALBUTEROL	61.41	2317.84
202851010021	202851010021001	FLOVENT HFA	257.56	20324.94
202851010071	202851010071001	FLOVENT HFA	280.71	20324.94
202851030042	202851030042001	SYMBICORT	227.22	22420.36
202851040011	202851040011001	SINGULAIR	401.98	19783.69
202851040041	202851040041001	SINGULAIR	441.72	19783.69
202851040101	202851040101001	MONTELUKAST	244.68	19783.69
202851040111	202851040111001	PROAIR HFA	43.74	19783.69
202941030011	202941030011001	FLOVENT HFA	149.99	3608.99
202941030011	202941030011002	FLOVENT HFA	149.99	3608.99
202941030011	202941030011003	FLOVENT HFA	149.99	3608.99
202941030011	202941030011004	FLOVENT HFA	149.99	3608.99
202941030011	202941030011005	FLOVENT HFA	149.99	3608.99
202941030011	202941030011006	FLOVENT HFA	149.99	3608.99
202941030011	202941030011007	FLOVENT HFA	149.99	3608.99
202941040011	202941040011001	FLOVENT HFA	149.99	4787.43
202941040011	202941040011002	FLOVENT HFA	149.99	4787.43
202941040011	202941040011003	FLOVENT HFA	149.99	4787.43
202941040011	202941040011004	FLOVENT HFA	149.99	4787.43
202941040011	202941040011005	FLOVENT HFA	149.99	4787.43
202941040011	202941040011006	FLOVENT HFA	149.99	4787.43
202941040011	202941040011007	FLOVENT HFA	149.99	4787.43
202941040021	202941040021001	FLUTICASONE	78.99	4787.43
202941040021	202941040021002	FLUTICASONE	78.99	4787.43
202941040021	202941040021003	FLUTICASONE	78.99	4787.43
202941040021	202941040021004	FLUTICASONE	78.99	4787.43
202941040021	202941040021005	FLUTICASONE	78.99	4787.43
202941040021	202941040021006	FLUTICASONE	78.99	4787.43
202941040021	202941040021007	FLUTICASONE	78.99	4787.43
202941040031	202941040031001	SINGULAIR	208.99	4787.43
202941040031	202941040031002	SINGULAIR	208.99	4787.43
202941040031	202941040031003	SINGULAIR	208.99	4787.43
202941040031	202941040031004	SINGULAIR	208.99	4787.43
202941040031	202941040031005	SINGULAIR	208.99	4787.43
202941040031	202941040031006	SINGULAIR	208.99	4787.43
202941040031	202941040031007	SINGULAIR	208.99	4787.43
202971030061	202971030061001	XOPENEX HFA	98.92	2689.56
202971030061	202971030061002	XOPENEX HFA	98.92	2689.56
203341010041	203341010041001	SPIRIVA	754.35	3559.46
203341010041	203341010041002	SPIRIVA	754.35	3559.46
203341010041	203341010041003	SPIRIVA	493.86	3559.46
203341010041	203341010041004	SPIRIVA	493.86	3559.46
203341010041	203341010041005	SPIRIVA	474.72	3559.46
203341010041	203341010041006	SPIRIVA	474.72	3559.46
203341010051	203341010051001	PROAIR HFA	45.09	3559.46
203341010061	203341010061001	PROAIR HFA	38.47	3559.46
203341010101	203341010101001	DULERA	74.55	3559.46
203341010101	203341010101002	DULERA	74.55	3559.46
203341010101	203341010101003	DULERA	78.86	3559.46
203341010101	203341010101004	DULERA	78.86	3559.46
203341010101	203341010101005	DULERA	78.86	3559.46

LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
203341010101	203341010101006	DULERA	78.86	3559.46
203341010111	203341010111001	PROAIR HFA	45.08	3559.46
203411010261	203411010261001	ALBUTEROL	11.00	9581.70
203451020041	203451020041001	ADVAIR HFA	294.99	11600.60
203451020041	203451020041002	ADVAIR HFA	315.99	11600.60
203451020041	203451020041003	ADVAIR HFA	315.99	11600.60
203451020051	203451020051001	PROAIR HFA	59.99	11600.60
203451020081	203451020081001	ADVAIR HFA	315.99	11600.60
203451020081	203451020081002	ADVAIR HFA	315.99	11600.60
203451020121	203451020121001	ADVAIR HFA	326.99	11600.60
203451020121	203451020121002	ADVAIR HFA	326.99	11600.60
203451020121	203451020121003	ADVAIR HFA	326.99	11600.60
203451030011	203451030011001	ADVAIR	242.23	9080.73
203451030011	203451030011002	ADVAIR	242.23	9080.73
203451030011	203451030011003	ADVAIR	242.23	9080.73
203451030021	203451030021001	ALBUTEROL	61.41	9080.73
203451030021	203451030021002	ALBUTEROL	61.41	9080.73
203451030031	203451030031001	ADVAIR	242.23	9080.73
203451030031	203451030031002	ADVAIR	242.23	9080.73
203451030041	203451030041001	ALBUTEROL	61.42	9080.73
203451030041	203451030041002	ALBUTEROL	61.42	9080.73
203451030051	203451030051001	ADVAIR	242.23	9080.73
203451030051	203451030051002	ADVAIR	242.23	9080.73
203451030051	203451030051003	ADVAIR	242.23	9080.73
203451030061	203451030061001	ALBUTEROL	61.41	9080.73
203451030061	203451030061002	ALBUTEROL	61.41	9080.73
203591010081	203591010081001	DULERA	214.09	5155.32
203591010251	203591010251001	DULERA	214.09	5155.32
203591010251	203591010251002	DULERA	214.09	5155.32
203591010251	203591010251003	DULERA	214.09	5155.32
203591010251	203591010251004	DULERA	214.09	5155.32
203661020021	203661020021001	SINGULAIR	165.12	4796.82
203661020031	203661020031001	SYMBICORT	153.37	4796.82
203661020041	203661020041001	ALBUTEROL	4.00	4796.82
203661020051	203661020051001	SINGULAIR	165.12	4796.82
203661020061	203661020061001	SYMBICORT	249.24	4796.82
203661020071	203661020071001	ALBUTEROL	4.00	4796.82
203661020121	203661020121001	MONTELUKAST	10.00	4796.82
203661020131	203661020131001	SYMBICORT	249.24	4796.82
203661020131	203661020131002	SYMBICORT	249.24	4796.82
203661020131	203661020131003	SYMBICORT	249.24	4796.82
203661020131	203661020131004	SYMBICORT	249.24	4796.82
203791010011	203791010011001	ADVAIR DISKU	242.25	23446.28
203921010131	203921010131001	ALBUTEROL SULFATE HFA	40.36	8804.91
203921010501	203921010501001	ALBUTEROL SULFATE HFA	40.36	8804.91
203921010501	203921010501002	ALBUTEROL SULFATE HFA	40.36	8804.91
203921010501	203921010501003	ALBUTEROL SULFATE HFA	40.36	8804.91
203951020021	203951020021001	ALBUTEROL SULFATE	19.75	4373.85
203951020061	203951020061001	ALBUTEROL SULFATE	19.75	4373.85
204151030041	204151030041001	BENADRYL	5.00	3683.94
204151030051	204151030051001	SOD CHLORIDE	15.60	3683.94
204191050011	204191050011001	VENTOLIN HFA	53.99	4652.90
204191050011	204191050011002	VENTOLIN HFA	53.99	4652.90
204191050041	204191050041001	PROVENTIL	45.00	4652.90
204191050041	204191050041002	PROVENTIL	45.00	4652.90
204191050041	204191050041003	PROVENTIL	45.00	4652.90
204251010061	204251010061001	ADVAIR	313.23	4810.15
204251010091	204251010091001	ADVAIR	149.86	4810.15
204321010041	204321010041001	SINGULAIR	165.12	13822.69
204621010011	204621010011001	ALBUTEROL	4.00	1660.96
204621030011	204621030011001	ALBUTEROL	8.00	1369.80
204621030071	204621030071001	ALBUTEROL	16.67	1369.80
204621030071	204621030071002	ALBUTEROL	16.67	1369.80
204621050021	204621050021001	PREDNISOLONE	5.00	2160.24
204621050041	204621050041001	PREDNISONE	1.28	2160.24
204621050051	204621050051001	ALBUTEROL	11.00	2160.24
204721030021	204721030021001	VENTOLIN HFA	45.72	5625.01
204721030021	204721030021002	VENTOLIN HFA	45.72	5625.01
204721030031	204721030031001	FLOVENT HFA	149.99	5625.01
204721030031	204721030031002	FLOVENT HFA	149.99	5625.01
204881010491	204881010491001	ALBUTEROL SULFATE	53.10	8893.53
204921010371	204921010371001	PROAIR HFA	42.44	9558.82
204921010371	204921010371002	PROAIR HFA	42.44	9558.82
204921010371	204921010371003	PROAIR HFA	42.44	9558.82



LINKIDX	RXRECIDX	RXNAME	RXXP12X	PERWT12F
204921010371	204921010371004	PROAIR HFA	42.44	9558.82
204921010371	204921010371005	PROAIR HFA	42.44	9558.82
204921010371	204921010371006	PROAIR HFA	42.44	9558.82
205071010071	205071010071001	ALBUTEROL INHALER	53.10	11747.34
205081010111	205081010111001	SOD CHLORIDE	33.31	4638.35
205081010111	205081010111002	SOD CHLORIDE	33.31	4638.35
205331010431	205331010431001	LEVOCETIRIZI	59.49	8084.80
205401020091	205401020091001	VENTOLIN HFA INH W/DOS CTR	50.40	21172.29
205531040011	205531040011001	SINGULAIR	208.99	1415.16

HC-152I

Sample SAS Job for Example B

Total Rx expenditures associated with asthma

Analysis Variable: RXXP12X SUM OF PAYMENTS RXSF12X-RXOU12X(IMPUTED)

N	Sum
10318	1359058.13

HC-152I  
Sample SAS Job for Example B  
Total Rx expenditures associated with asthma

Weighted

Analysis Variable: RXXP12X SUM OF PAYMENTS RXSF12X-RXOU12X(IMPUTED)

N	Sum
10318	13018352615

1  
August 24, 2014

The SAS System

22:45 Sunday,

NOTE: Copyright (c) 2002-2010 by SAS Institute Inc., Cary, NC, USA.  
NOTE: SAS (r) Proprietary Software 9.3 (TS1M2)  
NOTE: This session is executing on the W32\_7PRO platform.

NOTE: Enhanced analytical products:

SAS/STAT 12.1, SAS/ETS 12.1, SAS/OR 12.1, SAS/IML 12.1, SAS/QC 12.1

NOTE: SAS initialization used:  
real time 3.77 seconds  
cpu time 0.37 seconds

NOTE: AUTOEXEC processing beginning; file is C:\Program Files\SAS\SASMISC\autoexec\_93.sas.

NOTE: DATA statement used (Total process time):  
real time 0.21 seconds  
cpu time 0.06 seconds

NOTE: AUTOEXEC processing completed.

```
1 ods rtf file = 'C:\Data\sampleC.rtf' bodytitle;
NOTE: Writing RTF Body file: C:\Data\sampleC.rtf
2
3 ods noproctitle;
4
5 OPTIONS LS=132 PS=59;
6
7 TITLE1 "HC-152I";
8 TITLE2 "Sample SAS Job for Example C";
9
10 LIBNAME IN "C:\Data";
```

NOTE: Directory for library IN contains files of mixed engine types.

NOTE: Libref IN was successfully assigned as follows:

Engine: V9  
Physical Name: C:\Data

```
11
12 *****
13 * Calculate the expenditures for medical visits associated with asthma.
14 *****;
15 PROC FORMAT;
16 VALUE EVENTYPE
17 1 = "1 MVIS"
18 2 = "2 OPAT"
19 3 = "3 EROM"
20 4 = "4 STAZ"
21 5 = "5 DVIS"
22 6 = "6 OMED"
23 7 = "7 HVIS"
24 8 = "8 PMED";
```

NOTE: Format EVENTYPE has been output.

25           RUN;

NOTE: PROCEDURE FORMAT used (Total process time):  
      real time           0.03 seconds  
      cpu time            0.03 seconds

```
26  
27           *-----  
28           * Get conditions records coded as asthma.  
29           *-----;  
30       DATA ASCONDS;  
31           SET IN.H154 (KEEP=CONDIDX CCCODEX);  
32           IF CCCODEX="128";  
33       RUN;
```

NOTE: There were 118850 observations read from the data set IN.H154.  
NOTE: The data set WORK.ASCONDS has 2515 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCONDS increased size by 90.00 percent.  
      Compressed is 19 pages; un-compressed would require 10 pages.  
NOTE: DATA statement used (Total process time):  
      real time           1.62 seconds  
      cpu time            0.03 seconds

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

NOTE: There were 2515 observations read from the data set WORK.ASCONDS.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.ASCONDS has 2515 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCONDS increased size by 90.00 percent.  
      Compressed is 19 pages; un-compressed would require 10 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
      real time           0.04 seconds  
      cpu time            0.00 seconds

```
39  
40       proc print data=asconds (obs=50);  
41           title3 "sample print of work.asconds - sorted by condidx";  
42           title4 "COND (H154) records where cccodex=128";  
43       run;
```

NOTE: There were 50 observations read from the data set WORK.ASCONDS.  
NOTE: The PROCEDURE PRINT printed page 1.  
NOTE: PROCEDURE PRINT used (Total process time):  
      real time           0.14 seconds  
      cpu time            0.03 seconds

```
44  
45       PROC SORT DATA=IN.H152IF1 OUT=CLNK; BY CONDIDX; RUN;
```

NOTE: There were 329484 observations read from the data set IN.H152IF1.  
NOTE: SAS threaded sort was used.  
NOTE: The data set WORK.CLNK has 329484 observations and 6 variables.  
NOTE: Compressing data set WORK.CLNK increased size by 5.91 percent.  
Compressed is 6233 pages; un-compressed would require 5885 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 1.88 seconds  
cpu time 0.53 seconds

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

NOTE: There were 329484 observations read from the data set WORK.CLNK.  
NOTE: There were 2515 observations read from the data set WORK.ASCONDS.  
NOTE: The data set WORK.ASCLNKS has 7010 observations and 3 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 26.79 percent.  
Compressed is 71 pages; un-compressed would require 56 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.21 seconds  
cpu time 0.21 seconds

```
53  
54 proc report data=asclnks (obs=75)nowd headskip;  
55 define condidx / 'CONDIDX' order;  
56 define evntidx / 'EVNTIDX';  
57 define eventype / 'EVENTYPE';  
58 break after condidx / skip;  
59 format eventype eventype.;  
60 title3 "sample print of work.asclnks - sorted by condidx";  
61 title4 "events linked to asthma condition records";  
62 run;
```

NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 75 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE REPORT printed pages 2-3.  
NOTE: PROCEDURE REPORT used (Total process time):  
real time 0.23 seconds  
cpu time 0.06 seconds

```
63  
64 PROC SORT DATA=ASCLNKS; BY EVNTIDX; RUN;
```

NOTE: There were 7010 observations read from the data set WORK.ASCLNKS.  
NOTE: SAS sort was used.  
NOTE: The data set WORK.ASCLNKS has 7010 observations and 3 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 26.79 percent.  
Compressed is 71 pages; un-compressed would require 56 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.01 seconds

cpu time 0.01 seconds

```
65  
66     proc print data=asclnks (obs=50);  
67         format eventype eventype.;  
68         title3 "sample print of work.asclnks - sorted by evtntidx";  
69     run;
```

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE PRINT printed page 4.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.00 seconds

```
70  
71     DATA ASCLNKS;  
72         SET ASCLNKS (KEEP=EVNTIDX EVENTYPE);  
73         BY EVNTIDX;  
74         IF FIRST.EVNTIDX;  
75     RUN;
```

NOTE: There were 7010 observations read from the data set WORK.ASCLNKS.  
NOTE: The data set WORK.ASCLNKS has 6999 observations and 2 variables.  
NOTE: Compressing data set WORK.ASCLNKS increased size by 19.05 percent.  
Compressed is 50 pages; un-compressed would require 42 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
76  
77     proc print data=asclnks (obs=50);  
78         format eventype eventype.;  
79         title3 "sample print of unique evtntidxs from work.asclnks";  
80     run;
```

NOTE: There were 50 observations read from the data set WORK.ASCLNKS.  
NOTE: The PROCEDURE PRINT printed page 5.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

```
81  
82     *-----  
83     * Get non-telephone office based visits (i.e. MVIS events) for persons with positive weights.  
84     *-----  
85     DATA MVIS;  
86         SET IN.H152G (KEEP=EVNTIDX PERWT12F SEETLKPV OBXP12X);  
87         IF PERWT12F > 0 & SEETLKPV NE 2;  
88     RUN;
```

NOTE: There were 144755 observations read from the data set IN.H152G.  
NOTE: The data set WORK.MVIS has 140703 observations and 4 variables.  
NOTE: Compressing data set WORK.MVIS increased size by 6.46 percent.

Compressed is 1484 pages; un-compressed would require 1394 pages.  
NOTE: DATA statement used (Total process time):  
real time 4.89 seconds  
cpu time 0.37 seconds

89  
90 PROC SORT DATA=MVIS; BY EVNTIDX; RUN;

NOTE: There were 140703 observations read from the data set WORK.MVIS.  
NOTE: SAS threaded sort was used.  
NOTE: The data set WORK.MVIS has 140703 observations and 4 variables.  
NOTE: Compressing data set WORK.MVIS increased size by 6.46 percent.  
Compressed is 1484 pages; un-compressed would require 1394 pages.  
NOTE: PROCEDURE SORT used (Total process time):  
real time 0.18 seconds  
cpu time 0.20 seconds

91  
92 \*-----  
93 \* Identify MVIS events which were for asthma.  
94 \*-----;  
95 DATA ASMVIS;  
96 MERGE ASCLNKS (IN=INASCLNK)  
97 MVIS (IN=INMVIS);  
98 BY EVNTIDX;  
99 IF INASCLNK & INMVIS;  
100 RUN;

NOTE: There were 6999 observations read from the data set WORK.ASCLNKS.  
NOTE: There were 140703 observations read from the data set WORK.MVIS.  
NOTE: The data set WORK.ASMVIS has 1926 observations and 5 variables.  
NOTE: Compressing data set WORK.ASMVIS decreased size by 0.00 percent.  
Compressed is 24 pages; un-compressed would require 24 pages.  
NOTE: DATA statement used (Total process time):  
real time 0.07 seconds  
cpu time 0.07 seconds

101  
102 proc print data=asmvis (obs=50);  
103 format eventype eventype.;  
104 title3 "sample print of work.asmvis";  
105 title4 "unique evtidxs from work.asclnks that are non-telephone MVIS (HC-152G) events";  
106 run;

NOTE: There were 50 observations read from the data set WORK.ASMVIS.  
NOTE: The PROCEDURE PRINT printed page 6.  
NOTE: PROCEDURE PRINT used (Total process time):  
real time 0.01 seconds  
cpu time 0.01 seconds

107  
108 PROC MEANS DATA=ASMVIS N SUM;  
109 VAR OBXP12X;



```
110          TITLE3 "Total medical visit expenditures (excluding telephone) associated with asthma";  
111          RUN;
```

```
NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 1926 observations read from the data set WORK.ASMVIS.  
NOTE: The PROCEDURE MEANS printed page 7.  
NOTE: PROCEDURE MEANS used (Total process time):  
      real time      0.03 seconds  
      cpu time       0.01 seconds
```

```
112  
113          PROC MEANS DATA=ASMVIS N SUM;  
114              VAR OEXP12X;  
115              WEIGHT PERWT12F;  
116          TITLE3 "Total medical visit expenditures (excluding telephone) associated with asthma";  
117          TITLE5 "Weighted";  
118          RUN;
```

```
NOTE: Multiple concurrent threads will be used to summarize data.  
NOTE: There were 1926 observations read from the data set WORK.ASMVIS.  
NOTE: The PROCEDURE MEANS printed page 8.  
NOTE: PROCEDURE MEANS used (Total process time):  
      real time      0.01 seconds  
      cpu time       0.01 seconds
```

```
119          ods rtf close;  
120  
121  
122
```

```
NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414  
NOTE: The SAS System used:  
      real time      16.02 seconds  
      cpu time       2.32 seconds
```

**HC-152I**  
**Sample SAS Job for Example C**  
**sample print of work.asconds - sorted by condidx**  
**COND (H154) records where cccodex=128**

Obs	CONDIDX	CCCODEX
1	200111010041	128
2	200321020011	128
3	200331080011	128
4	200411050011	128
5	200461030011	128
6	200461060011	128
7	200481050011	128
8	200591010021	128
9	200591030011	128
10	200841020051	128
11	200941010021	128
12	200941020051	128
13	200961010081	128
14	200961030011	128
15	201091010021	128
16	201391010061	128
17	201501020021	128
18	201701040011	128
19	201731020021	128
20	201751010042	128
21	201791020011	128
22	201921020051	128
23	201991030011	128
24	202301020021	128
25	202301030011	128
26	202301050061	128
27	202541010021	128
28	202571010021	128
29	202621020042	128
30	202621060012	128
31	202631020011	128
32	202641010041	128
33	202641010061	128
34	202701050011	128
35	202781020011	128
36	202831040011	128
37	202831040021	128
38	202851010021	128
39	202851030012	128
40	202851040011	128
41	202941030011	128
42	202941040011	128
43	202971030011	128
44	203341010051	128
45	203411010021	128
46	203451020021	128
47	203451030011	128
48	203591010041	128
49	203661020011	128
50	203791010011	128

HC-152I

Sample SAS Job for Example C

sample print of work.asclinks - sorted by condidx  
 events linked to asthma condition records

CONDIDX	EVNTIDX	EVENTYPE
200111010041	200111010011	1 MVIS
200111010041	200111010031	7 HVIS
200111010041	200111010041	7 HVIS
200111010041	200111010051	7 HVIS
200331080011	200331080021	8 PMED
200411050011	200411050011	1 MVIS
200411050011	200411050021	8 PMED
200411050011	200411050031	1 MVIS
200411050011	200411050041	8 PMED
200411050011	200411050081	8 PMED
200461030011	200461030021	8 PMED
200591010021	200591010131	8 PMED
200591030011	200591030041	8 PMED
200591030011	200591030051	8 PMED
200591030011	200591030151	8 PMED
200591030011	200591030161	8 PMED
200941010021	200941010021	8 PMED
200941010021	200941010031	8 PMED
200941010021	200941010271	8 PMED
200941020051	200941020171	1 MVIS
200941020051	200941020201	1 MVIS
200961010081	200961010401	1 MVIS
200961010081	200961010411	1 MVIS
200961010081	200961010421	1 MVIS
200961010081	200961010431	1 MVIS
200961030011	200961030041	8 PMED
201091010021	201091010011	1 MVIS
201091010021	201091010021	1 MVIS
201091010021	201091010031	1 MVIS
201091010021	201091010041	8 PMED
201391010061	201391010061	1 MVIS
201391010061	201391010071	1 MVIS
201391010061	201391010081	1 MVIS
201391010061	201391010091	2 OPAT
201391010061	201391010101	2 OPAT
201391010061	201391010141	8 PMED
201391010061	201391010211	8 PMED
201391010061	201391010251	8 PMED
201391010061	201391010321	8 PMED
201501020021	201501020111	1 MVIS
201501020021	201501020121	1 MVIS
201501020021	201501020131	1 MVIS
201501020021	201501020141	1 MVIS
201501020021	201501020151	1 MVIS
201501020021	201501020161	1 MVIS
201501020021	201501020171	1 MVIS
201501020021	201501020181	1 MVIS
201501020021	201501020221	8 PMED
201701040011	201701040011	3 EROM
201731020021	201731020151	8 PMED
201731020021	201731020261	8 PMED
201751010042	201751010072	8 PMED
201751010042	201751010092	1 MVIS
201751010042	201751010112	8 PMED
201791020011	201791020031	1 MVIS
201791020011	201791020041	8 PMED
201921020051	201921020081	1 MVIS
201991030011	201991030011	1 MVIS
201991030011	201991030031	8 PMED
202301050061	202301050111	1 MVIS
202301050061	202301050121	1 MVIS
202301050061	202301050181	8 PMED
202541010021	202541010101	8 PMED
202541010021	202541010111	8 PMED
202621020042	202621020042	8 PMED
202621020042	202621020052	8 PMED
202621020042	202621020082	8 PMED
202621020042	202621020102	3 EROM
202621020042	202621020112	4 STAZ

<b>CONDIDX</b>	<b>EVNTIDX</b>	<b>EVENTYPE</b>
202621020042	202621020142	1 MVIS
202621020042	202621020152	1 MVIS
202621020042	202621020212	8 PMED
202641010041	202641010041	4 STAZ
202641010041	202641010051	2 OPAT
202641010041	202641010061	2 OPAT

**HC-152I**  
**Sample SAS Job for Example C**  
**sample print of work.asclnks - sorted by evntidx**

Obs	CONDIDX	EVNTIDX	EVENTYPE
1	200111010041	200111010011	1 MVIS
2	200111010041	200111010031	7 HVIS
3	200111010041	200111010041	7 HVIS
4	200111010041	200111010051	7 HVIS
5	200331080011	200331080021	8 PMED
6	200411050011	200411050011	1 MVIS
7	200411050011	200411050021	8 PMED
8	200411050011	200411050031	1 MVIS
9	200411050011	200411050041	8 PMED
10	200411050011	200411050081	8 PMED
11	200461030011	200461030021	8 PMED
12	200591010021	200591010131	8 PMED
13	200591030011	200591030041	8 PMED
14	200591030011	200591030051	8 PMED
15	200591030011	200591030151	8 PMED
16	200591030011	200591030161	8 PMED
17	200941010021	200941010021	8 PMED
18	200941010021	200941010031	8 PMED
19	200941010021	200941010271	8 PMED
20	200941020051	200941020171	1 MVIS
21	200941020051	200941020201	1 MVIS
22	200961010081	200961010401	1 MVIS
23	200961010081	200961010411	1 MVIS
24	200961010081	200961010421	1 MVIS
25	200961010081	200961010431	1 MVIS
26	200961030011	200961030041	8 PMED
27	201091010021	201091010011	1 MVIS
28	201091010021	201091010021	1 MVIS
29	201091010021	201091010031	1 MVIS
30	201091010021	201091010041	8 PMED
31	201391010061	201391010061	1 MVIS
32	201391010061	201391010071	1 MVIS
33	201391010061	201391010081	1 MVIS
34	201391010061	201391010091	2 OPAT
35	201391010061	201391010101	2 OPAT
36	201391010061	201391010141	8 PMED
37	201391010061	201391010211	8 PMED
38	201391010061	201391010251	8 PMED
39	201391010061	201391010321	8 PMED
40	201501020021	201501020111	1 MVIS
41	201501020021	201501020121	1 MVIS
42	201501020021	201501020131	1 MVIS
43	201501020021	201501020141	1 MVIS
44	201501020021	201501020151	1 MVIS
45	201501020021	201501020161	1 MVIS
46	201501020021	201501020171	1 MVIS
47	201501020021	201501020181	1 MVIS
48	201501020021	201501020221	8 PMED
49	201701040011	201701040011	3 EROM
50	201731020021	201731020151	8 PMED

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Sample SAS Job for Example C

sample print of unique evntidxs from work.asclnks

Obs	EVNTIDX	EVENTYPE
1	200111010011	1 MVIS
2	200111010031	7 HVIS
3	200111010041	7 HVIS
4	200111010051	7 HVIS
5	200331080021	8 PMED
6	200411050011	1 MVIS
7	200411050021	8 PMED
8	200411050031	1 MVIS
9	200411050041	8 PMED
10	200411050081	8 PMED
11	200461030021	8 PMED
12	200591010131	8 PMED
13	200591030041	8 PMED
14	200591030051	8 PMED
15	200591030151	8 PMED
16	200591030161	8 PMED
17	200941010021	8 PMED
18	200941010031	8 PMED
19	200941010271	8 PMED
20	200941020171	1 MVIS
21	200941020201	1 MVIS
22	200961010401	1 MVIS
23	200961010411	1 MVIS
24	200961010421	1 MVIS
25	200961010431	1 MVIS
26	200961030041	8 PMED
27	201091010011	1 MVIS
28	201091010021	1 MVIS
29	201091010031	1 MVIS
30	201091010041	8 PMED
31	201391010061	1 MVIS
32	201391010071	1 MVIS
33	201391010081	1 MVIS
34	201391010091	2 OPAT
35	201391010101	2 OPAT
36	201391010141	8 PMED
37	201391010211	8 PMED
38	201391010251	8 PMED
39	201391010321	8 PMED
40	201501020111	1 MVIS
41	201501020121	1 MVIS
42	201501020131	1 MVIS
43	201501020141	1 MVIS
44	201501020151	1 MVIS
45	201501020161	1 MVIS
46	201501020171	1 MVIS
47	201501020181	1 MVIS
48	201501020221	8 PMED
49	201701040011	3 EROM
50	201731020151	8 PMED

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Sample SAS Job for Example C

sample print of work.asmvis

unique evtidtxs from work.asclnks that are non-telephone MVIS (HC-152G) events

Obs	EVNTIDX	EVENTYPE	SEETLKPV	OBXP12X	PERWT12F
1	200111010011	1 MVIS	1	26.18	13725.41
2	200411050011	1 MVIS	1	87.83	8127.03
3	200411050031	1 MVIS	1	98.76	8127.03
4	200941020171	1 MVIS	1	27.74	6166.62
5	200941020201	1 MVIS	1	29.00	6166.62
6	200961010401	1 MVIS	1	40.74	2297.49
7	200961010411	1 MVIS	1	40.74	2297.49
8	200961010421	1 MVIS	1	40.74	2297.49
9	200961010431	1 MVIS	1	110.85	2297.49
10	201091010011	1 MVIS	1	78.95	5956.03
11	201091010021	1 MVIS	1	154.42	5956.03
12	201091010031	1 MVIS	1	41.53	5956.03
13	201391010061	1 MVIS	1	110.79	8966.52
14	201391010071	1 MVIS	1	110.79	8966.52
15	201391010081	1 MVIS	1	110.79	8966.52
16	201501020111	1 MVIS	1	57.19	21334.65
17	201501020121	1 MVIS	1	57.19	21334.65
18	201501020131	1 MVIS	1	99.63	21334.65
19	201501020141	1 MVIS	1	99.63	21334.65
20	201501020151	1 MVIS	1	67.28	21334.65
21	201501020161	1 MVIS	1	67.28	21334.65
22	201501020171	1 MVIS	1	99.63	21334.65
23	201501020181	1 MVIS	1	57.19	21334.65
24	201751010092	1 MVIS	1	54.54	4636.78
25	201791020031	1 MVIS	1	102.15	18436.16
26	201921020081	1 MVIS	1	67.66	17925.45
27	201991030011	1 MVIS	1	48.27	3526.80
28	202301050111	1 MVIS	1	32.56	2460.35
29	202301050121	1 MVIS	1	32.56	2460.35
30	202621020142	1 MVIS	1	103.16	3241.64
31	202621020152	1 MVIS	1	118.98	3241.64
32	202831040011	1 MVIS	1	248.56	2317.84
33	202831040021	1 MVIS	1	51.00	2317.84
34	202851040081	1 MVIS	1	214.00	19783.69
35	203341010011	1 MVIS	1	42.91	3559.46
36	203341010021	1 MVIS	1	136.21	3559.46
37	203341010261	1 MVIS	1	121.38	3559.46
38	203411010121	1 MVIS	1	72.45	9581.70
39	203451020101	1 MVIS	1	57.50	11600.60
40	203661020101	1 MVIS	1	249.00	4796.82
41	203951020051	1 MVIS	1	128.00	4373.85
42	204621050011	1 MVIS	1	5.96	2160.24
43	205071010011	1 MVIS	1	68.20	11747.34
44	205081010061	1 MVIS	1	421.94	4638.35
45	205331010011	1 MVIS	1	115.43	8084.80
46	205411010041	1 MVIS	1	105.28	3051.60
47	205411010051	1 MVIS	1	105.28	3051.60
48	205411010061	1 MVIS	1	167.39	3051.60
49	205411010071	1 MVIS	1	167.39	3051.60
50	205411010081	1 MVIS	1	69.01	3051.60

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Sample SAS Job for Example C

Total medical visit expenditures (excluding telephone) associated with asthma

Analysis Variable: OBXP12X SUM OF OBSF12X - OBOT12X (IMPUTED)

N	Sum
1926	261456.21



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Sample SAS Job for Example C

Total medical visit expenditures (excluding telephone) associated with asthma

Weighted

Analysis Variable: OBP12X SUM OF OBSF12X - OBOT12X (IMPUTED)

N	Sum
1926	2978371515