MEPS HC-026I:
Appendix to MEPS 1998 Event Files
HC-026A - HC-026H

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Agency for Healthcare Research and Quality
Center for Cost and Financing Studies

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A. Data Use Agreement

Individual identifiers have been removed from the microdata contained in the files on this CD-ROM. 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.

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.

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 18 U.S.C. 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

This documentation describes one in a series of public use files from the Medical Expenditure Panel Survey (MEPS). The survey provides a new and extensive data set on the use of health services and health care in the United States.

MEPS is conducted to provide nationally representative estimates of health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian noninstitutionalized population. MEPS is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) (formerly the Agency for Health Care Policy and Research (AHCPR)) and the National Center for Health Statistics (NCHS).

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

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

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

1.0   Household Component

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

The HC uses an overlapping panel design in which data are collected through a preliminary contact followed by a series of five rounds of interviews over a 2½-year period. Using computer-assisted personal interviewing (CAPI) technology, data on medical expenditures and use for two calendar years are collected from each household. This series of data collection rounds is launched each subsequent year on a new sample of households to provide overlapping panels of survey data and, when combined with other ongoing panels, will provide continuous and current estimates of health care expenditures.

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

2.0   Medical Provider Component

The MEPS MPC supplements and validates information on medical care events reported in the MEPS HC by contacting medical providers and pharmacies identified by household respondents. The MPC sample includes all hospitals, hospital physicians, home health agencies, and pharmacies reported in the HC. Also included in the MPC are all office-based physicians who:

- were identified by the household respondent as providing care for HC respondents receiving Medicaid.

- were selected through a 75-percent sample of HC households receiving care through an HMO (health maintenance organization) or managed care plan.

- were selected through a 25-percent sample of the remaining HC households.

Data are collected on medical and financial characteristics of medical and pharmacy events reported by HC respondents, including:

- Diagnoses coded according to ICD-9-CM (9th Revision, International Classification of Diseases) and DSM-IV (Fourth Edition, *Diagnostic and Statistical Manual of Mental Disorders*).

- Physician procedure codes classified by CPT-4 (Common Procedure Terminology, Version 4).

- Inpatient stay codes classified by DRGs (diagnosis-related groups).

- Prescriptions coded by national drug code (NDC), medication name, strength, and quantity dispensed.

- Charges, payments, and the reasons for any difference between charges and payments.

The MPC is conducted through telephone interviews and mailed survey materials. In some instances,

providers sent medical and billing records which were abstracted into the survey instruments.

3.0   Insurance Component

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

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

- A list of employers or other insurance providers identified by MEPS HC respondents who report having private health insurance at the Round 1 interview.

- A Bureau of the Census list frame of private-sector business establishments.

- The Census of Governments from Bureau of the Census.

- An Internal Revenue Service list of the self-employed.

To provide an integrated picture of health insurance, data collected from the first sampling frame (employers and insurance providers) are linked back to data provided by the MEPS HC respondents. Data from the other three sampling frames are collected to provide annual national and State estimates of the supply of private health insurance available to American workers and to evaluate policy issues pertaining to health insurance.

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

4.0   Survey Management

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

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports and microdata files. Summary reports are released as printed documents and/or as electronic files on the MEPS web site (www.meps.ahrq.gov). All microdata files are available for download from the MEPS web site in compressed formats (zip and self-extracting executable files). Selected data files are available on CD-ROM from the MEPS clearinghouse.

For printed documents and CD-ROMs that are available through the AHRQ Publications Clearinghouse, write or call:

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

Be sure to specify the AHRQ number of the document or CD-ROM you are requesting.

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

C. Technical and Programming Information

1.0   General Information

This documentation describes the MEPS Public Use Release HC-026I, which is the Appendix to MEPS releases HC-026A through HC-026H. This release contains two data files, both of which are provided in ASCII and SAS versions: 1) the condition-event link file; and 2) the prescribed medicines-event link file. Also included in this release are two tables provided as PDF files: 1) the condition-event frequency table and 2) the utilization and expenditures summary table.

This documentation offers a brief overview of the content and structure of the files and the codebooks (provided as files H26IF1CB.PDF and H26IF2CB.PDF). It contains the following sections:

Data File Information
Merging MEPS Data Files
Crosswalk of Clinical Classification Code to ICD-9 Code

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

2.0   Data File Information

This public use data set consists of two data files containing variables for linkage of the MEPS 1998 event-level data files. File 1, the H26IF1 or "CLNK" file, is used for linking the MEPS condition file with the MEPS event files; File 2, the H26IF2 or "RXLK" file, is used for linking the MEPS prescribed medicines event file with other MEPS event files.

2.1   Codebook Format

Section D of this document includes codebooks describing the ASCII version of each data file (the data are also provided as SAS transport files). The following codebook items are provided for each variable on the file:

IDENTIFIER	DESCRIPTION
Name	Variable name (maximum of 8 characters)
Description	Variable descriptor (maximum of 40 characters)
Format	Number of bytes
Type	Type of data: numeric (indicated by NUM) or character (indicated by CHAR)
Start	Beginning column position of variable in record

| End | Ending column position of variable in record |

2.2   Variable Naming and Source

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

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

File 1, (H26IF1) or the CLNK file, contains the variables needed to link each record on the MEPS 1998 condition file, HC-027, with one or more records on the MEPS 1998 event files, HC-026A through HC-026H. 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 which uniquely identifies each condition for a person and c orresponds to a unique record on the MEPS 1998 Condition file, HC-027.   There may be more than one record on the CLNK file for a specific CONDIDX value.

EVNTIDX is the 12-digit number which uniquely identifies each event for a person and corresponds to a unique record on one of the MEPS 1998 event files, HC-026B through HC-026H. (EVNTIDX is not included on the 1998 Prescription Medicines event file, HC-026A; 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 which 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-026G
    2 = OPAT - outpatient department visit event contained on MEPS release HC-026F
    3 = EROM - emergency room visit event contained on MEPS release HC-026E
    4 = STAZ - hospital inpatient stay event contained on MEPS release HC-026D
    5 = DVIS - dental visit event contained on MEPS release HC-026B
    7 = HVIS - home health visit event contained on MEPS release HC-026H
    8 = PMED - prescribed medicines event contained on MEPS release HC-026A

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

File 2, (H26IF2) or the RXLK file, contains the variables needed to link each record on the MEPS 1998 prescribed medicines file, HC-026A, with one or more records on the MEPS 1998 event files, HC-026B through HC-026H. 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 which uniquely identifies each event for a person and corresponds to a unique record on one of the MEPS 1998 event files, HC-026B through HC-026H. There may be more than one record on the RXLK file for a specific EVNTIDX value.

LINKIDX is the 12-digit number which identifies the record(s) on the prescribed medicines file, HC-026A which link to an event record. There may be more than one record on the RXLK file for a specific LINKIDX value, and there may be more than one record on the HC-026A file for a specific LINKIDX value.

RXLKIDX is the 24-digit number which 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-026G
 2 = OPAT - outpatient department visit event contained on MEPS release HC-026F
 3 = EROM - emergency room visit event contained on MEPS release HC-026E
 4 = STAZ - hospital inpatient stay event contained on MEPS release HC-026D
 5 = DVIS - dental visit event contained on MEPS release HC-026B
 6 = OMED - other medical expense event contained on MEPS release HC-026C

2.5 1998 Condition-Event Frequency Table

The file H26IT1.PDF contains the "MEPS 1998 Condition-Event Frequency" table. This table contains unweighted and weighted counts of records on the MEPS 1998 event files, HC-026A through HC-026H, for each of the condition, procedure and clinical classification codes contained on the MEPS 1998 condition file, HC-027. Attachment 1 contains a crosswalk of the clinical classification codes to ICD-9 codes. See the HC-027 document for additional information on these codes.

2.6 1998 Utilization and Expenditures Summary Table

The file H26IT2.PDF contains the "MEPS 1998 Utilization and Expenditures Summary" table. This

table contains statistics for all of the utilization and expenditure va riables contained on the MEPS 1998 Full Year Use and Expenditure Data file, HC-028. For e ach of these variables, the following statistics are provided from the HC-028 file, and from the corresponding event-level file(s) HC-026A through HC-026H:

Number of persons with positive person-level weight (WTDPER98) and with value GT 0 for that variable

Weighted sum of the variable

Weighted mean of the variable

The table also includes the technical spe cifications used to construct each of the person-level HC-028 variables from the event-level files.

3.0   Merging/Linking MEPS Data Files

This section provides information on using each of the two HC-026I files, RXLK and CLNK, to link with the files contained in MEPS releases HC-027 and HC-026A through HC-026H. 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 RXLK and CLNK Files with the Medical Conditions File (HC-027), the Prescribed Medicines and Office-Based Medical Provider Visits Event Files (HC-026A and HC-026G)

This example calculates the total expenditures for prescribed medicines associated with office-based medical provider visits for asthma, using these files: the condition file (HC-027), the CLNK file, the office-based medical provider visit event file (HC-026G), the RXLK file, and the prescribed medicines event file (HC-026A). It includes the following major steps:

1.   From HC-027 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-026G 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-026G 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-026A linked to those visits.

6.   Using these record IDs obtain the linked records from the HC-026A 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 with the Medical Conditions File (HC-027) and the Prescribed Medicines Event File (HC-026A)

This example calculates the total expenditure for prescribed medicines associated with asthma, using the condition file (HC-027), the CLNK file and the prescribed medicines event file (HC-026A). It includes the following major steps:

1.   From HC-027 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-026A file and calculate the weighted mean of the expenditure variable.

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

3.3   Example C: Using the CLNK File with the Medical Conditions File (HC-027) and Office-Based Medical Provider Visits Event File (HC-026G)

This example calculates the total expenditures for office-based medical provider visits associated with asthma, using the condition file (HC-027), the CLNK file and the office-based medical provider visits event file (HC-026G). It includes the following major steps:

1.   From HC-027 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-026G 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-026G 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 Example D: Using the RXLK File with the Other Medical Expenses Event File (HC-026C)

This example calculates the total prescription expenditures for other medical events reported by the household with type of other medical expense indicated as insulin (OMTYPEX=2), using the RXLK file and the other medical expenses event file (HC-026C). It includes the following major steps:

1.   From HC-026C file select only records for other medical expense type of insulin, for persons with a positive weight.

2.   Use the RXLK file to obtain unique record IDs of prescribed medicine events which are linked to each of the selected other medical expense records.

3.   Use the selected record IDs from the RXLK file to obtain the linked prescribed medicines event records from the HC-026A file, and calculate the weighted sum of the expenditure variable.

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

3.5 Limitations/Caveats of the CLNK File

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

3.6 Limitations/Caveats of the RXLK File

When using RXLK, 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.

**Attachment 1
Clinical Classification Code to
ICD-9 Code Crosswalk**

Clinical Classification Software—DIAGNOSES
(with all coding changes valid from January 1980 through September 1999)

Diagnosis category
ICD-9-CM codes

1   Tuberculosis

V1201	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						

NOTE: All ICD-9-CM coding changes from January 1980 through September 1999 are included in this appendix. However, special treatment is required for code 2510 (Hypoglycemic coma) which resides in diagnosis category 50 Diabetes mellitus, if data prior to October 1993 are used. After October 1993, code 2510 resides in diagnosis category 51 Other endocrine disorders (as depicted in this appendix).

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Attachment 1
Clinical Classification Software—DIAGNOSES
(with all coding changes valid from January 1980 through September 1999)

Diagnosis category
ICD-9-CM codes

2   Septicemia (except in labor)

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

3   Bacterial infection, unspecified site

V090	V091	V092	V093	V094	V0950	V0951	V096	V0970	V0971	V0980	V0981
V0990	V0991	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	04081	04089	0410	04100	04101	04102
04103	04104	04105	04109	0411	04110	04111	04119	0412	0413	0414	0415
0416	0417	0418	04181	04182	04183	04184	04185	04186	04189	0419	390
3929	7953										

4   Mycoses

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

5   HIV infection

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

6   Hepatitis

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

7   Viral infection

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

8   Other infections, including parasitic

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

9   Sexually transmitted infections (not HIV or hepatitis)

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

10   Immunizations and screening for infectious disease

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

11   Cancer of head and neck

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Clinical Classification Software—DIAGNOSES
(with all coding changes valid from January 1980 through September 1999)

Diagnosis category
ICD-9-CM codes

V1001	V1002	V1021	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											

12   Cancer of esophagus

V1003	1500	1501	1502	1503	1504	1505	1508	1509	2301

13   Cancer of stomach

V1004	1510	1511	1512	1513	1514	1515	1516	1518	1519	2302

14   Cancer of colon

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

15   Cancer of rectum and anus

V1006	1540	1541	1542	1543	1548	2304	2305	2306

16   Cancer of liver and intrahepatic bile duct

V1007	1550	1551	1552	2308

17   Cancer of pancreas

1570	1571	1572	1573	1574	1578	1579

18   Cancer of other GI organs, peritoneum

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

19   Cancer of bronchus, lung

V1011	1622	1623	1624	1625	1628	1629	2312

20   Cancer, other respiratory and intrathoracic

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

21   Cancer of bone and connective tissue

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

22   Melanomas of skin

| V1082 | 1720 | 1721 | 1722 | 1723 | 1724 | 1725 | 1726 | 1727 | 1728 | 1729 | |

23   Other non-epithelial cancer of skin

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

24   Cancer of breast

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

25   Cancer of uterus

| V1042 | 179 | 1820 | 1821 | 1828 | 2332 |

26   Cancer of cervix

| V1041 | 1800 | 1801 | 1808 | 1809 | 2331 | 7950 |

27   Cancer of ovary

| V1043 | 1830 |

28   Cancer of other female genital organs

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

29   Cancer of prostate

| V1046 | 185 | 2334 |

30   Cancer of testis

| V1047 | 1860 | 1869 |

31   Cancer of other male genital organs

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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

32   Cancer of bladder

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

33   Cancer of kidney and renal pelvis

V1052	1890	1891

34   Cancer of other urinary organs

V1050	V1059	1892	1893	1894	1898	1899	2339

35   Cancer of brain and nervous system

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

36   Cancer of thyroid

V1087	193

37   Hodgkin's disease

V1072	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											

38   Non-Hodgkin's lymphoma

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

39   Leukemias

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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

40   Multiple myeloma

2030   20300   20301   2038   20380   20381

41   Cancer, other and unspecified primary

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

42   Secondary malignancies

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

43   Malignant neoplasm without specification of site

1990   1991

44   Neoplasms of unspecified nature or uncertain behavior

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

45   Maintenance chemotherapy, radiotherapy

V580   V581   V661   V662   V671   V672

46   Benign neoplasm of uterus

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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

47   Other and unspecified benign neoplasm

V1272	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								

48   Thyroid disorders

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

49   Diabetes mellitus without complication

| 25000 | 25001 | 7902 | 7915 | 7916 |

50   Diabetes mellitus with complications

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

51   Other endocrine disorders

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

52   Nutritional deficiencies

| V121 | 260 | 261 | 262 | 2630 | 2631 | 2632 | 2638 | 2639 | 2640 | 2641 | 2642 |
| 2643 | 2644 | 2645 | 2646 | 2647 | 2648 | 2649 | 2650 | 2651 | 2652 | 2660 | 2661 |

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

2662	2669	267	2680	2681	2682	2689	2690	2691	2692	2693	2698
2699	7994										

53   Disorders of lipid metabolism

2720	2721	2722	2723	2724

54   Gout and other crystal arthropathies

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

55   Fluid and electrolyte disorders

2760	2761	2762	2763	2764	2765	2766	2767	2768	2769

56   Cystic fibrosis

27700	27701

57   Immunity disorders

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

58   Other nutritional, endocrine, and metabolic disorders

V122	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	2738	2739	2750	2751	2752	2753	2754	27540	27541
27542	27549	2758	2759	2771	2772	2773	2774	2775	2776	2778	2779
2780	27800	27801	2781	2782	2783	2784	2788	7831	7832	7833	7834
7835	7839	7947	7957	79579							

59   Deficiency and other anemia

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

60   Acute posthemorrhagic anemia

2851

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

61   Sickle cell anemia

   2825   28260   28261   28262   28263   28269

62   Coagulation and hemorrhagic disorders

   2860   2861   2862   2863   2864   2865   2866   2867   2869   2870   2871   2872
   2873   2874   2875   2878   2879   7827

63   Diseases of white blood cells

   2880   2881   2882   2883   2888   2889

64   Other hematologic conditions

   V123   V582   2890   2894   28950   28951   28959   2896   2897   2898   2899   7900

65   Mental retardation

   317   3180   3181   3182   319

66   Alcohol-related mental disorders

   2910   2911   2912   2913   2914   2915   2918   29181   29189   2919   30300   30301
   30302   30303   30390   30391   30392   30393   30500   30501   30502   30503

67   Substance-related mental disorders

   V1582   2920   29211   29212   2922   29281   29282   29283   29284   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   3051   30510   30511   30512   30513   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

68   Senility and organic mental disorders

   2900   29010   29011   29012   29013   29020   29021   2903   29040   29041   29042   29043
   2908   2909   2930   2931   29381   29382   29383   29384   29389   2939   2940   2941
   2948   2949   3100   3101   3102   3108   3109   3310   3311   3312   797

69   Affective disorders

   29600   29601   29602   29603   29604   29605   29606   29610   29611   29612   29613   29614
   29615   29616   29620   29621   29622   29623   29624   29625   29626   29630   29631   29632

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

| Diagnosis category |
ICD-9-CM codes

29633	29634	29635	29636	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	2980	3004	30111	30113

70   Schizophrenia and related disorders

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
29900	29901	29910	29911	29980	29981	29990	29991				

71   Other psychoses

| 2970 | 2971 | 2972 | 2973 | 2978 | 2979 | 2981 | 2982 | 2983 | 2984 | 2988 | 2989 |

72   Anxiety, somatoform, dissociative, and personality disorders

30000	30001	30002	30009	30010	30011	30012	30013	30014	30015	30016	30019
30020	30021	30022	30023	30029	3003	3005	3006	3007	30081	30082	3010
30110	30112	30120	30121	30122	3013	3014	30150	30151	30159	3016	3017
30181	30182	30183	30184	30189	3019	30740	30741	30742	30743	30744	30745
30747	30748	30749	30780	30781	30789	3079	3080	3081	3082	3083	3084
3089	30981	31230	31231	31232	31233	31234	31235	31239			

73   Preadult disorders

30921	31200	31201	31202	31203	31210	31211	31212	31213	31220	31221	31222
31223	3124	3128	31281	31282	31289	3129	3130	31321	31400	31401	3141
3142	3148	3149									

74   Other mental conditions

30089	3009	3021	3022	3023	3024	30250	30251	30252	30253	3026	30270
30271	30272	30273	30274	30275	30276	30279	30281	30282	30283	30284	30285
30289	3029	3060	3061	3062	3063	3064	30650	30651	30652	30653	30659
3066	3067	3068	3069	3070	3071	30720	30721	30722	30723	3073	30746
30750	30751	30752	30753	30754	30759	3076	3077	3090	3091	30922	30923
30924	30928	30929	3093	3094	30982	30983	30989	3099	311	3131	31322
31323	3133	31381	31382	31383	31389	3139	31500	31501	31502	31509	3151
3152	31531	31532	31539	3154	3155	3158	3159	316	7801		

75   Personal history of mental disorder, mental and behavioral problems, observation and screening for mental condition

| V110 | V111 | V112 | V113 | V118 | V119 | V154 | V1541 | V1542 | V1549 | V400 | V401 |

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

| V402 | V403 | V409 | V663 | V673 | V701 | V702 | V7101 | V7102 | V7109 | V790 | V791 |
| V792 | V793 | V798 | V799 | | | | | | | | |

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

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

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

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

78   Other CNS infection and poliomyelitis

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

79   Parkinson's disease

3320

80   Multiple sclerosis

340

81   Other hereditary and degenerative nervous system conditions

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

82   Paralysis

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

83   Epilepsy, convulsions

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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

84   Headache, including migraine

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

85   Coma, stupor, and brain damage

3481	7800	78001	78003	78009

86   Cataract

V431	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										

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
36210	36211	36212	36213	36214	36215	36216	36217	36218	36221	36229	36230
36231	36232	36233	36234	36235	36236	36237	36240	36241	36242	36243	36250
36251	36252	36253	36254	36255	36256	36257	36260	36261	36262	36263	36264
36265	36266	36270	36271	36272	36273	36274	36275	36276	36277	36281	36282
36283	36284	36285	36289	3629							

88   Glaucoma

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

89   Blindness and vision defects

V410	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										

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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

0213	03281	05320	05321	05322	05329	05440	05441	05442	05443	05444	05449
05571	0760	0761	0769	0770	0771	0772	0773	0774	0778	0779	07798
07799	11502	11512	11592	1301	1302	1391	36000	36001	36002	36003	36004
36011	36012	36013	36014	36019	36300	36301	36303	36304	36305	36306	36307
36308	36310	36311	36312	36313	36314	36315	36320	36321	36322	36400	36401
36402	36403	36404	36405	36410	36411	36421	36422	36423	36424	3643	37020
37021	37022	37023	37024	37031	37032	37033	37034	37035	37040	37044	37049
37050	37052	37054	37055	37059	3708	3709	37200	37201	37202	37203	37204
37205	37210	37211	37212	37213	37214	37215	37220	37221	37222	37230	37231
37233	37239	37300	37301	37302	37311	37312	37313	37331	37332	37333	37334
3734	3735	3736	3738	3739	37500	37501	37502	37503	37530	37531	37532
37533	37541	37542	37543	37600	37601	37602	37603	37604	37610	37611	37612
37613	37730	37731	37732	37733	37734	37739	37900	37901	37902	37903	37904
37905	37906	37907	37909								

91   Other eye disorders

V411	V425	V430	V456	V4561	V4569	V522	V531	V720	36020	36021	36023
36024	36029	36030	36031	36032	36033	36034	36040	36041	36042	36043	36044
36050	36051	36052	36053	36054	36055	36059	36060	36061	36062	36063	36064
36065	36069	36081	36089	3609	36330	36331	36332	36333	36334	36335	36340
36341	36342	36343	36350	36351	36352	36353	36354	36355	36356	36357	36361
36362	36363	36370	36371	36372	3638	3639	36441	36442	36451	36452	36453
36454	36455	36456	36457	36459	36460	36461	36462	36463	36464	36470	36471
36472	36473	36474	36475	36476	36477	3648	3649	37000	37001	37002	37003
37004	37005	37006	37007	37060	37061	37062	37063	37064	37100	37101	37102
37103	37104	37105	37110	37111	37112	37113	37114	37115	37116	37120	37121
37122	37123	37124	37130	37131	37132	37133	37140	37141	37142	37143	37144
37145	37146	37148	37149	37150	37151	37152	37153	37154	37155	37156	37157
37158	37160	37161	37162	37170	37171	37172	37173	37181	37182	37189	3719
37240	37241	37242	37243	37244	37245	37250	37251	37252	37253	37254	37255
37256	37261	37262	37263	37264	37271	37272	37273	37274	37275	3728	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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

37852	37853	37854	37855	37856	37860	37861	37862	37863	37871	37872	37873
37881	37882	37883	37884	37885	37886	37887	3789	37911	37912	37913	37914
37915	37916	37919	37921	37922	37923	37924	37925	37926	37929	37931	37932
37933	37934	37939	37940	37941	37942	37943	37945	37946	37949	37950	37951
37952	37953	37954	37955	37956	37957	37958	37959	3798	37990	37991	37992
37993	37999										

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

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

95   Other nervous system disorders

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

96   Heart valve disorders

V422	V433	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								

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

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

98   Essential hypertension

| 4011 | 4019 |

99   Hypertension with complications and secondary hypertension

4010	40200	40201	40210	40211	40290	40291	4030	40300	40301	4031	40310
40311	4039	40390	40391	4040	40400	40401	40402	40403	4041	40410	40411
40412	40413	4049	40490	40491	40492	40493	40501	40509	40511	40519	40591
40599	4372										

100   Acute myocardial infarction

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

101   Coronary atherosclerosis and other heart disease

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

102   Nonspecific chest pain

| 78650 | 78651 | 78659 |

103   Pulmonary heart disease

| 4150 | 4151 | 41519 | 4160 | 4161 | 4168 | 4169 | 4170 | 4171 | 4178 | 4179 |

104   Other and ill-defined heart disease

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

	Diagnosis category										
	ICD-9-CM codes										

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

105   Conduction disorders

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

106   Cardiac dysrhythmias

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

107   Cardiac arrest and ventricular fibrillation

	42741	42742	4275

108   Congestive heart failure, nonhypertensive

	39891	4280	4281	4289

109   Acute cerebrovascular disease

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

110   Occlusion or stenosis of precerebral arteries

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

111   Other and ill-defined cerebrovascular disease

	4370	4371	4373	4374	4375	4376	4377	4378	4379

112   Transient cerebral ischemia

	4350	4351	4352	4353	4358	4359

113   Late effects of cerebrovascular disease

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

114   Peripheral and visceral atherosclerosis

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

5571	5579									

115   Aortic, peripheral, and visceral artery aneurysms

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

116   Aortic and peripheral arterial embolism or thrombosis

4440	4441	44421	44422	44481	44489	4449

117   Other circulatory disease

V125	V1250	V1259	V151	V421	V432	V434	V717	4430	4431	44381	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

118   Phlebitis, thrombophlebitis and thromboembolism

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

119   Varicose veins of lower extremity

4540	4541	4542	4549

120   Hemorrhoids

4550	4551	4552	4553	4554	4555	4556	4557	4558	4559

121   Other diseases of veins and lymphatics

4563	4564	4565	4566	4568	4570	4571	4572	4578	4579	4591	4592
45981

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

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

123   Influenza

4870	4871	4878

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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124   Acute and chronic tonsillitis

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

125   Acute bronchitis

| 4660 | 4661 | 46611 | 46619 |

126   Other upper respiratory infections

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

127   Chronic obstructive pulmonary disease and bronchiectasis

| 490 | 4910 | 4911 | 4912 | 49120 | 49121 | 4918 | 4919 | 4920 | 4928 | 494 | 496 |

128   Asthma

| 49300 | 49301 | 49310 | 49311 | 49320 | 49321 | 49390 | 49391 |

129   Aspiration pneumonitis, food/vomitus

5070

130   Pleurisy, pneumothorax, pulmonary collapse

| 5100 | 5109 | 5110 | 5111 | 5118 | 5119 | 5120 | 5128 | 5180 | 5181 | 5182 |

131   Respiratory failure, insufficiency, arrest (adult)

| V461 | 5185 | 51881 | 51882 | 51883 | 51884 | 7991 |

132   Lung disease due to external agents

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

133   Other lower respiratory disease

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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134   Other upper respiratory disease

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

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	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

V523	V534	V585	V722	5200	5201	5202	5203	5204	5205	5206	5207
5208	5209	5210	5211	5212	5213	5214	5215	5216	5217	5218	5219
5220	5221	5222	5223	5224	5225	5226	5227	5228	5229	5230	5231
5232	5233	5234	5235	5236	5238	5239	5240	52400	52401	52402	52403
52404	52405	52406	52409	5241	52410	52411	52412	52419	5242	5243	5244
5245	5246	52460	52461	52462	52463	52469	52470	52471	52472	52473	52474
52479	5248	5249	5250	5251	5252	5253	5258	5259	5260	5261	5262
5263	5264	5265	52681	52689	5269						

137   Diseases of mouth, excluding dental

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

138   Esophageal disorders

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

139   Gastroduodenal ulcer (except hemorrhage)

V1271	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							

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

140 Gastritis and duodenitis

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

141 Other disorders of stomach and duodenum

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

142 Appendicitis and other appendiceal conditions

| 5400 | 5401 | 5409 | 541 | 542 | 5430 | 5439 |

143 Abdominal hernia

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

144 Regional enteritis and ulcerative colitis

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

145 Intestinal obstruction without hernia

| 5600 | 5601 | 5602 | 56030 | 56031 | 56039 | 56081 | 56089 | 5609 |

146 Diverticulosis and diverticulitis

| 56200 | 56201 | 56202 | 56203 | 56210 | 56211 | 56212 | 56213 |

147 Anal and rectal conditions

| 5646 | 5650 | 5651 | 566 | 5690 | 5691 | 5692 | 56941 | 56942 | 56949 |

148 Peritonitis and intestinal abscess

| 03283 | 5670 | 5671 | 5672 | 5678 | 5679 | 5695 |

149 Biliary tract disease

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

5764	5765	5768	5769	7933

150 Liver disease, alcohol-related

5710	5711	5712	5713

151 Other liver diseases

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

152 Pancreatic disorders (not diabetes)

5770	5771	5772	5778	5779	5794

153 Gastrointestinal hemorrhage

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

154 Noninfectious gastroenteritis

5589

155 Other gastrointestinal disorders

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

156 Nephritis, nephrosis, renal sclerosis

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

157 Acute and unspecified renal failure

5845	5846	5847	5848	5849	586

158 Chronic renal failure

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

V420	V451	V560	V561	V562	V568	585

159 Urinary tract infections

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

160 Calculus of urinary tract

V1301	5920	5921	5929	5940	5941	5942	5948	5949	7880

161 Other diseases of kidney and ureters

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

162 Other diseases of bladder and urethra

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

163 Genitourinary symptoms and ill-defined conditions

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

164 Hyperplasia of prostate

600

165 Inflammatory conditions of male genital organs

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

166 Other male genital disorders

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

167 Nonmalignant breast conditions

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

6100	6101	6102	6103	6104	6108	6109	6110	6111	6112	6113	6114
6115	6116	61171	61172	61179	6118	6119					

168   Inflammatory diseases of female pelvic organs

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

169   Endometriosis

6170	6171	6172	6173	6174	6175	6176	6178	6179

170   Prolapse of female genital organs

6180	6181	6182	6183	6184	6185	6186	6187	6188	6189

171   Menstrual disorders

6253	6260	6261	6262	6263	6264	6265	6266	6268	6269

172   Ovarian cyst

6200	6201	6202

173   Menopausal disorders

V074	6270	6271	6272	6273	6274	6278	6279

174   Female infertility

6280	6281	6282	6283	6284	6288	6289

175   Other female genital disorders

V132	V557	V723	6190	6191	6192	6198	6199	6203	6204	6205	6206
6207	6208	6209	6210	6211	6212	6213	6214	6215	6216	6217	6218
6219	6220	6221	6222	6223	6224	6225	6226	6227	6228	6229	6230
6231	6232	6233	6234	6235	6236	6237	6238	6239	6240	6241	6242
6243	6244	6245	6246	6248	6249	6250	6251	6252	6254	6255	6256
6258	6259	6267	6290	6291	6298	6299					

176   Contraceptive and procreative management

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

177   Spontaneous abortion

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

178   Induced abortion

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

179   Postabortion complications

6390	6391	6392	6393	6394	6395	6396	6398	6399

180   Ectopic pregnancy

6330	6331	6332	6338	6339

181   Other complications of pregnancy

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

182   Hemorrhage during pregnancy, abruptio placenta, placenta previa

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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183   Hypertension complicating pregnancy, childbirth and the puerperium

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

184   Early or threatened labor

    64400 64403 64410 64413 64420 64421

185   Prolonged pregnancy

    64500 64501 64503

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

    64800 64801 64802 64803 64804 64880 64881 64882 64883 64884

187   Malposition, malpresentation

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

188   Fetopelvic disproportion, obstruction

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

189   Previous C-section

    65420 65421 65423

190   Fetal distress and abnormal forces of labor

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

191   Polyhydramnios and other problems of amniotic cavity

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

7923

192 Umbilical cord complication

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

193 Trauma to perineum and vulva

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

194 Forceps delivery

66950 66951

195 Other complications of birth, puerperium affecting management of mother

V230 V231 V232 V233 V234 V235 V237 V238 V2381 V2382 V2383 V2384
V2389 V239 65103 65113 65123 65130 65131 65133 65140 65141 65143 65150
65151 65153 65160 65161 65163 65183 65193 65400 65401 65402 65403 65404
65410 65411 65412 65413 65414 65430 65431 65432 65433 65434 65440 65441
65442 65443 65444 65450 65451 65452 65453 65454 65460 65461 65462 65463
65464 65470 65471 65472 65473 65474 65480 65481 65482 65483 65484 65490
65491 65492 65493 65494 65500 65501 65503 65510 65511 65513 65520 65521
65523 65530 65531 65533 65540 65541 65543 65550 65551 65553 65560 65561
65563 65570 65571 65573 65580 65581 65583 65590 65591 65593 65600 65601
65603 65610 65611 65613 65620 65621 65623 65640 65641 65643 65650 65651
65653 65660 65661 65663 65670 65671 65673 65680 65681 65683 65690 65691
65693 65900 65901 65903 65910 65911 65913 65920 65921 65923 65930 65931
65933 65940 65941 65943 65950 65951 65953 65960 65961 65963 65970 65971
65973 65980 65981 65983 65990 65991 65993 66500 66501 66503 66510 66511
66512 66514 66520 66522 66524 66530 66531 66534 66540 66541 66544 66550
66551 66554 66560 66561 66564 66570 66571 66572 66574 66580 66581 66582
66583 66584 66590 66591 66592 66593 66594 66600 66602 66604 66610 66612
66614 66620 66622 66624 66630 66632 66634 66700 66702 66704 66710 66712
66714 66800 66801 66802 66803 66804 66810 66811 66812 66813 66814 66820
66821 66822 66823 66824 66880 66881 66882 66883 66884 66890 66891 66892
66893 66894 66900 66901 66902 66903 66904 66910 66911 66912 66913 66914
66920 66921 66922 66923 66924 66930 66932 66934 66940 66941 66942 66943
66944 66960 66961 66970 66971 66980 66981 66982 66983 66984 66990 66991
66992 66993 66994 67000 67002 67004 67100 67101 67102 67103 67104 67110
67111 67112 67113 67114 67120 67121 67122 67123 67124 67130 67131 67133
67140 67142 67144 67150 67151 67152 67153 67154 67180 67181 67182 67183
67184 67190 67191 67192 67193 67194 67200 67202 67204 67300 67301 67302
67303 67304 67310 67311 67312 67313 67314 67320 67321 67322 67323 67324

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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	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				

196   Normal pregnancy and/or delivery

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

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

199   Chronic ulcer of skin

7070	7071	7078	7079

200   Other skin disorders

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

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

00323	00324	0261	03682	05671	71100	71101	71102	71103	71104	71105	71106
71107	71108	71109	71110	71111	71112	71113	71114	71115	71116	71117	71118
71119	71120	71121	71122	71123	71124	71125	71126	71127	71128	71129	71130

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

71131	71132	71133	71134	71135	71136	71137	71138	71139	71140	71141	71142
71143	71144	71145	71146	71147	71148	71149	71150	71151	71152	71153	71154
71155	71156	71157	71158	71159	71160	71161	71162	71163	71164	71165	71166
71167	71168	71169	71170	71171	71172	71173	71174	71175	71176	71177	71178
71179	71180	71181	71182	71183	71184	71185	71186	71187	71188	71189	71190
71191	71192	71193	71194	71195	71196	71197	71198	71199	73000	73001	73002
73003	73004	73005	73006	73007	73008	73009	73010	73011	73012	73013	73014
73015	73016	73017	73018	73019	73020	73021	73022	73023	73024	73025	73026
73027	73028	73029	73030	73031	73032	73033	73034	73035	73036	73037	73038
73039	73070	73071	73072	73073	73074	73075	73076	73077	73078	73079	73080
73081	73082	73083	73084	73085	73086	73087	73088	73089	73090	73091	73092
73093	73094	73095	73096	73097	73098	73099					

202   Rheumatoid arthritis and related disease

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

203   Osteoarthritis

V134	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						

204   Other non-traumatic joint disorders

7130	7131	7132	7133	7134	7135	7136	7137	7138	71600	71601	71602
71603	71604	71605	71606	71607	71608	71609	71620	71621	71622	71623	71624
71625	71626	71627	71628	71629	71630	71631	71632	71633	71634	71635	71636
71637	71638	71639	71640	71641	71642	71643	71644	71645	71646	71647	71648
71649	71650	71651	71652	71653	71654	71655	71656	71657	71658	71659	71660
71661	71662	71663	71664	71665	71666	71667	71668	71680	71681	71682	71683
71684	71685	71686	71687	71688	71689	71690	71691	71692	71693	71694	71695
71696	71697	71698	71699	71810	71811	71812	71813	71814	71815	71817	71818
71819	71820	71821	71822	71823	71824	71825	71826	71827	71828	71829	71850
71851	71852	71853	71854	71855	71856	71857	71858	71859	71860	71865	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	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						

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

| 205 | Spondylosis, intervertebral disc disorders, other back problems |

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

| 206 | Osteoporosis |

73300	73301	73302	73303	73309

| 207 | Pathological fracture |

7331	73310	73311	73312	73313	73314	73315	73316	73319

| 208 | Acquired foot deformities |

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

| 209 | Other acquired deformities |

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

| 210 | Systemic lupus erythematosus and connective tissue disorders |

7100	7101	7102	7103	7104	7108	7109

| 211 | Other connective tissue disease |

V135	V436	V4360	V4361	V4362	V4363	V4364	V4365	V4366	V4369	V437	V454
V481	V482	V483	V490	V491	V492	V495	V4960	V4961	V4962	V4963	V4964
V4965	V4966	V4967	V4970	V4971	V4972	V4973	V4974	V4975	V4976	V4977	V537
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
72789	7279	7280	72810	72811	72812	72813	72819	7282	7283	7284	7285
7286	72871	72879	72881	72882	72883	72884	72885	72886	72889	7289	7290

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

| 7291 | 7292 | 72930 | 72931 | 72939 | 7294 | 7295 | 7296 | 72981 | 72982 | 72989 | 7299 |
| 7819 | 7937 | | | | | | | | | | |

212 Other bone disease and musculoskeletal deformities

V424	V486	V487	V494	7310	7311	7312	7318	7320	7321	7322	7323
7324	7325	7326	7327	7328	7329	73320	73321	73322	73329	7333	73340
73341	73342	73343	73344	73349	7335	7336	7337	73381	73382	73390	73391
73392	73399	73730	73731	73732	7390	7391	7392	7393	7394	7395	7396
7397	7398	7399									

213 Cardiac and circulatory congenital anomalies

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

214 Digestive congenital anomalies

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

215 Genitourinary congenital anomalies

V1361	7520	75210	75211	75219	7522	7523	75240	75241	75242	75249	7525
75251	75252	7526	75261	75262	75263	75264	75265	75269	7527	7528	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

216 Nervous system congenital anomalies

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

217 Other congenital anomalies

V136	V1369	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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

74921	74922	74923	74924	74925	7540	7541	7542	75430	75431	75432	75433
75435	75440	75441	75442	75443	75444	75450	75451	75452	75453	75459	75460
75461	75462	75469	75470	75471	75479	75481	75482	75489	75500	75501	75502
75510	75511	75512	75513	75514	75520	75521	75522	75523	75524	75525	75526
75527	75528	75529	75530	75531	75532	75533	75534	75535	75536	75537	75538
75539	7554	75550	75551	75552	75553	75554	75555	75556	75557	75558	75559
75560	75561	75562	75563	75564	75565	75566	75567	75569	7558	7559	7560
75610	75611	75612	75613	75614	75615	75616	75617	75619	7562	7563	7564
75650	75651	75652	75653	75654	75655	75656	75659	7566	7567	75670	75671
75679	75681	75682	75683	75689	7569	7570	7571	7572	75731	75732	75733
75739	7574	7575	7576	7578	7579	7580	7581	7582	7583	7584	7585
7586	7587	7588	75881	75889	7589	7590	7591	7592	7593	7594	7595
7596	7597	7598	75981	75982	75983	75989	7599	7952			

218   Liveborn

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

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

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

220   Intrauterine hypoxia and birth asphyxia

7680	7681	7682	7683	7684	7685	7686	7689

221   Respiratory distress syndrome

769

222   Hemolytic jaundice and perinatal jaundice

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

223   Birth trauma

| 7670 | 7671 | 7672 | 7673 | 7674 | 7675 | 7676 | 7677 | 7678 | 7679 | |

224   Other perinatal conditions

V137	V502	7600	7601	7602	7603	7604	7605	7606	76070	76071	76072
76073	76074	76075	76076	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	76389	7639	7660	7661	7662	7700	7701	7702	7703
7704	7705	7706	7707	7708	7709	7710	7711	7712	7713	7714	7715
7716	7717	7718	7720	7721	7722	7723	7724	7725	7726	7728	7729
7750	7751	7752	7753	7754	7755	7756	7757	7758	7759	7760	7761
7762	7763	7764	7765								
7766	7767	7768	7769	7771	7772	7773	7774	7775	7776	7778	7779
7780	7781	7782	7783	7784	7785	7786	7787	7788	7789	7790	7791
7792	7793	7794	7795	7796	7798	7799					

225   Joint disorders and dislocations, trauma-related

71610	71611	71612	71613	71614	71615	71616	71617	71618	71619	7170	7171
7172	7173	71740	71741	71742	71743	71749	7175	7176	7177	71781	71782
71783	71784	71785	71789	7179	71800	71801	71802	71803	71804	71805	71807
71808	71809	71830	71831	71832	71833	71834	71835	71836	71837	71838	71839
8300	8301	83100	83101	83102	83103	83104	83109	83110	83111	83112	83113
83114	83119	83200	83201	83202	83203	83204	83209	83210	83211	83212	83213
83214	83219	83300	83301	83302	83303	83304	83305	83309	83310	83311	83312
83313	83314	83315	83319	83400	83401	83402	83410	83411	83412	83500	83501
83502	83503	83510	83511	83512	83513	8360	8361	8362	8363	8364	83650
83651	83652	83653	83654	83659	83660	83661	83662	83663	83664	83669	8370
8371	83800	83801	83802	83803	83804	83805	83806	83809	83810	83811	83812
83813	83814	83815	83816	83819	83900	83901	83902	83903	83904	83905	83906
83907	83908	83910	83911	83912	83913	83914	83915	83916	83917	83918	83920
83921	83930	83931	83940	83941	83942	83949	83950	83951	83952	83959	83961
83969	83971	83979	8398	8399	9056						

226   Fracture of neck of femur (hip)

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

227   Spinal cord injury

80600	80601	80602	80603	80604	80605	80606	80607	80608	80609	80610	80611
80612	80613	80614	80615	80616	80617	80618	80619	80620	80621	80622	80623
80624	80625	80626	80627	80628	80629	80630	80631	80632	80633	80634	80635
80636	80637	80638	80639	8064	8065	80660	80661	80662	80669	80670	80671
80672	80679	8068	8069	9072	95200	95201	95202	95203	95204	95205	95206
95207	95208	95209	95210	95211	95212	95213	95214	95215	95216	95217	95218
95219	9522	9523	9524	9528	9529	99655	99656	99668			

228   Skull and face fractures

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

229   Fracture of upper limb

81000	81001	81002	81003	81010	81011	81012	81013	81100	81101	81102	81103
81109	81110	81111	81112	81113	81119	81200	81201	81202	81203	81209	81210
81211	81212	81213	81219	81220	81221	81230	81231	81240	81241	81242	81243
81244	81249	81250	81251	81252	81253	81254	81259	81300	81301	81302	81303
81304	81305	81306	81307	81308	81310	81311	81312	81313	81314	81315	81316
81317	81318	81320	81321	81322	81323	81330	81331	81332	81333	81340	81341
81342	81343	81344	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									

230   Fracture of lower limb

82100	82101	82110	82111	82120	82121	82122	82123	82129	82130	82131	82132
82133	82139	8220	8221	82300	82301	82302	82310	82311	82312	82320	82321
82322	82330	82331	82332	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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

8260	8261	8270	8271	9054

231 Other fractures

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

232 Sprains and strains

8400	8401	8402	8403	8404	8405	8406	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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

80480	80481	80482	80483	80484	80485	80486	80489	80490	80491	80492	80493
80494	80495	80496	80499	8500	8501	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								

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

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

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

41402	41403	41404	41405	44030	44031	44032	56960	56961	56969	99600	99601
99602	99603	99604	99609	9961	9962	99630	99631	99632	99639	9964	99651
99652	99653	99654	99655	99656	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	99689
99690	99691	99692	99693	99694	99695	99696	99699				

238   Complications of surgical procedures or medical care

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

239   Superficial injury, contusion

9062	9063	9100	9101	9102	9103	9104	9105	9106	9107	9108	9109
9110	9111	9112	9113	9114	9115	9116	9117	9118	9119	9120	9121

Diagnosis category
ICD-9-CM codes

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										

Diagnosis category
ICD-9-CM codes

241   Poisoning by psychotropic agents

| 9690 | 9691 | 9692 | 9693 | 9694 | 9695 | 9696 | 9697 | 9698 | 9699 | | |

242   Poisoning by other medications and drugs

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

243   Poisoning by nonmedicinal substances

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

244   Other injuries and conditions due to external causes

V155	V156	V713	V714	V715	V716	7960	7990	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	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

Diagnosis category
ICD-9-CM codes

9929	9930	9931	9932	9933	9934	9938	9939	9940	9941	9942	9943
9944	9945	9946	9947	9948	9949	9951	9955	99550	99551	99552	99553
99554	99555	99559	99580	99581	99582	99583	99584	99585	99589		

245 Syncope

7802

246 Fever of unknown origin

7806

247 Lymphadenitis

2891	2892	2893	683	7856

248 Gangrene

44024	7854

249 Shock

78550	78551	78559

250 Nausea and vomiting

7870	78701	78702	78703

251 Abdominal pain

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

252 Malaise and fatigue

7807	78071	78079

253 Allergic reactions

V071	V140	V141	V142	V143	V144	V145	V146	V147	V148	V149	V150
V727	5186	6910	6918	6920	6921	6922	6923	6924	6925	6926	69270
69271	69272	69273	69274	69279	69281	69282	69283	69289	6929	6930	6931
6938	6939	7080	7081	7082	7083	7084	7085	7088	7089	9950	9953

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Diagnosis category
ICD-9-CM codes

99560	99561	99562	99563	99564	99565	99566	99567	99568	99569	

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

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

255   Administrative/social admission

V200	V201	V202	V600	V601	V602	V603	V604	V605	V606	V608	V609
V610	V611	V6110	V6111	V6112	V6120	V6121	V6122	V6129	V613	V6141	V6149
V616	V617	V618	V619	V620	V621	V622	V623	V624	V625	V626	V6281
V6282	V6283	V6289	V629	V630	V631	V632	V638	V639	V650	V651	V652
V653	V654	V6540	V6541	V6542	V6543	V6544	V6545	V6549	V655	V658	V659
V680	V681	V682	V6881	V6889	V689					

256   Medical examination/evaluation

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

257   Other aftercare

V51	V539	V548	V549	V558	V559	V583	V584	V5841	V5849	V5861	V5862
V5869	V588	V5881	V5889	V589	V660	V665	V666	V667	V669	V670	V6751
V6759	V676	V679								

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

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

259   Residual codes, unclassified

V070	V072	V073	V0731	V0739	V078	V079	V131	V138	V139	V152	V153
V1581	V1584	V1585	V1586	V1589	V159	V160	V161	V162	V163	V164	V1640
V1641	V1642	V1643	V1649	V165	V1651	V1659	V166	V167	V168	V169	V170
V171	V172	V173	V174	V175	V176	V177	V178	V180	V181	V182	V183
V184	V185	V186	V1861	V1869	V187	V188	V190	V191	V192	V193	V194

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Attachment 1
Clinical Classification Software—DIAGNOSES
(with all coding changes valid from January 1980 through September 1999)

Diagnosis category
ICD-9-CM codes

V195	V196	V197	V198	V210	V211	V212	V218	V219	V418	V419	V428
V4281	V4282	V4283	V4289	V429	V438	V4381	V4382	V4383	V4389	V447	V448
V449	V4571	V4572	V4573	V4583	V4589	V460	V468	V469	V470	V471	V472
V479	V480	V488	V489	V498	V499	V500	V501	V503	V5041	V5042	V5049
V508	V509	V590	V5901	V5902	V5909	V591	V592	V593	V594	V595	V596
V598	V599	V615	V640	V641	V642	V643	V644	V690	V691	V692	V693
V698	V699	3020	78002	78050	78051	78052	78053	78054	78055	78056	78057
78059	7809	7815	7816	7823	78261	78262	7828	7829	7830	7836	7842
7901	7903	7906	7909	79091	79092	79093	79094	79099	7929	7932	7938
7939	7949	7954	7963	7964	7965	7969	7980	7981	7982	7989	7992
7993	7998	7999									

Source: AHRQ, Center for Organization and Delivery Studies, Healthcare Cost and Utilization Project (HCUP).

Attachment 2
Sample SAS Jobs for Linking Examples

```
NOTE: Copyright (c) 1989-1996 by SAS Institute Inc., Cary, NC, USA.
NOTE: SAS (r) Proprietary Software Release 6.12  TS060
      Licensed to SOCIAL & SCIENTIFIC SYSTEMS INC, Site 0026405003.


1             OPTIONS LS=132 PS=59;
2
3             TITLE1 "HC-026I";
4             TITLE2 'Sample SAS Job for Example A';
5
6             LIBNAME IN 'C:\';
NOTE: Directory for library IN contains files of mixed engine types.
NOTE: Libref IN was successfully assigned as follows:
      Engine:        V612
      Physical Name: C:\
7
8             ********************************************************************************************
9             * Calculate the expenditures for prescribed medicines associated with medical visits for asthma.
10            *******************************************************************************************;
11
12            PROC FORMAT;
13              VALUE EVENTYPE
14                  1 = "1 MVIS"
15                  2 = "2 OPAT"
16                  3 = "3 EROM"
17                  4 = "4 STAZ"
18                  5 = "5 DVIS"
19                  6 = "6 OMED"
20                  7 = "7 HVIS"
21                  8 = "8 PMED";
NOTE: Format EVENTYPE has been output.
22
23            RUN;

NOTE: The PROCEDURE FORMAT used 0.05 seconds.


24
25            *------------------------------------------------------------------------------------
26            * Get condition records coded as asthma.
27            *-----------------------------------------------------------------------------------;
28            DATA ASCONDS;
29              SET IN.H27 (KEEP=CONDIDX CCCODEX);
30              IF CCCODEX="128";
31
32            RUN;

NOTE: The data set WORK.ASCONDS has 1243 observations and 2 variables.
NOTE: The DATA statement used 0.59 seconds.


33
34            *------------------------------------------------------------------------------------
35            * Get the events linked to each of the asthma condition records.
36            *-----------------------------------------------------------------------------------;
37            PROC SORT DATA=ASCONDS; BY CONDIDX; RUN;
```

```
NOTE: The data set WORK.ASCONDS has 1243 observations and 2 variables.
NOTE: The PROCEDURE SORT used 0.17 seconds.


38
39          proc print data=asconds (obs=50);
40            title3 "sample print of work.asconds - sorted by condidx";
41            title4 "COND (H27) records where cccodex=128";
42          run;

NOTE: The PROCEDURE PRINT printed page 1.
NOTE: The PROCEDURE PRINT used 0.38 seconds.


43
44          PROC SORT DATA=IN.H26IF1 OUT=CLNK; BY CONDIDX; RUN;

NOTE: The data set WORK.CLNK has 219144 observations and 5 variables.
NOTE: The PROCEDURE SORT used 3.85 seconds.


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

NOTE: The data set WORK.ASCLNKS has 4817 observations and 3 variables.
NOTE: The DATA statement used 1.32 seconds.


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

NOTE: The PROCEDURE PRINT printed pages 2-3.
NOTE: The PROCEDURE PRINT used 0.11 seconds.


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

NOTE: The data set WORK.ASCLNKS has 4817 observations and 3 variables.
NOTE: The PROCEDURE SORT used 0.1 seconds.


62
63          proc print data=asclnks (obs=50);
64            format eventype eventype.;
```

```
65          title3 "sample print of work.asclnks - sorted by evntidx";
66        run;
```

NOTE: The PROCEDURE PRINT printed page 4.
NOTE: The PROCEDURE PRINT used 0.05 seconds.

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

NOTE: The data set WORK.ASCLNKS has 4807 observations and 2 variables.
NOTE: The DATA statement used 0.11 seconds.

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

NOTE: The PROCEDURE PRINT printed page 5.
NOTE: The PROCEDURE PRINT used 0.05 seconds.

```
78
79        *-------------------------------------------------------------------------------------------------
80        * Get non-telephone office based visits (i.e. MVIS events) for persons with positive weights.
81        *------------------------------------------------------------------------------------------------;
82        DATA MVIS;
83          SET IN.H26GF1 (KEEP=EVNTIDX WTDPER98 SEETLKPV);
84          IF WTDPER98 > 0 & SEETLKPV NE 2;
85        RUN;
```

NOTE: The data set WORK.MVIS has 101135 observations and 3 variables.
NOTE: The DATA statement used 1.04 seconds.

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

NOTE: The data set WORK.MVIS has 101135 observations and 3 variables.
NOTE: The PROCEDURE SORT used 1.04 seconds.

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

```
97         RUN;

NOTE: The data set WORK.ASMVIS has 1608 observations and 2 variables.
NOTE: The DATA statement used 0.44 seconds.


98
99         proc print data=asmvis (obs=50);
100          format eventype eventype.;
101          title3 "sample print of work.asmvis";
102          title4 "unique evntidxs from work.asclnks that are non-telephone MVIS (HC-026G) events";
103        run;

NOTE: The PROCEDURE PRINT printed page 6.
NOTE: The PROCEDURE PRINT used 0.05 seconds.


104
105          *------------------------------------------------------------------------------
106          * Get PMED IDs linked to the MVIS events which were for asthma.
107          *-----------------------------------------------------------------------------;
108          PROC SORT DATA=IN.H26IF2 OUT=RXLK; BY EVNTIDX; RUN;

NOTE: The data set WORK.RXLK has 41264 observations and 5 variables.
NOTE: The PROCEDURE SORT used 0.7 seconds.


109
110          proc print data=rxlk (obs=140);
111            by evntidx;
112            id evntidx;
113            var linkidx eventype;
114            format eventype eventype.;
115            title3 "sample print of work.rxlk - sorted by eventidx";
116            title4 "Rx+event link file records (HC-26IF2)";
117          run;

NOTE: The PROCEDURE PRINT printed pages 7-11.
NOTE: The PROCEDURE PRINT used 0.05 seconds.


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

NOTE: The data set WORK.PMEDIDS has 1241 observations and 3 variables.
NOTE: The DATA statement used 0.33 seconds.


125
126          proc print data=pmedids (obs=50);
127            by evntidx;
128            id evntidx;
```

```
129          format eventype eventype.;
130          title3 "sample print of work.pmedids - sorted by evntidx";
131          title4 "work.rxlk records for evntidxs in work.asmvis";
132       run;
```

NOTE: The PROCEDURE PRINT printed pages 12-13.
NOTE: The PROCEDURE PRINT used 0.05 seconds.

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

NOTE: The data set WORK.PMEDIDS has 1241 observations and 3 variables.
NOTE: The PROCEDURE SORT used 0.11 seconds.

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

NOTE: The PROCEDURE PRINT printed page 14.
NOTE: The PROCEDURE PRINT used 0.05 seconds.

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

NOTE: The data set WORK.PMEDIDS has 1147 observations and 1 variables.
NOTE: The DATA statement used 0.17 seconds.

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

NOTE: The PROCEDURE PRINT printed page 15.
NOTE: The PROCEDURE PRINT used 0.05 seconds.

```
150
151       *------------------------------------------------------------------------------------------
152       * Get PMED records linked to MVIS events which were for asthma.
153       *-----------------------------------------------------------------------------------------;
154       PROC SORT DATA=IN.H26A OUT=PMED; BY LINKIDX; RUN;
```

NOTE: The data set WORK.PMED has 172031 observations and 51 variables.
NOTE: The PROCEDURE SORT used 26.85 seconds.

```
155
```

```
156        DATA MVPMEDS;
157          MERGE PMED (KEEP=LINKIDX RXRECIDX  RXXP98X WTDPER98 RXNAME)
158               PMEDIDS (IN=A);
159          BY LINKIDX;
160          IF A;
161        RUN;
```

NOTE: The data set WORK.MVPMEDS has 2807 observations and 5 variables.
NOTE: The DATA statement used 1.63 seconds.

```
162
163        proc print data=mvpmeds (obs=200);
164          var rxrecidx rxname RXXP98X  WTDPER98;
165          by linkidx;
166          id linkidx;
167          title3 "sample print of work.mvpmeds";
168          title4 "PMED (HC-026A) records for unique linkidxs in work.pmedids";
169        run;
```

NOTE: The PROCEDURE PRINT printed pages 16-22.
NOTE: The PROCEDURE PRINT used 0.11 seconds.

```
170
171        PROC MEANS DATA=MVPMEDS N SUM;
172          VAR RXXP98X;
173          TITLE3 "Total Rx expenditures associated with medical visits (excluding telephone) for asthma";
174        RUN;
```

NOTE: The PROCEDURE MEANS printed page 23.
NOTE: The PROCEDURE MEANS used 0.0 seconds.

```
175
176        PROC MEANS DATA=MVPMEDS  N SUM;
177          VAR RXXP98X;
178          WEIGHT WTDPER98;
179          TITLE3 "Total Rx expenditures associated with medical visits (excluding telephone) for asthma";
180          TITLE5 "Weighted";
181        RUN;
```

NOTE: The PROCEDURE MEANS printed page 24.
NOTE: The PROCEDURE MEANS used 0.0 seconds.

```
182
183
184
```

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

Sample SAS Job for Example A
sample print of work.asconds - sorted by condidx
COND (H27) records where cccodex=128

OBS	CONDIDX	CCCODEX
1	300090440043	128
2	300250280014	128
3	300440450027	128
4	300440510027	128
5	300650110034	128
6	300760110011	128
7	300790330011	128
8	300820410011	128
9	300820660046	128
10	300850210026	128
11	300850280035	128
12	300860170094	128
13	300930200025	128
14	300930200047	128
15	300930370030	128
16	301130110028	128
17	301170150039	128
18	301440390013	128
19	301730670017	128
20	301740160080	128
21	301740460022	128
22	301740790033	128
23	301740870019	128
24	301750330049	128
25	301750330061	128
26	301770320016	128
27	301780410013	128
28	301800150035	128
29	301890170054	128
30	301910480036	128
31	301910540014	128
32	302100140091	128
33	302100210012	128
34	302190490020	128
35	302230180020	128
36	302340400020	128
37	302340560014	128
38	302580120069	128
39	302690390085	128
40	302850180127	128
41	302850250029	128
42	302870290014	128
43	302880230064	128
44	303170330027	128
45	303260180027	128
46	303320110064	128
47	303370440041	128
48	303370440079	128
49	303490470019	128
50	303490530031	128

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

CONDIDX	EVNTIDX	EVENTYPE
300250280014	300250280030	3 EROM
	300250280047	1 MVIS
	300250280085	8 PMED
300440450027	300440450091	8 PMED
300440510027	300440510016	1 MVIS
	300440510023	8 PMED
300760110011	300760110303	8 PMED
	300760110365	7 HVIS
	300760110416	7 HVIS
300790330011	300790330230	8 PMED
	300790330247	8 PMED
	300790330292	1 MVIS
	300790330312	8 PMED
	300790330329	8 PMED
	300790330336	8 PMED
	300790330343	8 PMED
300820660046	300820660030	8 PMED
300850210026	300850210050	1 MVIS
	300850210081	8 PMED
300860170094	300860170243	2 OPAT
	300860170370	8 PMED
	300860170387	8 PMED
	300860170394	8 PMED
300930200025	300930200016	3 EROM
	300930200061	8 PMED
300930200047	300930200030	3 EROM
	300930200047	3 EROM
	300930200054	8 PMED
300930370030	300930370047	8 PMED
301130110028	301130110052	8 PMED
	301130110076	8 PMED
301170150039	301170150172	8 PMED
	301170150230	8 PMED
	301170150261	8 PMED
301730670017	301730670064	8 PMED

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

CONDIDX	EVNTIDX	EVENTYPE
301740160080	301740160294	8 PMED
	301740160369	8 PMED
	301740160403	8 PMED
	301740160427	8 PMED
301740460022	301740460175	8 PMED
	301740460219	8 PMED
301740790033	301740790173	1 MVIS
	301740790180	8 PMED
	301740790197	8 PMED
	301740790231	8 PMED
301740870019	301740870165	8 PMED
	301740870172	8 PMED
301750330049	301750330108	1 MVIS
	301750330122	8 PMED
	301750330139	8 PMED
	301750330160	1 MVIS
	301750330177	8 PMED
301750330061	301750330160	1 MVIS
301780410013	301780410035	1 MVIS
301800150035	301800150195	8 PMED
	301800150208	8 PMED
301890170054	301890170238	8 PMED
	301890170245	8 PMED
	301890170252	8 PMED
	301890170303	1 MVIS
	301890170310	1 MVIS
	301890170327	1 MVIS
	301890170334	1 MVIS
	301890170341	1 MVIS
	301890170358	1 MVIS
	301890170365	1 MVIS
	301890170485	8 PMED
	301890170492	8 PMED
	301890170505	8 PMED
	301890170567	8 PMED
	301890170574	8 PMED
	301890170581	8 PMED
302100140091	302100140256	1 MVIS
	302100140263	1 MVIS
	302100140270	1 MVIS

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

OBS	CONDIDX	EVNTIDX	EVENTYPE	
1	300250280014	300250280030	3	EROM
2	300250280014	300250280047	1	MVIS
3	300250280014	300250280085	8	PMED
4	300440450027	300440450091	8	PMED
5	300440510027	300440510016	1	MVIS
6	300440510027	300440510023	8	PMED
7	300760110011	300760110303	8	PMED
8	300760110011	300760110365	7	HVIS
9	300760110011	300760110416	7	HVIS
10	300790330011	300790330230	8	PMED
11	300790330011	300790330247	8	PMED
12	300790330011	300790330292	1	MVIS
13	300790330011	300790330312	8	PMED
14	300790330011	300790330329	8	PMED
15	300790330011	300790330336	8	PMED
16	300790330011	300790330343	8	PMED
17	300820660046	300820660030	8	PMED
18	300850210026	300850210050	1	MVIS
19	300850210026	300850210081	8	PMED
20	300860170094	300860170243	2	OPAT
21	300860170094	300860170370	8	PMED
22	300860170094	300860170387	8	PMED
23	300860170094	300860170394	8	PMED
24	300930200025	300930200016	3	EROM
25	300930200047	300930200030	3	EROM
26	300930200047	300930200047	3	EROM
27	300930200047	300930200054	8	PMED
28	300930200025	300930200061	8	PMED
29	300930370030	300930370047	8	PMED
30	301130110028	301130110052	8	PMED
31	301130110028	301130110076	8	PMED
32	301170150039	301170150172	8	PMED
33	301170150039	301170150230	8	PMED
34	301170150039	301170150261	8	PMED
35	301730670017	301730670064	8	PMED
36	301740160080	301740160294	8	PMED
37	301740160080	301740160369	8	PMED
38	301740160080	301740160403	8	PMED
39	301740160080	301740160427	8	PMED
40	301740460022	301740460175	8	PMED
41	301740460022	301740460219	8	PMED
42	301740790033	301740790173	1	MVIS
43	301740790033	301740790180	8	PMED
44	301740790033	301740790197	8	PMED
45	301740790033	301740790231	8	PMED
46	301740870019	301740870165	8	PMED
47	301740870019	301740870172	8	PMED
48	301750330049	301750330108	1	MVIS
49	301750330049	301750330122	8	PMED
50	301750330049	301750330139	8	PMED

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

```
        OBS     EVNTIDX        EVENTYPE

          1    300250280030    3 EROM
          2    300250280047    1 MVIS
          3    300250280085    8 PMED
          4    300440450091    8 PMED
          5    300440510016    1 MVIS
          6    300440510023    8 PMED
          7    300760110303    8 PMED
          8    300760110365    7 HVIS
          9    300760110416    7 HVIS
         10    300790330230    8 PMED
         11    300790330247    8 PMED
         12    300790330292    1 MVIS
         13    300790330312    8 PMED
         14    300790330329    8 PMED
         15    300790330336    8 PMED
         16    300790330343    8 PMED
         17    300820660030    8 PMED
         18    300850210050    1 MVIS
         19    300850210081    8 PMED
         20    300860170243    2 OPAT
         21    300860170370    8 PMED
         22    300860170387    8 PMED
         23    300860170394    8 PMED
         24    300930200016    3 EROM
         25    300930200030    3 EROM
         26    300930200047    3 EROM
         27    300930200054    8 PMED
         28    300930200061    8 PMED
         29    300930370047    8 PMED
         30    301130110052    8 PMED
         31    301130110076    8 PMED
         32    301170150172    8 PMED
         33    301170150230    8 PMED
         34    301170150261    8 PMED
         35    301730670064    8 PMED
         36    301740160294    8 PMED
         37    301740160369    8 PMED
         38    301740160403    8 PMED
         39    301740160427    8 PMED
         40    301740460175    8 PMED
         41    301740460219    8 PMED
         42    301740790173    1 MVIS
         43    301740790180    8 PMED
         44    301740790197    8 PMED
         45    301740790231    8 PMED
         46    301740870165    8 PMED
         47    301740870172    8 PMED
         48    301750330108    1 MVIS
         49    301750330122    8 PMED
         50    301750330139    8 PMED
```

Sample SAS Job for Example A
sample print of work.asmvis
unique evntidxs from work.asclnks that are non-telephone MVIS (HC-026G) events

OBS	EVNTIDX	EVENTYPE
1	300250280047	1 MVIS
2	300440510016	1 MVIS
3	300790330292	1 MVIS
4	300850210050	1 MVIS
5	301740790173	1 MVIS
6	301750330108	1 MVIS
7	301750330160	1 MVIS
8	301780410035	1 MVIS
9	301890170303	1 MVIS
10	301890170310	1 MVIS
11	301890170327	1 MVIS
12	301890170334	1 MVIS
13	301890170341	1 MVIS
14	301890170358	1 MVIS
15	301890170365	1 MVIS
16	302100140256	1 MVIS
17	302100140263	1 MVIS
18	302100140270	1 MVIS
19	302100140287	1 MVIS
20	302100140321	1 MVIS
21	302190490106	1 MVIS
22	302340560416	1 MVIS
23	302580120173	1 MVIS
24	302850180545	1 MVIS
25	302850180552	1 MVIS
26	302850180569	1 MVIS
27	302850180576	1 MVIS
28	302850250090	1 MVIS
29	302880230603	1 MVIS
30	303260180222	1 MVIS
31	303540380056	1 MVIS
32	303650250102	1 MVIS
33	303650250119	1 MVIS
34	303650250126	1 MVIS
35	303650250133	1 MVIS
36	303650250140	1 MVIS
37	303670160641	1 MVIS
38	303670160658	1 MVIS
39	303670160665	1 MVIS
40	303670160672	1 MVIS
41	303670160689	1 MVIS
42	303670160730	1 MVIS
43	304040160399	1 MVIS
44	304040160515	1 MVIS
45	304040160522	1 MVIS
46	304660390140	1 MVIS
47	304730420519	1 MVIS
48	304730420526	1 MVIS
49	304820210012	1 MVIS
50	304820210067	1 MVIS

ATTACHMENT 2 - EXAMPLE A   **A2-13**   **MEPS HC-026I**

Sample SAS Job for Example A
sample print of work.rxlk - sorted by eventidx
Rx+event link file records (HC-26IF2)

EVNTIDX	LINKIDX	EVENTYPE
300010160237	300010160268	2 OPAT
300010160371	300010160446	1 MVIS
	300010160453	1 MVIS
	300010160460	1 MVIS
	300010160477	1 MVIS
	300010160484	1 MVIS
300010160422	300010160439	6 OMED
300010230220	300010230251	1 MVIS
300010230237	300010230268	5 DVIS
300010230282	300010230302	1 MVIS
	300010230319	1 MVIS
300010230299	300010230302	1 MVIS
	300010230319	1 MVIS
300010230326	300010230333	1 MVIS
	300010230340	1 MVIS
300010300100	300010300117	1 MVIS
	300010300124	1 MVIS
	300010300131	1 MVIS
	300010300148	1 MVIS
300010300162	300010300193	1 MVIS
	300010300206	1 MVIS
	300010300213	1 MVIS
	300010300220	1 MVIS
300010300179	300010300237	3 EROM
300010300244	300010300268	1 MVIS
	300010300275	1 MVIS
	300010300282	1 MVIS
	300010300299	1 MVIS
300040160522	300040160680	4 STAZ
	300040160697	4 STAZ
300040160539	300040160680	4 STAZ
	300040160700	4 STAZ
300040160577	300040160680	1 MVIS
300040160957	300040161032	1 MVIS

Sample SAS Job for Example A
sample print of work.rxlk - sorted by eventidx
Rx+event link file records (HC-26IF2)

EVNTIDX	LINKIDX	EVENTYPE
300040160957	300040161049	1 MVIS
	300040161056	1 MVIS
	300040161063	1 MVIS
	300040161070	1 MVIS
	300040161087	1 MVIS
	300040161094	1 MVIS
300050150140	300050150164	1 MVIS
300050220222	300050220239	4 STAZ
300050220284	300050220304	1 MVIS
300050390486	300050390513	3 EROM
300050390493	300050390520	1 MVIS
300060120555	300060120644	1 MVIS
300060120682	300060120702	4 STAZ
	300060120719	4 STAZ
	300060120726	4 STAZ
	300060120733	4 STAZ
	300060120740	4 STAZ
300080250050	300080250074	1 MVIS
300080320067	300080320074	1 MVIS
300090130472	300090130516	1 MVIS
	300090130523	1 MVIS
300090440136	300090440201	1 MVIS
	300090440218	1 MVIS
300120310032	300120310049	3 EROM
300130250076	300130250090	1 MVIS
	300130250103	1 MVIS
300130320134	300130320172	3 EROM
	300130320189	3 EROM
300130320230	300130320247	1 MVIS
300130490110	300130490134	1 MVIS
300140210482	300140210502	5 DVIS

Sample SAS Job for Example A
sample print of work.rxlk - sorted by eventidx
Rx+event link file records (HC-26IF2)

EVNTIDX	LINKIDX	EVENTYPE
300170100072	300170100096	1 MVIS
300170100116	300170100109	1 MVIS
300170270109	300170270325	5 DVIS
300170270161	300170270332	4 STAZ
	300170270349	4 STAZ
	300170270356	4 STAZ
	300170270363	4 STAZ
	300170270370	4 STAZ
	300170270387	4 STAZ
300190190266	300190190348	2 OPAT
300190190300	300190190355	1 MVIS
	300190190362	1 MVIS
	300190190379	1 MVIS
	300190190386	1 MVIS
300200180389	300200180423	1 MVIS
	300200180430	1 MVIS
	300200180447	1 MVIS
300200180396	300200180454	1 MVIS
300200180409	300200180416	6 OMED
300200180461	300200180485	1 MVIS
	300200180492	1 MVIS
	300200180505	1 MVIS
	300200180512	1 MVIS
300200180478	300200180492	1 MVIS
	300200180505	1 MVIS
	300200180529	1 MVIS
300230150194	300230150207	1 MVIS
300230220081	300230220125	3 EROM
300230220098	300230220132	1 MVIS
300230220149	300230220170	1 MVIS
300230220163	300230220170	2 OPAT
300240180434	300240180578	4 STAZ
	300240180585	4 STAZ

Sample SAS Job for Example A
sample print of work.rxlk - sorted by eventidx
Rx+event link file records (HC-26IF2)

EVNTIDX	LINKIDX	EVENTYPE
300240180434	300240180592	4 STAZ
	300240180605	4 STAZ
	300240180612	4 STAZ
300240180530	300240180547	6 OMED
300240180554	300240180561	6 OMED
300240180667	300240180807	1 MVIS
	300240180814	1 MVIS
	300240180821	1 MVIS
	300240180838	1 MVIS
	300240180845	1 MVIS
	300240180852	1 MVIS
	300240180869	1 MVIS
300240180787	300240180794	6 OMED
300250110181	300250110249	1 MVIS
300250110201	300250110218	6 OMED
300250110225	300250110232	6 OMED
300250110263	300250110270	6 OMED
300250110287	300250110294	6 OMED
300250280030	300250280054	3 EROM
	300250280061	3 EROM
	300250280078	3 EROM
	300250280085	3 EROM
300250280092	300250280129	3 EROM
300250280105	300250280136	1 MVIS
300270190357	300270190408	1 MVIS
300270260124	300270260213	1 MVIS
300270260162	300270260220	1 MVIS
300280130104	300280130128	1 MVIS
	300280130142	1 MVIS
300330100583	300330100665	1 MVIS
300330100627	300330100672	4 STAZ

Sample SAS Job for Example A
sample print of work.rxlk - sorted by eventidx
Rx+event link file records (HC-26IF2)

EVNTIDX	LINKIDX	EVENTYPE
300330100689	300330100747	4 STAZ
300330100723	300330100754	1 MVIS
	300330100761	1 MVIS
	300330100778	1 MVIS
300330100730	300330100785	1 MVIS
300350180350	300350180463	2 OPAT
300350180401	300350180470	1 MVIS
	300350180487	1 MVIS
300370140092	300370140129	1 MVIS
300370210030	300370210054	1 MVIS
	300370210061	1 MVIS

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

EVNTIDX	LINKIDX	EVENTYPE
300440510016	300440510023	1 MVIS
300790330292	300790330305	1 MVIS
300850210050	300850210081	1 MVIS
301740790173	301740790180	1 MVIS
	301740790197	1 MVIS
	301740790200	1 MVIS
	301740790217	1 MVIS
	301740790224	1 MVIS
	301740790231	1 MVIS
301750330108	301750330122	1 MVIS
	301750330139	1 MVIS
301750330160	301750330177	1 MVIS
301890170303	301890170423	1 MVIS
	301890170430	1 MVIS
	301890170447	1 MVIS
301890170310	301890170454	1 MVIS
301890170358	301890170461	1 MVIS
301890170365	301890170447	1 MVIS
302100140256	302100140294	1 MVIS
	302100140307	1 MVIS
	302100140314	1 MVIS
302100140321	302100140345	1 MVIS
	302100140352	1 MVIS
302190490106	302190490120	1 MVIS
302340560416	302340560423	1 MVIS
302850180569	302850180627	1 MVIS
	302850180634	1 MVIS
302850180576	302850180627	1 MVIS
	302850180634	1 MVIS
302850250090	302850250103	1 MVIS
302880230603	302880230627	1 MVIS

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

EVNTIDX	LINKIDX	EVENTYPE
303260180222	303260180239	1 MVIS
303540380056	303540380070	1 MVIS
303650250119	303650250171	1 MVIS
	303650250188	1 MVIS
303650250133	303650250195	1 MVIS
	303650250208	1 MVIS
	303650250215	1 MVIS
304040160515	304040160546	1 MVIS
	304040160553	1 MVIS
304040160522	304040160560	1 MVIS
304730420519	304730420533	1 MVIS
	304730420540	1 MVIS
	304730420557	1 MVIS
	304730420564	1 MVIS
	304730420571	1 MVIS
	304730420588	1 MVIS
	304730420595	1 MVIS
304730420526	304730420533	1 MVIS
	304730420557	1 MVIS

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

OBS	EVNTIDX	LINKIDX	EVENTYPE
1	300440510016	300440510023	1 MVIS
2	300790330292	300790330305	1 MVIS
3	300850210050	300850210081	1 MVIS
4	301740790173	301740790180	1 MVIS
5	301740790173	301740790197	1 MVIS
6	301740790173	301740790200	1 MVIS
7	301740790173	301740790217	1 MVIS
8	301740790173	301740790224	1 MVIS
9	301740790173	301740790231	1 MVIS
10	301750330108	301750330122	1 MVIS
11	301750330108	301750330139	1 MVIS
12	301750330160	301750330177	1 MVIS
13	301890170303	301890170423	1 MVIS
14	301890170303	301890170430	1 MVIS
15	301890170303	301890170447	1 MVIS
16	301890170365	301890170447	1 MVIS
17	301890170310	301890170454	1 MVIS
18	301890170358	301890170461	1 MVIS
19	302100140256	302100140294	1 MVIS
20	302100140256	302100140307	1 MVIS
21	302100140256	302100140314	1 MVIS
22	302100140321	302100140345	1 MVIS
23	302100140321	302100140352	1 MVIS
24	302190490106	302190490120	1 MVIS
25	302340560416	302340560423	1 MVIS
26	302850180569	302850180627	1 MVIS
27	302850180576	302850180627	1 MVIS
28	302850180569	302850180634	1 MVIS
29	302850180576	302850180634	1 MVIS
30	302850250090	302850250103	1 MVIS
31	302880230603	302880230627	1 MVIS
32	303260180222	303260180239	1 MVIS
33	303540380056	303540380070	1 MVIS
34	303650250119	303650250171	1 MVIS
35	303650250119	303650250188	1 MVIS
36	303650250133	303650250195	1 MVIS
37	303650250133	303650250208	1 MVIS
38	303650250133	303650250215	1 MVIS
39	304040160515	304040160546	1 MVIS
40	304040160515	304040160553	1 MVIS
41	304040160522	304040160560	1 MVIS
42	304730420519	304730420533	1 MVIS
43	304730420526	304730420533	1 MVIS
44	304730420519	304730420540	1 MVIS
45	304730420519	304730420557	1 MVIS
46	304730420526	304730420557	1 MVIS
47	304730420519	304730420564	1 MVIS
48	304730420526	304730420564	1 MVIS
49	304730420519	304730420571	1 MVIS
50	304730420526	304730420571	1 MVIS

Sample SAS Job for Example A
sample print of unique linkidxs in work.pmedids

OBS	LINKIDX
1	300440510023
2	300790330305
3	300850210081
4	301740790180
5	301740790197
6	301740790200
7	301740790217
8	301740790224
9	301740790231
10	301750330122
11	301750330139
12	301750330177
13	301890170423
14	301890170430
15	301890170447
16	301890170454
17	301890170461
18	302100140294
19	302100140307
20	302100140314
21	302100140345
22	302100140352
23	302190490120
24	302340560423
25	302850180627
26	302850180634
27	302850250103
28	302880230627
29	303260180239
30	303540380070
31	303650250171
32	303650250188
33	303650250195
34	303650250208
35	303650250215
36	304040160546
37	304040160553
38	304040160560
39	304730420533
40	304730420540
41	304730420557
42	304730420564
43	304730420571
44	304730420588
45	304730420595
46	304820210029
47	304820210036
48	304820210043
49	304820210050
50	304820210074

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
300440510023	300440510023001	ALBUTEROL SULFATE	10.69	16284.45
300790330305	300790330305001	EXGEST LA	5.00	1186.13
300850210081	300850210081001	-9	3.00	3325.32
301740790180	301740790180001	SEREVENT	57.08	3457.53
301740790197	301740790197001	AZMACORT	133.09	3457.53
301740790200	301740790200001	CLARITIN-D 12HR	68.86	3457.53
301740790217	301740790217001	FLONASE	164.50	3457.53
301740790224	301740790224001	ZYRTEC	99.95	3457.53
301740790231	301740790231001	ALBUTEROL	84.63	3457.53
301750330122	301750330122001	-9	13.33	19819.94
301750330139	301750330139001	BIAXIN	25.97	19819.94
301750330177	301750330177001	ANTIBIOTIC	14.95	19819.94
301890170423	301890170423001	ZESTRIL	161.26	15961.99
	301890170423002	ZESTRIL	50.48	15961.99
	301890170423003	ZESTRIL	161.26	15961.99
	301890170423004	ZESTRIL	50.48	15961.99
301890170430	301890170430001	K-DUR	15.54	15961.99
	301890170430002	K-DUR	15.22	15961.99
	301890170430003	K-DUR	15.54	15961.99
	301890170430004	K-DUR	15.22	15961.99
	301890170430005	K-DUR	15.54	15961.99
	301890170430006	K-DUR	15.54	15961.99
	301890170430007	K-DUR	15.54	15961.99
	301890170430008	K-DUR	15.54	15961.99
	301890170430009	K-DUR	15.54	15961.99
	301890170430010	K-DUR	15.22	15961.99
	301890170430011	K-DUR	15.22	15961.99
301890170447	301890170447001	FUROSEMIDE	4.55	15961.99
	301890170447002	FUROSEMIDE	4.55	15961.99
	301890170447003	FUROSEMIDE	4.55	15961.99
	301890170447004	FUROSEMIDE	4.55	15961.99
	301890170447005	FUROSEMIDE	4.55	15961.99
	301890170447006	FUROSEMIDE	4.55	15961.99
	301890170447007	FUROSEMIDE	4.55	15961.99
	301890170447008	FUROSEMIDE	4.55	15961.99

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
301890170454	301890170454001	LANOXIN	9.69	15961.99
	301890170454002	LANOXIN	9.69	15961.99
	301890170454003	LANOXIN	9.69	15961.99
	301890170454004	LANOXIN	9.69	15961.99
	301890170454005	LANOXIN	9.69	15961.99
301890170461	301890170461001	COZAAR	68.28	15961.99
	301890170461002	COZAAR	68.28	15961.99
	301890170461003	COZAAR	68.28	15961.99
302100140294	302100140294001	FLUOCINONIDE	12.40	1458.81
	302100140294002	FLUOCINONIDE	12.40	1458.81
302100140307	302100140307001	AMBIEN	24.55	1458.81
	302100140307002	AMBIEN	24.55	1458.81
	302100140307003	AMBIEN	24.55	1458.81
	302100140307004	AMBIEN	24.55	1458.81
302100140314	302100140314001	HYDROXYZINE	24.73	1458.81
302100140345	302100140345001	NAPROXEN	11.67	1458.81
	302100140345002	NAPROXEN	11.67	1458.81
	302100140345003	NAPROXEN	11.67	1458.81
302100140352	302100140352001	APAP/CODINE	8.20	1458.81
302190490120	302190490120001	VENTOLIN ROTACAPS	35.76	9465.66
	302190490120002	VENTOLIN ROTACAPS	35.76	9465.66
302340560423	302340560423001	BECONASE AQ	53.99	3309.39
302850180627	302850180627001	PROZAC	65.29	8106.00
	302850180627002	PROZAC	65.29	8106.00
	302850180627003	PROZAC	129.07	8106.00
	302850180627004	PROZAC	65.29	8106.00
	302850180627005	PROZAC	129.07	8106.00
302850180634	302850180634001	GLUCOPHAGE	28.91	8106.00
	302850180634002	GLUCOPHAGE	28.91	8106.00
302850250103	302850250103001	CLARITIN	30.85	9943.89
302880230627	302880230627001	MOTRIN	11.73	5807.26
303260180239	303260180239001	SEREVENT	58.33	25618.20
303540380070	303540380070001	TUSSORGANIDIN DM	17.47	5838.47
303650250171	303650250171001	TILADE INHALER	66.85	19458.95

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
303650250171	303650250171002	TILADE INHALER	66.85	19458.95
303650250188	303650250188001	AEROCHAMBER	27.84	19458.95
303650250195	303650250195001	RHINOCORT	34.45	19458.95
	303650250195002	RHINOCORT	34.45	19458.95
303650250208	303650250208001	AUGMENTIN	43.23	19458.95
303650250215	303650250215001	SINGULAIR	66.96	19458.95
	303650250215002	SINGULAIR	66.96	19458.95
	303650250215003	SINGULAIR	66.96	19458.95
304040160546	304040160546001	TOPROL XL	30.11	8340.92
304040160553	304040160553001	LOTREL	82.07	8340.92
304040160560	304040160560001	ALBUTEROL	21.41	8340.92
	304040160560002	ALBUTEROL	21.41	8340.92
304730420533	304730420533001	ALBUTEROL	16.78	13574.99
	304730420533002	ALBUTEROL	16.78	13574.99
	304730420533003	ALBUTEROL	16.78	13574.99
	304730420533004	ALBUTEROL	16.78	13574.99
	304730420533005	ALBUTEROL	16.78	13574.99
304730420540	304730420540001	SODIUM CHLORIDE	8.95	13574.99
	304730420540002	SODIUM CHLORIDE	8.95	13574.99
	304730420540003	SODIUM CHLORIDE	8.95	13574.99
	304730420540004	SODIUM CHLORIDE	8.95	13574.99
	304730420540005	SODIUM CHLORIDE	8.95	13574.99
304730420557	304730420557001	PROVENTIL	13.50	13574.99
	304730420557002	PROVENTIL	13.50	13574.99
	304730420557003	PROVENTIL	13.50	13574.99
	304730420557004	PROVENTIL	13.50	13574.99
	304730420557005	PROVENTIL	13.50	13574.99
304730420564	304730420564001	THEOPHYLLINE	5.22	13574.99
	304730420564002	THEOPHYLLINE	5.22	13574.99
	304730420564003	THEOPHYLLINE	5.22	13574.99
	304730420564004	THEOPHYLLINE	5.22	13574.99
	304730420564005	THEOPHYLLINE	5.22	13574.99
304730420571	304730420571001	AEROBID	51.44	13574.99
	304730420571002	AEROBID	51.44	13574.99
	304730420571003	AEROBID	51.44	13574.99
	304730420571004	AEROBID	51.44	13574.99
	304730420571005	AEROBID	51.44	13574.99

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
304730420588	304730420588001	ATROVENT	34.26	13574.99
	304730420588002	ATROVENT	34.26	13574.99
	304730420588003	ATROVENT	34.26	13574.99
	304730420588004	ATROVENT	34.26	13574.99
	304730420588005	ATROVENT	34.26	13574.99
304730420595	304730420595001	COMBIVENT INHALER	42.92	13574.99
	304730420595002	COMBIVENT INHALER	42.92	13574.99
	304730420595003	COMBIVENT INHALER	42.92	13574.99
	304730420595004	COMBIVENT INHALER	42.92	13574.99
	304730420595005	COMBIVENT INHALER	42.92	13574.99
304820210029	304820210029001	ALBUTEROL	53.62	4217.27
304820210036	304820210036001	PHENERGAN	27.70	4217.27
304820210043	304820210043001	CEDAX	48.00	4217.27
304820210050	304820210050001	NALDECON-DX	10.80	4217.27
304820210074	304820210074001	CEDAX	48.00	4217.27
304820210081	304820210081001	NALEX-DH	6.84	4217.27
304820210098	304820210098001	TYLENOL	6.58	4217.27
305000340025	305000340025001	CHERATUSSIN DAC	5.96	10566.04
305190210050	305190210050001	PROVENTIL	28.93	1209.14
305190380043	305190380043001	PROVENTIL	21.41	2196.08
305430370091	305430370091001	PROVENTIL	32.69	1802.77
305430370135	305430370135001	CLARITIN	64.06	1802.77
	305430370135002	CLARITIN	64.06	1802.77
305430370142	305430370142001	AEROBID INHALER	69.80	1802.77
	305430370142002	AEROBID INHALER	69.80	1802.77
	305430370142003	AEROBID INHALER	69.80	1802.77
305430370159	305430370159001	PROVENTIL	32.69	1802.77
	305430370159002	PROVENTIL	32.69	1802.77
	305430370159003	PROVENTIL	32.69	1802.77
305430370180	305430370180001	CLARITIN-D	72.19	1802.77
305430370197	305430370197001	SEREVENT	56.30	1802.77

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
305430370200	305430370200001	ALBUTEROL	21.41	1802.77
305530310039	305530310039001	ALBUTEROL INHALER	21.41	3480.31
306370480276	306370480276001	CROMOLYN	40.80	14528.53
306370480310	306370480310001	AUGMENTIN	21.80	14528.53
	306370480310002	AUGMENTIN	21.80	14528.53
306370480334	306370480334001	PRELONE	49.02	14528.53
306370480430	306370480430001	NYSTATIN	6.62	14528.53
306370480512	306370480512001	ZITHROMAX	27.34	14528.53
306370480529	306370480529001	CROMOLYN	36.13	14528.53
	306370480529002	CROMOLYN	36.13	14528.53
	306370480529003	CROMOLYN	36.13	14528.53
306370480536	306370480536001	CODITUSS DH	7.04	14528.53
306780210270	306780210270001	AEROBID	51.44	5142.02
306780210287	306780210287001	ALBUTEROL	22.00	5142.02
306780210294	306780210294001	ATUSS DM	19.85	5142.02
306780210307	306780210307001	AUGMENTIN	69.75	5142.02
306780210314	306780210314001	TESSALON	29.05	5142.02
307100650128	307100650128001	ALBUTEROL	18.89	11945.57
	307100650128002	ALBUTEROL	18.89	11945.57
	307100650128003	ALBUTEROL	18.89	11945.57
307100740068	307100740068001	ALBUTEROL	188.91	11945.57
	307100740068002	ALBUTEROL	19.85	11945.57
	307100740068003	ALBUTEROL	188.91	11945.57
	307100740068004	ALBUTEROL	188.91	11945.57
307480180333	307480180333001	DYPHYLLINE-GG	8.99	1561.16
	307480180333002	DYPHYLLINE-GG	8.99	1561.16
	307480180333003	DYPHYLLINE-GG	8.99	1561.16
	307480180333004	DYPHYLLINE-GG	8.99	1561.16
307660720050	307660720050001	CROMOLYN SODIUM	48.20	3711.05
307770270035	307770270035001	EZ SPACER	12.51	9144.06

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
307770270042	307770270042001	DONATUSSIN DC	13.76	9144.06
307930150107	307930150107001	FLOVENT	53.29	7266.21
	307930150107002	DEVILBLISS PULMOMATE	13.25	7266.21
307930150114	307930150114001	SEREVENT	58.33	7266.21
	307930150114002	SEREVENT	58.33	7266.21
308150300143	308150300143001	AZMACORT	47.65	4515.18
308180280950	308180280950001	PREDNISONE	3.13	25922.74
308180281117	308180281117001	PREDNISONE	3.98	25922.74
	308180281117002	PREDNISONE	3.98	25922.74
	308180281117003	PREDNISONE	3.98	25922.74
308970260340	308970260340001	LOTENSIN	25.17	4861.52
308970260535	308970260535001	PREDNISONE	10.69	4861.52
308970260542	308970260542001	BIAXIN	58.45	4861.52
308970260559	308970260559001	PROMETHAZINE W/DM	6.02	4861.52
	308970260559002	PROMETHAZINE W/DM	6.02	4861.52
308970260566	308970260566001	LEVOTHROID	21.09	4861.52
309180160080	309180160080001	CODEINE/PROMETHAZINE HCL	6.21	3106.07
309180940139	309180940139001	PRELONE	11.42	4769.53
309390330315	309390330315001	IBUPROFEN	7.66	8380.19
309390330322	309390330322001	AMOXICILLIN	6.66	8380.19
309390330339	309390330339001	INTRON-A	235.49	8380.19
311500140180	311500140180001	VANCERIL	35.77	3411.00
311500140197	311500140197001	-9	5.62	3411.00
311600140695	311600140695001	METHOTREXATE	73.07	27046.91
	311600140695002	METHOTREXATE	79.93	27046.91
	311600140695003	METHOTREXATE	73.07	27046.91
	311600140695004	METHOTREXATE	79.93	27046.91
	311600140695005	METHOTREXATE	73.07	27046.91
	311600140695006	METHOTREXATE	79.93	27046.91
311600140708	311600140708001	NAPROXEN	21.34	27046.91

Sample SAS Job for Example A
sample print of work.mvpmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
311600140708	311600140708002	NAPROXEN	20.99	27046.91
	311600140708003	NAPROXEN	20.99	27046.91
	311600140708004	NAPROXEN	20.99	27046.91

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

Analysis Variable : RXXP98X SUM OF PAYMENTS RXSF98X-RXOU98X(IMPUTED)

```
         N           Sum
     ------------------
     2807      98698.15
     ------------------
```

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

Weighted

Analysis Variable : RXXP98X SUM OF PAYMENTS RXSF98X-RXOU98X(IMPUTED)

```
      N          Sum
------------------
    2807     995125072
------------------
```

```
1                       The SAS System                                    11:09 Wednesday, December 19,
2001

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1           OPTIONS LS=132 PS=59;
2
3           TITLE1 "HC-026I";
4           TITLE2 'Sample SAS Job for Example B';
5
6           LIBNAME IN 'C:\';
NOTE: Directory for library IN contains files of mixed engine types.
NOTE: Libref IN was successfully assigned as follows:
      Engine:       V612
      Physical Name: C:\
7
8           ****************************************************************************************
9           * Calculate the expenditures for prescribed medicines associated with asthma.
10          ****************************************************************************************;
11          PROC FORMAT;
12            VALUE EVENTYPE
13                1 = "1 MVIS"
14                2 = "2 OPAT"
15                3 = "3 EROM"
16                4 = "4 STAZ"
17                5 = "5 DVIS"
18                6 = "6 OMED"
19                7 = "7 HVIS"
20                8 = "8 PMED";
NOTE: Format EVENTYPE has been output.
21          RUN;

NOTE: The PROCEDURE FORMAT used 0.11 seconds.


22
23          *-------------------------------------------------------------------------------------
24          * Get condition records coded as asthma.
25          *------------------------------------------------------------------------------------;
26          DATA ASCONDS;
27            SET IN.H27 (KEEP=CONDIDX CCCODEX);
28            IF CCCODEX="128";
29          RUN;

NOTE: The data set WORK.ASCONDS has 1243 observations and 2 variables.
NOTE: The DATA statement used 0.66 seconds.


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

NOTE: The data set WORK.ASCONDS has 1243 observations and 2 variables.
NOTE: The PROCEDURE SORT used 0.17 seconds.
```

```
35
36          proc print data=asconds (obs=50);
37            title3 "sample print of work.asconds - sorted by condidx";
38            title4 "COND (H27) records where cccodex=128";
39          run;

NOTE: The PROCEDURE PRINT printed page 1.
NOTE: The PROCEDURE PRINT used 0.33 seconds.


40
41          PROC SORT DATA=IN.H26IF1 OUT=CLNK; BY CONDIDX; RUN;

NOTE: The data set WORK.CLNK has 219144 observations and 5 variables.
NOTE: The PROCEDURE SORT used 4.28 seconds.


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

NOTE: The data set WORK.ASCLNKS has 4817 observations and 3 variables.
NOTE: The DATA statement used 1.59 seconds.


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

NOTE: The PROCEDURE PRINT printed pages 2-3.
NOTE: The PROCEDURE PRINT used 0.11 seconds.


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

NOTE: The data set WORK.ASCLNKS has 4817 observations and 3 variables.
NOTE: The PROCEDURE SORT used 0.11 seconds.


59
60          proc print data=asclnks (obs=50);
61            format eventype eventype.;
62            title3 "sample print of work.asclnks - sorted by evntidx";
63          run;
```

ATTACHMENT 2 - EXAMPLE B   **A2-33**   **MEPS HC-026I**

NOTE: The PROCEDURE PRINT printed page 4.
NOTE: The PROCEDURE PRINT used 0.05 seconds.


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

NOTE: The data set WORK.ASCLNKS has 4807 observations and 2 variables.
NOTE: The DATA statement used 0.22 seconds.


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

NOTE: The PROCEDURE PRINT printed page 5.
NOTE: The PROCEDURE PRINT used 0.11 seconds.


```
75
76          *-------------------------------------------------------------------------------
77          * Get PMED records linked to asthma condition records.
78          *------------------------------------------------------------------------------;
79          PROC SORT DATA=IN.H26A OUT=PMED; BY LINKIDX; RUN;
```

NOTE: The data set WORK.PMED has 172031 observations and 51 variables.
NOTE: The PROCEDURE SORT used 34.32 seconds.


```
80
81          DATA ASPMEDS;
82            MERGE PMED (KEEP=LINKIDX RXRECIDX RXNAME RXXP98X  WTDPER98)
83                  ASCLNKS (IN=INASCLNK KEEP=EVNTIDX RENAME=(EVNTIDX=LINKIDX));
84            BY LINKIDX;
85            IF INASCLNK & WTDPER98>0;
86          RUN;
```

NOTE: The data set WORK.ASPMEDS has 6142 observations and 5 variables.
NOTE: The DATA statement used 5.59 seconds.


```
87
88          proc print data=aspmeds (obs=300);
89            by linkidx;
90            id linkidx;
91            var rxrecidx rxname RXXP98X  WTDPER98;
92            title3 "sample print of work.aspmeds";
93            title4 "PMED (HC-026A) records which link to condition records coded as asthma";
94          run;
```

NOTE: The PROCEDURE PRINT printed pages 6-14.

NOTE: The PROCEDURE PRINT used 0.33 seconds.


```
95
96          PROC MEANS DATA=ASPMEDS N SUM;
97            VAR RXXP98X;
98            TITLE3 "Total Rx expenditures associated with asthma";
99          RUN;
```

NOTE: The PROCEDURE MEANS printed page 15.
NOTE: The PROCEDURE MEANS used 0.11 seconds.


```
100
101         PROC MEANS DATA=ASPMEDS N SUM;
102           VAR RXXP98X;
103           WEIGHT WTDPER98;
104           TITLE3 "Total Rx expenditures associated with asthma";
105           TITLE5 "Weighted";
106         RUN;
```

NOTE: The PROCEDURE MEANS printed page 16.
NOTE: The PROCEDURE MEANS used 0.05 seconds.


```
107
108
```

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

Sample SAS Job for Example B
sample print of work.asconds - sorted by condidx
COND (H27) records where cccodex=128

OBS	CONDIDX	CCCODEX
1	300090440043	128
2	300250280014	128
3	300440450027	128
4	300440510027	128
5	300650110034	128
6	300760110011	128
7	300790330011	128
8	300820410011	128
9	300820660046	128
10	300850210026	128
11	300850280035	128
12	300860170094	128
13	300930200025	128
14	300930200047	128
15	300930370030	128
16	301130110028	128
17	301170150039	128
18	301440390013	128
19	301730670017	128
20	301740160080	128
21	301740460022	128
22	301740790033	128
23	301740870019	128
24	301750330049	128
25	301750330061	128
26	301770320016	128
27	301780410013	128
28	301800150035	128
29	301890170054	128
30	301910480036	128
31	301910540014	128
32	302100140091	128
33	302100210012	128
34	302190490020	128
35	302230180020	128
36	302340400020	128
37	302340560014	128
38	302580120069	128
39	302690390085	128
40	302850180127	128
41	302850250029	128
42	302870290014	128
43	302880230064	128
44	303170330027	128
45	303260180027	128
46	303320110064	128
47	303370440041	128
48	303370440079	128
49	303490470019	128
50	303490530031	128

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

              CONDIDX          EVNTIDX          EVENTYPE

           300250280014     300250280030        3 EROM
                            300250280047        1 MVIS
                            300250280085        8 PMED

           300440450027     300440450091        8 PMED

           300440510027     300440510016        1 MVIS
                            300440510023        8 PMED

           300760110011     300760110303        8 PMED
                            300760110365        7 HVIS
                            300760110416        7 HVIS

           300790330011     300790330230        8 PMED
                            300790330247        8 PMED
                            300790330292        1 MVIS
                            300790330312        8 PMED
                            300790330329        8 PMED
                            300790330336        8 PMED
                            300790330343        8 PMED

           300820660046     300820660030        8 PMED

           300850210026     300850210050        1 MVIS
                            300850210081        8 PMED

           300860170094     300860170243        2 OPAT
                            300860170370        8 PMED
                            300860170387        8 PMED
                            300860170394        8 PMED

           300930200025     300930200016        3 EROM
                            300930200061        8 PMED

           300930200047     300930200030        3 EROM
                            300930200047        3 EROM
                            300930200054        8 PMED

           300930370030     300930370047        8 PMED

           301130110028     301130110052        8 PMED
                            301130110076        8 PMED

           301170150039     301170150172        8 PMED
                            301170150230        8 PMED
                            301170150261        8 PMED

           301730670017     301730670064        8 PMED
```

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

CONDIDX	EVNTIDX	EVENTYPE
301740160080	301740160294	8 PMED
	301740160369	8 PMED
	301740160403	8 PMED
	301740160427	8 PMED
301740460022	301740460175	8 PMED
	301740460219	8 PMED
301740790033	301740790173	1 MVIS
	301740790180	8 PMED
	301740790197	8 PMED
	301740790231	8 PMED
301740870019	301740870165	8 PMED
	301740870172	8 PMED
301750330049	301750330108	1 MVIS
	301750330122	8 PMED
	301750330139	8 PMED
	301750330160	1 MVIS
	301750330177	8 PMED
301750330061	301750330160	1 MVIS
301780410013	301780410035	1 MVIS
301800150035	301800150195	8 PMED
	301800150208	8 PMED
301890170054	301890170238	8 PMED
	301890170245	8 PMED
	301890170252	8 PMED
	301890170303	1 MVIS
	301890170310	1 MVIS
	301890170327	1 MVIS
	301890170334	1 MVIS
	301890170341	1 MVIS
	301890170358	1 MVIS
	301890170365	1 MVIS
	301890170485	8 PMED
	301890170492	8 PMED
	301890170505	8 PMED
	301890170567	8 PMED
	301890170574	8 PMED
	301890170581	8 PMED
302100140091	302100140256	1 MVIS
	302100140263	1 MVIS
	302100140270	1 MVIS

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

OBS	CONDIDX	EVNTIDX	EVENTYPE
1	300250280014	300250280030	3 EROM
2	300250280014	300250280047	1 MVIS
3	300250280014	300250280085	8 PMED
4	300440450027	300440450091	8 PMED
5	300440510027	300440510016	1 MVIS
6	300440510027	300440510023	8 PMED
7	300760110011	300760110303	8 PMED
8	300760110011	300760110365	7 HVIS
9	300760110011	300760110416	7 HVIS
10	300790330011	300790330230	8 PMED
11	300790330011	300790330247	8 PMED
12	300790330011	300790330292	1 MVIS
13	300790330011	300790330312	8 PMED
14	300790330011	300790330329	8 PMED
15	300790330011	300790330336	8 PMED
16	300790330011	300790330343	8 PMED
17	300820660046	300820660030	8 PMED
18	300850210026	300850210050	1 MVIS
19	300850210026	300850210081	8 PMED
20	300860170094	300860170243	2 OPAT
21	300860170094	300860170370	8 PMED
22	300860170094	300860170387	8 PMED
23	300860170094	300860170394	8 PMED
24	300930200025	300930200016	3 EROM
25	300930200047	300930200030	3 EROM
26	300930200047	300930200047	3 EROM
27	300930200047	300930200054	8 PMED
28	300930200025	300930200061	8 PMED
29	300930370030	300930370047	8 PMED
30	301130110028	301130110052	8 PMED
31	301130110028	301130110076	8 PMED
32	301170150039	301170150172	8 PMED
33	301170150039	301170150230	8 PMED
34	301170150039	301170150261	8 PMED
35	301730670017	301730670064	8 PMED
36	301740160080	301740160294	8 PMED
37	301740160080	301740160369	8 PMED
38	301740160080	301740160403	8 PMED
39	301740160080	301740160427	8 PMED
40	301740460022	301740460175	8 PMED
41	301740460022	301740460219	8 PMED
42	301740790033	301740790173	1 MVIS
43	301740790033	301740790180	8 PMED
44	301740790033	301740790197	8 PMED
45	301740790033	301740790231	8 PMED
46	301740870019	301740870165	8 PMED
47	301740870019	301740870172	8 PMED
48	301750330049	301750330108	1 MVIS
49	301750330049	301750330122	8 PMED
50	301750330049	301750330139	8 PMED

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

```
            OBS       EVNTIDX        EVENTYPE

             1      300250280030     3 EROM
             2      300250280047     1 MVIS
             3      300250280085     8 PMED
             4      300440450091     8 PMED
             5      300440510016     1 MVIS
             6      300440510023     8 PMED
             7      300760110303     8 PMED
             8      300760110365     7 HVIS
             9      300760110416     7 HVIS
            10      300790330230     8 PMED
            11      300790330247     8 PMED
            12      300790330292     1 MVIS
            13      300790330312     8 PMED
            14      300790330329     8 PMED
            15      300790330336     8 PMED
            16      300790330343     8 PMED
            17      300820660030     8 PMED
            18      300850210050     1 MVIS
            19      300850210081     8 PMED
            20      300860170243     2 OPAT
            21      300860170370     8 PMED
            22      300860170387     8 PMED
            23      300860170394     8 PMED
            24      300930200016     3 EROM
            25      300930200030     3 EROM
            26      300930200047     3 EROM
            27      300930200054     8 PMED
            28      300930200061     8 PMED
            29      300930370047     8 PMED
            30      301130110052     8 PMED
            31      301130110076     8 PMED
            32      301170150172     8 PMED
            33      301170150230     8 PMED
            34      301170150261     8 PMED
            35      301730670064     8 PMED
            36      301740160294     8 PMED
            37      301740160369     8 PMED
            38      301740160403     8 PMED
            39      301740160427     8 PMED
            40      301740460175     8 PMED
            41      301740460219     8 PMED
            42      301740790173     1 MVIS
            43      301740790180     8 PMED
            44      301740790197     8 PMED
            45      301740790231     8 PMED
            46      301740870165     8 PMED
            47      301740870172     8 PMED
            48      301750330108     1 MVIS
            49      301750330122     8 PMED
            50      301750330139     8 PMED
```

HC-026I   11:09 Wednesday, December 19,

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
300250280085	300250280085001	ALBUTEROL	21.49	2507.60
300440450091	300440450091001	HYDROPHED	30.78	13570.52
	300440450091002	HYDROPHED	30.78	13570.52
	300440450091003	HYDROPHED	30.78	13570.52
300440510023	300440510023001	ALBUTEROL SULFATE	10.69	16284.45
300790330230	300790330230001	FLOVENT	167.04	1186.13
300790330247	300790330247001	SEREVENT INHALER	72.82	1186.13
	300790330247002	SEREVENT INHALER	72.82	1186.13
300790330312	300790330312001	FLOVENT	167.04	1186.13
	300790330312002	FLOVENT	167.04	1186.13
	300790330312003	FLOVENT	167.04	1186.13
	300790330312004	FLOVENT	167.04	1186.13
300790330329	300790330329001	SEREVENT	116.66	1186.13
	300790330329002	SEREVENT	116.66	1186.13
	300790330329003	SEREVENT	8.97	1186.13
	300790330329004	SEREVENT	116.66	1186.13
300790330336	300790330336001	FLOVENT	167.04	1186.13
	300790330336002	FLOVENT	167.04	1186.13
	300790330336003	FLOVENT	167.04	1186.13
	300790330336004	FLOVENT	167.04	1186.13
300790330343	300790330343001	SEREVENT	116.66	1186.13
	300790330343002	SEREVENT	6.99	1186.13
	300790330343003	SEREVENT	6.99	1186.13
	300790330343004	SEREVENT	6.99	1186.13
300820660030	300820660030001	ALBUTEROL	24.76	11088.56
300850210081	300850210081001	-9	3.00	3325.32
300860170370	300860170370001	ALBUTEROL	26.98	5106.67
300860170387	300860170387001	PREDNISONE	5.00	5106.67
300860170394	300860170394001	FLOVENT	54.10	5106.67
	300860170394002	FLOVENT	54.10	5106.67
300930200054	300930200054001	ALBUTEROL	21.99	5902.66
300930200061	300930200061001	ALBUTEROL	21.49	5902.66
300930370047	300930370047001	PROVENTIL HFA	27.32	8288.16

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
301130110052	301130110052001	ALBUTEROL	21.41	2752.93
	301130110052002	ALBUTEROL	21.41	2752.93
301130110076	301130110076001	ALBUTEROL	21.41	2752.93
	301130110076002	ALBUTEROL	21.41	2752.93
	301130110076003	ALBUTEROL	21.41	2752.93
301170150172	301170150172001	THEOPHYLLINE ER	26.40	8279.84
301170150230	301170150230001	PROPULSID	89.72	8279.84
301170150261	301170150261001	THEOPHYLLINE	10.24	8279.84
301730670064	301730670064001	DIMETAPP	4.29	1517.94
301740160294	301740160294001	MENTHOL CR/AVEENO	8.73	5519.81
	301740160294002	MENTHOL CR/AVEENO	8.73	5519.81
301740160369	301740160369001	POTASSIUM CHLORIDE	19.04	5519.81
	301740160369002	POTASSIUM CHLORIDE	19.04	5519.81
301740160403	301740160403001	ALBUTEROL	21.75	5519.81
301740160427	301740160427001	THEOPHYLLINE ANHYDROUS	15.20	5519.81
	301740160427002	THEOPHYLLINE ANHYDROUS	15.20	5519.81
	301740160427003	THEOPHYLLINE ANHYDROUS	15.20	5519.81
	301740160427004	THEOPHYLLINE ANHYDROUS	15.20	5519.81
	301740160427005	THEOPHYLLINE ANHYDROUS	15.20	5519.81
301740460175	301740460175001	SEREVENT	56.30	1275.60
301740460219	301740460219001	PROVENTIL	57.86	1275.60
301740790180	301740790180001	SEREVENT	57.08	3457.53
301740790197	301740790197001	AZMACORT	133.09	3457.53
301740790231	301740790231001	ALBUTEROL	84.63	3457.53
301740870165	301740870165001	SLO-BID GYROCAPS	31.59	4148.40
301740870172	301740870172001	SEREVENT INH	156.25	4148.40
301750330122	301750330122001	-9	13.33	19819.94
301750330139	301750330139001	BIAXIN	25.97	19819.94
301750330177	301750330177001	ANTIBIOTIC	14.95	19819.94

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
301800150195	301800150195001	SEREVENT	116.66	18065.37
301800150208	301800150208001	ALBUTEROL	30.29	18065.37
301890170238	301890170238001	SEREVENT REFILL	51.20	15961.99
301890170245	301890170245001	ATROVENT REFILL	28.91	15961.99
301890170252	301890170252001	AZMACORT	47.33	15961.99
	301890170252002	AZMACORT	47.33	15961.99
301890170485	301890170485001	SEREVENT REFILL	53.67	15961.99
	301890170485002	SEREVENT REFILL	53.67	15961.99
	301890170485003	SEREVENT REFILL	53.67	15961.99
	301890170485004	SEREVENT REFILL	53.67	15961.99
	301890170485005	SEREVENT REFILL	53.67	15961.99
	301890170485006	SEREVENT REFILL	53.67	15961.99
	301890170485007	SEREVENT REFILL	53.67	15961.99
301890170492	301890170492001	ATROVENT REFILL	30.07	15961.99
	301890170492002	ATROVENT REFILL	31.15	15961.99
	301890170492003	ATROVENT REFILL	30.07	15961.99
	301890170492004	ATROVENT REFILL	30.07	15961.99
	301890170492005	ATROVENT REFILL	31.15	15961.99
	301890170492006	ATROVENT REFILL	30.07	15961.99
	301890170492007	ATROVENT REFILL	30.07	15961.99
	301890170492008	ATROVENT REFILL	31.15	15961.99
	301890170492009	ATROVENT REFILL	30.07	15961.99
301890170505	301890170505001	AZMACORT	47.33	15961.99
	301890170505002	AZMACORT	49.10	15961.99
	301890170505003	AZMACORT	49.10	15961.99
	301890170505004	AZMACORT	47.33	15961.99
	301890170505005	AZMACORT	49.10	15961.99
	301890170505006	AZMACORT	49.10	15961.99
	301890170505007	AZMACORT	47.33	15961.99
	301890170505008	AZMACORT	47.33	15961.99
	301890170505009	AZMACORT	47.33	15961.99
	301890170505010	AZMACORT	49.10	15961.99
	301890170505011	AZMACORT	49.10	15961.99
301890170567	301890170567001	SEREVENT REFILL	53.67	15961.99
	301890170567002	SEREVENT REFILL	53.67	15961.99
	301890170567003	SEREVENT REFILL	53.67	15961.99
301890170574	301890170574001	ATROVENT REFILL	31.15	15961.99
	301890170574002	ATROVENT REFILL	31.15	15961.99
	301890170574003	ATROVENT REFILL	31.15	15961.99

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
301890170581	301890170581001	AZMACORT	49.10	15961.99
	301890170581002	AZMACORT	49.10	15961.99
	301890170581003	AZMACORT	49.10	15961.99
302100210263	302100210263001	CARBAMAZEPINE	35.22	1870.22
302100210270	302100210270001	ALBUTEROL	20.45	1870.22
302190490120	302190490120001	VENTOLIN ROTACAPS	35.76	9465.66
	302190490120002	VENTOLIN ROTACAPS	35.76	9465.66
302230180732	302230180732001	PANFIL G	10.00	3376.03
302230180749	302230180749001	ALBUTEROL INHALER	21.41	3376.03
	302230180749002	ALBUTEROL INHALER	21.41	3376.03
302340400042	302340400042001	ALBUTEROL	12.10	5178.65
302340560423	302340560423001	BECONASE AQ	53.99	3309.39
302340560454	302340560454001	BECONASE AQ	53.99	3309.39
	302340560454002	BECONASE AQ	53.99	3309.39
	302340560454003	BECONASE AQ	53.99	3309.39
302340560461	302340560461001	ALBUTEROL	11.12	3309.39
	302340560461002	ALBUTEROL	11.12	3309.39
	302340560461003	ALBUTEROL	11.12	3309.39
302340560478	302340560478001	PSEUDOEPHEDRINE	3.17	3309.39
	302340560478002	PSEUDOEPHEDRINE	3.17	3309.39
	302340560478003	PSEUDOEPHEDRINE	3.17	3309.39
302340560492	302340560492001	BECONASE AQ	53.99	3309.39
	302340560492002	BECONASE AQ	53.99	3309.39
302340560505	302340560505001	ALBUTEROL	11.12	3309.39
	302340560505002	ALBUTEROL	11.12	3309.39
302340560512	302340560512001	PSEUDOEPHEDRINE	3.17	3309.39
	302340560512002	PSEUDOEPHEDRINE	3.17	3309.39
302580120197	302580120197001	AEROCHAMBER	40.75	9703.32
302850250103	302850250103001	CLARITIN	30.85	9943.89
302850250165	302850250165001	CLARITIN	30.85	9943.89
	302850250165002	CLARITIN	30.85	9943.89
	302850250165003	CLARITIN	30.85	9943.89
	302850250165004	CLARITIN	30.85	9943.89

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
302850250172	302850250172001	E-MYCIN	15.26	9943.89
302880230627	302880230627001	MOTRIN	11.73	5807.26
303260180099	303260180099001	AZMACORT	49.18	25618.20
	303260180099002	AZMACORT	49.18	25618.20
	303260180099003	AZMACORT	49.18	25618.20
303260180102	303260180102001	ALBUTEROL	21.41	25618.20
	303260180102002	ALBUTEROL	21.41	25618.20
	303260180102003	ALBUTEROL	21.41	25618.20
	303260180102004	ALBUTEROL	21.41	25618.20
303260180195	303260180195001	AZMACORT	49.18	25618.20
	303260180195002	AZMACORT	49.18	25618.20
	303260180195003	AZMACORT	49.18	25618.20
	303260180195004	AZMACORT	49.18	25618.20
303260180208	303260180208001	ALBUTEROL	21.41	25618.20
	303260180208002	ALBUTEROL	21.41	25618.20
	303260180208003	ALBUTEROL	21.41	25618.20
	303260180208004	ALBUTEROL	21.41	25618.20
	303260180208005	ALBUTEROL	21.41	25618.20
	303260180208006	ALBUTEROL	21.41	25618.20
303260180239	303260180239001	SEREVENT	58.33	25618.20
303260180246	303260180246001	AZMACORT	49.18	25618.20
	303260180246002	AZMACORT	49.18	25618.20
303260180253	303260180253001	ALBUTEROL	21.41	25618.20
	303260180253002	ALBUTEROL	21.41	25618.20
	303260180253003	ALBUTEROL	21.41	25618.20
	303260180253004	ALBUTEROL	21.41	25618.20
303320110584	303320110584001	ALBUTEROL	11.07	17519.00
303320110591	303320110591001	VANCERIL	48.88	17519.00
303540380070	303540380070001	TUSSORGANIDIN DM	17.47	5838.47
303650250171	303650250171001	TILADE INHALER	66.85	19458.95
	303650250171002	TILADE INHALER	66.85	19458.95
303650250188	303650250188001	AEROCHAMBER	27.84	19458.95
303650250195	303650250195001	RHINOCORT	34.45	19458.95
	303650250195002	RHINOCORT	34.45	19458.95

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
303650250215	303650250215001	SINGULAIR	66.96	19458.95
	303650250215002	SINGULAIR	66.96	19458.95
	303650250215003	SINGULAIR	66.96	19458.95
303650250246	303650250246001	SINGULAIR	66.96	19458.95
	303650250246002	SINGULAIR	66.96	19458.95
303650250253	303650250253001	RHINOCORT	34.45	19458.95
303650250260	303650250260001	TILADE INHALER	66.85	19458.95
	303650250260002	TILADE INHALER	66.85	19458.95
303670160583	303670160583001	BRETHINE	31.07	5364.52
	303670160583002	BRETHINE	31.07	5364.52
303940330034	303940330034001	PROVENTIL	28.93	2422.50
303940330041	303940330041001	VISTARIL	34.68	2422.50
	303940330041002	VISTARIL	34.68	2422.50
303940330058	303940330058001	PROVENTIL	28.93	2422.50
303940330065	303940330065001	VISTARIL	16.62	2422.50
	303940330065002	VISTARIL	16.62	2422.50
303940330072	303940330072001	PROVENTIL	28.93	2422.50
	303940330072002	PROVENTIL	28.93	2422.50
303940330089	303940330089001	VISTARIL	34.68	2422.50
	303940330089002	VISTARIL	34.68	2422.50
304040160344	304040160344001	VANCERIL	38.73	8340.92
	304040160344002	VANCERIL	38.73	8340.92
	304040160344003	VANCERIL	38.73	8340.92
	304040160344004	VANCERIL	38.73	8340.92
304040160351	304040160351001	ALBUTEROL	10.25	8340.92
	304040160351002	ALBUTEROL	10.25	8340.92
	304040160351003	ALBUTEROL	10.25	8340.92
304040160464	304040160464001	TOPROL XL	47.89	8340.92
304040160488	304040160488001	ALBUTEROL	8.14	8340.92
	304040160488002	ALBUTEROL	8.14	8340.92
	304040160488003	ALBUTEROL	8.14	8340.92
	304040160488004	ALBUTEROL	8.14	8340.92
	304040160488005	ALBUTEROL	8.14	8340.92
	304040160488006	ALBUTEROL	8.14	8340.92

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
304040160508	304040160508001	VANCERIL	38.73	8340.92
	304040160508002	VANCERIL	38.73	8340.92
	304040160508003	VANCERIL	38.73	8340.92
	304040160508004	VANCERIL	38.73	8340.92
304040160546	304040160546001	TOPROL XL	30.11	8340.92
304040160560	304040160560001	ALBUTEROL	21.41	8340.92
	304040160560002	ALBUTEROL	21.41	8340.92
304220140163	304220140163001	INTAL INHALER	76.13	14586.07
	304220140163002	INTAL INHALER	76.13	14586.07
304230130824	304230130824001	ALBUTEROL	13.07	10639.91
304230130951	304230130951001	VENTOLIN	35.37	10639.91
304230200533	304230200533001	ATROVENT	33.09	4188.36
	304230200533002	ATROVENT	33.09	4188.36
	304230200533003	ATROVENT	33.09	4188.36
	304230200533004	ATROVENT	33.09	4188.36
	304230200533005	ATROVENT	33.09	4188.36
	304230200533006	ATROVENT	33.09	4188.36
304230200691	304230200691001	ATROVENT I	47.76	4188.36
304240170092	304240170092001	VENTOLIN	26.94	3780.92
	304240170092002	VENTOLIN	26.94	3780.92
	304240170092003	VENTOLIN	26.94	3780.92
	304240170092004	VENTOLIN	26.94	3780.92
	304240170092005	VENTOLIN	26.94	3780.92
	304240170092006	VENTOLIN	26.94	3780.92
	304240170092007	VENTOLIN	26.94	3780.92
304240170105	304240170105001	EZ SPACER	12.51	3780.92
	304240170105002	EZ SPACER	12.51	3780.92
	304240170105003	EZ SPACER	12.51	3780.92
	304240170105004	EZ SPACER	12.51	3780.92
	304240170105005	EZ SPACER	12.51	3780.92
	304240170105006	EZ SPACER	12.51	3780.92
	304240170105007	EZ SPACER	12.51	3780.92
304290500189	304290500189001	VANCENASE	46.51	3005.58
304290500196	304290500196001	AEROCHAMBER	33.39	3005.58
	304290500196002	AEROCHAMBER	33.39	3005.58
304290500209	304290500209001	ALBUTEROL	9.88	3005.58
	304290500209002	ALBUTEROL	9.88	3005.58

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
304290500209	304290500209003	ALBUTEROL	9.88	3005.58
304310250320	304310250320001	ALBUTEROL	10.38	8036.09
304310250515	304310250515001	ALBUTEROL	21.41	8036.09
304470110281	304470110281001	AEROBID INHALER	69.80	2657.64
	304470110281002	AEROBID INHALER	69.80	2657.64
	304470110281003	AEROBID INHALER	69.80	2657.64
304470110298	304470110298001	INSPIREASE	20.99	2657.64
	304470110298002	INSPIREASE	20.99	2657.64
	304470110298003	INSPIREASE	20.99	2657.64
304470110301	304470110301001	AFRIN	14.78	2657.64
304470110318	304470110318001	EZ SPACER	12.51	2657.64
304470110452	304470110452001	AEROBID INHALER	69.80	2657.64
	304470110452002	AEROBID INHALER	69.80	2657.64
	304470110452003	AEROBID INHALER	69.80	2657.64
	304470110452004	AEROBID INHALER	69.80	2657.64
	304470110452005	AEROBID INHALER	69.80	2657.64
	304470110452006	AEROBID INHALER	69.80	2657.64
	304470110452007	AEROBID INHALER	69.80	2657.64
304470110469	304470110469001	INSPIREASE	20.99	2657.64
	304470110469002	INSPIREASE	20.99	2657.64
	304470110469003	INSPIREASE	20.99	2657.64
	304470110469004	INSPIREASE	20.99	2657.64
	304470110469005	INSPIREASE	20.99	2657.64
	304470110469006	INSPIREASE	20.99	2657.64
	304470110469007	INSPIREASE	20.99	2657.64
304470110476	304470110476001	AFRIN	14.78	2657.64
	304470110476002	AFRIN	14.78	2657.64
	304470110476003	AFRIN	14.78	2657.64
	304470110476004	AFRIN	14.78	2657.64
	304470110476005	AFRIN	14.78	2657.64
	304470110476006	AFRIN	14.78	2657.64
	304470110476007	AFRIN	14.78	2657.64
304470110483	304470110483001	EZ SPACER	12.51	2657.64
	304470110483002	EZ SPACER	12.51	2657.64
	304470110483003	EZ SPACER	12.51	2657.64
	304470110483004	EZ SPACER	12.51	2657.64
	304470110483005	EZ SPACER	12.51	2657.64
	304470110483006	EZ SPACER	12.51	2657.64
	304470110483007	EZ SPACER	12.51	2657.64

Sample SAS Job for Example B
sample print of work.aspmeds
PMED (HC-026A) records which link to condition records coded as asthma

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
304470110490	304470110490001	CIMETIDINE	170.00	2657.64
	304470110490002	CIMETIDINE	170.00	2657.64
	304470110490003	CIMETIDINE	170.00	2657.64
	304470110490004	CIMETIDINE	170.00	2657.64
	304470110490005	CIMETIDINE	170.00	2657.64
	304470110490006	CIMETIDINE	170.00	2657.64
	304470110490007	CIMETIDINE	170.00	2657.64
304470110503	304470110503001	PROVENTIL REPETABS	38.81	2657.64
	304470110503002	PROVENTIL REPETABS	38.81	2657.64
	304470110503003	PROVENTIL REPETABS	38.81	2657.64
	304470110503004	PROVENTIL REPETABS	38.81	2657.64
	304470110503005	PROVENTIL REPETABS	38.81	2657.64
	304470110503006	PROVENTIL REPETABS	38.81	2657.64
	304470110503007	PROVENTIL REPETABS	38.81	2657.64
304470110510	304470110510001	ALLEGRA	25.60	2657.64
	304470110510002	ALLEGRA	25.60	2657.64
	304470110510003	ALLEGRA	25.60	2657.64
	304470110510004	ALLEGRA	25.60	2657.64
	304470110510005	ALLEGRA	25.60	2657.64
	304470110510006	ALLEGRA	25.60	2657.64
	304470110510007	ALLEGRA	25.60	2657.64
304660390171	304660390171001	ALBUTEROL INH	27.95	4554.36

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

Analysis Variable : RXXP98X SUM OF PAYMENTS RXSF98X-RXOU98X(IMPUTED)

```
         N          Sum
    ------------------
    6142      216221.93
    ------------------
```

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

Weighted

Analysis Variable : RXXP98X SUM OF PAYMENTS RXSF98X-RXOU98X(IMPUTED)

```
        N           Sum
------------------
6142    2230518530
------------------
```

```
1                        The SAS System                               11:19 Wednesday, December 19,
2001

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1
2              OPTIONS LS=132 PS=59;
3
4              TITLE1 "HC-026I";
5              TITLE2 'Sample SAS Job for Example C';
6
7              LIBNAME IN 'C:\';
NOTE: Directory for library IN contains files of mixed engine types.
NOTE: Libref IN was successfully assigned as follows:
      Engine:        V612
      Physical Name: C:\
8
9              *************************************************************************************
10             *  Calculate the expenditures for medical visits associated with asthma.
11             *************************************************************************************;
12             PROC FORMAT;
13               VALUE EVENTYPE
14                   1 = "1 MVIS"
15                   2 = "2 OPAT"
16                   3 = "3 EROM"
17                   4 = "4 STAZ"
18                   5 = "5 DVIS"
19                   6 = "6 OMED"
20                   7 = "7 HVIS"
21                   8 = "8 PMED";
NOTE: Format EVENTYPE has been output.
22        RUN;

NOTE: The PROCEDURE FORMAT used 0.17 seconds.


23
24             *------------------------------------------------------------------------------------
25             * Get conditions records coded as asthma.
26             *-----------------------------------------------------------------------------------;
27             DATA ASCONDS;
28               SET IN.H27 (KEEP=CONDIDX CCCODEX);
29               IF CCCODEX="128";
30             RUN;

NOTE: The data set WORK.ASCONDS has 1243 observations and 2 variables.
NOTE: The DATA statement used 0.93 seconds.


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

NOTE: The data set WORK.ASCONDS has 1243 observations and 2 variables.
```

NOTE: The PROCEDURE SORT used 0.16 seconds.


```
36
37          proc print data=asconds (obs=50);
38            title3 "sample print of work.asconds - sorted by condidx";
39            title4 "COND (HC-027) records where cccodex=128";
40          run;
```

NOTE: The PROCEDURE PRINT printed page 1.
NOTE: The PROCEDURE PRINT used 0.33 seconds.


```
41
42          PROC SORT DATA=IN.H26IF1 OUT=CLNK; BY CONDIDX; RUN;
```

NOTE: The data set WORK.CLNK has 219144 observations and 5 variables.
NOTE: The PROCEDURE SORT used 8.94 seconds.


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

NOTE: The data set WORK.ASCLNKS has 4817 observations and 3 variables.
NOTE: The DATA statement used 5.32 seconds.


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

NOTE: The PROCEDURE PRINT printed pages 2-3.
NOTE: The PROCEDURE PRINT used 0.0 seconds.


```
58
59          PROC SORT DATA=ASCLNKS; BY EVNTIDX; RUN;
```

NOTE: The data set WORK.ASCLNKS has 4817 observations and 3 variables.
NOTE: The PROCEDURE SORT used 0.22 seconds.


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

ATTACHMENT 2 - EXAMPLE C   **A2-53**   **MEPS HC-026I**

NOTE: The PROCEDURE PRINT printed page 4.
NOTE: The PROCEDURE PRINT used 0.05 seconds.


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

NOTE: The data set WORK.ASCLNKS has 4807 observations and 2 variables.
NOTE: The DATA statement used 0.33 seconds.


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

NOTE: The PROCEDURE PRINT printed page 5.
NOTE: The PROCEDURE PRINT used 0.11 seconds.


```
76
77          *------------------------------------------------------------------------------------------
78          * Get non-telephone office based visits (i.e. MVIS events) for persons with positive weights.
79          *------------------------------------------------------------------------------------------;
80          DATA MVIS;
81            SET IN.H26GF1 (KEEP=EVNTIDX WTDPER98 SEETLKPV OBXP98X);
82            IF WTDPER98 > 0 & SEETLKPV NE 2;
83          RUN;
```

NOTE: The data set WORK.MVIS has 101135 observations and 4 variables.
NOTE: The DATA statement used 2.08 seconds.


```
84
85          PROC SORT DATA=MVIS; BY EVNTIDX; RUN;
```

NOTE: The data set WORK.MVIS has 101135 observations and 4 variables.
NOTE: The PROCEDURE SORT used 2.79 seconds.


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

NOTE: The data set WORK.ASMVIS has 1608 observations and 5 variables.
NOTE: The DATA statement used 2.64 seconds.


```
96
97          proc print data=asmvis (obs=50);
98            format eventype eventype.;
99            title3 "sample print of work.asmvis";
100           title4 "unique evntidxs from work.asclnks that are non-telephone MVIS (HC-026G) events";
101         run;
```

NOTE: The PROCEDURE PRINT printed page 6.
NOTE: The PROCEDURE PRINT used 0.17 seconds.


```
102
103         PROC MEANS DATA=ASMVIS N SUM;
104           VAR OBXP98X;
105           TITLE3 "Total medical visit expenditures (excluding telephone) associated with asthma";
106         RUN;
```

NOTE: The PROCEDURE MEANS printed page 7.
NOTE: The PROCEDURE MEANS used 0.0 seconds.


```
107
108         PROC MEANS DATA=ASMVIS SUM;
109           VAR OBXP98X;
110           WEIGHT WTDPER98;
111           TITLE3 "Total medical visit expenditures (excluding telephone) associated with asthma";
112           TITLE5 "Weighted";
113         RUN;
```

NOTE: The PROCEDURE MEANS printed page 8.
NOTE: The PROCEDURE MEANS used 0.0 seconds.


```
114
115
116
```

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

Sample SAS Job for Example C
sample print of work.asconds - sorted by condidx
COND (HC-027) records where cccodex=128

OBS	CONDIDX	CCCODEX
1	300090440043	128
2	300250280014	128
3	300440450027	128
4	300440510027	128
5	300650110034	128
6	300760110011	128
7	300790330011	128
8	300820410011	128
9	300820660046	128
10	300850210026	128
11	300850280035	128
12	300860170094	128
13	300930200025	128
14	300930200047	128
15	300930370030	128
16	301130110028	128
17	301170150039	128
18	301440390013	128
19	301730670017	128
20	301740160080	128
21	301740460022	128
22	301740790033	128
23	301740870019	128
24	301750330049	128
25	301750330061	128
26	301770320016	128
27	301780410013	128
28	301800150035	128
29	301890170054	128
30	301910480036	128
31	301910540014	128
32	302100140091	128
33	302100210012	128
34	302190490020	128
35	302230180020	128
36	302340400020	128
37	302340560014	128
38	302580120069	128
39	302690390085	128
40	302850180127	128
41	302850250029	128
42	302870290014	128
43	302880230064	128
44	303170330027	128
45	303260180027	128
46	303320110064	128
47	303370440041	128
48	303370440079	128
49	303490470019	128
50	303490530031	128

HC-026I   11:19 Wednesday, December 19,

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

```
        CONDIDX        EVNTIDX        EVENTYPE

      300250280014   300250280030    3 EROM
                     300250280047    1 MVIS
                     300250280085    8 PMED

      300440450027   300440450091    8 PMED

      300440510027   300440510016    1 MVIS
                     300440510023    8 PMED

      300760110011   300760110303    8 PMED
                     300760110365    7 HVIS
                     300760110416    7 HVIS

      300790330011   300790330230    8 PMED
                     300790330247    8 PMED
                     300790330292    1 MVIS
                     300790330312    8 PMED
                     300790330329    8 PMED
                     300790330336    8 PMED
                     300790330343    8 PMED

      300820660046   300820660030    8 PMED

      300850210026   300850210050    1 MVIS
                     300850210081    8 PMED

      300860170094   300860170243    2 OPAT
                     300860170370    8 PMED
                     300860170387    8 PMED
                     300860170394    8 PMED

      300930200025   300930200016    3 EROM
                     300930200061    8 PMED

      300930200047   300930200030    3 EROM
                     300930200047    3 EROM
                     300930200054    8 PMED

      300930370030   300930370047    8 PMED

      301130110028   301130110052    8 PMED
                     301130110076    8 PMED

      301170150039   301170150172    8 PMED
                     301170150230    8 PMED
                     301170150261    8 PMED

      301730670017   301730670064    8 PMED
```

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

```
        CONDIDX        EVNTIDX        EVENTYPE

     301740160080   301740160294     8 PMED
                    301740160369     8 PMED
                    301740160403     8 PMED
                    301740160427     8 PMED

     301740460022   301740460175     8 PMED
                    301740460219     8 PMED

     301740790033   301740790173     1 MVIS
                    301740790180     8 PMED
                    301740790197     8 PMED
                    301740790231     8 PMED

     301740870019   301740870165     8 PMED
                    301740870172     8 PMED

     301750330049   301750330108     1 MVIS
                    301750330122     8 PMED
                    301750330139     8 PMED
                    301750330160     1 MVIS
                    301750330177     8 PMED

     301750330061   301750330160     1 MVIS

     301780410013   301780410035     1 MVIS

     301800150035   301800150195     8 PMED
                    301800150208     8 PMED

     301890170054   301890170238     8 PMED
                    301890170245     8 PMED
                    301890170252     8 PMED
                    301890170303     1 MVIS
                    301890170310     1 MVIS
                    301890170327     1 MVIS
                    301890170334     1 MVIS
                    301890170341     1 MVIS
                    301890170358     1 MVIS
                    301890170365     1 MVIS
                    301890170485     8 PMED
                    301890170492     8 PMED
                    301890170505     8 PMED
                    301890170567     8 PMED
                    301890170574     8 PMED
                    301890170581     8 PMED

     302100140091   302100140256     1 MVIS
                    302100140263     1 MVIS
                    302100140270     1 MVIS
```

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

               OBS   CONDIDX   EVNTIDX   EVENTYPE

                1   300250280014   300250280030   3 EROM
                2   300250280014   300250280047   1 MVIS
                3   300250280014   300250280085   8 PMED
                4   300440450027   300440450091   8 PMED
                5   300440510027   300440510016   1 MVIS
                6   300440510027   300440510023   8 PMED
                7   300760110011   300760110303   8 PMED
                8   300760110011   300760110365   7 HVIS
                9   300760110011   300760110416   7 HVIS
               10   300790330011   300790330230   8 PMED
               11   300790330011   300790330247   8 PMED
               12   300790330011   300790330292   1 MVIS
               13   300790330011   300790330312   8 PMED
               14   300790330011   300790330329   8 PMED
               15   300790330011   300790330336   8 PMED
               16   300790330011   300790330343   8 PMED
               17   300820660046   300820660030   8 PMED
               18   300850210026   300850210050   1 MVIS
               19   300850210026   300850210081   8 PMED
               20   300860170094   300860170243   2 OPAT
               21   300860170094   300860170370   8 PMED
               22   300860170094   300860170387   8 PMED
               23   300860170094   300860170394   8 PMED
               24   300930200025   300930200016   3 EROM
               25   300930200047   300930200030   3 EROM
               26   300930200047   300930200047   3 EROM
               27   300930200047   300930200054   8 PMED
               28   300930200025   300930200061   8 PMED
               29   300930370030   300930370047   8 PMED
               30   301130110028   301130110052   8 PMED
               31   301130110028   301130110076   8 PMED
               32   301170150039   301170150172   8 PMED
               33   301170150039   301170150230   8 PMED
               34   301170150039   301170150261   8 PMED
               35   301730670017   301730670064   8 PMED
               36   301740160080   301740160294   8 PMED
               37   301740160080   301740160369   8 PMED
               38   301740160080   301740160403   8 PMED
               39   301740160080   301740160427   8 PMED
               40   301740460022   301740460175   8 PMED
               41   301740460022   301740460219   8 PMED
               42   301740790033   301740790173   1 MVIS
               43   301740790033   301740790180   8 PMED
               44   301740790033   301740790197   8 PMED
               45   301740790033   301740790231   8 PMED
               46   301740870019   301740870165   8 PMED
               47   301740870019   301740870172   8 PMED
               48   301750330049   301750330108   1 MVIS
               49   301750330049   301750330122   8 PMED
               50   301750330049   301750330139   8 PMED

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

OBS	EVNTIDX	EVENTYPE
1	300250280030	3 EROM
2	300250280047	1 MVIS
3	300250280085	8 PMED
4	300440450091	8 PMED
5	300440510016	1 MVIS
6	300440510023	8 PMED
7	300760110303	8 PMED
8	300760110365	7 HVIS
9	300760110416	7 HVIS
10	300790330230	8 PMED
11	300790330247	8 PMED
12	300790330292	1 MVIS
13	300790330312	8 PMED
14	300790330329	8 PMED
15	300790330336	8 PMED
16	300790330343	8 PMED
17	300820660030	8 PMED
18	300850210050	1 MVIS
19	300850210081	8 PMED
20	300860170243	2 OPAT
21	300860170370	8 PMED
22	300860170387	8 PMED
23	300860170394	8 PMED
24	300930200016	3 EROM
25	300930200030	3 EROM
26	300930200047	3 EROM
27	300930200054	8 PMED
28	300930200061	8 PMED
29	300930370047	8 PMED
30	301130110052	8 PMED
31	301130110076	8 PMED
32	301170150172	8 PMED
33	301170150230	8 PMED
34	301170150261	8 PMED
35	301730670064	8 PMED
36	301740160294	8 PMED
37	301740160369	8 PMED
38	301740160403	8 PMED
39	301740160427	8 PMED
40	301740460175	8 PMED
41	301740460219	8 PMED
42	301740790173	1 MVIS
43	301740790180	8 PMED
44	301740790197	8 PMED
45	301740790231	8 PMED
46	301740870165	8 PMED
47	301740870172	8 PMED
48	301750330108	1 MVIS
49	301750330122	8 PMED
50	301750330139	8 PMED

Sample SAS Job for Example C
sample print of work.asmvis
unique evntidxs from work.asclnks that are non-telephone MVIS (HC-026G) events

OBS	EVNTIDX	EVENTYPE	SEETLKPV	OBXP98X	WTDPER98
1	300250280047	1 MVIS	1	16.00	2507.60
2	300440510016	1 MVIS	1	46.00	16284.45
3	300790330292	1 MVIS	1	40.78	1186.13
4	300850210050	1 MVIS	1	38.00	3325.32
5	301740790173	1 MVIS	1	1220.66	3457.53
6	301750330108	1 MVIS	1	45.00	19819.94
7	301750330160	1 MVIS	1	59.00	19819.94
8	301780410035	1 MVIS	1	30.00	2966.91
9	301890170303	1 MVIS	1	141.00	15961.99
10	301890170310	1 MVIS	1	69.56	15961.99
11	301890170327	1 MVIS	1	89.00	15961.99
12	301890170334	1 MVIS	1	68.00	15961.99
13	301890170341	1 MVIS	1	62.00	15961.99
14	301890170358	1 MVIS	1	38.00	15961.99
15	301890170365	1 MVIS	1	42.92	15961.99
16	302100140256	1 MVIS	1	43.20	1458.81
17	302100140263	1 MVIS	1	43.20	1458.81
18	302100140270	1 MVIS	1	42.29	1458.81
19	302100140287	1 MVIS	1	43.20	1458.81
20	302100140321	1 MVIS	1	32.00	1458.81
21	302190490106	1 MVIS	1	39.00	9465.66
22	302340560416	1 MVIS	1	58.81	3309.39
23	302580120173	1 MVIS	1	31.00	9703.32
24	302850180545	1 MVIS	1	42.62	8106.00
25	302850180552	1 MVIS	1	63.29	8106.00
26	302850180569	1 MVIS	1	11.98	8106.00
27	302850180576	1 MVIS	1	11.98	8106.00
28	302850250090	1 MVIS	1	57.70	9943.89
29	302880230603	1 MVIS	1	52.08	5807.26
30	303260180222	1 MVIS	1	90.00	25618.20
31	303540380056	1 MVIS	1	32.82	5838.47
32	303650250102	1 MVIS	1	14.38	19458.95
33	303650250119	1 MVIS	1	30.08	19458.95
34	303650250126	1 MVIS	1	67.36	19458.95
35	303650250133	1 MVIS	1	101.69	19458.95
36	303650250140	1 MVIS	1	70.38	19458.95
37	303670160641	1 MVIS	1	52.00	5364.52
38	303670160658	1 MVIS	1	62.31	5364.52
39	303670160665	1 MVIS	1	29.56	5364.52
40	303670160672	1 MVIS	1	26.22	5364.52
41	303670160689	1 MVIS	1	75.13	5364.52
42	303670160730	1 MVIS	1	57.00	5364.52
43	304040160399	1 MVIS	1	38.19	8340.92
44	304040160515	1 MVIS	1	37.13	8340.92
45	304040160522	1 MVIS	1	54.17	8340.92
46	304660390140	1 MVIS	1	34.00	4554.36
47	304730420519	1 MVIS	1	179.76	13574.99
48	304730420526	1 MVIS	1	230.00	13574.99
49	304820210012	1 MVIS	1	185.96	4217.27
50	304820210067	1 MVIS	1	16.56	4217.27

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

Analysis Variable : OBXP98X SUM OF OBSF98X-OBOT98X (IMPUTED)

```
          N           Sum
     ------------------
     1608    132674.92
     ------------------
```

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

Weighted

Analysis Variable : OBXP98X SUM OF OBSF98X-OBOT98X (IMPUTED)

```
                    Sum
                 ------------
                  1426547322
                 ------------
```

```
1                       The SAS System                                      11:25 Wednesday, December 19,
2001

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1
2          OPTIONS LS=132 PS=59;
3
4          TITLE1 "HC-026I";
5          TITLE2 'Sample SAS Job for Example D';
6
7          LIBNAME IN 'C:\';
NOTE: Directory for library IN contains files of mixed engine types.
NOTE: Libref IN was successfully assigned as follows:
      Engine:        V612
      Physical Name: C:\
8          *********************************************************************************
9          * Calculate the expenditures for prescribed medicines associated
10         * with insulin reported by the household as an other medical expense.
11         *********************************************************************************;
12
13         PROC FORMAT;
14           VALUE EVENTYPE
15              1 = "1 MVIS"
16              2 = "2 OPAT"
17              3 = "3 EROM"
18              4 = "4 STAZ"
19              5 = "5 DVIS"
20              6 = "6 OMED"
21              7 = "7 HVIS"
22              8 = "8 PMED";
NOTE: Format EVENTYPE has been output.
23
24           VALUE OMTYPE
25              -9 = '-9 NOT ASCERTAINED'
26              -8 = '-8 DK'
27              -7 = '-7 REFUSED'
28              -1 = '-1 INAPPLICABLE'
29              1 = '1 GLASSES OR CONTACT LENSES'
30              2 = '2 INSULIN'
31              3 = '3 DIABETIC EQUIPMENT/SUPPLIES'
32              4 = '4 AMBULANCE SERVICES'
33              5 = '5 ORTHOPEDIC ITEMS'
34              6 = '6 HEARING DEVICES'
35              7 = '7 PROSTHESIS'
36              8 = '8 BATHROOM AIDS'
37              9 = '9 MEDICAL EQUIPMENT'
38              10 = '10 DISPOSABLE SUPPLIES'
39              11 = '11 ALTERATIONS/MODIFICATIONS'
40              91 = '91 OTHER'
41              ;
NOTE: Format OMTYPE has been output.
42         RUN;

NOTE: The PROCEDURE FORMAT used 0.11 seconds.
```

```
43
44          *-------------------------------------------------------------------------------------
45          * Get other medical records for insulin for persons with positive weights.
46          *------------------------------------------------------------------------------------;
47
48          DATA OMED;
49            SET IN.H26CF1 (KEEP=EVNTIDX WTDPER98 OMTYPEX);
50            IF WTDPER98 > 0 & OMTYPEX = 2;
51          RUN;

NOTE: The data set WORK.OMED has 386 observations and 3 variables.
NOTE: The DATA statement used 0.16 seconds.


52
53          proc print data=omed (obs=100);
54            var evntidx OMTYPEX WTDPER98;
55            format OMTYPEX omtype.;
56            title3 "sample print of OMED (HC-026C) records where OMTYPEX=2";
57          run;

NOTE: The PROCEDURE PRINT printed pages 1-2.
NOTE: The PROCEDURE PRINT used 0.33 seconds.


58
59          *-------------------------------------------------------------------------------------
60          * Get PMED IDs linked to the OMED events which were for insulin.
61          *------------------------------------------------------------------------------------;
62
63          PROC SORT DATA=IN.H26IF2 OUT=RXLK; BY EVNTIDX; RUN;

NOTE: The data set WORK.RXLK has 41264 observations and 5 variables.
NOTE: The PROCEDURE SORT used 1.09 seconds.


64
65          proc print data=rxlk (obs=150);
66            by evntidx;
67            id evntidx;
68            var linkidx eventype;
69            format eventype eventype.;
70            title3 "sample print of Rx+event link file records (HC-26IF2) - sorted by eventidx";
71          run;

NOTE: The PROCEDURE PRINT printed pages 3-7.
NOTE: The PROCEDURE PRINT used 0.05 seconds.


72
73          data omedrxlk;
74            set rxlk (where=(eventype=6));
75          run;

NOTE: The data set WORK.OMEDRXLK has 998 observations and 5 variables.
NOTE: The DATA statement used 0.16 seconds.
```

```
76          proc print data=omedrxlk (obs=120);
77            by evntidx;
78            id evntidx;
79            var linkidx eventype;
80            format eventype eventype.;
81            title3 "sample print of work.omedrxlk - sorted by eventidx";
82            title4 "Rx+event link file records (HC-26IF2) where eventype=6 (omed)";
83          run;
```

NOTE: The PROCEDURE PRINT printed pages 8-12.
NOTE: The PROCEDURE PRINT used 0.11 seconds.

```
84
85          DATA PMEDIDS;
86            MERGE RXLK (IN=INRXLK KEEP=EVNTIDX LINKIDX EVENTYPE)
87                  OMED (IN=INOMED KEEP=EVNTIDX);
88            BY EVNTIDX;
89            IF INRXLK & INOMED;
90          RUN;
```

NOTE: The data set WORK.PMEDIDS has 363 observations and 3 variables.
NOTE: The DATA statement used 0.27 seconds.

```
91
92          proc print data=pmedids (obs=50);
93            by evntidx;
94            id evntidx;
95            format eventype eventype.;
96            title3 "sample print of work.pmedids - sorted by evntidx";
97            title4 "work.rxlk records for omed events for insulin";
98          run;
```

NOTE: The PROCEDURE PRINT printed pages 13-14.
NOTE: The PROCEDURE PRINT used 0.05 seconds.

```
99
100         PROC SORT DATA=PMEDIDS; BY LINKIDX; RUN;
```

NOTE: The data set WORK.PMEDIDS has 363 observations and 3 variables.
NOTE: The PROCEDURE SORT used 0.0 seconds.

```
101
102         proc print data=pmedids (obs=50);
103           format eventype eventype.;
104           title3 "sample print of work.pmedids - sorted by linkidx";
105         run;
```

NOTE: The PROCEDURE PRINT printed page 15.
NOTE: The PROCEDURE PRINT used 0.05 seconds.

```
106
107         DATA PMEDIDS;
108           SET PMEDIDS (KEEP=LINKIDX);
109           BY LINKIDX;
110           IF FIRST.LINKIDX;
111           KEEP LINKIDX;
112         RUN;
```

NOTE: The data set WORK.PMEDIDS has 363 observations and 1 variables.
NOTE: The DATA statement used 0.05 seconds.

```
113
114         proc print data=pmedids (obs=50);
115           title3 "sample print of unique linkidxs in work.pmedids";
116         run;
```

NOTE: The PROCEDURE PRINT printed page 16.
NOTE: The PROCEDURE PRINT used 0.0 seconds.

```
117
118
119         *-----------------------------------------------------------------------------------
120         * Get PMED records for OMED event which were for insulin.
121         *----------------------------------------------------------------------------------;
122         PROC SORT DATA=IN.H26A OUT=PMED; BY LINKIDX; RUN;
```

NOTE: The data set WORK.PMED has 172031 observations and 51 variables.
NOTE: The PROCEDURE SORT used 33.39 seconds.

```
123
124         DATA OMPMEDS;
125           MERGE PMED (KEEP=LINKIDX RXRECIDX  RXXP98X WTDPER98 RXNAME)
126                 PMEDIDS (IN=A);
127           BY LINKIDX;
128           IF A & WTDPER98>0;
129         RUN;
```

NOTE: The data set WORK.OMPMEDS has 1455 observations and 5 variables.
NOTE: The DATA statement used 6.15 seconds.

```
130
131         proc print data=ompmeds (obs=200);
132           by linkidx;
133           id linkidx;
134           var rxrecidx rxname RXXP98X  WTDPER98;
135           title3 "sample print of work.pmeds";
136           title4 "PMED (HC-026A) records for unique linkidxs in work.pmedids";
137         run;
```

NOTE: The PROCEDURE PRINT printed pages 17-22.
NOTE: The PROCEDURE PRINT used 0.22 seconds.

```
138
139         PROC MEANS DATA=OMPMEDS N SUM;
140           VAR RXXP98X;
141           TITLE3 "Total Rx expenditures associated with other medical expenses for insulin";
142         RUN;

NOTE: The PROCEDURE MEANS printed page 23.
NOTE: The PROCEDURE MEANS used 0.05 seconds.


143
144         PROC MEANS DATA=OMPMEDS N SUM;
145           VAR RXXP98X;
146           WEIGHT WTDPER98;
147           TITLE3 "Total Rx expenditures associated with other medical expenses for insulin";
148           TITLE5 "Weighted";
149         RUN;

NOTE: The PROCEDURE MEANS printed page 24.
NOTE: The PROCEDURE MEANS used 0.0 seconds.


150
151

NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414
```

Sample SAS Job for Example D
sample print of OMED (HC-026C) records where OMTYPEX=2

OBS	EVNTIDX	OMTYPEX	WTDPER98
1	300240180530	2 INSULIN	3714.96
2	300250110201	2 INSULIN	3120.23
3	300250110263	2 INSULIN	3120.23
4	300890120705	2 INSULIN	8352.31
5	301060183220	2 INSULIN	1749.53
6	301140270818	2 INSULIN	7077.24
7	301140271037	2 INSULIN	7077.24
8	301140271171	2 INSULIN	7077.24
9	301230220119	2 INSULIN	12784.86
10	301230220208	2 INSULIN	12784.86
11	301230220253	2 INSULIN	12784.86
12	302220160376	2 INSULIN	1153.65
13	302220160650	2 INSULIN	1153.65
14	303070170168	2 INSULIN	4084.39
15	303070170219	2 INSULIN	4084.39
16	303070170257	2 INSULIN	4084.39
17	304610280640	2 INSULIN	5095.78
18	304610280859	2 INSULIN	5095.78
19	304610280986	2 INSULIN	5095.78
20	304740160492	2 INSULIN	5514.04
21	305030230313	2 INSULIN	4844.49
22	306830190178	2 INSULIN	9500.80
23	306830190250	2 INSULIN	9500.80
24	307460400170	2 INSULIN	5913.78
25	307460400221	2 INSULIN	5913.78
26	307460400245	2 INSULIN	5913.78
27	307520150081	2 INSULIN	3812.19
28	307910140616	2 INSULIN	4240.25
29	307910140863	2 INSULIN	4240.25
30	307920250509	2 INSULIN	8423.78
31	307920250650	2 INSULIN	8423.78
32	308710360177	2 INSULIN	3329.92
33	308710360242	2 INSULIN	3329.92
34	308710360280	2 INSULIN	3329.92
35	308970260491	2 INSULIN	4861.52
36	310680150284	2 INSULIN	3849.70
37	310680220551	2 INSULIN	6771.63
38	310680220924	2 INSULIN	6771.63
39	310880170279	2 INSULIN	18877.97
40	310880170402	2 INSULIN	18877.97
41	310980230141	2 INSULIN	3707.39
42	311090170702	2 INSULIN	8067.56
43	311150110134	2 INSULIN	12428.47
44	311150110261	2 INSULIN	12428.47
45	311150110343	2 INSULIN	12428.47
46	311380130557	2 INSULIN	25293.13
47	311460170265	2 INSULIN	5023.66
48	311460170354	2 INSULIN	5023.66
49	311730210460	2 INSULIN	22206.59
50	312830140397	2 INSULIN	9499.16
51	312830140657	2 INSULIN	9499.16
52	312830140828	2 INSULIN	9499.16
53	313010140361	2 INSULIN	12821.69

Sample SAS Job for Example D
sample print of OMED (HC-026C) records where OMTYPEX=2

OBS	EVNTIDX	OMTYPEX	WTDPER98
54	313630120572	2 INSULIN	17521.67
55	313630120692	2 INSULIN	17521.67
56	314620130505	2 INSULIN	18083.43
57	314810210359	2 INSULIN	12774.78
58	314880280103	2 INSULIN	21630.99
59	314880280172	2 INSULIN	21630.99
60	314880280223	2 INSULIN	21630.99
61	315010120852	2 INSULIN	12990.56
62	315010121660	2 INSULIN	12990.56
63	315010121906	2 INSULIN	12990.56
64	315330120715	2 INSULIN	10580.11
65	315330120811	2 INSULIN	10580.11
66	315970280192	2 INSULIN	2754.67
67	315970280318	2 INSULIN	2754.67
68	315970280421	2 INSULIN	2754.67
69	316050340555	2 INSULIN	11966.99
70	316590310147	2 INSULIN	3998.39
71	316590310229	2 INSULIN	3998.39
72	316880160500	2 INSULIN	2569.14
73	317390120392	2 INSULIN	8430.95
74	317420260259	2 INSULIN	11946.01
75	318500190582	2 INSULIN	5901.11
76	318530141438	2 INSULIN	7106.10
77	318660230373	2 INSULIN	838.99
78	319810180311	2 INSULIN	11235.68
79	319810180373	2 INSULIN	11235.68
80	319860190463	2 INSULIN	11892.22
81	319860190658	2 INSULIN	11892.22
82	319860190805	2 INSULIN	11892.22
83	320170730350	2 INSULIN	810.34
84	320170730456	2 INSULIN	810.34
85	320330220267	2 INSULIN	5660.67
86	320330220490	2 INSULIN	5660.67
87	320330220750	2 INSULIN	5660.67
88	320340110370	2 INSULIN	3253.43
89	320340110630	2 INSULIN	3253.43
90	320900110134	2 INSULIN	1469.04
91	322650150225	2 INSULIN	2386.84
92	322650150270	2 INSULIN	2386.84
93	323000130595	2 INSULIN	7621.20
94	323000130824	2 INSULIN	7621.20
95	323000130982	2 INSULIN	7621.20
96	323490150286	2 INSULIN	15605.59
97	323490150368	2 INSULIN	15605.59
98	324240120863	2 INSULIN	5035.79
99	324240121133	2 INSULIN	5035.79
100	324240121311	2 INSULIN	5035.79

Sample SAS Job for Example D
sample print of Rx+event link file records (HC-26IF2) - sorted by eventidx

EVNTIDX	LINKIDX	EVENTYPE
300010160237	300010160268	2 OPAT
300010160371	300010160446	1 MVIS
	300010160453	1 MVIS
	300010160460	1 MVIS
	300010160477	1 MVIS
	300010160484	1 MVIS
300010160422	300010160439	6 OMED
300010230220	300010230251	1 MVIS
300010230237	300010230268	5 DVIS
300010230282	300010230302	1 MVIS
	300010230319	1 MVIS
300010230299	300010230302	1 MVIS
	300010230319	1 MVIS
300010230326	300010230333	1 MVIS
	300010230340	1 MVIS
300010300100	300010300117	1 MVIS
	300010300124	1 MVIS
	300010300131	1 MVIS
	300010300148	1 MVIS
300010300162	300010300193	1 MVIS
	300010300206	1 MVIS
	300010300213	1 MVIS
	300010300220	1 MVIS
300010300179	300010300237	3 EROM
300010300244	300010300268	1 MVIS
	300010300275	1 MVIS
	300010300282	1 MVIS
	300010300299	1 MVIS
300040160522	300040160680	4 STAZ
	300040160697	4 STAZ
300040160539	300040160680	4 STAZ
	300040160700	4 STAZ
300040160577	300040160680	1 MVIS
300040160957	300040161032	1 MVIS
	300040161049	1 MVIS

Sample SAS Job for Example D
sample print of Rx+event link file records (HC-26IF2) - sorted by eventidx

EVNTIDX	LINKIDX	EVENTYPE
300040160957	300040161056	1 MVIS
	300040161063	1 MVIS
	300040161070	1 MVIS
	300040161087	1 MVIS
	300040161094	1 MVIS
300050150140	300050150164	1 MVIS
300050220222	300050220239	4 STAZ
300050220284	300050220304	1 MVIS
300050390486	300050390513	3 EROM
300050390493	300050390520	1 MVIS
300060120555	300060120644	1 MVIS
300060120682	300060120702	4 STAZ
	300060120719	4 STAZ
	300060120726	4 STAZ
	300060120733	4 STAZ
	300060120740	4 STAZ
300080250050	300080250074	1 MVIS
300080320067	300080320074	1 MVIS
300090130472	300090130516	1 MVIS
	300090130523	1 MVIS
300090440136	300090440201	1 MVIS
	300090440218	1 MVIS
300120310032	300120310049	3 EROM
300130250076	300130250090	1 MVIS
	300130250103	1 MVIS
300130320134	300130320172	3 EROM
	300130320189	3 EROM
300130320230	300130320247	1 MVIS
300130490110	300130490134	1 MVIS
300140210482	300140210502	5 DVIS
300170100072	300170100096	1 MVIS

Sample SAS Job for Example D
sample print of Rx+event link file records (HC-26IF2) - sorted by eventidx

EVNTIDX	LINKIDX	EVENTYPE
300170100116	300170100109	1 MVIS
300170270109	300170270325	5 DVIS
300170270161	300170270332	4 STAZ
	300170270349	4 STAZ
	300170270356	4 STAZ
	300170270363	4 STAZ
	300170270370	4 STAZ
	300170270387	4 STAZ
300190190266	300190190348	2 OPAT
300190190300	300190190355	1 MVIS
	300190190362	1 MVIS
	300190190379	1 MVIS
	300190190386	1 MVIS
300200180389	300200180423	1 MVIS
	300200180430	1 MVIS
	300200180447	1 MVIS
300200180396	300200180454	1 MVIS
300200180409	300200180416	6 OMED
300200180461	300200180485	1 MVIS
	300200180492	1 MVIS
	300200180505	1 MVIS
	300200180512	1 MVIS
300200180478	300200180492	1 MVIS
	300200180505	1 MVIS
	300200180529	1 MVIS
300230150194	300230150207	1 MVIS
300230220081	300230220125	3 EROM
300230220098	300230220132	1 MVIS
300230220149	300230220170	1 MVIS
300230220163	300230220170	2 OPAT
300240180434	300240180578	4 STAZ
	300240180585	4 STAZ
	300240180592	4 STAZ
	300240180605	4 STAZ
	300240180612	4 STAZ

Sample SAS Job for Example D
sample print of Rx+event link file records (HC-26IF2) - sorted by eventidx

EVNTIDX	LINKIDX	EVENTYPE
300240180530	300240180547	6 OMED
300240180554	300240180561	6 OMED
300240180667	300240180807	1 MVIS
	300240180814	1 MVIS
	300240180821	1 MVIS
	300240180838	1 MVIS
	300240180845	1 MVIS
	300240180852	1 MVIS
	300240180869	1 MVIS
300240180787	300240180794	6 OMED
300250110181	300250110249	1 MVIS
300250110201	300250110218	6 OMED
300250110225	300250110232	6 OMED
300250110263	300250110270	6 OMED
300250110287	300250110294	6 OMED
300250280030	300250280054	3 EROM
	300250280061	3 EROM
	300250280078	3 EROM
	300250280085	3 EROM
300250280092	300250280129	3 EROM
300250280105	300250280136	1 MVIS
300270190357	300270190408	1 MVIS
300270260124	300270260213	1 MVIS
300270260162	300270260220	1 MVIS
300280130104	300280130128	1 MVIS
	300280130142	1 MVIS
300330100583	300330100665	1 MVIS
300330100627	300330100672	4 STAZ
300330100689	300330100747	4 STAZ
300330100723	300330100754	1 MVIS
	300330100761	1 MVIS

Sample SAS Job for Example D
sample print of Rx+event link file records (HC-26IF2) - sorted by eventidx

EVNTIDX	LINKIDX	EVENTYPE
300330100723	300330100778	1 MVIS
300330100730	300330100785	1 MVIS
300350180350	300350180463	2 OPAT
300350180401	300350180470	1 MVIS
	300350180487	1 MVIS
300370140092	300370140129	1 MVIS
300370210030	300370210054	1 MVIS
	300370210061	1 MVIS
	300370210078	1 MVIS
300380100051	300380100157	1 MVIS
300380100099	300380100164	1 MVIS
300380270253	300380270277	5 DVIS
300380270291	300380270335	1 MVIS
300380270311	300380270342	5 DVIS
300390160870	300390160983	1 MVIS
300390160938	300390160990	1 MVIS
300390160945	300390161006	1 MVIS
300390160952	300390161013	3 EROM

ATTACHMENT 2 - EXAMPLE D   **A2-75**   **MEPS HC-026I**

Sample SAS Job for Example D
sample print of work.omedrxlk - sorted by eventidx
Rx+event link file records (HC-26IF2) where eventype=6 (omed)

EVNTIDX	LINKIDX	EVENTYPE
300010160422	300010160439	6 OMED
300200180409	300200180416	6 OMED
300240180530	300240180547	6 OMED
300240180554	300240180561	6 OMED
300240180787	300240180794	6 OMED
300250110201	300250110218	6 OMED
300250110225	300250110232	6 OMED
300250110263	300250110270	6 OMED
300250110287	300250110294	6 OMED
300850660755	300850660762	6 OMED
300860170565	300860170572	6 OMED
300860170661	300860170678	6 OMED
300890120705	300890120712	6 OMED
300890120729	300890120736	6 OMED
300890120921	300890120938	6 OMED
300930560155	300930560162	6 OMED
301140270818	301140270825	6 OMED
301140270832	301140270849	6 OMED
301140271037	301140271044	6 OMED
301140271051	301140271068	6 OMED
301140271171	301140271188	6 OMED
301140271195	301140271208	6 OMED
301230220119	301230220126	6 OMED
301230220133	301230220140	6 OMED
301230220208	301230220215	6 OMED

Sample SAS Job for Example D
sample print of work.omedrxlk - sorted by eventidx
Rx+event link file records (HC-26IF2) where eventype=6 (omed)

EVNTIDX	LINKIDX	EVENTYPE
301230220222	301230220239	6 OMED
301230220253	301230220260	6 OMED
301230220277	301230220284	6 OMED
301440150242	301440150259	6 OMED
301440150355	301440150362	6 OMED
301440150444	301440150451	6 OMED
301640160335	301640160342	6 OMED
302220160376	302220160383	6 OMED
302220160390	302220160403	6 OMED
302220160650	302220160667	6 OMED
302220160674	302220160681	6 OMED
303070170168	303070170175	6 OMED
303070170182	303070170199	6 OMED
303070170219	303070170226	6 OMED
303070170233	303070170240	6 OMED
303070170257	303070170264	6 OMED
303070170271	303070170288	6 OMED
303520110337	303520110344	6 OMED
304000180479	304000180486	6 OMED
304610280640	304610280657	6 OMED
304610280664	304610280671	6 OMED
304610280835	304610280842	6 OMED
304610280859	304610280866	6 OMED
304610280986	304610280993	6 OMED
304610281009	304610281016	6 OMED

Sample SAS Job for Example D
sample print of work.omedrxlk - sorted by eventidx
Rx+event link file records (HC-26IF2) where eventype=6 (omed)

EVNTIDX	LINKIDX	EVENTYPE
304740160492	304740160505	6 OMED
304740160512	304740160529	6 OMED
304950100238	304950100245	6 OMED
305030230313	305030230320	6 OMED
305030230337	305030230344	6 OMED
305030230642	305030230659	6 OMED
306050140864	306050140871	6 OMED
306830190178	306830190185	6 OMED
306830190192	306830190205	6 OMED
306830190250	306830190267	6 OMED
307130130899	307130130902	6 OMED
307130131361	307130131378	6 OMED
307460400170	307460400187	6 OMED
307460400194	307460400207	6 OMED
307460400221	307460400238	6 OMED
307460400245	307460400252	6 OMED
307520150067	307520150074	6 OMED
307520150081	307520150098	6 OMED
307590200308	307590200315	6 OMED
307590200404	307590200411	6 OMED
307780380732	307780380749	6 OMED
307910140616	307910140623	6 OMED
307910140630	307910140647	6 OMED
307910140863	307910140870	6 OMED
307910140887	307910140894	6 OMED

Sample SAS Job for Example D
sample print of work.omedrxlk - sorted by eventidx
Rx+event link file records (HC-26IF2) where eventype=6 (omed)

EVNTIDX	LINKIDX	EVENTYPE
307910141037	307910141044	6 OMED
307920250509	307920250516	6 OMED
307920250523	307920250530	6 OMED
307920250650	307920250667	6 OMED
307920250674	307920250681	6 OMED
308260150120	308260150137	6 OMED
308260150144	308260150151	6 OMED
308710360191	308710360204	6 OMED
308710360242	308710360259	6 OMED
308710360266	308710360273	6 OMED
308710360280	308710360297	6 OMED
308710360300	308710360317	6 OMED
308970260491	308970260504	6 OMED
308970260511	308970260528	6 OMED
309260140184	309260140191	6 OMED
309260140393	309260140406	6 OMED
310130530184	310130530191	6 OMED
310140180498	310140180501	6 OMED
310680150284	310680150291	6 OMED
310680150304	310680150311	6 OMED
310680150455	310680150462	6 OMED
310680220551	310680220568	6 OMED
310680220575	310680220582	6 OMED
310680220924	310680220931	6 OMED
310680220948	310680220955	6 OMED

Sample SAS Job for Example D
sample print of work.omedrxlk - sorted by eventidx
Rx+event link file records (HC-26IF2) where eventype=6 (omed)

EVNTIDX	LINKIDX	EVENTYPE
310880170293	310880170306	6 OMED
310880170402	310880170419	6 OMED
310880170426	310880170433	6 OMED
311090170702	311090170719	6 OMED
311090170726	311090170733	6 OMED
311150110134	311150110141	6 OMED
311150110261	311150110278	6 OMED
311150110285	311150110292	6 OMED
311150110343	311150110350	6 OMED
311150110367	311150110374	6 OMED
311380130557	311380130564	6 OMED
311380130571	311380130588	6 OMED
311460170265	311460170272	6 OMED
311460170289	311460170296	6 OMED
311460170354	311460170361	6 OMED
311710260382	311710260399	6 OMED
311710260844	311710260851	6 OMED
311730210460	311730210477	6 OMED
311730210484	311730210491	6 OMED
311840141489	311840141496	6 OMED

Sample SAS Job for Example D
sample print of work.pmedids - sorted by evntidx
work.rxlk records for omed events for insulin

EVNTIDX	LINKIDX	EVENTYPE
300240180530	300240180547	6 OMED
300250110201	300250110218	6 OMED
300250110263	300250110270	6 OMED
300890120705	300890120712	6 OMED
301140270818	301140270825	6 OMED
301140271037	301140271044	6 OMED
301140271171	301140271188	6 OMED
301230220119	301230220126	6 OMED
301230220208	301230220215	6 OMED
301230220253	301230220260	6 OMED
302220160376	302220160383	6 OMED
302220160650	302220160667	6 OMED
303070170168	303070170175	6 OMED
303070170219	303070170226	6 OMED
303070170257	303070170264	6 OMED
304610280640	304610280657	6 OMED
304610280859	304610280866	6 OMED
304610280986	304610280993	6 OMED
304740160492	304740160505	6 OMED
305030230313	305030230320	6 OMED
306830190178	306830190185	6 OMED
306830190250	306830190267	6 OMED
307460400170	307460400187	6 OMED
307460400221	307460400238	6 OMED
307460400245	307460400252	6 OMED

Sample SAS Job for Example D
sample print of work.pmedids - sorted by evntidx
work.rxlk records for omed events for insulin

EVNTIDX	LINKIDX	EVENTYPE
307520150081	307520150098	6 OMED
307910140616	307910140623	6 OMED
307910140863	307910140870	6 OMED
307920250509	307920250516	6 OMED
307920250650	307920250667	6 OMED
308710360242	308710360259	6 OMED
308710360280	308710360297	6 OMED
308970260491	308970260504	6 OMED
310680150284	310680150291	6 OMED
310680220551	310680220568	6 OMED
310680220924	310680220931	6 OMED
310880170402	310880170419	6 OMED
311090170702	311090170719	6 OMED
311150110134	311150110141	6 OMED
311150110261	311150110278	6 OMED
311150110343	311150110350	6 OMED
311380130557	311380130564	6 OMED
311460170265	311460170272	6 OMED
311460170354	311460170361	6 OMED
311730210460	311730210477	6 OMED
312830140397	312830140400	6 OMED
312830140657	312830140664	6 OMED
312830140828	312830140835	6 OMED
313010140361	313010140378	6 OMED
313630120572	313630120589	6 OMED

Sample SAS Job for Example D
sample print of work.pmedids - sorted by linkidx

OBS	EVNTIDX	LINKIDX	EVENTYPE
1	300240180530	300240180547	6 OMED
2	300250110201	300250110218	6 OMED
3	300250110263	300250110270	6 OMED
4	300890120705	300890120712	6 OMED
5	301140270818	301140270825	6 OMED
6	301140271037	301140271044	6 OMED
7	301140271171	301140271188	6 OMED
8	301230220119	301230220126	6 OMED
9	301230220208	301230220215	6 OMED
10	301230220253	301230220260	6 OMED
11	302220160376	302220160383	6 OMED
12	302220160650	302220160667	6 OMED
13	303070170168	303070170175	6 OMED
14	303070170219	303070170226	6 OMED
15	303070170257	303070170264	6 OMED
16	304610280640	304610280657	6 OMED
17	304610280859	304610280866	6 OMED
18	304610280986	304610280993	6 OMED
19	304740160492	304740160505	6 OMED
20	305030230313	305030230320	6 OMED
21	306830190178	306830190185	6 OMED
22	306830190250	306830190267	6 OMED
23	307460400170	307460400187	6 OMED
24	307460400221	307460400238	6 OMED
25	307460400245	307460400252	6 OMED
26	307520150081	307520150098	6 OMED
27	307910140616	307910140623	6 OMED
28	307910140863	307910140870	6 OMED
29	307920250509	307920250516	6 OMED
30	307920250650	307920250667	6 OMED
31	308710360242	308710360259	6 OMED
32	308710360280	308710360297	6 OMED
33	308970260491	308970260504	6 OMED
34	310680150284	310680150291	6 OMED
35	310680220551	310680220568	6 OMED
36	310680220924	310680220931	6 OMED
37	310880170402	310880170419	6 OMED
38	311090170702	311090170719	6 OMED
39	311150110134	311150110141	6 OMED
40	311150110261	311150110278	6 OMED
41	311150110343	311150110350	6 OMED
42	311380130557	311380130564	6 OMED
43	311460170265	311460170272	6 OMED
44	311460170354	311460170361	6 OMED
45	311730210460	311730210477	6 OMED
46	312830140397	312830140400	6 OMED
47	312830140657	312830140664	6 OMED
48	312830140828	312830140835	6 OMED
49	313010140361	313010140378	6 OMED
50	313630120572	313630120589	6 OMED

Sample SAS Job for Example D
sample print of unique linkidxs in work.pmedids

```
OBS     LINKIDX

  1    300240180547
  2    300250110218
  3    300250110270
  4    300890120712
  5    301140270825
  6    301140271044
  7    301140271188
  8    301230220126
  9    301230220215
 10    301230220260
 11    302220160383
 12    302220160667
 13    303070170175
 14    303070170226
 15    303070170264
 16    304610280657
 17    304610280866
 18    304610280993
 19    304740160505
 20    305030230320
 21    306830190185
 22    306830190267
 23    307460400187
 24    307460400238
 25    307460400252
 26    307520150098
 27    307910140623
 28    307910140870
 29    307920250516
 30    307920250667
 31    308710360259
 32    308710360297
 33    308970260504
 34    310680150291
 35    310680220568
 36    310680220931
 37    310880170419
 38    311090170719
 39    311150110141
 40    311150110278
 41    311150110350
 42    311380130564
 43    311460170272
 44    311460170361
 45    311730210477
 46    312830140400
 47    312830140664
 48    312830140835
 49    313010140378
 50    313630120589
```

Sample SAS Job for Example D
sample print of work.pmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
300240180547	300240180547001	ILETIN I REGULAR	16.52	3714.96
	300240180547002	ILETIN I REGULAR	16.52	3714.96
300250110218	300250110218001	HUMULIN N	20.81	3120.23
	300250110218002	HUMULIN N	20.81	3120.23
300250110270	300250110270001	HUMULIN N	17.49	3120.23
	300250110270002	HUMULIN N	17.49	3120.23
	300250110270003	HUMULIN N	17.49	3120.23
	300250110270004	HUMULIN N	17.49	3120.23
	300250110270005	HUMULIN N	17.49	3120.23
	300250110270006	HUMULIN N	17.49	3120.23
	300250110270007	HUMULIN N	17.49	3120.23
300890120712	300890120712001	HUMULIN N	19.99	8352.31
	300890120712002	HUMULIN N	19.99	8352.31
	300890120712003	HUMULIN N	19.99	8352.31
301140270825	301140270825001	HUMULIN N	17.51	7077.24
	301140270825002	HUMULIN N	18.38	7077.24
	301140270825003	HUMULIN N	18.38	7077.24
	301140270825004	HUMULIN N	18.38	7077.24
301140271044	301140271044001	HUMULIN N	18.38	7077.24
	301140271044002	HUMULIN N	20.10	7077.24
	301140271044003	HUMULIN N	20.10	7077.24
	301140271044004	HUMULIN N	20.10	7077.24
301140271188	301140271188001	HUMULIN N	20.10	7077.24
301230220126	301230220126001	HUMULIN R	20.56	12784.86
	301230220126002	HUMULIN R	20.56	12784.86
301230220215	301230220215001	HUMULIN R	20.56	12784.86
	301230220215002	HUMULIN R	20.56	12784.86
301230220260	301230220260001	HUMULIN R	20.56	12784.86
	301230220260002	HUMULIN R	20.56	12784.86
302220160383	302220160383001	INSULIN REG	2.14	1153.65
	302220160383002	INSULIN REG	2.14	1153.65
	302220160383003	INSULIN REG	2.14	1153.65
	302220160383004	INSULIN REG	2.14	1153.65
302220160667	302220160667001	HUMULIN N VIAL	62.43	1153.65
	302220160667002	HUMULIN N VIAL	62.43	1153.65
	302220160667003	HUMULIN N VIAL	62.43	1153.65
	302220160667004	HUMULIN N VIAL	62.43	1153.65

Sample SAS Job for Example D
sample print of work.pmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
303070170175	303070170175001	INSULIN REG	2.14	4084.39
	303070170175002	INSULIN REG	2.14	4084.39
	303070170175003	INSULIN REG	2.14	4084.39
303070170226	303070170226001	INSULIN REG	2.14	4084.39
	303070170226002	INSULIN REG	2.14	4084.39
	303070170226003	INSULIN REG	2.14	4084.39
	303070170226004	INSULIN REG	2.14	4084.39
	303070170226005	INSULIN REG	2.14	4084.39
	303070170226006	INSULIN REG	2.14	4084.39
303070170264	303070170264001	INSULIN REG	46.68	4084.39
	303070170264002	INSULIN REG	46.68	4084.39
	303070170264003	INSULIN REG	46.68	4084.39
304610280657	304610280657001	ILETIN I REGULAR	24.25	5095.78
	304610280657002	ILETIN I REGULAR	24.25	5095.78
	304610280657003	ILETIN I REGULAR	24.25	5095.78
304610280866	304610280866001	INSULIN REG	46.68	5095.78
	304610280866002	INSULIN REG	46.68	5095.78
	304610280866003	INSULIN REG	46.68	5095.78
	304610280866004	INSULIN REG	46.68	5095.78
	304610280866005	INSULIN REG	46.68	5095.78
304610280993	304610280993001	INSULIN REG	46.68	5095.78
	304610280993002	INSULIN REG	46.68	5095.78
	304610280993003	INSULIN REG	46.68	5095.78
	304610280993004	INSULIN REG	46.68	5095.78
	304610280993005	INSULIN REG	46.68	5095.78
304740160505	304740160505001	INSULIN	2.08	5514.04
	304740160505002	INSULIN	2.08	5514.04
	304740160505003	INSULIN	2.08	5514.04
	304740160505004	INSULIN	2.08	5514.04
	304740160505005	INSULIN	2.08	5514.04
	304740160505006	INSULIN	2.08	5514.04
	304740160505007	INSULIN	2.08	5514.04
	304740160505008	INSULIN	2.08	5514.04
305030230320	305030230320001	REGULAR INSULIN	24.25	4844.49
	305030230320002	REGULAR INSULIN	24.25	4844.49
	305030230320003	REGULAR INSULIN	24.25	4844.49
	305030230320004	REGULAR INSULIN	24.25	4844.49
	305030230320005	REGULAR INSULIN	24.25	4844.49
	305030230320006	REGULAR INSULIN	24.25	4844.49
	305030230320007	REGULAR INSULIN	24.25	4844.49
306830190185	306830190185001	INSULIN REGULAR	20.02	9500.80

Sample SAS Job for Example D
sample print of work.pmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
306830190267	306830190267001	REGULAR INSULIN	24.25	9500.80
307460400187	307460400187001	HUMULIN 70/30	20.81	5913.78
	307460400187002	HUMULIN 70/30	20.81	5913.78
	307460400187003	HUMULIN 70/30	20.81	5913.78
307460400238	307460400238001	HUMULIN 70/30	20.81	5913.78
	307460400238002	HUMULIN 70/30	20.81	5913.78
	307460400238003	HUMULIN 70/30	20.81	5913.78
	307460400238004	HUMULIN 70/30	41.62	5913.78
	307460400238005	HUMULIN 70/30	20.81	5913.78
	307460400238006	HUMULIN 70/30	20.81	5913.78
307460400252	307460400252001	INSULIN REG	2.14	5913.78
307520150098	307520150098001	HUMULIN 70/30	41.62	3812.19
	307520150098002	HUMULIN 70/30	41.62	3812.19
307910140623	307910140623001	HUMULIN N	38.21	4240.25
	307910140623002	HUMULIN N	38.21	4240.25
307910140870	307910140870001	HUMULIN R	20.10	4240.25
	307910140870002	HUMULIN R	20.10	4240.25
	307910140870003	HUMULIN R	20.10	4240.25
	307910140870004	HUMULIN R	20.10	4240.25
	307910140870005	HUMULIN R	20.10	4240.25
307920250516	307920250516001	HUMULIN N	62.43	8423.78
	307920250516002	HUMULIN N	62.43	8423.78
	307920250516003	HUMULIN N	62.43	8423.78
	307920250516004	HUMULIN N	62.43	8423.78
	307920250516005	HUMULIN N	62.43	8423.78
	307920250516006	HUMULIN N	62.43	8423.78
307920250667	307920250667001	HUMULIN 70/30	41.62	8423.78
	307920250667002	HUMULIN 70/30	41.62	8423.78
308710360259	308710360259001	INSULIN REG	46.68	3329.92
	308710360259002	INSULIN REG	46.68	3329.92
	308710360259003	INSULIN REG	46.68	3329.92
308710360297	308710360297001	ILETIN I REGULAR	24.25	3329.92
	308710360297002	ILETIN I REGULAR	24.25	3329.92
308970260504	308970260504001	INSULIN REG	46.68	4861.52
	308970260504002	INSULIN REG	46.68	4861.52
	308970260504003	INSULIN REG	46.68	4861.52
	308970260504004	INSULIN REG	46.68	4861.52
	308970260504005	INSULIN REG	46.68	4861.52

Sample SAS Job for Example D
sample print of work.pmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
310680150291	310680150291001	INSULIN REG	2.14	3849.70
310680220568	310680220568001	INSULIN REG	46.68	6771.63
	310680220568002	INSULIN REG	46.68	6771.63
	310680220568003	INSULIN REG	46.68	6771.63
310680220931	310680220931001	ILETIN I REGULAR	16.52	6771.63
	310680220931002	ILETIN I REGULAR	16.52	6771.63
	310680220931003	ILETIN I REGULAR	16.52	6771.63
310880170419	310880170419001	INSULIN REG	46.68	18877.97
311090170719	311090170719001	HUMULIN R	83.24	8067.56
	311090170719002	HUMULIN R	83.24	8067.56
311150110141	311150110141001	INSULIN REGULAR	20.02	12428.47
	311150110141002	INSULIN REGULAR	20.02	12428.47
311150110278	311150110278001	HUMULIN-N	20.02	12428.47
	311150110278002	HUMULIN-N	20.02	12428.47
	311150110278003	HUMULIN-N	20.02	12428.47
	311150110278004	HUMULIN-N	20.02	12428.47
	311150110278005	HUMULIN-N	20.02	12428.47
	311150110278006	HUMULIN-N	20.02	12428.47
311150110350	311150110350001	HUMULIN-R	20.02	12428.47
	311150110350002	HUMULIN-R	20.02	12428.47
	311150110350003	HUMULIN-R	20.02	12428.47
311380130564	311380130564001	INSULIN REG	2.14	25293.13
	311380130564002	INSULIN REG	2.14	25293.13
311460170272	311460170272001	HUMULIN ULTRALENTE	16.83	5023.66
	311460170272002	HUMULIN ULTRALENTE	16.83	5023.66
	311460170272003	HUMULIN ULTRALENTE	16.83	5023.66
	311460170272004	HUMULIN ULTRALENTE	16.83	5023.66
	311460170272005	HUMULIN ULTRALENTE	16.87	5023.66
311460170361	311460170361001	HUMULIN R	16.87	5023.66
	311460170361002	HUMULIN R	16.87	5023.66
	311460170361003	HUMULIN R	16.87	5023.66
	311460170361004	HUMULIN R	16.87	5023.66
	311460170361005	HUMULIN R	16.87	5023.66
	311460170361006	HUMULIN R	16.87	5023.66
	311460170361007	HUMULIN R	16.87	5023.66
311730210477	311730210477001	INSULIN REG	2.14	22206.59
	311730210477002	INSULIN REG	2.14	22206.59

Sample SAS Job for Example D
sample print of work.pmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
312830140400	312830140400001	ILETIN I REGULAR	16.52	9499.16
312830140664	312830140664001	INSULIN REG	46.68	9499.16
	312830140664002	INSULIN REG	46.68	9499.16
	312830140664003	INSULIN REG	46.68	9499.16
	312830140664004	INSULIN REG	46.68	9499.16
	312830140664005	INSULIN REG	46.68	9499.16
312830140835	312830140835001	INSULIN REG	2.14	9499.16
	312830140835002	INSULIN REG	2.14	9499.16
	312830140835003	INSULIN REG	2.14	9499.16
313010140378	313010140378001	ILETIN I REGULAR	24.25	12821.69
	313010140378002	ILETIN I REGULAR	24.25	12821.69
	313010140378003	ILETIN I REGULAR	24.25	12821.69
	313010140378004	ILETIN I REGULAR	24.25	12821.69
	313010140378005	ILETIN I REGULAR	24.25	12821.69
313630120589	313630120589001	INSULIN REG	2.14	17521.67
	313630120589002	INSULIN REG	2.14	17521.67
313630120705	313630120705001	INSULIN REG	46.68	17521.67
	313630120705002	INSULIN REG	46.68	17521.67
	313630120705003	INSULIN REG	46.68	17521.67
	313630120705004	INSULIN REG	46.68	17521.67
	313630120705005	INSULIN REG	46.68	17521.67
	313630120705006	INSULIN REG	46.68	17521.67
	313630120705007	INSULIN REG	46.68	17521.67
	313630120705008	INSULIN REG	46.68	17521.67
314620130512	314620130512001	REGULAR INSULIN	24.25	18083.43
	314620130512002	REGULAR INSULIN	24.25	18083.43
	314620130512003	REGULAR INSULIN	24.25	18083.43
	314620130512004	REGULAR INSULIN	24.25	18083.43
314810210366	314810210366001	HUMULIN N	19.69	12774.78
	314810210366002	HUMULIN N	19.69	12774.78
	314810210366003	HUMULIN N	19.69	12774.78
314880280110	314880280110001	HUMULIN 70/30	59.69	21630.99
	314880280110002	HUMULIN 70/30	59.69	21630.99
	314880280110003	HUMULIN 70/30	59.69	21630.99
314880280189	314880280189001	HUMULIN 70/30	59.69	21630.99
314880280230	314880280230001	HUMULIN 70/30	59.69	21630.99
	314880280230002	HUMULIN 70/30	59.69	21630.99
315010120869	315010120869001	HUMULIN R	41.22	12990.56

ATTACHMENT 2 - EXAMPLE D   **A2-89**   **MEPS HC-026I**

Sample SAS Job for Example D
sample print of work.pmeds
PMED (HC-026A) records for unique linkidxs in work.pmedids

LINKIDX	RXRECIDX	RXNAME	RXXP98X	WTDPER98
315010120869	315010120869002	HUMULIN R	41.22	12990.56
315010121677	315010121677001	HUMULIN R	78.26	12990.56
	315010121677002	HUMULIN R	78.26	12990.56
	315010121677003	HUMULIN R	78.26	12990.56
	315010121677004	HUMULIN R	78.26	12990.56
315010121913	315010121913001	HUMULIN R	78.26	12990.56
	315010121913002	HUMULIN R	78.26	12990.56
	315010121913003	HUMULIN R	78.26	12990.56
315330120722	315330120722001	HUMULIN 70/30 INSULIN	39.13	10580.11

Sample SAS Job for Example D
Total Rx expenditures associated with other medical expenses for insulin

Analysis Variable : RXXP98X SUM OF PAYMENTS RXSF98X-RXOU98X(IMPUTED)

```
        N          Sum
   ------------------
    1455      39952.00
   ------------------
```

ATTACHMENT 2 - EXAMPLE D   **A2-91**   **MEPS HC-026I**

Sample SAS Job for Example D
Total Rx expenditures associated with other medical expenses for insulin

Weighted

Analysis Variable : RXXP98X SUM OF PAYMENTS RXSF98X-RXOU98X(IMPUTED)

```
        N          Sum
     ------------------
     1455     400292418
     ------------------
```