# NATIONAL HOSPITAL DISCHARGE SURVEY

# 2004

# PUBLIC USE DATA FILE DOCUMENTATION

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## **Abstract**

This document provides information for users of the National Hospital Discharge Survey (NHDS) Public Use Data File for 2004. The NHDS is conducted annually by the National Center for Health Statistics (NCHS) and is a principal source of information on inpatient hospital utilization in the United States.

Section I describes the survey and includes information on the history and scope of the NHDS; the methodology, including data collection and medical coding procedures; population estimates; measurement errors and sampling errors.

Section II provides technical details about the file.

Section III provides a detailed description of the contents of each data record.

Appendix A defines certain terms used in this document;

Appendix B lists the ICD-9-CM Addenda;

Appendix C provides population estimates to allow for the calculation of rates;

Appendix D provides unweighted and weighted frequencies for selected variables; and

Appendix E includes a copy of the NHDS Medical Abstract Form.

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#### I. DESCRIPTION OF THE NATIONAL HOSPITAL DISCHARGE SURVEY

Introduction. This document and its appendices contain information for users of the 2004 National Hospital Discharge Survey (NHDS) public use data file. Conducted annually by the National Center for Health Statistics, NHDS collects medical and demographic information from a sample of discharge records selected from a national sample of non-Federal, short-stay hospitals. The data serve as a basis for calculating statistics on hospital inpatient utilization in the United States. For a brief description of the survey design and data collection procedures, see below. For a more detailed description of the survey design, data collection procedures, and the estimation process, see Reference 1. Publications based on the data for each survey year can be obtained from the NCHS website at: <a href="http://www.cdc.gov/nchs/about/major/hdasd/listpubs.htm">http://www.cdc.gov/nchs/about/major/hdasd/listpubs.htm</a>.

<u>History.</u> To provide more complete and precise information on the utilization of the Nation's hospitals and on the nature and treatment of illness among the hospitalized population, in 1962 the NCHS began exploring possibilities for surveying morbidity in hospitals. A national advisory group was established. The NCHS conducted planning discussions with other officials of the Public Health Service. Hospitalization material from the Survey Research Center of the University of Michigan, the American Hospital Association, and the Professional Activities Study was examined and evaluated. In 1963, a study by the School of Public Health of the University of Pittsburgh under contract to the NCHS demonstrated the feasibility of an NHDS type of program. An additional pilot study using enumerators from the Bureau of the Census was conducted in late 1964 and confirmed the University of Pittsburgh's findings.

Finally, with advice and support from the American Hospital Association, the American Medical Association, individual experts, other professional groups, and officials of the U.S. Public Health Service, the NCHS initiated the National Hospital Discharge Survey in 1964.

#### **SURVEY METHODOLOGY**

<u>Source of the Data.</u> The National Hospital Discharge Survey (NHDS) covers discharges from noninstitutional hospitals, exclusive of Federal, military, and Veterans Administration hospitals, located in the 50 States and the District of Columbia. Only short-stay hospitals (hospitals with an average length of stay for all patients of less than 30 days) or those whose specialty is general (medical or surgical) or children's general are included in the survey. These hospitals must also have six or more beds staffed for patient use. These criteria, used from 1988 through the current survey year, differ slightly from those used prior to 1988.

Beginning in 1988, the NHDS sampling frame consisted of hospitals that were listed in the April 1987 SMG Hospital Market Database (2), met the above criteria, and began accepting patients by August 1987. Until 2003, the hospital sampling frame for the new NHDS design was constructed from the SMG Hospital Market Database. Beginning in 2003, the sample frame was constructed from the products of Verispan, L.L.C., specifically their "Healthcare Market Index, Updated May 15, 2003" and their "Hospital Market Profiling Solution, Second Quarter, 2003". These products were formerly known as the SMG Hospital Market Database. The hospital sample was updated in 1991, 1994, 1997, 2000, and 2003 to allow for hospitals that opened later or changed their eligibility status since the previous sample update. In 2004, the sample consisted of 501 hospitals. Of the 501 hospitals, 25 were found to be out-of-scope (ineligible) because they went out of business or otherwise failed to meet the criteria for the NHDS universe. Of the 476 in-scope (eligible) hospitals, 439 hospitals responded to the survey.

<u>Sample design and data collection.</u> NCHS has conducted the NHDS continuously since 1965. The original sample was selected in 1964 from a frame of short-stay hospitals listed in the National Master Facility Inventory (NMFI). That sample was updated periodically with samples of hospitals that opened later. Sample hospitals were selected with probabilities ranging from certainty for the largest hospitals to 1 in 40 for the smallest hospitals. Within each sampled hospital, a systematic random

sample of discharges was selected. A report on the design and development of the original NHDS has been published (3).

In 1988, the NHDS was redesigned to provide geographic sampling comparability with other surveys conducted by the NCHS; to update the sample of hospitals selected into the survey; and to maximize the use of data collected through automated systems. The hospital sampling frame for the redesigned survey was constructed from the SMG Hospital Market Database from 1988-2002 (2). In 2003, the hospital sampling frame was constructed from Verispan's Healthcare Market Index and Hospital Market Profiling Solution. These products were formerly known as the SMG Hospital Market Database. Prior to 1988, the NHDS was based on a two-stage sample design. When the survey was redesigned in 1988, a modified, three-stage design was implemented. Units selected at the first stage of sampling consisted of either hospitals or geographic areas, such as counties, groups of counties, or metropolitan statistical areas in the 50 states and the District of Columbia. Within sampled geographic areas, additional hospitals were selected. Finally at the last stage, discharges were selected within the sampled hospitals using systematic random sampling.

These changes in the survey may affect trend data. That is, some of the differences between NHDS statistics based on the 1965-87 samples and statistics based on the sample drawn for the new design may be due to sampling error rather than actual changes in hospital utilization.

Two data collection procedures were used for the survey. The first was a manual system of sample selection and data abstraction, used for approximately 56 percent of the responding hospitals. The second was an automated method, used for approximately 44 percent of the responding hospitals. The automated method involved the purchase of computerized data files from abstracting service organizations, state data systems, or from the hospitals themselves.

In the manual system, the sample selection and the transcription of information from the hospital records to abstract forms were performed at the hospitals. Of the hospitals using this system in 2004, about 29 percent had the work performed by their own medical records staff. In the remaining hospitals using the manual system, personnel of the U.S. Bureau of the Census did the work on behalf of NCHS. The completed forms, along with sample selection control sheets, were forwarded to NCHS for coding, editing, and weighting.

For the automated system, NCHS purchased files containing machine-readable medical record data from which records were systematically sampled by NCHS.

The Medical Abstract Form (Appendix E) and the automated data contain items relating to the personal characteristics of the patient, including birth date or age, sex, race, and marital status, but not name and address; administrative information, including admission and discharge dates, and discharge status; and medical information, including diagnoses and surgical and nonsurgical procedures. Since 1977, patient zip code, expected source of payment, and dates of surgery have also been collected. (Patient date of birth and zip code are confidential information and are not available to the public). Beginning in the 2001 survey year, two additional items were included in the medical abstract form: Type of Admission and Source of Admission. The coding of all variables can be found in section III of this document which describes the record layout.

<u>Medical Coding and Edits.</u> The medical information that was recorded manually on the sample patient abstracts was coded centrally by NCHS staff. A maximum of seven diagnostic codes was assigned for each sample abstract. In addition, if the medical information included surgical or nonsurgical procedures, a maximum of four codes for these procedures was assigned. The system currently used for coding the diagnoses and procedures on the medical abstract forms as well as on the commercial abstracting services data files is the *International Classification of Diseases*, *9th Revision, Clinical Modification*, or ICD-9-CM (4).

NHDS usually presents diagnoses and procedures in the order they are listed on the abstract form or obtained from abstract services; however, there are exceptions. For women discharged after a delivery, a code of V27 from the supplemental classification is entered as the first-listed code, with a

code designating either normal or abnormal delivery in the second-listed position. In another exception, a decision was made to reorder some acute myocardial infarction diagnoses. If an acute myocardial infarction is listed with other circulatory diagnoses and is other than the first entry, it is reordered to first position. If a symptom appears as a first-listed code and a diagnosis appears as a secondary code, the diagnosis replaces the symptom which is moved back.

Following conversion of the data on the medical abstract to a computer file and combining it with the automated data files, a final medical edit was accomplished by computer inspection and by a manual review of rejected records. Priority was given to medical information in the editing decision.

A new edit program was developed for the NHDS and was implemented beginning in the 1996 data year. The updated edit program, while following the same general specifications as the previous edit program, was designed to make as few changes as possible in the data. Thus, there may be some minor anomalies in certain areas which would be apparent when examining data over time, performing trend analyses, or examining combinations of variables. Particular features of the new edit program which may affect certain variables are:

- An improved imputation procedure for missing **age** and **sex** data was developed, which maintains the known distribution of these variables, according to categories of the First-Listed Diagnosis.
- There is no longer a re-ordering of the **procedure codes**. However, if the length of stay is missing for a discharge, it is imputed based on the first-listed procedure.
- Principal and additional **expected sources of payment** are no longer re-ordered, with one exception: Self-Pay is listed as the principal source only if there are no other sources, or the only other source is Not Stated; otherwise it must be listed after every other source (except Not Stated).
- An arbitrary month of admission is no longer assigned to records received from abstract services that do not provide the exact date of admission and discharge.
- Seven hospitals failed to provide month of discharge but did provide the quarter of discharge. For these hospitals, discharge month within the quarter was sequentially assigned to each record. For example, for discharges within the first quarter, a discharge month of January, February, or March was assigned.

Users of the National Hospital Discharge Survey (NHDS) diagnostic and/or procedure data, which is coded to the ICD-9-CM, must take into account the annual ICD-9-CM addendum. The addendum lists new codes, new fourth or fifth digits to existing codes, as well as other modifications. Changes go into effect October 1 of the calendar year. Coding of the 2004 data is consistent with the ICD-9-CM and the addendum which became effective October 1, 2003. Addendum changes for 1986 through 2003 are listed in Appendix B. For more information about the ICD-9-CM visit: <a href="http://www.cdc.gov/nchs/icd9.htm">http://www.cdc.gov/nchs/icd9.htm</a>.

The Uniform Hospital Discharge Data Set (UHDDS). Starting with 1979 data, the NHDS has followed guidelines of the Uniform Hospital Discharge Data Set (UHDDS) within the confines of its contractual agreement with participating hospitals. The UHDDS is a minimum data set of items uniformly defined (5). These items were selected on the basis of their usefulness to a broad range of organizations and agencies requiring hospital information, uniformity of definition, and general availability from medical records and abstract services.

<u>Population Estimates.</u> Estimates of the civilian population of the United Stated as of July 1, 2004 are presented in Appendix C. These estimates were provided by the U.S. Bureau of the Census, and are based on the 2000 Census. Because of new federal guidelines implemented in the 2000 Census which regulate the reporting of race data, population estimates by race based on the 2000 Census are not directly comparable with estimates from earlier censuses. See Appendix C for further explanation.

<u>Confidentiality.</u> Persons using the public use file agree to abide by the confidentiality restrictions that accompany use of the data. Specifically, they agree that, in the event of inadvertent discovery of the identity of any individual or establishment, then: (a) no use will be made of this knowledge; (b) the director of NCHS will be advised of the incident; (c) the information that would identify the

individual or establishment will be safe-guarded or destroyed, as requested by NCHS; and (d) no one else will be informed of the discovered identity.

Maintaining the confidentiality of survey respondents, whether individuals or establishments, is a responsibility of NCHS as described in section 308(d) of the Public Health Service Act. As such it may be necessary for NCHS to block the release of data or modify variables that may, because of their unique nature, lead to inadvertent disclosure of the identity of a participating facility or respondent.

Measurement Errors. As in any survey, results are subject to nonsampling or measurement errors, which include errors due to hospital nonresponse, missing abstracts, information incompletely or inaccurately recorded on abstract forms, and processing errors. A very small proportion (less than one percent) of the discharge records failed to include the sex, age, or date of birth of the patient. If the hospital record did not state either the age or sex of patient, it was imputed by assigning an age or sex value according to the specifications described above. In a very few cases (less than one percent of the records), the age or sex was edited because it was inconsistent with the diagnosis. In 2004, data for RACE were missing for 27 percent of the discharges, and no attempt was made to impute for these missing values.

Other edit and imputation procedures may have been applied to data in the NHDS collected in automated form.

<u>Sampling errors and rounding of numbers.</u> The standard error is primarily a measure of sampling variability that occurs by chance because only a sample rather than the entire universe is surveyed. The relative standard error of the estimate is obtained by dividing the standard error by the estimate itself. The resulting value is multiplied by 100, so the relative standard error is expressed as a percent of the estimate. Estimates of sampling variability were calculated with SUDAAN software, which computes standard errors by using a first-order Taylor series approximation of the deviation of estimates from their expected values. A description of the software and the approach it uses was published by Bieler and Williams (6).

#### **Relative Standard Errors for Aggregate Estimates**

Parameter values for generalized variance curves needed to calculate approximate relative standard errors for aggregate estimates are presented in Table 1. To derive error estimates that would be applicable to a wide variety of statistics, numerous estimates and their variances were produced. A regression model then used these data to produce best-fit curves, based on an empirically determined relationship between the size of an estimate X and its relative variance. The square root of the relative variance is the relative standard error of an estimate X [RSE(X)] and, using the generalized variance curves, may be calculated from the formula:

$$RSE(X) = SQRT(a + b/X)$$

with a and b provided in Table 1. When multiplied by 100, the RSE(X) is expressed as a percent of X.

For example, in 2004 the estimated number of discharges from short-stay hospitals for children under age 15 with a first-listed diagnosis of asthma (ICD-9-CM code 493) was 190,000. Using the applicable constants from Table 1 for estimates by age produces:

$$RSE(190,000) = SQRT(.02165 + (252.708/190,000))$$
  
 $RSE(190,000) = .152$ 

When multiplied by 100, the relative standard error for the estimate of interest becomes 15.2 percent. The standard error of the estimate is obtained by multiplying the relative standard error by the estimate itself:

$$SE(190,000) = 190,000 * .152 = 28,880$$

The standard error can be used to generate confidence intervals for statistical testing. In this example, the 95% confidence interval for the estimate of children under age 15 with a first-listed diagnosis of asthma is:

#### **Relative Standard Error for Estimates of Percents**

Approximate relative standard errors for estimates of percents may also be calculated from Table 1. The relative standard error for a percent, 100p (0 , may be calculated using the formula:

$$RSE(p) = SQRT(b * (1 - p)/(p * X))$$

where 100p is the percent of interest, X is the base of the percent, and b is the parameter b in the formula for approximating the RSE(X). The values for b are given in Table 1. When multiplied by 100, the RSE(p) is expressed as a percent of the estimate, p.

For example, in 2004 the estimated number of discharges from short-stay hospitals who were women was 21,020,000. This is 60.3 percent of the estimated 34,864,000 total discharges for that year. Using the applicable constants from Table 1 for estimates by sex produces:

$$RSE(.603) = SQRT(305.682 * (1 - .603) / (.603 * 34,864,000))$$
  
 $RSE(.603) = .00240$ 

When multiplied by 100, the relative standard error for the estimate of interest becomes 0.240 percent. The standard error is obtained by multiplying the relative standard error by the estimate itself:

$$SE(.603) = .603 * .00240 = .0014$$

The standard error can be used to calculate confidence intervals for statistical testing. In this example, the 95% confidence interval for the estimate of the percentage of female inpatients is:

#### **Relative Standard Error for Ratio Estimators**

The approximate RSE of a ratio (X/Y) in which the numerator (X) and the denominator (Y) are both estimated from the same survey, but the numerator is not a subclass of the denominator, is calculated using the formula:

$$RSE(X/Y) = SQRT(RSE^{2}(X) + RSE^{2}(Y))$$

The approximation is valid if the RSE of the denominator is less than 5 percent or the RSE's of the numerator and denominator are both less than 10 percent. When multiplied by 100, the RSE(X/Y) is expressed as a percent of the ratio estimate, X/Y.

For example, average length of stay (ALOS) is considered a ratio estimator since it is the ratio of days of care to the number of discharges. In 2004, the estimated number of days of care for inpatients with a first-listed diagnosis of septicemia (ICD-9-CM code 038) was 3,438,000. The estimated number of discharges for inpatients with a first-listed diagnosis of septicemia was 410,000. The ALOS for inpatients with a first-listed diagnosis of septicemia was 3,438,000/410,000 = 8.4.

To compute the RSE for ALOS, first compute the RSE for the estimated number of days of care and the RSE for the estimated number of discharges. See the section above on *Relative Standard Errors for Aggregate Estimates* for computation of these RSE's.

$$RSE(3,438,000) = .0575$$
  
 $RSE(410,000) = .0527$ 

Next, substitute those RSE's into the formula above to approximate the RSE for the ALOS estimate:

$$RSE(8.4) = SQRT ((.0575)^2 + (.0527)^2)$$
  
 $RSE(8.4) = .0780$ 

The standard error of the estimate is obtained by multiplying the relative standard error by the estimate itself:

$$SE(8.4) = .0780 * 8.4 = .654$$

The standard error can be used to generate confidence intervals for statistical testing. In this example, the 95% confidence interval for the estimate of the ALOS for inpatients diagnosed with septicemia is:

Table 1. Parameter values for generalized variance curves for National Hospital Discharge Survey aggregate statistics by statistic type: United States, 2004

CHARACTERISTIC	FIRST-LISTED D	IAGNOSIS	DAYS OF	CARE	ALL-LISTED DIA	AGNOSES	ALL-LISTED PRO	OCEDURES
	<u>a</u>	<u>b</u>	<u>a</u>	<u>b</u>	<u>a</u>	<u>b</u>	<u>a</u>	<u>b</u>
TOTAL	0.00193	348.537	0.00298	1102.846	0.00244	368.046	0.00327	385.864
SEX								
Male	0.00211	355.129	0.00346	1420.176	0.00294	303.325	0.00375	352.677
Female	0.00202	305.682	0.00297	979.291	0.00403	379.773	0.00663	319.316
AGE GROUP								
Under 15 years	0.02165	252.708	0.02950	652.859	0.02385	269.440	0.03286	211.058
15-44 years	0.00238	261.974	0.00417	886.487	0.00306	287.451	0.00305	299.209
45-64 years	0.00180	334.793	0.00330	1198.332	0.00254	329.647	0.00353	322.197
65 years and over	0.00278	342.258	0.00342	1679.155	0.00366	361.861	0.00322	276.671
REGION								
Northeast	0.00900	217.924	0.01201	655.356	0.01786	268.205	0.01325	136.233
Midwest	0.01269	244.190	0.01558	730.556	0.01453	248.977	0.01850	183.671
South	0.00258	319.022	0.00377	1229.085	0.00341	398.944	0.00382	344.749
West	0.00682	244.576	0.01016	1061.770	0.00879	369.545	0.00759	300.855
RACE								
White	0.00391	385.185	0.00600	1099.961	0.00449	420.178	0.00497	333.247
Black/African American	0.00499	224.103	0.00755	860.189	0.00533	211.251	0.00580	236.246
All other races	0.02239	206.435	0.03591	538.979	0.02129	210.846	0.02221	218.497
Race not stated	0.01638	217.625	0.01876	654.303	0.01901	233.642	0.01759	214.327
EXPECTED SOURCE OF PAYMENT								
Medicare	0.00247	347.898	0.00381	1468.303	0.00431	382.152	0.00358	251.689
Medicaid	0.00685	275.268	0.00944	1011.549	0.00516	341.450	0.00660	312.552
Worker's compensation &	0.00070	007.700	0.04000	1001 100	0.00040	000 407	0.00004	004000
other government payments	0.00672	327.736	0.01296	1331.432	0.00940	322.407	0.00861	324.239
HMO/PPO	0.00511	281.902	0.00694	881.873	0.00515	253.947	0.00698	231.569
BC/BS & other private insurance	0.00352	299.179	0.00577	921.851	0.00411	341.241	0.00546	324.355
Self pay	0.00507	238.592	0.01181	445.933	0.00495	287.494	0.00575	298.687
No charge and other	0.02980	216.556	0.04234	452.271	0.02688	225.121	0.03263	204.223

Users of NHDS data are cautioned that computed estimates based on fewer than 30 unweighted records are not reliable and should not be reported. Because these estimates are based on so few data points, they are excluded from the calculation of the generalized variance curves. Thus, application of generalized variance curves is appropriate only for estimates based on at least 30 records.

<u>Presentation of Estimates.</u> Publication of estimates for the NHDS is based on the relative standard error of the estimate and the number of sample records on which the estimate is based (referred to as the sample size). Estimates are not presented in NCHS reports unless a reasonable assumption regarding the probability distribution of the sampling error is possible.

Based on consideration of the complex sample design of the NHDS, the following guidelines are used for presenting the NHDS estimates:

If the sample size is less than 30, the value of the estimate is not reported.

If the sample size is 30-59, the value of the estimate is reported but should not be assumed reliable.

If the sample size is 60 or more and the relative standard error is less than 30 percent, the estimate is reported.

If the relative standard error of any estimate is over 30 percent, the estimate is considered to be unreliable. It is left to the author to decide whether or not to present it. However, if the author chooses to present the unreliable estimate, the consumer of the statistic must be informed that the statistic is not reliable.

Monthly and Seasonal Estimates Under the New Design. An important difference between the old and new designs is the method used to adjust for nonresponse. In the old design, weights for responding hospitals were adjusted each month to account for hospitals that did not respond for that month. In the new design, the type of nonresponse adjustment applied depended on whether the hospital was considered a nonrespondent or partial respondent. A nonresponding hospital was one which failed to provide at least half of the expected number of discharges for at least half of the months for which it was in-scope. In this case, weights of discharges from hospitals similar to the nonresponding hospital were inflated to account for discharges of the nonrespondent hospital. However, this adjustment was performed just once, after the close out of the survey for the year, instead of monthly as before.

For partially responding hospitals, one or both of two adjustments were made. If the hospital provided at least half, but not all, of the expected number of abstracts for a given month, the weights of the abstracts actually collected for that month were inflated to account for the missing abstracts. If fewer than half of the expected number of abstracts were provided, the weights of the abstracts provided were inflated by a factor of two, and then a second adjustment was made to account for the excess nonresponse. In the second adjustment, the weights of the discharges in the hospital's respondent months were inflated by ratios that varied by category of first-listed ICD-9-CM diagnostic code. This adjustment ratio was based on the hospital's month(s) of nonresponse and the month-bymonth distributions of first-listed diagnostic groups among discharges from hospitals which responded for all twelve months. The ratio accounts for the seasonality in the occurrence of the first-listed diagnostic groups for annual statistics, but not for partial year estimates. As a result monthly and seasonal estimates may be skewed. While the effect is believed to be small, it is recommended that partial year estimates NOT be produced. In the 2004 NHDS, 94 percent of the 439 responding hospitals provided data for all twelve months, and 98 percent provided at least nine months of data.

How to Use the Data File. The NHDS records are weighted to allow inflation to national or regional estimates. The weight applied to each record is found in location 21-25. To produce an estimate of the number of discharges, the weights for the desired records must be summed. To produce an estimate for number of days of care, the weight must be multiplied by the days of care (location 13-16) and these products are summed. Average length of stay data can be obtained by dividing the days of care by the number of discharges as calculated above.

Appendix D contains weighted and unweighted frequencies for selected variables. These may be used as a cross-check when processing NHDS data. Please note that Procedure Chapter 00 – Procedures

and Interventions, Not Elsewhere Classified – was added to the list of frequencies for all-listed procedures on page 64. In 2002, the ICD-9-CM Coordination and Maintenance Committee created this new procedure chapter as a way of handling space limitations in the existing hierarchical structure and alleviating inappropriate categorization of new procedures. Since October addendum changes are not implemented in the NHDS until the following data collection year, 2003 is the first year these codes have been used.

<u>Diagnosis-Related Groups (DRGs).</u> Many users of the NHDS data have expressed an interest in converting the medical data to DRGs. This has been done using DRG Grouper Programs obtained from the Centers for Medicare and Medicaid Services (formerly HCFA). The DRGs and the DRG Grouper Programs were developed outside of the National Center for Health Statistics; any questions about DRGs, other than specific questions about how they relate to NHDS data, should be addressed elsewhere.

**Questions.** Questions concerning NHDS data should be directed to:

Centers for Disease Control and Prevention National Center for Health Statistics Division of Health Care Statistics Hospital Care Statistics Branch 3311 Toledo Road Hyattsville, Maryland 20782 Phone: 301.458.4321

Fax: 301.458.4032 email: NHDS@cdc.gov

For more information about the NHDS, visit our website: <a href="http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm">http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm</a>

For email discussions and dissemination of NHDS data, join the Hospital Discharge and Ambulatory Surgery Data listserv (HDAS-DATA). In the body of an email message (leaving the subject line blank), type:

subscribe hdas-data Your Name

Send this message to: <a href="mailto:listserv@cdc.gov">listserv@cdc.gov</a>

#### **REFERENCES**

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<sup>&</sup>lt;sup>2</sup>SMG Marketing Group, Inc. Hospital Market Database. Chicago: Healthcare Information Specialists, 1342 North LaSalle Drive, Chicago, IL. April 1987, April 1991, April 1994, April 1997, April 2000; Verispan, L.L.C. Healthcare Market Index, Updated May 15, 2003 and Hospital Market Profiling Solution, Second Quarter, 2003. Verispan Corporate Headquarters, 800 Township Line Road, Suite 125, Yardley, PA 19067.

<sup>&</sup>lt;sup>3</sup>Simmons WR, Schnack GA. Development of the Design of the NCHS Hospital Discharge Survey. National Center for Health Statistics. Vital Health Stat 2(39). 1977.

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<sup>&</sup>lt;sup>5</sup>Office of the Secretary, Department of Health and Human Services: Health Information Policy Council: 1984 Revision of the Uniform Hospital Discharge Data Set. Federal Register, Volume 50, No. 147. July 31, 1985.

<sup>&</sup>lt;sup>6</sup>Bieler GS, Williams RL. *Analyzing Survey Data Using SUDAAN Release 7.5.* Research Triangle Institute: Research Triangle Park, N.C. 1997.

#### II. TECHNICAL DESCRIPTION OF DATA FILE

Data Set Name NHDS04.PU.TXT

Record Length 88

Number of Records 370,785

#### III. RECORD LAYOUT: Location and Coding of Data Elements

This section provides detailed information for each sampled record on the file, with a description of each item included on the record. Data elements are arranged sequentially according to their physical location on the file. Unless otherwise stated in the Item Description, the data are derived from the abstract form or from automated sources. The SMG Hospital Market Database file, Verispan's data products, and the hospital interview are alternate sources of data; some other items are computer generated.

Item Number	Location	Number of Positions	Item description	Code description
1	1-2	2	Survey Year	04
2	3	1	Newborn status	1=Newborn 2=Not newborn
3	4	1	Units for age	1=Years 2=Months 3=Days
4	5-6	2	Age in years, months, or days	If units=years: 00-99* If units=months: 01-11 If units=days: 00-28 *Ages 100 and over were recoded to 99
5	7	1	Sex	1=Male 2=Female
6	8	1	Race	1=White 2=Black/African American 3=American Indian/Alaskan Native 4=Asian 5=Native Hawaiian or other Pacific Isldr 6=Other 8=Multiple race indicated 9=Not stated
7	9	1	Marital status	1=Married 2=Single 3=Widowed 4=Divorced 5=Separated 9=Not stated
8	10-11	2	Discharge month	01-12=January to December
9	12	1	Discharge Status	1=Routine/discharged home 2=Left against medical advice 3=Discharged/transferred to short-term facility 4=Discharged/transferred to long-term care institution 5=Alive, disposition not stated 6=Dead 9=Not stated or not reported
10	13-16	4	Days of care	Use to calculate number of days of care. Values of zero generated by the computer from admission and discharge dates were changed to one. (Discharges for which dates of admission and discharge are the same are identified in Item Number 11)

Item Number	Location	Number of Positions	Item description	Code description
11	17	1	Length of stay flag	0=Less than 1 day 1=One day or more
12	18	1	Geographic region	1=Northeast 2=Midwest 3=South 4=West
13	19	1	Number of beds, recode	1=6-99 2=100-199 3=200-299 4=300-499 5=500 and over
14	20	1	Hospital ownership	1=Proprietary 2=Government 3=Nonprofit, including church
15	21-25	5	Analysis weight	Use to obtain weighted estimates
16	26-27	2	First two digits of survey year	20
17	28-32	5	Diagnosis code #1	*
18	33-37	5	Diagnosis code #2	*
19	38-42	5	Diagnosis code #3	*
20	43-47	5	Diagnosis code #4	*
21	48-52	5	Diagnosis code #5	*
22	53-57	5	Diagnosis code #6	*
23	58-62	5	Diagnosis code #7	*
24	63-66	4	Procedure code#1	*
25	67-70	4	Procedure code#2	*
26	71-74	4	Procedure code#3	*
27	75-78	4	Procedure code#4	*

Item Number	Location	Number of Positions	Item description	Code description
28	79-80	2	Principal expected source of payment	01=Worker's compensation 02=Medicare 03=Medicaid 04=Other government 05=Blue Cross/Blue Shield 06=HMO/PPO 07=Other private insurance 08=Self-pay 09=No charge 10=Other 99=Not stated
29	81-82	2	Secondary expected source of payment	Same coding as item 28 above, except Not Stated left blank (not coded to 99)
30	83-85	3	Diagnosis-Related Groups (DRG)	Grouper version 21.0
31	86	1	Type of Admission	1 = Emergency 2 = Urgent 3 = Elective 4 = Newborn 9 = Not available
32	87-88	2	Source of Admission	01 = Physician referral 02 = Clinical referral 03 = HMO referral 04 = Transfer from a hospital 05 = Transfer from skilled nursing facility 06 = Transfer from other health facility 07 = Emergency room 08 = Court/law enforcement 09 = Other 99 = Not available

<sup>\*</sup>Diagnosis and procedure codes are in compliance with the *International Classification of Diseases, 9th Revision, Clinical Modification, (ICD-9-CM)*. For **diagnosis** codes, there is an implied decimal between positions 3 and 4. For E-codes, the implied decimal is between the 4th and 5th position. For inapplicable 4th or 5th digits, a dash is inserted. For **procedure** codes, there is an implied decimal between positions 2 and 3. For inapplicable 3rd or 4th digits, a dash is inserted.

#### APPENDIX A

#### **DEFINITION OF TERMS**

Terms relating to hospitals and hospitalization

<u>Hospitals</u>: Short stay hospitals or hospitals whose specialty is general (medical or surgical), or children's general. Hospitals must have 6 beds or more staffed for patients use. Federal hospitals and hospital units of institutions are not included.

**Type of ownership of hospital**: The type of organization that controls and operates the hospital. Hospitals are grouped as follows:

Not for Profit: Hospitals operated by a church or another not for profit organization.

**Government**: Hospitals operated by State and local government.

**Proprietary**: Hospitals operated by individuals, partnerships, or corporations for profit.

<u>Patient</u>: A person who is formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment, or by birth.

<u>Discharge</u>: The formal release of a patient by a hospital; that is, the termination of a period of hospitalization by death or by disposition to place of residence, nursing home, or another hospital. The terms "discharges" and "patients discharged" are used synonymously.

<u>Discharge rate</u>: The ratio of the number of hospital discharges during the year to the number of persons in the civilian population on July 1 of that year.

<u>Days of care</u>: The total number of patient days accumulated at time of discharge by patients discharged from short stay hospitals during a year. A stay of less than 1 day (patient admission and discharge on the same day) is counted as 1 day in the summation of total days of care. For patients admitted and discharged on different days, the number of days of care is computed by counting all days from (and including) the date of admission to (but not including) the date of discharge.

**Rate of days of care**: The ratio of the number of patient days accumulated at time of discharge to the number of persons in the civilian population on July 1 of that year.

<u>Average length of stay</u>: The total number of days of care accumulated at time of discharge by patients discharged during the year, divided by the number of patients discharged.

Terms relating to diagnoses and procedures

<u>Discharge diagnoses</u>: One or more diseases or injuries (or some factor that influences health status and contact with health services that is not itself a current illness or injury) listed by the attending physician on the medical record of a patient. In the NHDS, discharge (or final) diagnoses listed on the face sheet (summary sheet) of the medical record are transcribed in the order listed. Each sample discharge is assigned a maximum of seven five-digit codes according to ICD-9-CM (4).

<u>Principal diagnosis</u>: The condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.

<u>First-listed diagnosis</u>: The coded diagnosis identified as the principal diagnosis or listed first on the face sheet of the medical record if the principal diagnosis cannot be identified. The number of first-listed diagnoses is equivalent to the number of discharges.

<u>Procedure</u>: One or more surgical or nonsurgical operations, procedures, or special treatments listed by the physician on the medical record. In the NHDS, all terms listed on the face sheet (summary sheet) of the medical record under the caption "operation," "operative procedures," "operations and/or special treatment," and the like are transcribed in the order listed. A maximum of four procedures are coded.

**Rate of procedures**: The ratio of the number of all-listed procedures during a year to the number of persons in the civilian population on July 1 of that year determines the rate of procedures.

#### Demographic terms

**<u>Age</u>**: Refers to the age of the patient on the birthday prior to admission to the hospital inpatient service.

<u>Population</u>: Civilian population is the resident population excluding members of the Armed Forces.

<u>Geographic regions</u>: Hospitals are classified by location in one of the four geographic regions of the United States corresponding to those used by the U.S. Bureau of the Census:

U.S. CENSUS REGIONS				
NORTHEAST MIDWEST		SOUTH	WEST	
Maine	Michigan	Delaware	Montana	
New Hampshire	Ohio	Maryland	Idaho	
Vermont	Illinois	District of Columbia	Wyoming	
Massachusetts	Indiana	Virginia	Colorado	
Connecticut	Wisconsin	West Virginia	New Mexico	
Rhode Island	Minnesota	North Carolina	Arizona	
New York	Iowa	South Carolina	Utah	
New Jersey	Missouri	Georgia	Nevada	
Pennsylvania	North Dakota	Florida	Washington	
	South Dakota	Kentucky	Oregon	
	Nebraska	Tennessee	California	
	Kansas	Alabama	Hawaii	
		Mississippi	Alaska	
		Arkansas		
		Louisiana		
		Oklahoma		
		Texas		

#### APPENDIX B

The International Classification of Diseases, 9th Revision, Clinical Modification has been used for coding NHDS data since 1979. The classification system undergoes annual updating, which involves the assignment of new diagnostic and procedure codes, fourth or fifth digit expansion of existing codes, as well as code deletions. Changes are contained in addenda developed by the ICD-9-CM Coordination and Maintenance Committee and approved by the Director of NCHS and the Administrator of the Centers for Medicare and Medicaid Services (formerly HCFA). Addenda to the ICD-9-CM become effective on October 1 of the calendar year and have been released for 1986 through 2004, except for 1999 when there was no addendum due to concerns about possible complications for instituting coding changes prior to the millennium crossover.

As described earlier in this document, the 2004 NHDS involved two data collection modes: manual and automated abstract services. All data collected manually were coded using the third edition of the ICD-9-CM, including addendum changes for 1986 through 2003. Because addendum changes become effective in the last quarter of the calendar year, data collected via abstract services were coded using two different ICD-9-CM revisions. For the first 9 months of 2004, the ICD-9-CM with addendum changes up to October 1, 2003 was used; but for the last 3 months, the October 2004 addendum changes were incorporated. Therefore, to preserve consistent coding across the 12 months and to prevent NHDS data users from mistaking partial year estimates for annual estimates, abstract service data for the last quarter of 2004 were converted back to their previous code assignments under the October 2003 addendum.

In order to assist users, a conversion table is provided which shows the date of introduction of each new code and the previously assigned code equivalent, which had been used for reporting the selected diagnosis or procedure prior to issuance of the new code. This conversion table can be obtained online at the following location: <a href="http://www.cdc.gov/nchs/icd9.htm">http://www.cdc.gov/nchs/icd9.htm</a>.

Current code(s) assignment	Effective October 1	Previous code(s) assignment
005.81	1995	005.8
005.89	1995	005.8
007.4	1997	007.8
007.5	2000	007.8
008.00-008.09	1992	008.0
008.43-008.47	1992	008.49
008.61-008.69	1992	008.6
031.2	1997	031.8
000.10	400=	222.4
038.10	1997	038.1
038.11	1997	038.1
038.19	1997	038.1
040.82	2002	040.89
041.00-041.03	1992	041.0
041.04	1992	041.0
041.04 (code title restated)	1997	041.04
041.05	1992	041.0
041.09	1992	041.0
041.10-041.19	1992	041.1
041.81-041.85	1992	041.8
041.86	1995	041.84
041.89	1992	041.8
042	1994	042.0-042.2, 042.9*, 043.0-043.3,
0.40.0.40.0	4004	043.9*, 044.0, 044.9* (*Codes deleted)
042.0-042.9	1986	279.19
043.0-043.9	1986	279.19
044.0-044.9	1986	279.19
066.4	2002	066.3
070.20-070.21	1991	070.2
070.22	1994	070.20
070.23	1994	070.21
070.30-070.31	1991	070.3
070.32	1994	070.30
070.33	1994	070.31
070.41-070.43	1991	070.4
070.44	1994	070.41
070.49	1991	070.4
070.51-070.53	1991	070.5

	<u>Effective</u>	
Current code(s) assignment	October 1	Previous code(s) assignment
070.54	1994	070.51
070.59	1991	070.5
077.98-077.99	1993	077.9
078.10-078.11, 078.19	1993	078.1
078.88	1993	078.89
079.4	1993	079.8
079.50-079.53, 079.59	1993	079.8
079.6	1996	079.89
079.81	1995	079.89
079.82	2003	079.89
079.88-079.89	1993	079.8
079.98-079.99	1993	079.9
082.40-082.41, 082.49	2000	082.8
002.40 002.41, 002.47	2000	002.0
088.81, 088.89	1989	088.8
088.82	1993	088.89
099.40-099.49	1992	099.4
099.50-099.59	1992	078.89
112.84-112.85	1992	112.89
114.4-114.5	1993	114.3
176.0-176.9	1991	173.0-173.9
203.00	1991	203.0
203.01	1991	V10.79
203.10	1991	203.1
203.11	1991	V10.79
203.80	1991	203.8
203.81	1991	V10.79
204.00	1991	204.0
204.01	1991	V10.61
204.10	1991	204.1
204.11	1991	V10.61
204.20	1991	204.2
204.20	1991	V10.61
204.21	1991	204.8
204.81	1991	V10.61
204.81	1991	204.9
204.90	1991	V10.61
20.071	1771	, 10.01

Current code(s) assignment	Effective October 1	Previous code(s) assignment
205.00	1991	205.0
205.01	1991	V10.62
205.10	1991	205.1
205.11	1991	V10.62
205.20	1991	205.2
205.21	1991	V10.62
205.30	1991	205.3
205.31	1991	V10.62
205.80	1991	205.8
205.81	1991	V10.62
205.90	1991	205.9
205.91	1991	V10.62
206.00	1991	206.0
206.01	1991	V10.63
206.10	1991	206.1
206.11	1991	V10.63
206.20	1991	206.2
206.21	1991	V10.63
206.80	1991	206.8
206.81	1991	V10.63
206.90	1991	206.9
206.91	1991	V10.63
207.00	1991	207.0
207.01	1991	V10.69
207.10	1991	207.1
207.11	1991	V10.69
207.20	1991	207.2
207.21	1991	V10.69
207.80	1991	207.8
207.81	1991	V10.69
208.00	1991	208.0
208.01	1991	V10.60
208.10	1991	208.1
208.11	1991	V10.60
208.20	1991	208.2
208.21	1991	V10.60
208.80	1991	208.8
208.81	1991	V10.60
208.90	1991	208.9
208.91	1991	V10.60
237.70-237.72	1990	237.7

Current code(s) assignment	Effective October 1	Previous code(s) assignment
250.02	1993	250.90
250.03	1993	250.91
250.12	1993	250.10
250.13	1993	250.11
250.22	1993	250.20
250.23	1993	250.21
250.32	1993	250.30
250.33	1993	250.31
250.42	1993	250.40
250.43	1993	250.41
250.52	1993	250.50
250.53	1993	250.51
250.62	1993	250.60
250.63	1993	250.61
250.72	1993	250.70
250.73	1993	250.71
250.82	1993	250.80
250.83	1993	250.81
250.92	1993	250.90
250.93	1993	250.91
255 10 255 14	2002	255.1
255.10-255.14	2003	255.1
256.31-256.39	2001	256.3
275.40-275.42	1997	275.4
275.49	1997	275.4
2,011)	2,5,7,	27011
277.02-277.03,277.09	2002	277.00
277.7	2001	277.8
277.81-277.84,277.89	2003	277.8
278.00-278.01	1995	278.0
282.41-282.42,282.49	2003	282.4
282.64	2003	282.63
282.68	2003	282.69
283.10-283.11,283.19	1993	283.1
285.21-285.22,285.29	2000	285.8
289.52	2003	289.59
289.81-289.82,289.89	2003	289.8
···-= ===:==============================		

Current code(s) assignment	Effective October 1	Previous code(s) assignment
291.81	1996	291.8
291.89	1996	291.8
293.84	1996	293.89
294.10-294.11	2000	294.1
300.82	1996	300.81
305.1	1994	305.10, 305.11*, 305.12, 305.13* (*Codes deleted)
312.81-312.82, 312.89	1994	312.8
315.32	1996	315.39
320.81-320.89	1992	320.8
331.11	2003	331.1
331.19	2003	331.1
331.82	2003	331.89
333.92-333.93	1994	333.99
337.20-337.22, 337.29	1993	337.9
337.3	1998	337.9
342.00-342.02	1994	342.0
342.10-342.12	1994	342.1
342.80-342.82	1994	342.9
342.90-342.92	1994	342.9
344.00-344.04, 344.09	1994	344.0
344.30-344.32	1994	344.3
344.40-344.42	1994	344.4
344.81, 344.89	1993	344.8
345.00-345.01	1989	345.0
345.10-345.11	1989	345.1
345.40-345.41	1989	345.4
345.50-345.51	1989	345.5
345.60-345.61	1989	345.6
345.70-345.71	1989	345.7
345.80-345.81	1989	345.8
345.90-345.91	1989	345.9

	Effective	
Current and (a) assistment	Effective	Provious ando(s) assignment
Current code(s) assignment	October 1	Previous code(s) assignment
346.00-346.01	1992	346.0
346.10-346.11	1992	346.1
346.20-346.21		346.2
	1992	
346.80-346.81 346.90-346.91	1992 1992	346.8 346.9
340.90-340.91	1992	340.9
348.30-348.31,348.39	2003	348.3
5-10:00 5-10:02 (5-10:02)	2003	540.5
355.71	1993	354.4
355.79	1993	355.7
	-,,-	
357.81-357.82,357.89	2002	357.8
337.01 337.02,337.07	2002	337.0
358.00-358.01	2003	358.0
22000 22002	2000	
359.81,359.89	2002	359.8
367,61,667,67	2002	557.6
365.83	2002	365.89
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2002	555.65
371.82	1992	371.89
371.02	1,,,2	3,1.0)
372.81, 372.89	2000	372.8
374.87	1990	374.89
403.00-403.01	1989	403.0
403.10-403.11	1989	403.1
403.90-403.91	1989	403.9
404.00-404.03	1989	404.0
404.10-404.13	1989	404.1
404.90-404.93	1989	404.9
410.00-410.02	1989	410.0
410.10-410.12	1989	410.1
410.20-410.22	1989	410.2
410.30-410.32	1989	410.3
410.40-410.42	1989	410.4
410.50-410.52	1989	410.5
410.60-410.62	1989	410.6
410.70-410.72	1989	410.7
410.80-410.82	1989	410.8
410.90-410.92	1989	410.9
411.81	1989	410.9
411.89	1989	411.8

Current code(s) assignment	Effective October 1	Previous code(s) assignment
414.00-414.01	1994	414.0
414.02-414.03	1994	996.03
414.04-414.05	1996	414.00
414.06	2002	414.00
414.07	2003	414.06
414.12	2002	414.11
415.11	1995	997.3 & 415.1
415.19	1995	415.1
428.20-428.23	2002	428.0
428.30-428.33	2002	428.0
428.40-428.43	2002	428.0
429.71	1989	410.0-410.9
429.79	1989	410.0-410.9
433.00-433.01	1993	433.0
433.10-433.11	1993	433.1
433.20-433.21	1993	433.2
433.30-433.31	1993	433.3
433.80-433.81	1993	433.8
433.90-433.91	1993	433.9
434.00-434.01	1993	434.0
434.10-434.11	1993	434.1
434.90-434.91	1993	434.9
435.3	1995	435.0 & 435.1
437.7	1992	780.9
438.0	1997	294.9 & 438
438.10	1997	784.5 & 438
438.11	1997	784.3 & 438
438.12	1997	784.4 & 438
438.19	1997	784.5 & 438
438.20	1997	342.90 & 438
438.21	1997	342.91 & 438
438.22	1997	342.92 & 438
438.30	1997	344.40 & 438
438.31	1997	344.41 & 438
438.32	1997	344.42 & 438
438.40	1997	344.30 & 438
438.41	1997	344.31 & 438
438.42	1997	344.32 & 438

	<u>Effective</u>	
Current code(s) assignment	October 1	Previous code(s) assignment
<u>Surrous codo(s) assignment</u>	<u>october r</u>	Trevious code(s) assignment
438.50-438.52	1997	344.89 & 438
438.53	1998	438.50
438.6-438.7	2002	438.89
438.81	1997	784.69 & 438
438.82	1997	787.2 & 438
438.83-438.85	2002	438.89
438.89	1997	438
438.9	1997	438
440.20-440.22	1992	440.2
440.23	1993	440.20 & 707.1 or 707.8 or 707.9
440.24	1993	440.20 & 785.4
440.29	1993	440.2
440.30-440.32	1994	996.1
441.00-441.03	1994	441.0
441.6	1993	441.1 & 441.3
441.7	1993	441.2 & 441.4
443.21	2002	442.81
443.22	2002	442.2
443.23	2002	442.1
443.24	2002	442.89
443.29	2002	442.89
445.01-445.02	2002	440.29
445.81	2002	440.1
445.89	2002	440.8
446.20-446.21, 446.29	1990	446.2
451.82-451.84	1993	451.89
454.8	2002	454.9
458.2	1995	997.9 & 458.9
458.21,458.29	2003	458.2
458.8	1997	458.9
459.10-459.13,459.19	2002	459.1
459.30-459.33,459.39	2002	459.89
464.00-464.01	2001	464.0
464.50-464.51	2001	464.0

Current code(s) assignment	Effective October 1	Previous code(s) assignment
466.11	1996	466.1
466.19	1996	466.1
474.0 (code title restated)	1997	474.0
474.00-474.02	1997	474.0
477.1	2000	477.8
480.3	2003	480.8
482.30-482.39	1992	482.3
482.40	1998	482.4
482.41	1998	482.4
482.49	1998	482.4
482.81-482.83, 482.89	1992	482.8
482.84	1997	482.83
492.0	1002	102
483.0 483.1	1992 1996	483 078.88 & 484.8
483.8	1990	483
403.0	1992	463
491.20-491.21	1991	491.2
493.20	1989	493.90
493.21	1989	493.91
493.02	2000	493.00
493.12	2000	493.10
493.22	2000	493.20
493.81	2003	519.1
493.82	2003	493.90-493.91
493.92	2000	493.90
494.0-494.1	2000	494
512.1	1994	997.3
517.3	2003	282.62
518.6	1997	518.89
518.81	1987	799.1
518.82-518.89	1987	518.8
518.83	1998	518.81
518.84	1998	518.81
519.00-519.02, 519.09	1998	519.0

Current code(s) assignment	Effective October 1	Previous code(s) assignment
521.00-521.09	2001	521.0
524.00-524.09	1992	524.0
524.10-524.19	1992	524.1
524.60-524.69	1991	524.6
524.70-524.79	1992	524.8
525.10-525.19	2001	525.1
530.10-530.11, 530.19	1993	530.1
530.12	2001	530.10
530.20-530.21	2003	530.2
530.81	1993	530.1
530.82-530.84, 530.89	1993	530.8
530.85	2003	530.2
535.00-535.01	1991	535.0
535.10-535.11	1991	535.1
535.20-535.21	1991	535.2
535.30-535.31	1991	535.3
535.40-535.41	1991	535.4
535.50-535.51	1991	535.5
535.60-535.61	1991	535.6
536.3	1994	536.8
536.40-536.42, 536.49	1998	997.4
537.82	1990	537.89
537.83	1991	537.82
537.84	2002	531.00
556.0-556.6	1994	556
556.8-556.9	1994	556
558.3	2000	558.9
562.02	1991	562.00
562.03	1991	562.01
562.12	1991	562.10
562.13	1991	562.11
564.00-564.09	2001	564.0
564.81	1998	564.8
564.89	1998	564.8
569.60-569.61	1995	569.6
569.62	1998	569.69
569.69	1995	569.6

Current code(s) assignment	Effective October 1	Previous code(s) assignment
569.84	1990	557.1
569.85	1991	569.84
569.86	2002	569.82
574.60	1996	574.00 & 574.30
574.61	1996	574.01 & 574.31
574.70	1996	574.10 & 574.40
574.71	1996	574.11 & 574.41
574.80	1996	574.00 & 574.10
		574.30 & 574.40
574.81	1996	574.01 & 574.11
		574.31 & 574.41
574.90	1996	574.20 & 574.50
574.91	1996	574.21 & 574.51
575.10-575.11	1996	575.1
575.12	1996	575.0 & 575.1
593.70-593.73	1994	593.7
596.51-596.53	1992	596.5
596.54	1992	344.61
596.55-596.59	1992	596.5
599.81-599.89	1992	599.8
600.0-600.3, 600.9	2000	600
600.00-600.01	2003	600.0
600.10-600.11	2003	600.1
600.20-600.21	2003	600.2
600.90-600.91	2003	600.9
602.3	2001	602.8
607.85	2003	607.89
608.82	2001	608.83
608.87	2001	608.89
633.00-633.01	2002	633.0
633.10-633.11	2002	633.1
633.20-633.21	2002	633.2
633.80-633.81	2002	633.8
633.90-633.91	2002	633.9
645.0	1991	645
645.10-645.11, 645.13	2000	645.00-645.01, 645.03

	<u>Effective</u>	
<u>Current code(s) assignment</u>	October 1	Previous code(s) assignment
645.20-645.21, 645.23	2000	645.00-645.01, 645.03
651.30-651.31,651.33	1989	651.00-651.01,651.03
651.40-651.41,651.43	1989	651.10-651.11,651.13
651.50-651.51,651.53	1989	651.20-651.21,651.23
651.60-651.61,651.63	1989	651.80-651.81,651.83
654.20-654.21,654.23	1990	654.2, 654.9
654.90-654.94	1990	654.2, 654.9
655.70 & 655.71	1997	655.8
655.73	1997	655.8
657.0	1991	657
659.60, 659.61, 659.63	1992	659.80-659.81, 659.83
659.70, 659.71, 659.73	1998	656.30, 656.31, 656.33
665.10, 665.11	1992	665.10, 665.11, 665.12, 665.14
Note: The title for the subcategory, 665.1, has bee	n changed,	
making the fifth-digit subclassification, 665.12 an		d.
670.0	1991	670
672.0	1991	672
674.50-674.54	2003	674.80,674.82,674.84
677	1994	None
686.00 & 686.01	1997	686.0
686.09	1997	686.0
690.10	1995	690
690.11	1995	691.8 & 704.8
690.12	1995	691.8
690.18	1995	690
690.8	1995	690
692.72-692.74	1992	692.79
692.75	2000	692.79
692.76-692.77	2001	692.71
692.82-692.83	1992	692.89
702.0-702.8	1991	702
702.11,702.19	1994	702.1

Current code(s) assignment	Effective October 1	Previous code(s) assignment
704.02	1993	704.09
707.10-707.15, 707.19	2000	707.1
709.00-709.01,709.09	1994	709.0
710.5	1992	288.3,729.1
718.70-718.79	2001	718.80-718.89
719.7	2003	719.70, 719.75-719.79 (codes deleted)
727.83	2000	727.89
728.86	1995	729.4
728.87	2003	728.9
728.88	2003	728.89
733.10-733.16, 733.19	1993	733.1
733.93	2001	733.16
733.94	2001	733.19
733.95	2001	733.19
738.10-738.19	1992	738.1
747.60-747.64, 747.69	1993	747.6
747.82	1993	747.89
747.83	2002	747.89, 747.9
752.51-752.52	1996	752.5
752.61-752.63	1996	752.6
752.64-752.65	1996	752.8
752.69	1996	752.8
752.81, 752.89	2003	752.8
752 10 752 17 752 10	1990	753.1
753.10-753.17,753.19 753.20-753.23	1990	753.1 753.2
753.29 753.29	1996	753.2 753.2
133.29	1990	133.2
756.70-756.71	1997	756.7
756.79	1997	756.7
758.81	1996	758.8
758.89	1996	758.9
759.81-759.82	1989	759.8
759.83	1994	759.89

Current code(s) assignment	Effective October 1	Previous code(s) assignment
759.89	1989	759.8
760.75	1991	760.79
760.76	1994	760.79
763.81-763.83, 763.89	1998	763.8
764.00-764.09	1988	764.0
764.10-764.19	1988	764.1
764.20-764.29	1988	764.2
764.90-764.99	1988	764.9
765.00-765.09	1988	765.0
765.10-765.19	1988	765.1
765.20-765.24	2002	765.00-765.09
765.25-765.29	2002	765.10-765.19
766.21-766.22	2003	766.2
767.11-767.19	2003	767.1
770.81-770.84,770.89	2002	770.8
771.81-771.83,771.89	2002	771.8
772.10-772.14	2001	772.1
779.7	2001	772.1
779.81-779.82	2002	779.8
779.83	2003	779.89
779.89	2002	779.8
780.01-780.02	1992	780.0
780.03	1993	780.01
780.09	1992	780.0
780.31	1997	780.3
780.39	1997	780.3
780.57	1992	780.51, 780.53
780.71	1998	780.7
780.79	1998	780.7
780.91-780.92	2002	780.9
780.93	2003	780.99
780.94	2003	780.99
780.99	2002	780.9

	<u>Effective</u>	
Current code(s) assignment	October 1	Previous code(s) assignment
Current code(s) assignment	October 1	Flevious code(s) assignment
781.8	1994	781.9
781.91-781.92	2000	781.9
781.93	2002	723.5
<b>781.94</b>	2003	<b>781.99</b>
781.99	2000	781.9
701.57	2000	701.5
783.21	2000	783.2
783.22	2000	783.4
783.40-783.43	2000	783.4
783.7	2000	783.4
785.52	2003	785.59
786.03	1998	786.09
786.04	1998	786.09
786.05	1998	786.09
786.06	1998	786.09
786.07	1998	786.09
787.01-787.03	1994	787.0
787.91	1995	558.9
787.99	1995	787.9
788.20-788.21, 788.29	1993	788.2
788.30-788.39	1992	788.3
788.41-788.43	1993	788.4
788.61-788.62	1993	788.6
788.63	2003	788.69
788.69	1993	788.6
789.00-789.07, 789.09	1994	789.0
789.30-789.37, 789.39	1994	789.3
789.40-789.47, 789.49	1994	789.4
789.60-789.67, 789.69	1994	789.6
<b>-</b> 00.04 <b>-</b> 00.00	•000	<b>-</b> 000
790.01, 790.09	2000	790.0
790.21-790.22, 790.29	2003	790.2
790.91	1993	790.9
790.92	1993	286.9
790.93, 790.99	1993	790.9
790.94	1997	790.99
702 5	2000	702.0
792.5	2000	792.9
702.90 702.91 702.90	2001	702.0
793.80-793.81, 793.89	2001	793.8
705 00 705 02 705 00	2002	705.0
795.00-795.02,795.09	2002	795.0

Current code(s) assignment	Effective October 1	Previous code(s) assignment
795.31-795.39	2002	795.3
795.71	1994	795.8 (Code deleted)
795.79	1994	795.7
795.8	1986	795.7
796.5	1997	796.9
799.81	2003	799.8
799.89	2003	799.8
813.45	2002	813.42
823.40-823.42	2002	823.80-823.82
840.7	2001	840.8
850.11-850.12	2003	850.1
864.05	1992	864.09
864.15	1992	864.19
909.5	1994	909.9
922.31-922.33	1996	922.3
925.1-925.2	1993	925
959.0 (code title restated)	1997	959.0
959.01	1997	854.00
959.09	1997	959.0
959.11-959.14,959.19	2003	959.1
0.65.61	1000	0656
965.61	1998	965.6
965.69	1998	965.6
989.81-989.84	1995	989.8
989.89	1995	989.8
909.09	1993	909.0
995.50-995.55	1996	995.5
995.59	1996	995.5
995.60-995.69	1993	995.0
995.7	2000	None
995.80	1996	995.81
995.81 (Code title restated)	1996	995.81
995.82-995.85	1996	995.81
995.86	1998	995.89

	Effective	
Current ando(s) assignment	Effective October 1	Pravious anda(s) assignment
Current code(s) assignment	October 1	Previous code(s) assignment
995.90	2002	038.0-038.9
995.91	2002	038.0-038.9
995.92	2002	038.0-038.9
995.93	2002	038.0-038.9
995.94	2002	038.0-038.9
996.04	1994	996.09
996.51-996.59	1987	996.5
996.55	1998	996.52
996.56	1998	996.59
996.57	2003	996.59
996.60-996.69	1989	996.6
996.68	1998	996.69
996.70-996.79	1989	996.7
996.80-996.84	1987	996.8
996.85	1990	996.8
996.86	1987	996.8
996.87	2000	996.89
996.89	1987	996.8
997.00-997.01	1995	997.0
997.02	1995	997.9 & 430-434, 436
997.09	1995	997.0
997.71	2001	997.4
997.72	2001	997.5
997.79	2001	997.2
997.91	1995	997.9
997.99	1995	997.9
998.11-998.12	1996	998.1
998.13	1996	998.89
998.31-998.32	2002	998.3
998.51	1996	998.5
998.59	1996	998.5
998.81-998.82, 998.89	1994	998.8
998.83	1996	998.89
7704 04 7704 00		T104 0
V01.81,V01.89	2002	V01.8
V01.82	2003	V01.89
1100.51	1000	N/02 5
V02.51	1998	V02.5

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V02.52	1998	V02.5
V02.52 V02.59	1998	V02.5 V02.5
V 02.39	1998	V 02.5
V02.60-V02.62	1997	V02.6
V02.69	1997	V02.6
, 62.67	1,,,,	1 02.0
V03.81-V03.82, V03.89	1994	V03.8
,		
V04.81-V04.82, V04.89	2003	V04.8
,		
V05.3-V05.4	1993	V05.8
V06.5-V06.6	1994	V06.8
V07.31,V07.39	1994	V07.3
V07.4	1992	V07.8
V08	1994	044.9, 795.8 (Codes deleted)
V09.0-V09.91	1993	None
V10.48	1998	V10.49
V10.53	2001	V10.59
1112 00 1112 02 1112 02	1004	1112.0
V12.00-V12.03, V12.09	1994	V12.0
V12.40-V12.41	1997	V12.4
V12.49	1997	V12.4
V12.50-V12.52	1995	V12.5
V12.59	1995	V12.5 V12.7
V12.70-V12.72, V12.79	1994	V12.7
V13.00-V13.01, V13.09	1994	V13.0
V 13.00- V 13.01, V 13.09	1994	V 13.0
V13.21,V13.29	2002	V13.2
¥ 13.21, ¥ 13.27	2002	V 13.2
V13.61	1998	V13.6
V13.69	1998	V13.6
1210)	1,,,0	1200
V15.01-V15.09	2000	V15.0
V15.41-V15.42	1996	V15.4
V15.49	1996	V15.4
V15.82	1994	305.13 (Codes deleted)
V15.84-V15.86	1995	V15.89
V15.87	2003	V15.89
V16.40-V16.43	1997	V16.4

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V16.49	1997	V16.4
V16.51	1998	V16.5
V16.59	1998	V16.5
V18.61	1998	V18.6
V18.69	1998	V18.6
V21.30-V21.35	2000	None
V23.41,V23.49	2002	V23.4
V23.7	1989	V23.8
V23.81	1998	V23.8
V23.82	1998	V23.8
V23.83	1998	V23.8
V23.84	1998	V23.8
V23.89	1998	V23.8
V25.03	2003	V25.01
V25.43	1992	V25.49
V25.5	1992	V25.8
V26.21-V26.22, V26.29	2000	V26.2
V26.51	1998	None
V26.52	1998	None
V28.6	1997	V28.8
V29.0-V29.1, V29.8	1992	V71.8
V29.2	1994	V29.8
V29.3	1998	V29.8
V29.8	1992	V71.8
V29.9	1992	V71.9
V30.00-V30.01	1989	V30.0
V31.00-V31.01	1989	V31.0
V32.00-V32.01	1989	V32.0
V33.00-V33.01	1989	V33.0
V34.00-V34.01	1989	V34.0
V35.00-V35.01	1989	V35.0
V36.00-V36.01	1989	V36.0
V37.00-V37.01	1989	V37.0
V39.00-V39.01	1989	V39.0
V42.81-V82.83	1997	V42.8

Current code(s) assignment	Effective	Province and a(a) assignment
Current code(s) assignment	October 1	Previous code(s) assignment
V42.84	2000	V42.89
V42.89	1997	V42.8
V43.21-V43.22	2003	V43.2
V43.60-V43.66, V43.69	1994	V43.6
V43.81-V43.82	1995	V43.8
V43.83	1998	V43.89
V43.89	1995	V43.8
V44.50	1998	V44.5
V44.51	1998	V44.5
V44.52	1998	V44.5
V44.59	1998	V44.5
V45.00	1994	V45.89
V45.01	1994	V45.0
V45.02, V45.09	1994	V45.89
V45.51	1994	V45.5
V45.52, V45.59	1994	V45.89
V45.61	1007	\$145.C
V45.61	1997	V45.6
V45.63	1997	V45.6
V45.71	1997	611.8
V45.72	1997	569.89
V45.73	1997	593.89
V45.74	2000	593.89, 596.8
V45.75	2000	V45.89
V45.76	2000	518.89
V45.77	2000	602.8, 607.89,
		608.89, 620.8,
		621.8, 622.8
V45.78	2000	360.89
V45.79	2000	255.8, 289.59,
		388.8, 569.49,
		577.8, V45.89
V45.82	1994	V45.89
V45.83	1995	V45.89
V45.84	2001	None
V45.85	2003	V45.89
77462	2002	11160
V46.2	2002	V46.8
V40 40 V40 47	1004	V40.5
V49.60-V49.67	1994	V49.5
V49.70-V49.77	1994	V49.5

	Effective	
Current code(s) assignment	October 1	Previous code(s) assignment
V49.81	2000	None
V49.82	2001	None
, 15.02	2001	Tione
V49.89	2000	V49.8
V50.41-V50.42, V50.49	1994	V50.8
V53.01-V53.02	1997	V53.0
V53.09	1997	V53.0
V53.31	1994	V53.3
V53.32, V53.39	1994	V53.9
V53.90-V53.91, V53.99	2003	V53.9
V54.01-V54.02,V54.09	2003	V54.0
V54.10-V54.17,V54.19	2002	V54.8
V54.20-V54.27,V54.29	2002	V54.8
V54.81,V54.89	2002	V54.8
V56.1	1995	V58.89
V56.1 (code title restated)	1998	V56.1
V56.2	1998	V56.1
, 30.2	1,,,0	130.1
V56.31-V56.32	2000	V56.8
V57.21-V57.22	1994	V57.2
	4004	*****
V58.41	1994	V58.4
V58.42	2002	V58.49
V58.43	2002	V58.49
V58.49	1994	V58.4
V58.61	1995	V67.51
V58.62	1998	V58.69
V58.63-V58.65	2003	V58.69
V58.69	1995	V67.51
V58.71-V58.78	2002	V58.49
V58.81, V58.89	1994	V58.8
V58.82	1995	V58.89
V58.83	2000	V58.89
NEO 01 NEO 02	1007	V.50.0
V59.01-V59.02	1995	V59.0
V59.09	1995	V59.0
V59.6	1995	V59.8

	<u>Effective</u>	
Current code(s) assignment	October 1	Previous code(s) assignment
<u>Carrone Code(s) assignment</u>	<u> </u>	110 +10 dis Godo(s) dissignment
V61.10-V61.12	1996	V61.1
V61.22	1996	V61.21
V62.83	1996	V65.49
V64.4	1997	None
V64.41-V64.43	2003	V64.4
V65.11,V65.19	2003	V65.1
V65.40-V65.45	1994	V65.4
V65.46	2003	V65.49
V65.49	1994	V65.4
	4004	
V66.7	1996	None
V. 7 00 V. 7 01 V. 7 00	2000	1467.0
V67.00-V67.01, V67.09	2000	V67.0
V69.0-V69.3	1994	None
V69.8-V69.9	1994	None
v 09.0- v 09.9	1994	None
V71.81	2000	V71.8
V71.81 V71.82-V71.83	2002	V71.89
V71.89	2002	V71.8
771.05	2000	171.0
V72.81-V72.85	1993	V72.8
V73.88-V73.89	1993	V73.8
V73.98-V73.99	1993	V73.9
V76.10-V76.12	1997	V76.1
V76.19	1997	V76.1
V76.44	1998	V76.49
V76.45	1998	V76.49
V76.46-V76.47	2000	V76.49
V76.50-V76.52	2000	V76.49
V76.81, V76.89	2000	V76.8
NGC 01 NGC 00	2000	1177.0
V77.91, V77.99	2000	V77.9
VIO 01 VIO 00	2000	V02.0
V82.81, V82.89	2000	V82.8
V83.01, V83.02	2001	None
v 05.01, v 05.02	2001	TAOHE
V83.81	2002	None
V83.89	2002	V19.8
1 00.07	2002	1 17.0

Current code(s) assignment	Effective October 1	Previous code(s) assignment
E854.8	1995	E858.8
E869.4	1994	E869.8
E880.1	1995	E884.9
E884.3-E884.4	1995	E884.2
E884.5-E884.6	1995	E884.9
E885.0	2002	E885.9
E885.1-E885.4, E885.9	2000	E885
E888.0	2001	E920
E888.1	2001	E888
E888.8-E888.9	2001	E888
E906.5	1995	E906.3
E908.0-E908.4	1995	E908
E908.8-E908.9	1995	E908
E909.0-E909.4	1995	E909
E909.8-E909.9	1995	E909
E917.3	2001	E917.9
E917.4	2001	E917.9
E917.5	2001	E886.0
E917.6	2001	E917.1
E917.7	2001	E888
E917.8	2001	E888
E920.5	1995	E920.4
E922.4	1997	E917.9
E922.5	2002	E922.8
E924.2	1995	E924.0
E928.3	2000	E928.8
E928.4	2003	E928.8
E928.5	2003	E928.8
E955.6	1997	E955.9
E955.7	2002	E955.4
E967.2	1996	E967.0
E967.3	1996	None
E967.4-E967.8	1996	E967.1
	-	

Current code(s) assignment	Effective October 1	Previous code(s) assignment
E968.5	1995	E968.8
E968.6	1997	E968.8
E968.7	2000	E968.8
E985.6	1997	E985.4
E985.7	2002	E985.4
E979.0-E979.9	2002	E960.0-E966,E968.0-E968.9
E999.0	2002	E999
E999.1	2002	E969

Current code(s) assignment	Effective October 1	Previous code(s) assignment
00.01	2002	99.99
00.02	2002	99.99
00.03	2002	99.99
00.09	2002	99.99
00.07	2002	77.77
00.10	2002	99.25
00.11	2002	99.19
00.12	2002	93.98
00.13	2002	99.29
00.14	2002	99.21
00.15	2003	99.28
00.13	2003	<i>&gt;&gt;</i> •
00.50	2002	37.70-37.74,37.76,37.80-37.87
00.51	2002	37.94
00.52	2002	None
00.53	2002	37.80-37.87
00.54	2002	37.96
00.55	2002	39.90
02.96	1992	89.19
03.90	1987	03.99 (Insertion of Catheter)
05.25	1995	39.7
11.75	1989	11.79
11.76	1989	11.62
20.96-20.98	1986	20.95
22.12	1988	22.11
26.12	1988	26.11
29.31	1991	83.02
29.32	1991	29.3
29.33	1991	29.3
29.39	1991	29.3
31.45	1988	31.43-31.44
31.95	1989	31.75
32.01	1989	32.0
32.09	1989	32.0
32.22	1995	32.29, 32.9
32.28	1989	32.29
	A A	

Current co	ode(s) assignment	Effective October 1	Previous code(s) assignment
33.27		1987	33.22 + 33.27
33.28		1987	33.27
33.29		1987	33.28-33.29
33.50		1995	33.5
33.51		1995	33.5
33.52		1995	33.5
33.6		1990	33.5 + 37.5
34.05		1994	34.99
35.84		1988	35.82
35.96		1986	35.03
36.00-36.0	03	1986	36.0
36.04		1986	39.97
36.05		1987	36.01
36.05		1986	36.01*, 36.02
36.06		1995	36.01, 36.02, 36.03, 36.05
36.07		2002	36.06
36.09		1986	36.0
36.09		1991	36.00 (Code deleted)
36.17		1006	36.19
36.31		1996	
36.32		1998	36.3 36.3
		1998	
36.39		1998	36.3
37.26-37.	27	1988	37.29
37.28		2001	88.72
37.20		2001	00.72
37.34		1988	37.33
37.35		1997	37.33
37.51		2003	37.5
37.52		2003	37.62
37.53		2003	37.63
37.54		2003	37.63
37.65		1995	37.62
37.66		1995	37.62
37.67		1998	37.4
37.70	(Leads only)	1987	37.70 (Leads/Device)
	72 (Leads only)	1987	37.74 (Leads/Device)
37.71-37.	(Leads only)	1987	37.74 (Leads/Device) 37.73 (Leads/Device)
37.74	(Leads only)	1987	37.76 (Leads/Device)
	( <i></i>	45	(2000) 201100)
		47	

	<u>Effective</u>	
Current code(s) assignment	October 1	Previous code(s) assignment
37.75 (Leads only)	1987	37.89 (Leads/Device)
37.75 (Leads only) 37.76 (Leads only)	1987	37.89 (Leads/Device) 37.81 (Leads/Device)
37.77 (Leads only) 37.77 (Leads only)	1987	37.83 (Leads/Device) 37.83-37.84 (Leads/Device)
37.77 (Ecads offly) 37.78	1987	37.71-37.72
37.79	1987	86.09
31.17	1707	89.49
37.80-37.87	1992	(Code deleted, this procedure is included in the code for pacemaker insertion/replacement)
37.80 (Device only)	1987	37.73-37.77 (Leads/Device)
37.81 (Device only)	1987	37.73-37.77 (Leads/Device)
37.82 (Device only)	1987	37.73-37.77 (Leads/Device)
37.83 (Device only)	1987	37.73-37.77 (Leads/Device)
37.85-37.87	1987	37.85
37.89	1987	37.86 + 37.89
37.94-37.98	1986	37.99
38.22	1986	38.29
38.44 (Abdominal Aorta Only)	1986	38.44 (Entire Aorta)
38.45 (Thoracic Aorta Added)	1986	38.44-38.45
38.95	1989	38.93
39.28	1991	39.29
39.50	1995	39.59
39.65	1988	39.61
39.66	1990	39.65
39.71	2000	39.52
39.72 39.79	2002 2000	39.79
39.79	2000 1996	39.52 39.50
39.90	1990	39.30
41.00-41.03	1988	41.0
41.04	1994	99.79
41.05	1997	None
41.06	1997	None
41.07	2000	41.04
41.08	2000	41.05
41.09	2000	41.01
42.25	1988	42.24
42.33	1989	42.32, 42.39
42.33	1990	42.91
42.11	1000	42.1
43.11	1989	43.1
43.19	1989	43.1, 43.2
43.41	1989	43.41, 43.49

Current code(s) assignment	Effective October 1	Previous code(s) assignment
44.21	1097	44.2
44.21 44.22	1986 1986	44.2 44.99
44.22		44.99
44.32	1986 2001	44.2
44.43	1989	43.49,45.32
44.44	1989	38.86
44.49	1989	43.0
44.93-44.94	1986	44.99
45.16	1988	45.14 (45.15 before 1987)
45.30	1989	45.31,45.32
45.42	1988	45.41
45.43	1989	45.49
45.75 (Hartmann Resection Added)	1988	48.66 (Code deleted)
45.95	1987	45.93
43.73	1707	43.73
46.13	1992	46.12 (Code deleted)
46.32	1989	46.39
46.85	1989	46.99
46.97	2000	46.99
47.01	1996	47.0
47.09	1996	47.0
47.11	1996	47.1
47.19	1996	47.1
48.36	1995	45.42
40.04	4000	40.2
49.31	1989	49.3
49.39	1989	49.3
49.75	2002	49.79
49.76	2002	49.79
47.70	2002	49.19
51.10	1989	51.97
51.11	1989	51.11,51.97
51.14	1989	51.12
51.15	1989	51.97
51.21	1996	51.22, 51.23
51.22	1991	51.21 (Code deleted),51.22
51.23	1991	51.22 (Code deleted),51.22
51.24	1996	51.22, 51.23
51.64	1989	51.69
51.84-51.88	1989	51.97
51.97	1986	52.91,51.99, or 51.82
51.98	1986	51.99
	-, -0	
52.13	1989	51.97,52.91
	47	•

Current code(s) assignment	Effective October 1	Previous code(s) assignment
52.14	1989	52.11
52.21	1989	52.2
52.22	1989	52.2
52.84	1996	99.29
52.85	1996	99.29
52.86	1996	99.29
52.93	1989	52.93 + 52.91
52.94	1989	52.09
52.97	1989	52.91
52.98	1989	52.91
52.99	1989	52.93, 52.94, 52.99
54.24	1987	54.23
54.25	1993	54.98
54.51	1996	54.5
54.59	1996	54.5
55.03-55.04	1986	55.02
56.33-56.34	1987	56.33
56.35	1987	45.12
57.17-57.18	1989	57.21
57.22	1989	57.22,57.82
58.31	1990	58.3
58.39	1990	58.3
58.93	1986	57.99
59.03	1996	59.02
59.12	1996	59.11
59.72	1995	59.79
59.96	1986	59.95
60.21	1995	60.2
60.29	1995	60.2
60.95	1991	60.99
60.96	2000	60.29
60.97	2000	60.29
64.97	1986	64.95
65.01	1996	65.0
65.09	1996	65.0
65.13	1996	65.12
65.14	1996	65.19
65.23	1996	65.21
	48	

Current code(s) assignment	Effective October 1	Previous code(s) assignment
65.24	1996	65.22
65.25	1996	65.29
65.31	1996	65.3
65.39	1996	65.3
65.41	1996	65.4
65.49	1996	65.4
65.53	1996	65.51
65.54	1996	65.52
65.63	1996	65.61
65.64	1996	65.62
65.74	1996	65.71
65.75	1996	65.72
65.76	1996	65.73
65.81	1996	65.8
65.89	1996	65.8
66.01	1992	66.0
66.02	1992	66.73
67.51	2001	67.5
67.59	2001	67.5
68.15	1987	68.14
68.16	1987	68.13
68.23	1996	68.29
68.31	2003	68.3
68.39	2003	68.3
68.51	1996	68.5
68.59	1996	68.5
68.9	1992	68.4
74.3	1992	69.11 (Code deleted)
75.37	1998	99.29
75.38	2001	75.34
73.36	2001	75.54
77.56	1989	77.89,78.49,81.18
77.57	1989	77.89,80.48,81.18,83.85
77.58	1989	77.59,81.18
77.50	1707	77.55,01.10
78.10	1991	78.40
78.11	1991	78.41
78.12	1991	78.42
78.13	1991	78.43
78.14	1991	78.44
78.15	1991	78.45
78.16	1991	78.46
	49	

Current code(s) assignment	Effective October 1	Previous code(s) assignment
78.17	1991	78.47
78.18	1991	78.48
78.19	1991	78.49
78.20	1991	78.10,78.20,78.30
78.21	1991	78.11,78.31
78.22	1991	78.12,78.22,78.32
78.23	1991	78.13,78.23,78.33
78.24	1991	78.14,78.34
78.25	1991	78.15,78.25,78.35
78.27	1991	78.17,78.27,78.37
78.28	1991	78.18,78.38
78.29	1991	78.11,78.16,78.19,78.29,78.39
78.39	1991	78.31
78.90**	1987	78.40
78.91**	1987	78.41
78.92**	1987	78.42
78.93**	1987	78.43
78.94**	1987	78.44
78.95**	1987	78.45
78.96**	1987	78.46
78.97**	1987	78.47
78.98**	1987	78.48
78.99**	1987	78.49
80.50-80.59	1986	80.5
81.03	1989	81.02
81.04-81.05	1989	81.03,81.04,81.05
81.06-81.07	1989	81.06,81.07
81.08	1989	81.06,81.07,81.08
81.09	1989	81.08
81.30	2001	81.09
81.31	2001	81.09
81.32	2001	81.09
81.33	2001	81.09
81.34	2001	81.09
81.35	2001	81.09
81.36	2001	81.09
81.37	2001	81.09
81.38	2001	81.09
81.39	2001	81.09
81.40	1989	81.69
81.51	1989	81.51,81.59

Current code(s) assignment	Effective October 1	Previous code(s) assignment
81.52	1989	81.61,81.62,81.63,81.64
81.53	1989	81.51,81.59,81.61,81.62, 81.63,81.64
81.54-81.55	1989	81.41 (Code deleted)
81.56	1989	81.48
81.57	1989	81.31,81.39
81.59	1989	81.39
01.37	1707	01.37
81.61	2002	81.00-81.08,81.30-81.39
81.62	2003	None
81.63	2003	None
81.64	2003	None
81.72	1989	81.79
81.73-81.74	1989	81.86 (Code deleted)
81.75	1989	81.87 (Code deleted)
81.79	1989	81.79,81.87
81.80	1989	81.81
81.97	1992	81.59
84.51	2002	None
84.52	2002	None
85.95	1987	85.99
85.96	1987	85.99
86.06	1987	86.09
86.07	1990	86.09
86.27	1986	86.22-86.23
86.28	1988	86.22
86.67	1998	86.65
86.93	1987	86.89
00.00	4004	00.00
88.90	1986	88.39
88.91	1986	89.15
88.92	1986	89.39
88.93	1986	89.15
88.94	1986	89.39
88.95	1986	89.29
88.96	2002	88.91-88.97
88.97	1989	88.99
88.98	1989	88.90
88.99	1986	89.39
89.10	1989	89.15
89.10 89.17-89.18	1989	89.15 89.15
89.17-89.18 89.19	1988	89.15
89.50	1989	89.13 89.54
07.50	1991	07.07

	<u>Effective</u>						
Current code(s) assignment	October 1	Previous code(s) assignment					
89.60	2002	89.65					
92.3	1995	01.59, 04.07, 07.63, 07.68					
92.30	1998	92.3					
92.31	1998	92.3					
92.32	1998	92.3					
92.33	1998	92.3					
92.39	1998	92.3					
93.90	1988	93.92					
94.61-94.69	1989	94.25					
96.29	1998	96.39					
96.6	1986	96.35					
96.70	1991	93.92 (Code deleted)					
96.71	1991	93.92 (Code deleted)					
96.72	1991	93.92 (Code deleted)					
		,					
97.05	1989	51.97					
97.44	2001	37.64					
98.51-98.52	1989	59.96 (Code deleted)					
98.59	1989	59.96 (Code deleted)					
		,					
99.00	1995	99.02					
99.10	1998	99.29					
99.15	1986	99.29					
99.20	1998	99.29					
99.28	1994	99.25					
99.71- 99.79***	1988	99.07					
99.75	2000	99.29					
99.76	2002	99.79					
99.77	2002	None					
99.85	1987	93.35					
99.86	1987	93.39					
99.88	1988	99.83					
	. • •						

<sup>\*</sup>Before October 1986 contents of current code 36.05 would have been assigned to 36.0.

\*\*Codes 78.90-78.99 were retitled as "Insertion of bone growth stimulator" in October 1987; the previous contents of codes 78.90-78.99 were reassigned to codes 78.40-78.49.

\*\*\*Codes 99.71-99.79 were deleted in October 1987; their contents were not transferred elsewhere. In the October 1988 revision, codes 99.71-99.79 were reclassified as "Therapeutic apheresis." Codes 99.75-99.78 have not yet been reassigned.

#### **APPENDIX C**

This appendix provides estimates of the civilian population of the United States as of July 1, 2004. These figures are based on the results of the 2000 Census and were obtained from the U.S. Bureau of the Census, Population Division. All estimates are rounded to thousands.

Three tables are provided:

- TABLE 1: Civilian population of the United States, by sex, selected age groups, race, and geographic region
- TABLE 2: Civilian population of the United States, by sex, 5-year age groups, and geographic region
- TABLE 3: Civilian population of the United States by sex, single-year age groups, and race

In 1997, the Federal Office of Management and Budget (OMB) revised standards that regulated how the Federal government would collect and report data on race and ethnicity in the 2000 Census. In addition to changes in some of the racial categories previously reported, it also permitted respondents to self-identify with more than one racial group. The goal was to improve the accuracy of information on racial diversity in the United States.

The major implication of the new Federal guidelines is that Census 2000 race data are not directly comparable with race data from the 1990 or earlier censuses. A number of new tabulations of racial categories are now available, but the National Hospital Discharge Survey utilizes tabulations based on six race-alone and one multiple race categorization. The six single race-alone groups are White, African-American, American Indian and Alaskan Native, Asian, Native Hawaiian and Other Pacific Islander, and Some Other Race; and the multiple-race category groups together all respondents who identified with two or more races. These categories are mutually exclusive and when summed together add to 100 percent of the US population.

It is not known to what extent these groupings differ from earlier ones where no attempt was made to identify respondents with multi-racial backgrounds. Census cautions that direct comparisons of racial categories from the 1990's to 2000 can not be made, and recommends that the data user decide whether the single race-alone estimate is appropriate for their analysis.

The Census population tables provided in the NHDS data file documentation contain groupings for three primary racial groups: White, Black/African American, and All Other Races. The reason for this is simply that NHDS statistics based on the smaller racial groups (e.g. Asian, American Indian/Alaskan Native, and Native Hawaiian/Other Pacific Islander) often do not meet NCHS standards for reliability of published estimates. Calculating rates with NHDS data by race is complicated by the fact that there is substantial underreporting of race in the survey (27% nonresponse in 2004). Extreme caution should be exercised when using NHDS race data, especially when reporting population-based utilization rates.

The OMB standards discussed above do not apply to how hospitals record patient information in medical records, the source document for the NHDS. As a result, reporting of multiple races in the NHDS is almost non-existent. For the 2004 NHDS, 92 of the 371,000 sample records had more than one race marked and all of these records were from hospitals using the manual data collection method.

TABLE 1: Civilian population of the United States, by sex, age, race, and geographic region: July 1, 2004. Source: U.S. Bureau of the Census, Population Division.

#### **Estimates in thousands**

	Total	Male	Female		Total	Male	Female
All ages	292,414	143,480	148,934	15 to 44 years	124,644	62,789	61,855
White	235,128	116,019	119,109	Northeast	22,782	11,378	11,404
Black/AfAm	37,270	17,696	19,575	Midwest	27,803	14,034	13,768
Other	20,016	9,766	10,250	South	44,793	22,425	22,368
				West	29,266	14,952	14,315
Northeast	54,515	26,423	28,091				
Midwest	65,641	32,231	33,409	45 to 64 years	70,655	34,415	36,240
South	105,223	51,445	53,778	45 to 54 years	41,578	20,417	21,161
West	67,036	33,381	33,655	55 to 64 years	29,077	13,998	15,079
Under 15							
years	60,822	31,123	29,699	White	58,872	28,986	29,886
Under 1 year	4,077	2,085		Black/AfAm	7,718	3,519	4,199
1 to 4 years	15,994	8,178	7,817	Other	4,065	1,910	2,155
5 to 14 years	40,751	20,860	19,890				
				Northeast	13,728	6,623	7,104
White	46,443	23,820	22,624	Midwest	16,071	7,887	8,184
Black/AfAm	9,414	4,778	4,636	South	25,270	12,235	13,035
Other	4,965	2,526	2,439	West	15,586	7,670	7,916
				65 years and			
Northeast	10,584	5,414	5,170	over	36,294	15,154	21,140
Midwest	13,384	6,851	6,533	65 to 74 years	18,463	8,428	10,036
South	22,098	11,300	10,798	75 to 84 years	12,971	5,218	7,753
West	14,755	7,558	7,197	85 years and over	4,860	1,508	3,352
45 to 44 veers	104 (44	(0.700	/4.055	White	24 770	40.050	10.41/
15 to 44 years	124,644	62,789			31,770	13,353	18,416
15 to 24 years	41,184	21,007		Black/AfAm	3,047	1,168	1,879
25 to 34 years	39,599	19,967	· ·	Other	1,477	633	845
35 to 44 years	43,860	21,814	22,046	Nouthood	7 404	0.000	4 440
\	00.04:	40.07	40.400	Northeast	7,421	3,008	4,413
White	98,044	49,861		Midwest	8,383	3,459	4,923
Black/AfAm	17,091	8,231	=	South	13,061	5,484	7,577
Other	9,509	4,697	4,812	West	7,428	3,202	4,227

<sup>\*</sup>The NHDS used the civilian noninstitutionalized population to calculate hospital utilization rates from 1965 through 1980. Beginning in 1981, the civilian resident population has been used to calculate rates. If you have NHDS data files for years before 1981 and used the civilian noninstitutionalized population provided in the documentation to calculate rates, these rates will have to be adjusted to be comparable to 2000 rates using the civilian resident population.

TABLE 2: Civilian population of the United States by sex, age, and geographic region: July 1, 2004. Source: U.S. Bureau of the Census, Population Division.

		Estimates in thousands													
	UNITED STATES			NORTH EAST			MIDWEST			SOUTH			WEST		
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
AII	292,414	143,480	148,934	54,515	26,423	28,091	65,641	32,231	33,409	105,223	51,445	53,778	67,036	33,381	33,655
0-4	20,071	10,263	9,808	3,388	1,731	1,657	4,322	2,212	2,110	7,464	3,811	3,653	4,897	2,508	2,389
5-9	19,606	10,029	9,576	3,414	1,746	1,669	4,344	2,221	2,123	7,087	3,626	3,461	4,760	2,436	2,324
10-14	21,145	10,831	10,314	3,781	1,937	1,844	4,718	2,418	2,301	7,547	3,863	3,684	5,098	2,613	2,485
15-19	20,640	10,561	10,079	3,712	1,900	1,811	4,730	2,421	2,308	7,374	3,770	3,604	4,824	2,469	2,355
20-24	20,544	10,446	10,098	3,599	1,826	1,773	4,743	2,413	2,330	7,405	3,752	3,653	4,797	2,456	2,342
25-29	19,306	9,780	9,526	3,333	1,668	1,664	4,249	2,156	2,093	7,018	3,525	3,493	4,706	2,430	2,275
30-34	20,293	10,187	10,106	3,640	1,799	1,841	4,369	2,199	2,170	7,370	3,670	3,701	4,914	2,519	2,395
35-39	20,898	10,434	10,464	4,047	1,994	2,053	4,553	2,281	2,273	7,443	3,684	3,759	4,854	2,476	2,379
40-44	22,962	11,380	11,582	4,452	2,190	2,262	5,158	2,564	2,594	8,182	4,024	4,158	5,170	2,602	2,568
45-49	22,091	10,890	11,201	4,285	2,098	2,186	5,078	2,517	2,561	7,810	3,824	3,985	4,919	2,450	2,469
50-54	19,487	9,527	9,960	3,756	1,822	1,934	4,477	2,211	2,267	6,893	3,345	3,548	4,361	2,150	2,211
55-59	16,488	8,000	8,488	3,226	1,545	1,681	3,692	1,805	1,887	5,946	2,873	3,072	3,625	1,777	1,848
60-64	12,589	5,998	6,591	2,461	1,158	1,304	2,824	1,354	1,470	4,622	2,193	2,429	2,682	1,294	1,389
65-59	9,956	4,633	5,324	1,865	854	1,010	2,233	1,040	1,193	3,762	1,750	2,012	2,096	989	1,108
70-74	8,507	3,795	4,712	1,660	722	939	1,894	829	1,066	3,199	1,432	1,767	1,753	812	941
75-79	7,411	3,099	4,312	1,586	652	934	1,742	737	1,005	2,635	1,100	1,535	1,447	610	837
80-84	5,560	2,120	3,441	1,199	447	753	1,298	492	807	1,913	722	1,191	1,150	459	690
0-14	60,822	31,123	29,698	10,583	5,414	5,170	13,384	6,851	6,534	22,098	11,300	10,798	14,755	7,557	7,198
15-44	124,643	62,788	61,855	22,783	11,377	11,404	27,802	14,034	13,768	44,792	22,425	22,368	29,265	14,952	14,314
45-64	70,655	34,415	36,240	13,728	6,623	7,105	16,071	7,887	8,185	25,271	12,235	13,034	15,587	7,671	7,917
15+	231,592	112,358	-	43,931	21,008	22,922	52,255	25,381	26,877	83,124	40,145	42,979	52,280	25,825	26,457
45+	106,949	49,570	57,381	21,148	9,631	11,518	24,453	11,347	13,109	38,332	17,720	20,611	23,015	10,873	12,143
65+	36,294	15,155	21,141	7,420	3,008	4,413	8,382	3,460	4,924	13,061	5,485	7,577	7,428	3,202	4,226
75+	17,831	6,727	11,105	3,895	1,432	2,464	4,255	1,591	2,665	6,100	2,303	3,798	3,579	1,401	2,177
85+	4,860	1,508	3,352	1,110	333	777	1,215	362	853	1,552	481	1,072	982	332	650

TABLE 3: Civilian Population of the United States by sex, age, and race: July 1, 2004. Source: U.S. Bureau of the Census, Population Division.

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	Estimates in thousand						ands	d s				
		ALL RACES			WHITE			BLACK			OTHER	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
ALL AGES	292,414	143,480	148,934	235,128	116,019	119,109	37,270	17,696	19,575	20,016	9,766	10,250
0-4	20,071	10,263	9,808	15,345	7,859	7,486	3,029	1,537	1,492	1,697	867	830
0	4,077	2,085	1,992	3,116	1,595	1,521	612	312	301	348	178	170
1	4,038	2,065	1,973	3,088	1,581	1,507	605	307	298	344	176	168
2	3,998	2,043	1,955	3,060	1,566	1,493	604	306	298	334	171	164
3	4,051	2,069	1,981	3,096	1,584	1,511	619	314	306	336	171	164
4	3,907	2,000	1,907	2,985	1,532	1,453	588	298	289	335	170	165
5-9	19,606	10,029	9,576	14,973	7,682	7,291	2,979	1,512	1,466	1,654	835	819
5	3,852	1,969	1,882	2,941	1,508	1,432	577	293	284	334	168	166
6	3,863	1,976	1,887	2,945	1,511	1,434	586	298	288	332	167	165
7	3,889	1,987	1,902	2,970	1,522	1,448	589	299	290	330	166	164
8	3,963	2,028	1,935	3,032	1,556	1,476	599	304	295	331	167	164
9	4,039	2,069	1,970	3,085	1,584	1,501	628	319	309	326	166	161
10-14	21,145	10,831	10,314	16,125	8,278	7,847	3,407	1,729	1,678	1,614	824	790
10	4,074	2,086	1,988	3,101	1,592	1,509	649	329	320	324	165	159
11	4,158	2,132	2,027	3,163	1,625	1,538	673	343	331	322	164	158
12	4,242	2,171	2,072	3,235	1,659	1,576	684	346	337	324	165	159
13	4,296	2,200	2,096	3,281	1,684	1,597	694	352	341	321	164	157
14	4,375	2,243	2,132	3,344	1,719	1,626	707	359	349	323	166	158
15-19	20,640	10,561	10,079	15,947	8,181	7,765	3,169	1,602	1,566	1,525	777	748
15	4,212	2,158	2,054	3,228	1,657	1,571	669	340	330	314	161	153
16	4,144	2,123	2,021	3,191	1,639	1,552	645	327	318	307	157	150
17	4,098	2,100	1,999	3,170	1,629	1,541	628	318	310	301	153	147
18	4,101	2,099	2,002	3,180	1,632	1,548	619	313	306	302	154	148
19	4,084	2,081	2,003	3,177	1,624	1,553	607	305	302	301	152	149
20-24	20,544	10,446	10,098	15,991	8,182	7,809	2,984	1,478	1,505	1,569	786	783
20	3,994	2,036	1,957	3,104	1,589	1,516	589	296	293	300	151	149
21	4,072	2,080	1,993	3,172	1,627	1,545	594	298	295	307	154	152
22	4,118	2,096	2,021	3,206	1,643	1,564	597	296	301	314	158	157
23	4,179	2,115	2,064	3,256	1,661	1,595	600	293	307	323	161	162
24	4,181	2,119	2,063	3,253	1,663	1,590	604	294	310	325	161	163
25-29	19,306	9,780	9,526	15,045	7,719	7,326	2,649	1,267	1,382	1,612	794	817
25	3,989	2,026	1,963	3,104	1,594	1,511	567	274	293	317	158	160
26	3,879	1,969	1,910	3,031	1,556	1,475	536	258	278	312	154	158
27	3,834	1,942	1,892	2,990	1,535	1,456	526	251	275	318	157	161
28	3,744	1,894	1,850	2,914	1,495	1,420	505	240	265	325	160	165
29	3,860	1,949	1,911	3,005	1,539	1,466	515	244	272	340	167	173
30-34	20,293	10,187	10,106	15,868	8,070	7,798	2,688	1,265	1,424	1,738	852	885
30	3,756	1,891	1,865	2,918	1,489	1,429	499	235	264	339	166	172
31	3,853	1,934	1,919	2,986	1,518	1,467	520	245	275	348	171	177
32	4,044	2,029	2,015	3,154	1,603	1,551	539	253	285	351	172	179
33	4,276	2,138	2,138	3,364	1,704	1,660	562	263	299	349	171	178
34	4,365	2,195	2,170	3,446	1,755	1,691	568	268	300	351	172	179

	ALL WHITE				BLACK			OTHER				
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
35-39	20,898	10,434	10,464	16,619	8,400	8,220	2,717	1,273	1,444	1,561	761	800
35	4,125	2,067	2,058	3,273	1,660	1,612	524	246	277	328	160	168
36	4,052	2,026	2,026	3,209	1,625	1,584	527	247	280	315	154	162
37	4,063	2,024	2,039	3,239	1,634	1,605	525	245	280	299	145	154
38	4,182	2,085	2,097	3,325	1,678	1,648	552	259	294	304	148	156
39	4,476	2,232	2,244	3,573	1,803	1,770	589	276	313	314	154	161
40-44	22,962	11,380	11,582	18,574	9,309	9,265	2,885	1,346	1,539	1,504	726	778
40	4,551	2,259	2,292	3,656	1,836	1,820	582	272	311	313	152	161
41	4,542	2,249	2,292	3,660	1,832	1,828	573	267	306	309	150	159
42	4,560	2,260	2,300	3,699	1,853	1,846	568	265	303	293	142	151
43	4,611	2,279	2,332	3,754	1,877	1,877	569	264	304	288	138	151
44	4,698	2,333	2,365	3,805	1,911	1,894	593	278	315	300	144	156
45-49	22,091	10,890	11,201	18,074	9,010	9,064	2,658	1,236	1,422	1,359	644	714
45	4,510	2,227	2,282	3,675	1,835	1,839	556	259	297	280	133	147
46	4,514	2,230	2,284	3,690	1,842	1,848	545	255	290	279	134	146
47	4,463	2,197	2,266	3,656	1,820	1,836	537	249	288	270	128	142
48	4,291	2,109	2,182	3,516	1,749	1,767	511	236	274	265	124	140
49	4,312	2,126	2,186	3,538	1,764	1,774	510	237	273	265	125	139
50-54	19,487	9,527	9,960	16,131	7,979	8,152	2,198	1,007	1,191	1,158	542	617
50	4,127	2,022	2,105	3,404	1,687	1,717	475	219	257	247	116	131
51	3,992	1,953	2,040	3,307	1,635	1,671	447	205	242	238	112	126
52	3,860	1,888	1,972	3,206	1,588	1,619	427	195	233	226	106	120
53	3,760	1,834	1,926	3,118	1,539	1,579	423	193	230	219	102	117
54	3,748	1,830	1,917	3,095	1,529	1,566	424	195	230	228	106	122
55-59	16,488	8,000	8,488	13,927	6,829	7,097	1,656	748	908	905	423	482
55	3,603	1,753	1,850	3,007	1,480	1,527	387	176	211	209	97	111
56	3,571	1,737	1,835	3,009	1,479	1,530	364	166	199	198	92	106
57	3,744	1,821	1,923	3,210	1,577	1,634	345	156	189	189	88	100
58	2,790	1,348	1,442	2,353	1,149	1,203	280	125	155	158	74	84
59	2,779	1,340	1,439	2,348	1,145	1,203	279	124	155	152	71	81
60-64	12,589	5,998	6,591	10,740	5,168	5,572	1,206	528	678	643	301	341
60	2,734	1,313	1,422	2,329	1,129	1,200	263	117	146	143	67	76
61	2,824	1,352	1,472	2,428	1,174	1,254	260	115	146	135	64	72
62	2,488	1,184	1,304	2,125	1,022	1,104	235	103	133	127	60	68
63	2,305	1,092	1,213	1,962	939	1,023	223	97	127	120	56	64
64	2,238	1,057	1,181	1,895	904	991	225	97	127	118	56	62
65-69	9,956	4,633	5,324	8,508	3,999	4,509	957	408	550	491	226	265
65	2,123	1,001	1,122	1,814	863	950	202	87	115	107	51	56
66	2,076	972	1,104	1,773	839	934	199	85	114	104	48	56
67	1,949	907	1,042	1,665	782	882	187	80	107	97	45	52
68	1,907	881	1,026	1,629	761	868	185	78	107	93	42	51
69 70.74	1,902	872	1,030	1,628	754	874	184	77	106	90	40	50
70-74	8,507	3,795	4,712	7,373	3,326	4,047	756	305	450	378	163	215
70 74	1,733	788	945	1,486	683	803	165	68	96	82	36	46
71 70	1,726	777	949	1,486	677	809	161	66	95	80	35	45
72 72	1,696	758	939	1,473	665	808	149	60	89	74 74	32	42
73 74	1,670	738	932	1,461	653	808	138	55	83	71 74	30	41
74	1,681	734	947	1,467	648	820	143	56	87	71	30	41

	ALL RACES				WHITE			BLACK			OTHER	
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
75-79	7,411	3,099	4,312	6,545	2,765	3,780	584	217	367	282	117	165
75	1,572	679	894	1,381	603	778	128	49	79	64	27	37
76	1,551	660	891	1,368	588	779	123	46	77	61	25	35
77	1,491	625	867	1,319	558	760	117	43	73	56	23	33
78	1,414	580	834	1,251	518	733	111	41	70	52	21	31
79	1,382	555	826	1,225	496	729	107	38	68	50	21	29
80-84	5,560	2,120	3,441	4,977	1,907	3,070	399	138	262	184	75	109
80	1,290	508	782	1,151	456	694	95	34	61	45	18	26
81	1,187	462	725	1,059	414	645	87	31	56	40	17	24
82	1,121	427	693	1,005	385	620	79	27	52	37	15	22
83	1,029	384	645	928	348	580	69	23	46	32	13	19
84	933	338	595	835	304	531	69	22	46	30	12	18
85-89	3,079	1,035	2,044	2,778	937	1,841	210	64	146	91	34	57
85	774	273	501	695	246	449	55	18	37	24	9	15
86	714	247	467	646	225	421	47	15	33	21	8	13
87	602	201	400	543	182	361	40	12	28	18	7	11
88	527	170	357	476	154	323	35	10	24	15	5	10
89	463	144	319	418	130	288	32	9	23	13	5	9
90-94	1,350	377	972	1,210	337	872	101	27	75	39	13	25
90	390	117	274	351	105	246	28	8	20	11	4	7
91	324	92	231	291	83	207	24	6	18	9	3	6
92	261	72	189	234	64	170	19	5	14	7	3	5
93	210	55	155	188	48	139	16	4	12	6	2	4
94	166	42	124	147	37	110	14	3	11	5	2	3
95-99	370	83	286	328	73	255	31	7	24	10	4	7
95	123	29	93	110	26	84	9	2	7	3	1	2
96	97	22	75	87	20	67	8	2	6	3	1	2
97	68	15	53	60	13	47	6	1	5	2	1	1
98	48	10	38	42	8	34	5	1	4	1	0	1
99	34	7	27	30	6	24	4	1	3	1	0	1
100+	61	12	49	50	9	41	8	2	6	3	1	2
0 to 14	60,822	31,123	29,699	46,443	23,820	22,624	9,414	4,778	4,636	4,965	2,526	2,439
15 to 44	124,644	62,789	61,855	98,044	49,861	48,183	17,091	8,231	8,860	9,509	4,697	4,812
45 to 64	70,655	34,415	36,240	58,872	28,986	29,886	7,718	3,519	4,199	4,065	1,910	2,155
15+	231,592	112,357	119,235	188,685	92,200	96,486	27,856	12,918	14,938	15,051	7,240	7,811
45+	106,949	49,568	57,380	90,641	42,339	48,302	10,765	4,686	6,079	5,542	2,543	2,999
65+	36,294	15,154	21,140	31,770	13,353	18,416	3,047	1,168	1,879	1,477	633	845
75+	17,831	6,726	11,104	15,888	6,028	9,860	1,334	455	879	608	243	365
85+	4,860	1,508	3,352	4,366	1,357	3,010	350	99	251	143	52	91
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### **APPENDIX D**

### **UNWEIGHTED FREQUENCIES FOR SELECTED VARIABLES**

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SURVEY YEAR			
2004	39,563	331,222	370,785
UNITS			
YEARS		322,599	322,599
MONTHS		5,555	5,555
DAYS	39,563	3,068	42,631
AGE			
U15 YEARS	39,563	27,450	67,013
15-44 YEARS		103,352	103,352
45-64 YEARS		79,680	79,680
65 YEARS &UP		120,740	120,740
SEX			
MALE	20,412	131,743	152,155
FEMALE	19,151	199,479	218,630
RACE			
WHITE	19,236	177,638	196,874
BLACK/AFRICAN AMERICAN	4,518	46,121	50,639
AMERICAN INDIAN//ALASKAN NATIVE	237	1,142	1,379
ASIAN	533	2,049	2,582
NATIVE HAWAIIAN/OTH PACIFIC ISLANDER	101	614	715
OTHER	2,744	14,049	16,793
MULTIPLE RACE	20	72	92
NOT STATED	12,174	89,537	101,711
MARSTAT			
MARRIED		54,514	54,514
SINGLE	39,563	36,578	76,141
WIDOWED		18,002	18,002
DIVORCED		8,092	8,092
SEPARATED		1,348	1,348
NOT STATED		212,688	212,688
DISCHARGE STATUS			
ROUTINE	38,314	254,376	292,690
LEFT AGAINST MEDICAL ADVICE	9	3,476	3,485
SHORT-TERM TRANSFER	406	9,130	9,536
LONG-TERM TRANSFER	18	29,228	29,246
ALIVE, OTHER	444	23,597	24,041
DEAD	143	7,264	7,407
NOT STATED	229	4,151	4,380
LOSFLAG			
LESS THAN 1 DAY	315	5,750	6,065
ONE DAY OR MORE	39,248	325,472	364,720

	NEWBORN INFANTS	NON-NEWBORNS 1	TOTAL SAMPLE
REGION			
NORTHEAST	7,964	79,988	87,952
MIDWEST	9,895	89,806	99,701
SOUTH	14,261	119,951	134,212
WEST	7,443	41,477	48,920
BEDSIZE			
6-99	3,529	39,503	43,032
100-199	8,271	73,210	81,481
200-299	11,196	82,875	94,071
300-499	11,829	93,540	105,369
500&UP	4,738	42,094	46,832
OWNERSHIP		24.422	
PROPRIETARY	4,307	34,438	38,745
GOVERNMENT	2,995	26,689	29,684
NOT FOR PROFIT	32,261	270,095	302,356
PRINCIPAL EXPECTED SOURCE OF PA		1 720	1 722
WORKER'S COMPENSATION MEDICARE	2	1,730	1,732
MEDICARE		125,425 51,563	125,432
OTHER GOVERNMENT PAYMENT	13,546 384	3,883	65,109
BLUE CROSS/BLUE SHIELD	5,634	32,179	4,267 37,813
HMO/PPO	11,397	55,341	66,738
OTHER PRIVATE/COMMERCIAL INSUR	•	31,972	36,917
SELF PAY	1,497	13,600	15,097
NO CHARGE	10	1,867	1,877
OTHER	1,660	9,764	11,424
SOURCE NOT STATED	481	3,898	4,379
DISCHARGE MONTH	101	0,000	1,070
JANUARY	3,252	28,194	31,446
FEBRUARY	3,088	27,095	30,183
MARCH	3,262	29,194	32,456
APRIL	3,223	28,094	31,317
MAY	3,415	27,837	31,252
JUNE	3,261	27,440	30,701
JULY	3,527	27,678	31,205
AUGUST	3,378	27,309	30,687
SEPTEMBER	3,336	27,333	30,669
OCTOBER	3,401	27,345	30,746
NOVEMBER	3,117	26,197	29,314
DECEMBER	3,303	27,506	30,809
TYPE OF ADMISSION			
EMERGENCY		149,092	149,092
URGENT		74,601	74,601
ELECTIVE		83,489	83,489
NEWBORN	39,563		39,563
NOT STATED		24,040	24,040

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SOURCE OF ADMISSION			
PHYSICIAN REFERRAL		107,965	107,965
CLINICAL REFERRAL		5,218	5,218
HMO REFERRAL		1,423	1,423
TRANSFER FROM HOSPITAL		11,327	11,327
TRANSFER FROM SNF		2,040	2,040
TRANSFER FROM OTHER		2,848	2,848
EMERGENCY ROOM		145,236	145,236
COURT/LAW ENFORCEMENT		695	695
OTHER	39,563	4,280	43,843
NOT AVAILABLE		50,190	50,190
FIRST-LISTED DIAGNOSIS CHAPTER			
CHAPTER 01		9,544	9,544
CHAPTER 02		16,847	16,847
CHAPTER 03		16,575	16,575
CHAPTER 04		4,514	4,514
CHAPTER 05		22,239	22,239
CHAPTER 06		5,753	5,753
CHAPTER 07		61,339	61,339
CHAPTER 08		32,174	32,174
CHAPTER 09		32,967	32,967
CHAPTER 10		17,471	17,471
CHAPTER 11		4,976	4,976
CHAPTER 12		6,809	6,809
CHAPTER 13		18,656	18,656
CHAPTER 14		2,369	2,369
CHAPTER 15		2,146	2,146
CHAPTER 16		1,889	1,889
CHAPTER 17		26,600	26,600
V-CODES	39,563	48,354	87,917

### WEIGHTED FREQUENCIES FOR SELECTED VARIABLES

	NEWBORN INFANTS	NON- NEWBORNS	TOTAL SAMPLE
SURVEY YEAR			
2004	3,907,910	34,864,166	38,772,076
UNITS			
YEARS		34,022,088	34,022,088
MONTHS		556,944	556,944
DAYS	3,907,910	285,134	4,193,044
AGE			
U15 YEARS	3,907,910	2,570,979	6,478,889
15-44 YEARS		10,799,996	10,799,996
45-64 YEARS		8,322,634	8,322,634
65 YEARS &UP		13,170,557	13,170,557
SEX			
MALE	2,019,522	13,844,420	15,863,942
FEMALE	1,888,388	21,019,746	22,908,134
RACE			
WHITE	2,089,360	20,979,123	23,068,483
BLACK/AFRICAN AMERICAN	426,950	4,118,156	4,545,106
AMERICAN INDIAN//ALASKAN NATIVE	25,891	135,459	161,350
ASIAN	100,639	507,828	608,467
NATIVE HAWAIIAN/OTH PACIFIC ISLANDER	13,233	83,923	97,156
OTHER	131,971	770,505	902,476
MULTIPLE RACE	6,866	27,934	34,800
NOT STATED	1,113,000	8,241,238	9,354,238
MARSTAT			
MARRIED		9,617,100	9,617,100
SINGLE	3,907,910	6,804,829	10,712,739
WIDOWED		3,205,798	3,205,798
DIVORCED		1,442,657	1,442,657
SEPARATED		190,457	190,457
NOT STATED		13,603,325	13,603,325
DISCHARGE STATUS			
ROUTINE	3,766,674	26,714,697	30,481,371
LEFT AGAINST MEDICAL ADVICE	1,286	353,571	354,857
SHORT-TERM TRANSFER	54,781	1,554,819	1,609,600
LONG-TERM TRANSFER	1,650	3,103,506	3,105,156
ALIVE, OTHER	42,006	1,934,576	1,976,582
DEAD	14,284	801,927	816,211
NOT STATED	27,229	401,070	428,299
LOSFLAG			
LESS THAN 1 DAY	47,491	688,021	735,512
ONE DAY OR MORE	3,860,419	34,176,145	38,036,564

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
REGION		NON NEW BONNS	1017/12 07/11111 22
NORTHEAST	702,190	7,387,692	8,089,882
MIDWEST	802,719	7,680,065	8,482,784
SOUTH	1,403,084	13,238,977	14,642,061
WEST	999,917	6,557,432	7,557,349
BEDSIZE	,	, ,	, ,
6-99	748,499	8,200,202	8,948,701
100-199	971,858	8,754,119	9,725,977
200-299	765,321	6,931,426	7,696,747
300-499	928,024	6,907,748	7,835,772
500&UP	494,208	4,070,671	4,564,879
OWNERSHIP			
PROPRIETARY	566,623	4,441,659	5,008,282
GOVERNMENT	459,370	4,072,002	4,531,372
NOT FOR PROFIT	2,881,917	26,350,505	29,232,422
PRINCIPAL EXPTD SOURCE OF PAYM	MENT		
WORKER'S COMPENSATION	130	171,433	171,563
MEDICARE	348	13,751,077	13,751,425
MEDICAID	1,552,359	5,734,101	7,286,460
OTHER GOVERNMENT PAY	53,365	496,751	550,116
BLUE CROSS/BLUE SHIELD	499,254	3,132,536	3,631,790
HMO/PPO	982,178	5,252,548	6,234,726
OTHER PRIVATE/COMMERCIAL INS	441,150	3,272,593	3,713,743
SELF PAY	199,165	1,551,433	1,750,598
NO CHARGE	1,631	116,717	118,348
OTHER	111,198	783,127	894,325
SOURCE NOT STATED	67,132	601,850	668,982
DISCHARGE MONTH			
JANUARY	316,202	3,053,566	3,369,768
FEBRUARY	307,764	2,919,317	3,227,081
MARCH	308,554	3,138,551	3,447,105
APRIL	317,794	2,971,594	3,289,388
MAY	337,672	2,958,204	3,295,876
JUNE	321,502	2,886,997	3,208,499
JULY	350,114	2,867,654	3,217,768
AUGUST	330,585	2,859,686	3,190,271
SEPTEMBER	349,304	2,849,241	3,198,545
OCTOBER NOVEMBER	338,895	2,834,743	3,173,638
NOVEMBER	301,237	2,736,559	3,037,796
DECEMBER TYPE OF ADMISSION	328,287	2,788,054	3,116,341
TYPE OF ADMISSION		40 007 700	40 007 700
EMERGENCY	•	13,397,730	13,397,730
URGENT	•	8,954,011	8,954,011
ELECTIVE	. 007 040	8,379,251	8,379,251
NEWBORN NOT STATED	3,907,910	. 4 400 474	3,907,910
NOT STATED	•	4,133,174	4,133,174

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SOURCE OF ADMISSION			
PHYSICIAN REFERRAL	•	12,684,162	12,684,162
CLINICAL REFERRAL		818,378	818,378
HMO REFERRAL		136,714	136,714
TRANSFER FROM HOSPITAL		1,114,757	1,114,757
TRANSFER FROM SNF		283,672	283,672
TRANSFER FROM OTHER		263,897	263,897
EMERGENCY ROOM		14,194,833	14,194,833
COURT/LAW ENFORCEMENT		132,873	132,873
OTHER	3,907,910	565,603	4,473,513
NOT AVAILABLE		4,669,277	4,669,277
FIRST-LISTED DIAGNOSIS CHAPTER			
CHAPTER 01		948,577	948,577
CHAPTER 02		1,639,526	1,639,526
CHAPTER 03		1,752,506	1,752,506
CHAPTER 04		448,554	448,554
CHAPTER 05		2,311,087	2,311,087
CHAPTER 06		553,263	553,263
CHAPTER 07		6,363,298	6,363,298
CHAPTER 08		3,549,560	3,549,560
CHAPTER 09		3,580,419	3,580,419
CHAPTER 10		1,941,031	1,941,031
CHAPTER 11		522,672	522,672
CHAPTER 12		763,516	763,516
CHAPTER 13		1,920,487	1,920,487
CHAPTER 14		205,721	205,721
CHAPTER 15		203,252	203,252
CHAPTER 16		248,209	248,209
CHAPTER 17		2,844,647	2,844,647
V-CODES	3,907,910	5,067,851	8,975,761

### WEIGHTED FREQUENCIES FOR ALL-LISTED DIAGNOSES BY ICD-9-CM CHAPTERS

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL DIAGNOSES	8,626,358	169,989,068	178,615,426
CHAPTER 01	16,176	4,142,844	4,159,020
CHAPTER 02	12,970	4,531,699	4,544,669
CHAPTER 03	25,635	19,279,862	19,305,497
CHAPTER 04	7,574	5,050,936	5,058,510
CHAPTER 05	4,771	12,157,976	12,162,747
CHAPTER 06	11,464	3,873,281	3,884,745
CHAPTER 07	20,426	34,383,900	34,404,326
CHAPTER 08	12,085	11,854,884	11,866,969
CHAPTER 09	25,585	11,144,291	11,169,876
CHAPTER 10	34,080	8,641,778	8,675,858
CHAPTER 11		10,337,125	10,337,125
CHAPTER 12	26,007	2,511,406	2,537,413
CHAPTER 13	13,346	6,867,889	6,881,235
CHAPTER 14	274,672	730,113	1,004,785
CHAPTER 15	2,831,109	677,053	3,508,162
CHAPTER 16	75,732	8,835,713	8,911,445
CHAPTER 17	12,279	6,914,310	6,926,589
ECODES	9,581	4,472,199	4,481,780
VCODES	5,212,866	13,581,809	18,794,675
UNWEIGHTED FREQUENCI	ES FOR ALL-LISTE	D DIAGNOSES BY ICD	-9-CM CHAPTERS
ALL DIAGNOSES	92,926	1,650,267	1,743,193
CHAPTER 01	157	39,596	39,753
CHAPTER 02	137	45,994	46,131
CHAPTER 03	222	185,040	185,262
CHAPTER 04	63	48,940	49,003
CHAPTER 05	29	118,814	118,843
CHAPTER 06	122	37,361	37,483
CHAPTER 07	178	333,411	333,589
CHAPTER 08	119	114,041	114,160
CHAPTER 09	275	106,187	106,462
CHAPTER 10	394	82,370	82,764
CHAPTER 11		102,983	102,983
CHAPTER 12	291	24,783	25,074
CHAPTER 13	152	64,759	64,911
CHAPTER 14	2,947	8,611	11,558
CHAPTER 15	30,992	7,323	38,315
CHAPTER 16	807	94,202	95,009
CHAPTER 17	113	64,876	64,989
ECODES	61	32,274	32,335
VCODES	55,867	138,702	194,569

### WEIGHTED FREQUENCIES FOR ALL-LISTED PROCEDURES BY ICD-9-CM CHAPTERS

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL PROCEDURES	2,991,477	45,022,620	48,014,097
CHAPTER 00*	383	91,612	91,995
CHAPTER 01	22,407	1,290,634	1,313,041
CHAPTER 02	137	102,710	102,847
CHAPTER 03	636	71,324	71,960
CHAPTER 04	143	44,691	44,834
CHAPTER 05	4,937	308,572	313,509
CHAPTER 06	11,851	1,045,167	1,057,018
CHAPTER 07	122,080	6,993,253	7,115,333
CHAPTER 08	610	340,700	341,310
CHAPTER 09	12,128	5,823,568	5,835,696
CHAPTER 10	572	962,811	963,383
CHAPTER 11	1,161,201	241,606	1,402,807
CHAPTER 12	23	2,049,994	2,050,017
CHAPTER 13		6,971,479	6,971,479
CHAPTER 14	2,576	4,039,781	4,042,357
CHAPTER 15	9,749	1,497,752	1,507,501
CHAPTER 16	1,642,044	13,146,966	14,789,010
UNWEIGHTED FREQUENCIES	FOR ALL-LISTED P	ROCEDURES BY ICD	-9-CM CHAPTERS
ALL PROCEDURES	30,945	465,879	496,824
CHAPTER 00*	1	908	909
CHAPTER 01	260	13,708	13,968
CHAPTER 02	2	1,103	1,105
CHAPTER 03	4	710	714
CHAPTER 04	2	524	526
CHAPTER 05	39	2,830	2,869
CHAPTER 06	135	11,493	11,628
CHAPTER 07	1,204	75,032	76,236
CHAPTER 08	5	3,688	3,693
CHAPTER 09	111	57,783	57,894
CHAPTER 10	7	10,455	10,462
CHAPTER 11	12,584	2,291	14,875
CHAPTER 12	1	19,199	19,200
CHAPTER 13		70,176	70,176
CHAPTER 14	13	40,174	40,187
CHAPTER 15	93	14,300	14,393
CHAPTER 16	16,484	141,505	157,989

<sup>\*</sup> In 2002, the ICD-9-CM Coordination and Maintenance Committee created procedure Chapter 00 – Procedures and Interventions, Not Elsewhere Classified – as a way of handling space limitations in the existing hierarchical structure and alleviating inappropriate categorization of new procedures. Since October addendum changes are not implemented in the NHDS until the following data collection year, 2003 was the first year these codes were used.

### **APPENDIX E**

# **NHDS Medical Abstract Form**

Form HDS-1