NATIONAL HOSPITAL DISCHARGE SURVEY

2003

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 2003. 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;
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Appendix C provides population estimates to allow for the calculation of rates;
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I. DESCRIPTION OF THE NATIONAL HOSPITAL DISCHARGE SURVEY

Introduction. This document and its appendices contain information for users of the 2003 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: http://www.cdc.gov/nchs/about/major/hdasd/listpubs.htm .

History. 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

Source of the Data. 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 2003, the sample consisted of 501 hospitals. Of the 501 hospitals, 22 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 479 in-scope (eligible) hospitals, 426 hospitals responded to the survey.

Sample design and data collection. 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 59 percent of the responding hospitals.   The second was an automated method, used for approximately 41 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 2003, about 30 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.

Medical Coding and Edits. 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 which do not provide the exact date of admission and discharge.

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 2003 data is consistent with the ICD-9-CM and the addendum which became effective October 1, 2002. Addendum changes for 1986 through 2002 are listed in Appendix B. For more information about the ICD-9-CM visit: http://www.cdc.gov/nchs/icd9.htm .

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.

Population Estimates. Estimates of the civilian population of the United Stated as of July 1, 2003 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.

Confidentiality. 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

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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 2003, data for RACE were missing for 30 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.

Sampling errors and rounding of numbers.   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 2003 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 213,000. Using the applicable constants from Table 1 for estimates by age produces:

$$RSE(213,000) = SQRT(.02189 + (278.306/213,000))$$

$$RSE(213,000) = .152$$

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:

$$SE(213,000) = 213,000 * .152 = 32,376$$

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:

$$(213,000 - 2*32,376) \quad \text{<->} \quad (213,000 + 2*32,376)$$

$$148,248 \quad \text{<->} \quad 277,752$$

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<p<1), 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 2003 the estimated number of discharges from short-stay hospitals who were women was 20,864,000. This is 60.0 percent of the estimated 34,738,000 total discharges for that year. Using the applicable constants from Table 1 for estimates by sex produces:

$$RSE(.600) = SQRT(379.425 * (1 - .600) / (.600 * 34,738,000))$$

$$RSE(.600) = .00270$$

When multiplied by 100, the relative standard error for the estimate of interest becomes 0.270 percent. The standard error is obtained by multiplying the relative standard error by the estimate itself:

$$SE(.600) = .600 * .00270 = .0016$$

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:

$$(.600 - 2*.0016) \quad \text{<->} \quad (.600 + 2*.0016)$$

$$.597 \quad \text{<->} \quad .603$$

or, equivalently, **59.7% <-> 60.3%**

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 2003, the estimated number of days of care for inpatients with a first-listed diagnosis of septicemia (ICD-9-CM code 038) was 3,008,000. The estimated

number of discharges for inpatients with a first-listed diagnosis of septicemia was 366,000. The ALOS for inpatients with a first-listed diagnosis of septicemia was 3,008,000/366,000 = 8.2.

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(3,008,000) = .0590
RSE(366,000) = .0569

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

$$RSE(8.2) = SQRT\ (\ (.0590)^2 + (.0569)^2\ )$$

$$RSE(8.2) = .082$$

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

$$SE(8.2) = .0820 * 8.2 = .672$$

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:

$$(8.2 - 2*.672)\ <->\ (8.2 + 2*.672)$$

$$6.9\ <->\ 9.5$$

Table 1. Parameter values for generalized variance curves for National Hospital Discharge Survey aggregate statistics by statistic type: United States, 2003

CHARACTERISTIC	FIRST-LISTED DIAGNOSIS		DAYS OF CARE		ALL-LISTED DIAGNOSES		ALL-LISTED PROCEDURES	
	a	**b**	**a**	**b**	**a**	**b**	**a**	**b**
TOTAL	0.00200	452.978	0.00293	1673.967	0.00253	480.982	0.00441	334.517
SEX								
Male	0.00232	376.367	0.00380	1298.484	0.00242	394.744	0.00367	358.897
Female	0.00208	379.425	0.00297	1498.797	0.00253	422.645	0.00457	301.268
AGE GROUP								
Under 15 years	0.02189	278.306	0.03032	598.879	0.02389	195.334	0.03687	234.932
15-44 years	0.00239	376.555	0.00414	1192.920	0.00267	350.584	0.00367	348.640
45-64 years	0.00226	348.074	0.00413	1001.677	0.00319	368.179	0.00375	350.745
65 years and over	0.00222	389.142	0.00318	2159.324	0.00236	407.096	0.00377	304.945
REGION								
Northeast	0.00715	244.148	0.01073	645.904	0.01047	248.270	0.01304	259.453
Midwest	0.01311	234.991	0.01713	409.623	0.01548	231.947	0.03189	274.825
South	0.00403	441.502	0.00671	1354.720	0.00418	428.043	0.00662	363.179
West	0.00637	373.261	0.00975	1162.560	0.00749	380.663	0.01257	418.892
RACE								
White	0.00437	443.070	0.00603	1422.259	0.00443	475.790	0.00803	358.612
Black/African American	0.00498	277.525	0.00823	972.960	0.00830	350.864	0.00638	252.485
All other races	0.01889	200.899	0.03175	401.425	0.01629	248.842	0.02090	208.342
Race not stated	0.01646	271.767	0.01875	728.310	0.02194	343.522	0.01823	222.665
EXPECTED SOURCE OF PAYMENT								
Medicare	0.00239	412.282	0.00373	1927.395	0.00318	390.458	0.00393	344.614
Medicaid	0.00701	293.908	0.01176	593.015	0.00761	376.658	0.00889	314.056
Worker's compensation & other government payments	0.00673	393.816	0.01267	1374.019	0.01265	388.985	0.01237	343.506
HMO/PPO	0.00533	270.413	0.00785	717.123	0.00544	366.346	0.00693	262.613
BC/BS & other private insurance	0.00435	322.462	0.00714	906.562	0.00721	388.502	0.00717	319.949
Self pay	0.00468	324.665	0.00919	960.526	0.00541	352.580	0.00864	289.366
No charge and other	0.03379	201.206	0.04050	798.339	0.02985	208.230	0.03107	267.194

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.

Presentation of Estimates. 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, 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-by-month 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 2003 NHDS, 94 percent of the 426 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.

Diagnosis-Related Groups (DRGs). 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:

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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

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For more information about the NHDS, visit our website:
http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm

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:
listserv@cdc.gov

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II. TECHNICAL DESCRIPTION OF DATA FILE

Data Set Name	NHDS03.PU.TXT
Record Length	88
Number of Records	319,530

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.

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Item Number	Location	Number of Positions	Item description	Code description
1	1-2	2	Survey Year	03
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)

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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	*

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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 20.0
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

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*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

Hospitals: 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.

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

Discharge: 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.

Discharge rate: 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.

Days of care: 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.

Average length of stay: 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

Discharge diagnoses: 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).

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

First-listed diagnosis: 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.

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Procedure: 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

Age: Refers to the age of the patient on the birthday prior to admission to the hospital inpatient service.

Population: Civilian population is the resident population excluding members of the Armed Forces.

Geographic regions: 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 2003, 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 2003 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 2002. 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 2003, the ICD-9-CM with addendum changes up to October 1, 2002 was used; but for the last 3 months, the October 2003 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 2003 were converted back to their previous code assignments under the October 2002 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: http://www.cdc.gov/nchs/icd9.htm.

DIAGNOSIS CODES

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
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, 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

DIAGNOSIS CODES

Current code(s) assignment	Effective 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
079.88-079.89	1993	079.8
079.98-079.99	1993	079.9
082.40-082.41, 082.49	2000	082.8
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
204.21	1991	V10.61
204.80	1991	204.8
204.81	1991	V10.61
204.90	1991	204.9
204.91	1991	V10.61

DIAGNOSIS CODES

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
250.02	1993	250.90

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
256.31-256.39	2001	256.3
275.40-275.42	1997	275.4
275.49	1997	275.4
277.02-277.03,277.09	**2002**	**277.00**
277.7	2001	277.8
278.00-278.01	1995	278.0
283.10-283.11,283.19	1993	283.1
285.21-285.22,285.29	2000	285.8
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)

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
312.81-312.82, 312.89	1994	312.8
315.32	1996	315.39
320.81-320.89	1992	320.8
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
346.00-346.01	1992	346.0
346.10-346.11	1992	346.1
346.20-346.21	1992	346.2
346.80-346.81	1992	346.8
346.90-346.91	1992	346.9
355.71	1993	354.4
355.79	1993	355.7
357.81-357.82,357.89	**2002**	**357.8**
359.81,359.89	**2002**	**359.8**
365.83	**2002**	**365.89**
371.82	1992	371.89

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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**
414.12	**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

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
458.8	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
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
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
483.0	1992	483
483.1	1996	078.88 & 484.8
483.8	1992	483
491.20-491.21	1991	491.2

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
493.92	2000	493.90
494.0-494.1	2000	494
512.1	1994	997.3
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
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
530.81	1993	530.1
530.82-530.84, 530.89	1993	530.8
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**

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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
602.3	2001	602.8

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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 been changed,
making the fifth-digit subclassification, 665.12 and 665.14, invalid.

Current code(s) assignment	Effective October 1	Previous code(s) assignment
670.0	1991	670
672.0	1991	672
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

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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
727.83	2000	727.89
728.86	1995	729.4
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
753.10-753.17,753.19	1990	753.1
753.20-753.23	1996	753.2
753.29	1996	753.2
756.70-756.71	1997	756.7
756.79	1997	756.7
758.81	1996	758.8

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
758.89	1996	758.9
759.81-759.82	1989	759.8
759.83	1994	759.89
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**
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**
779.89	**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**
780.99	**2002**	**780.9**
781.8	1994	781.9
781.91-781.92	2000	781.9
781.93	**2002**	**723.5**

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
781.99	2000	781.9
783.21	2000	783.2
783.22	2000	783.4
783.40-783.43	2000	783.4
783.7	2000	783.4
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, 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
790.01, 790.09	2000	790.0
790.91	1993	790.9
790.92	1993	286.9
790.93, 790.99	1993	790.9
790.94	1997	790.99
792.5	2000	792.9
793.80-793.81, 793.89	2001	793.8
795.00-795.02,795.09	**2002**	**795.0**
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
813.45	**2002**	**813.42**

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
823.40-823.42	**2002**	**823.80-823.82**
840.7	2001	840.8
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
965.61	1998	965.6
965.69	1998	965.6
989.81-989.84	1995	989.8
989.89	1995	989.8
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
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
996.60-996.69	1989	996.6
996.68	1998	996.69
996.70-996.79	1989	996.7
996.80-996.84	1987	996.8

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
V01.81-V01.89	**2002**	**V01.8**
V02.51	1998	V02.5
V02.52	1998	V02.5
V02.59	1998	V02.5
V02.60-V02.62	1997	V02.6
V02.69	1997	V02.6
V03.81-V03.82, V03.89	1994	V03.8
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)

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V09.0-V09.91	1993	None
V10.48	1998	V10.49
V10.53	2001	V10.59
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
V12.70-V12.72, V12.79	1994	V12.7
V13.00-V13.01, V13.09	1994	V13.0
V13.21,V13.29	**2002**	**V13.2**
V13.61	1998	V13.6
V13.69	1998	V13.6
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
V16.40-V16.43	1997	V16.4
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

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
V42.84	2000	V42.89
V42.89	1997	V42.8
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	1997	V45.6
V45.63	1997	V45.6

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
V46.2	**2002**	**V46.8**
V49.60-V49.67	1994	V49.5
V49.70-V49.77	1994	V49.5
V49.81	2000	None
V49.82	2001	None
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
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
V56.31-V56.32	2000	V56.8

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V57.21-V57.22	1994	V57.2
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
V58.69	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
V59.01-V59.02	1995	V59.0
V59.09	1995	V59.0
V59.6	1995	V59.8
V61.10-V61.12	1996	V61.1
V61.22	1996	V61.21
V62.83	1996	V65.49
V64.4	1997	None
V65.40-V65.45, V65.49	1994	V65.4
V66.7	1996	None
V67.00-V67.01, V67.09	2000	V67.0
V69.0-V69.3	1994	None
V69.8-V69.9	1994	None
V71.81	2000	V71.8
V71.82-V71.83	**2002**	**V71.89**
V71.89	2000	V71.8
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

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
V77.91, V77.99	2000	V77.9
V82.81, V82.89	2000	V82.8
V83.01, V83.02	2001	None
V83.81	**2002**	**None**
V83.89	**2002**	**V19.8**
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

DIAGNOSIS CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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
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**

PROCEDURE CODES

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**
00.10	**2002**	**99.25**
00.11	**2002**	**99.19**
00.12	**2002**	**93.98**
00.13	**2002**	**99.29**
00.14	**2002**	**99.21**
00.50	**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

PROCEDURE CODES

Current code(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
36.00-36.03	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	1996	36.19
36.31	1998	36.3
36.32	1998	36.3
36.39	1998	36.3
37.26-37.27	1988	37.29
37.28	2001	88.72
37.34	1988	37.33
37.35	1997	37.33
37.65	1995	37.62
37.66	1995	37.62
37.67	1998	37.4
37.70 (Leads only)	1987	37.70 (Leads/Device)
37.71-37.72 (Leads only)	1987	37.74 (Leads/Device)
37.73 (Leads only)	1987	37.73 (Leads/Device)
37.74 (Leads only)	1987	37.76 (Leads/Device)
37.75 (Leads only)	1987	37.89 (Leads/Device)
37.76 (Leads only)	1987	37.81 (Leads/Device)
37.77 (Leads only)	1987	37.83-37.84 (Leads/Device)
37.78	1987	37.71-37.72
37.79	1987	86.09
		89.49
37.80-37.87	1992	(Code deleted, this procedure is included in the code for pacemaker insertion/replacement)

PROCEDURE CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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	**2002**	**39.79**
39.79	2000	39.52
39.90	1996	39.50
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
43.11	1989	43.1
43.19	1989	43.1, 43.2
43.41	1989	43.41, 43.49
44.21	1986	44.2
44.22	1986	44.99
44.29	1986	44.2
44.32	2001	44.39
44.43	1989	43.49,45.32
44.44	1989	38.86
44.49	1989	43.0
44.93-44.94	1986	44.99

PROCEDURE CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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
49.31	1989	49.3
49.39	1989	49.3
49.75	**2002**	**49.79**
49.76	**2002**	**49.79**
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
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
52.13	1989	51.97,52.91
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

PROCEDURE CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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

PROCEDURE CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
68.51	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
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
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
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

PROCEDURE CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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
81.61	**2002**	**81.00-81.08,81.30-81.39**
81.72	1989	81.79

PROCEDURE CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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
89.17-89.18	1988	89.15
89.19	1989	89.15
89.50	1991	89.54
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

PROCEDURE CODES

Current code(s) assignment	Effective October 1	Previous code(s) assignment	
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	

*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, 2003. 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 (30% nonresponse in 2003). 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 2003 NHDS, 94 of the 320,000 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, 2003.   Source: U.S. Bureau of the Census, Population Division.

Estimates in thousands

	Total	Male	Female		Total	Male	Female
All ages	289,558	141,970	147,589	**15 to 44 years**	124,239	62,508	61,731
White	233,259	114,999	118,260	Northeast	22,921	11,430	11,491
Black/AfAm	36,865	17,493	19,372	Midwest	27,825	14,030	13,795
Other	19,434	9,477	9,957	South	44,413	22,203	22,210
				West	29,079	14,843	14,237
Northeast	54,344	26,316	28,027				
Midwest	65,318	32,052	33,265	**45 to 64 years**	68,662	33,432	35,231
South	103,811	50,697	53,115	45 to 54 years	40,765	20,009	20,756
West	66,085	32,904	33,181	55 to 64 years	27,898	13,422	14,475
Under 15 years	60,738	31,082	29,656	White	57,331	28,211	29,120
Under 1 year	4,004	2,046	1,958	Black/AfAm	7,454	3,399	4,055
1 to 4 years	15,766	8,060	7,706	Other	3,877	1,822	2,056
5 to 14 years	40,969	20,977	19,992				
				Northeast	13,426	6,474	6,952
White	46,409	23,804	22,605	Midwest	15,644	7,675	7,970
Black/AfAm	9,462	4,802	4,659	South	24,473	11,845	12,629
Other	4,867	2,476	2,391	West	15,120	7,438	7,682
				65 years and over	35,919	14,948	20,971
Northeast	10,581	5,413	5,167	65 to 74 years	18,337	8,349	9,988
Midwest	13,522	6,921	6,600	75 to 84 years	12,869	5,154	7,714
South	22,043	11,273	10,770	85 years and over	4,713	1,445	3,269
West	14,591	7,474	7,119				
				White	31,516	13,201	18,315
15 to 44 years	124,239	62,508	61,731	Black/AfAm	2,999	1,148	1,852
15 to 24 years	40,674	20,739	19,935	Other	1,404	600	804
25 to 34 years	39,448	19,859	19,589				
35 to 44 years	44,118	21,910	22,208	Northeast	7,415	2,999	4,417
				Midwest	8,328	3,425	4,902
White	98,003	49,784	48,219	South	12,881	5,376	7,506
Black/AfAm	16,951	8,144	8,806	West	7,295	3,149	4,146
Other	9,286	4,579	4,706				

*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, 2003.
Source: U.S. Bureau of the Census, Population Division.

Estimates in thousands

Age	UNITED STATES Total	Male	Female	NORTH EAST Total	Male	Female	MIDWEST Total	Male	Female	SOUTH Total	Male	Female	WEST Total	Male	Female
All	289,558	141,970	147,589	54,344	26,316	28,027	65,318	32,052	33,265	103,811	50,697	53,115	66,085	32,904	33,181
0-4	19,769	10,105	9,664	3,329	1,701	1,628	4,323	2,211	2,112	7,349	3,752	3,597	4,768	2,441	2,327
5-9	19,775	10,120	9,655	3,460	1,769	1,690	4,422	2,263	2,159	7,120	3,644	3,476	4,773	2,444	2,330
10-14	21,193	10,857	10,337	3,792	1,943	1,849	4,777	2,447	2,329	7,574	3,877	3,697	5,050	2,589	2,462
15-19	20,381	10,439	9,941	3,652	1,872	1,780	4,714	2,415	2,299	7,271	3,721	3,551	4,743	2,432	2,311
20-24	20,293	10,299	9,993	3,588	1,813	1,774	4,704	2,389	2,315	7,286	3,679	3,606	4,716	2,417	2,299
25-29	18,921	9,564	9,357	3,290	1,641	1,649	4,141	2,097	2,044	6,849	3,433	3,416	4,640	2,392	2,249
30-34	20,527	10,295	10,232	3,762	1,858	1,904	4,435	2,232	2,203	7,383	3,672	3,711	4,947	2,533	2,414
35-39	21,248	10,585	10,663	4,167	2,051	2,116	4,653	2,326	2,327	7,539	3,723	3,816	4,889	2,485	2,404
40-44	22,870	11,325	11,545	4,462	2,195	2,268	5,178	2,571	2,607	8,085	3,975	4,110	5,144	2,584	2,560
45-49	21,730	10,704	11,026	4,224	2,068	2,156	5,006	2,481	2,525	7,645	3,740	3,905	4,855	2,414	2,441
50-54	19,035	9,305	9,729	3,700	1,792	1,908	4,371	2,158	2,213	6,712	3,259	3,454	4,251	2,096	2,155
55-59	15,792	7,659	8,133	3,118	1,493	1,625	3,531	1,725	1,806	5,688	2,748	2,940	3,456	1,694	1,762
60-64	12,105	5,763	6,342	2,384	1,121	1,263	2,736	1,311	1,426	4,428	2,098	2,330	2,558	1,234	1,324
65-59	9,746	4,526	5,221	1,886	862	1,024	2,184	1,014	1,170	3,654	1,695	1,959	2,022	955	1,067
70-74	8,591	3,824	4,767	1,741	757	984	1,951	863	1,088	3,158	1,405	1,753	1,741	799	942
75-79	7,453	3,099	4,354	1,577	642	935	1,741	726	1,014	2,639	1,094	1,545	1,496	636	860
80-84	5,416	2,055	3,361	1,166	430	737	1,281	477	804	1,865	704	1,161	1,104	445	659
0-14	60,737	31,082	29,656	10,581	5,413	5,167	13,522	6,921	6,600	22,043	11,273	10,770	14,591	7,474	60,737
15-44	124,240	62,507	61,731	22,921	11,430	11,491	27,825	14,030	13,795	44,413	22,203	22,210	29,079	14,843	124,240
45-64	68,662	33,431	35,230	13,426	6,474	6,952	15,644	7,675	7,970	24,473	11,845	12,629	15,120	7,438	68,662
15+	228,821	110,887	117,933	43,762	20,903	22,860	51,797	25,130	26,667	81,767	39,424	42,345	51,494	25,430	228,821
45+	104,581	48,380	56,202	20,841	9,473	11,369	23,972	11,100	12,872	37,354	17,221	20,135	22,415	10,587	104,581
65+	35,919	14,949	20,972	7,415	2,999	4,417	8,328	3,425	4,902	12,881	5,376	7,506	7,295	3,149	35,919
75+	17,582	6,599	10,984	3,788	1,380	2,409	4,193	1,548	2,644	6,069	2,276	3,794	3,532	1,395	17,582
85+	4,713	1,445	3,269	1,045	308	737	1,171	345	826	1,565	478	1,088	932	314	618

TABLE 3: Civilian Population of the United States by sex, age, and race: July 1, 2003.
Source: U.S. Bureau of the Census, Population Division.

Estimates in thousands

	ALL RACES			WHITE			BLACK			OTHER		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
ALL AGES	289,558	141,970	147,589	233,259	114,999	118,260	36,865	17,493	19,372	19,434	9,477	9,957
0-4	19,769	10,105	9,664	15,119	7,742	7,376	2,998	1,521	1,477	1,652	842	811
0	4,004	2,046	1,958	3,061	1,565	1,496	612	311	301	331	169	161
1	4,005	2,045	1,959	3,063	1,567	1,497	613	310	302	329	168	161
2	4,040	2,064	1,976	3,088	1,580	1,508	619	314	305	333	170	163
3	3,879	1,987	1,891	2,974	1,527	1,447	575	292	283	329	168	162
4	3,842	1,963	1,879	2,933	1,503	1,430	579	293	286	331	167	164
5-9	19,775	10,120	9,655	15,098	7,748	7,350	3,048	1,548	1,501	1,628	824	805
5	3,868	1,978	1,890	2,950	1,513	1,437	588	299	289	330	166	164
6	3,865	1,976	1,889	2,953	1,514	1,438	585	297	288	327	165	162
7	3,969	2,032	1,937	3,038	1,560	1,478	604	307	297	327	165	162
8	4,005	2,051	1,954	3,057	1,570	1,488	623	316	307	324	165	159
9	4,069	2,083	1,986	3,101	1,592	1,509	648	329	320	320	162	157
10-14	21,193	10,857	10,337	16,192	8,313	7,879	3,415	1,733	1,682	1,586	811	776
10	4,139	2,120	2,019	3,152	1,619	1,533	669	340	329	319	162	156
11	4,226	2,163	2,063	3,223	1,653	1,570	684	347	337	320	163	157
12	4,293	2,199	2,094	3,282	1,684	1,598	692	351	341	319	163	156
13	4,318	2,213	2,105	3,302	1,696	1,605	699	354	344	318	163	155
14	4,217	2,161	2,056	3,233	1,661	1,573	672	341	331	311	160	152
15-19	20,381	10,439	9,941	15,790	8,110	7,680	3,097	1,569	1,528	1,494	760	734
15	4,118	2,109	2,009	3,172	1,629	1,544	641	325	316	305	156	149
16	4,095	2,098	1,997	3,167	1,626	1,541	629	319	310	299	152	146
17	4,090	2,099	1,991	3,170	1,632	1,538	623	315	307	297	152	146
18	4,070	2,086	1,984	3,164	1,626	1,538	609	309	300	297	151	146
19	4,008	2,047	1,960	3,116	1,597	1,519	595	300	295	296	149	147
20-24	20,293	10,299	9,993	15,809	8,081	7,728	2,942	1,448	1,494	1,542	771	771
20	4,031	2,059	1,972	3,140	1,610	1,530	591	297	294	299	151	148
21	4,069	2,065	2,003	3,171	1,618	1,553	591	293	298	307	154	153
22	4,120	2,083	2,037	3,207	1,633	1,574	599	293	306	314	157	157
23	4,118	2,085	2,032	3,208	1,639	1,569	595	290	305	315	157	158
24	3,955	2,007	1,948	3,083	1,581	1,502	565	274	291	307	153	154
25-29	18,921	9,564	9,357	14,759	7,558	7,201	2,577	1,226	1,351	1,584	780	804
25	3,867	1,961	1,906	3,022	1,550	1,472	541	260	281	304	151	154
26	3,764	1,906	1,859	2,942	1,509	1,433	516	246	270	306	151	155
27	3,750	1,896	1,854	2,924	1,498	1,426	510	242	267	316	155	161
28	3,793	1,916	1,878	2,954	1,513	1,442	509	241	268	330	162	167
29	3,746	1,886	1,861	2,918	1,489	1,429	501	236	265	328	161	167
30-34	20,527	10,295	10,232	16,130	8,194	7,937	2,705	1,272	1,433	1,691	829	862
30	3,813	1,914	1,899	2,960	1,505	1,455	515	243	272	338	166	172
31	4,029	2,022	2,008	3,148	1,600	1,548	538	253	285	343	169	175
32	4,213	2,107	2,106	3,318	1,681	1,637	553	259	295	342	167	175
33	4,344	2,184	2,160	3,433	1,748	1,685	568	268	300	344	169	175
34	4,127	2,068	2,059	3,272	1,660	1,612	532	250	281	323	158	165

	ALL RACES			WHITE			BLACK			OTHER		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
35-39	21,248	10,585	10,663	16,956	8,549	8,407	2,771	1,296	1,475	1,521	740	781
35	4,047	2,024	2,023	3,213	1,628	1,586	526	247	279	309	150	159
36	4,044	2,015	2,029	3,221	1,625	1,596	527	246	281	296	144	152
37	4,178	2,081	2,097	3,328	1,677	1,650	551	258	293	299	146	153
38	4,451	2,220	2,231	3,555	1,794	1,761	586	274	311	310	151	159
39	4,528	2,245	2,283	3,639	1,824	1,814	581	271	310	308	149	159
40-44	22,870	11,325	11,545	18,558	9,292	9,266	2,858	1,334	1,524	1,454	699	754
40	4,517	2,237	2,280	3,643	1,823	1,819	572	267	305	303	147	156
41	4,562	2,261	2,300	3,700	1,855	1,845	570	265	304	292	141	151
42	4,582	2,265	2,318	3,727	1,862	1,864	569	265	304	286	137	149
43	4,696	2,332	2,365	3,811	1,914	1,898	592	278	314	293	141	153
44	4,512	2,230	2,282	3,677	1,838	1,839	555	259	297	280	134	146
45-49	21,730	10,704	11,026	17,820	8,875	8,945	2,595	1,206	1,388	1,315	622	693
45	4,525	2,236	2,290	3,698	1,846	1,852	552	259	294	275	131	144
46	4,427	2,183	2,244	3,625	1,807	1,817	534	249	285	268	127	141
47	4,330	2,130	2,199	3,547	1,766	1,782	519	241	278	264	124	140
48	4,307	2,122	2,185	3,534	1,762	1,772	511	237	274	261	123	138
49	4,141	2,033	2,109	3,417	1,695	1,722	478	221	257	246	116	130
50-54	19,035	9,305	9,729	15,787	7,808	7,980	2,132	977	1,155	1,115	521	595
50	4,006	1,962	2,044	3,317	1,644	1,673	452	208	244	237	111	126
51	3,912	1,915	1,998	3,249	1,609	1,640	438	200	237	226	106	120
52	3,740	1,827	1,913	3,099	1,532	1,567	423	194	229	219	102	117
53	3,762	1,839	1,922	3,110	1,539	1,572	427	196	231	225	105	120
54	3,615	1,762	1,853	3,012	1,485	1,527	393	179	214	209	97	112
55-59	15,792	7,659	8,133	13,394	6,562	6,832	1,558	703	855	840	393	447
55	3,661	1,784	1,877	3,092	1,522	1,570	370	169	201	199	93	106
56	3,495	1,701	1,794	2,977	1,464	1,514	333	151	182	184	86	98
57	3,063	1,486	1,578	2,597	1,273	1,325	303	136	166	163	77	87
58	2,785	1,345	1,439	2,351	1,147	1,203	282	127	156	151	71	80
59	2,788	1,343	1,445	2,376	1,156	1,220	270	120	150	142	66	75
60-64	12,105	5,763	6,342	10,329	4,965	5,364	1,169	512	657	607	286	321
60	2,742	1,315	1,427	2,347	1,136	1,210	260	115	145	135	63	72
61	2,608	1,246	1,361	2,233	1,078	1,156	247	108	138	128	60	68
62	2,337	1,110	1,226	1,989	955	1,035	228	100	128	119	56	63
63	2,259	1,071	1,189	1,917	917	1,000	226	98	127	117	55	62
64	2,160	1,021	1,139	1,843	879	964	209	90	119	108	51	57
65-69	9,746	4,526	5,221	8,335	3,910	4,425	943	401	541	468	214	254
65	2,101	989	1,112	1,794	853	941	204	88	116	103	48	55
66	1,987	929	1,058	1,698	802	896	192	82	110	97	45	52
67	1,947	903	1,044	1,665	780	884	188	80	108	94	42	51
68	1,912	882	1,030	1,634	762	873	187	79	107	91	41	50
69	1,799	822	977	1,545	713	831	171	71	100	83	37	46
70-74	8,591	3,824	4,767	7,480	3,366	4,113	747	301	446	364	156	207
70	1,761	799	962	1,513	694	819	168	69	98	80	35	45
71	1,752	788	963	1,522	693	829	155	63	92	75	32	42
72	1,725	769	957	1,510	680	830	144	58	86	72	31	41
73	1,715	755	960	1,499	667	831	145	58	87	72	31	41
74	1,638	713	925	1,437	633	804	136	53	83	65	27	38

	ALL RACES			WHITE			BLACK			OTHER		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
75-79	7,453	3,099	4,354	6,601	2,770	3,831	581	217	365	270	112	158
75	1,614	694	919	1,423	619	804	129	49	80	62	26	36
76	1,551	656	895	1,371	586	785	123	47	77	57	24	34
77	1,480	614	867	1,310	549	761	117	43	74	53	22	32
78	1,445	588	857	1,283	526	756	111	41	70	51	21	30
79	1,362	546	816	1,215	491	725	101	37	64	46	19	27
80-84	5,416	2,055	3,361	4,856	1,852	3,004	390	134	256	170	69	101
80	1,249	492	757	1,115	442	673	93	33	59	42	17	24
81	1,197	463	734	1,073	417	656	86	30	56	38	16	22
82	1,117	423	693	1,007	384	623	76	26	50	34	14	20
83	961	354	608	860	318	542	71	23	48	31	12	19
84	892	323	569	802	291	511	64	21	43	26	10	16
85-89	3,003	997	2,006	2,715	905	1,810	203	61	143	84	31	53
85	770	271	499	697	247	450	51	16	35	22	8	13
86	674	229	444	609	208	401	46	14	32	19	7	12
87	595	197	398	538	179	360	40	12	28	17	6	11
88	519	164	354	469	149	320	35	10	25	15	5	9
89	446	136	310	402	123	279	32	9	23	12	4	8
90-94	1,296	357	939	1,164	320	844	97	25	72	35	12	22
90	378	111	267	340	100	240	28	7	20	10	4	7
91	310	88	222	279	79	200	22	6	16	8	3	5
92	252	68	184	226	61	165	19	5	14	7	2	4
93	203	52	150	180	46	135	17	4	12	6	2	4
94	154	38	116	139	34	105	11	3	9	4	1	3
95-99	355	79	276	315	69	246	30	7	23	9	3	6
95	121	28	92	108	25	83	9	2	7	3	1	2
96	90	20	69	80	18	62	7	2	6	2	1	2
97	66	14	52	59	12	46	6	1	5	2	1	1
98	47	10	37	41	8	33	4	1	3	1	0	1
99	32	6	26	28	5	23	3	1	2	1	0	1
100+	60	12	48	50	9	41	8	2	6	2	1	2
0 to 14	60,738	31,082	29,656	46,409	23,804	22,605	9,462	4,802	4,659	4,867	2,476	2,391
15 to 44	124,239	62,508	61,731	98,003	49,784	48,219	16,951	8,144	8,806	9,286	4,579	4,706
45 to 64	68,662	33,432	35,231	57,331	28,211	29,120	7,454	3,399	4,055	3,877	1,822	2,056
15+	228,820	110,888	117,933	186,850	91,196	95,654	27,404	12,691	14,713	14,567	7,001	7,566
45+	104,582	48,380	56,202	88,847	41,412	47,435	10,453	4,547	5,906	5,281	2,421	2,860
65+	35,919	14,948	20,971	31,516	13,201	18,315	2,999	1,148	1,852	1,404	600	804
75+	17,582	6,599	10,983	15,701	5,924	9,777	1,309	445	864	572	229	342
85+	4,713	1,445	3,269	4,244	1,302	2,941	338	95	244	131	48	84

APPENDIX D

UNWEIGHTED FREQUENCIES FOR SELECTED VARIABLES

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SURVEY YEAR			
2003	34,094	285,436	319,530
UNITS			
YEARS	.	277,239	277,239
MONTHS	.	5,368	5,368
DAYS	34,094	2,829	36,923
AGE			
U15 YEARS	34,094	26,220	60,314
15-44 YEARS	.	90,284	90,284
45-64 YEARS	.	66,654	66,654
65 YEARS &UP	.	102,278	102,278
SEX			
MALE	17,527	113,768	131,295
FEMALE	16,567	171,668	188,235
RACE			
WHITE	15,418	145,748	161,166
BLACK/AFRICAN AMERICAN	4,207	40,609	44,816
AMERICAN INDIAN//ALASKAN NATIVE	162	797	959
ASIAN	357	1,659	2,016
NATIVE HAWAIIAN/OTH PACIFIC ISLANDER	77	331	408
OTHER	2,349	12,865	15,214
MULTIPLE RACE	11	83	94
NOT STATED	11,513	83,344	94,857
MARSTAT			
MARRIED	.	44,862	44,862
SINGLE	34,094	31,316	65,410
WIDOWED	.	14,647	14,647
DIVORCED	.	6,384	6,384
SEPARATED	.	1,102	1,102
NOT STATED	.	187,125	187,125
DISCHARGE STATUS			
ROUTINE	33,087	223,646	256,733
LEFT AGAINST MEDICAL ADVICE	9	2,984	2,993
SHORT-TERM TRANSFER	395	8,693	9,088
LONG-TERM TRANSFER	22	24,783	24,805
ALIVE, OTHER	424	16,935	17,359
DEAD	111	6,582	6,693
NOT STATED	46	1,813	1,859
LOSFLAG			
LESS THAN 1 DAY	314	5,212	5,526
ONE DAY OR MORE	33,780	280,224	314,004

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
REGION			
NORTHEAST	7,281	70,735	78,016
MIDWEST	9,486	87,108	96,594
SOUTH	10,685	90,998	101,683
WEST	6,642	36,595	43,237
BEDSIZE			
6-99	2,644	35,786	38,430
100-199	8,382	66,500	74,882
200-299	8,428	62,589	71,017
300-499	10,511	85,173	95,684
500&UP	4,129	35,388	39,517
OWNERSHIP			
PROPRIETARY	1,758	15,494	17,252
GOVERNMENT	2,792	23,853	26,645
NOT FOR PROFIT	29,544	246,089	275,633
PRINCIPAL EXPECTED SOURCE OF PAYMENT			
WORKER'S COMPENSATION	1	1,460	1,461
MEDICARE	15	105,822	105,837
MEDICAID	11,029	44,154	55,183
OTHER GOVERNMENT PAYMENT	485	3,670	4,155
BLUE CROSS/BLUE SHIELD	4,844	28,061	32,905
HMO/PPO	10,227	49,661	59,888
OTHER PRIVATE/COMMERCIAL INSUR	4,494	29,162	33,656
SELF PAY	1,287	11,134	12,421
NO CHARGE	18	1,613	1,631
OTHER	1,146	6,761	7,907
SOURCE NOT STATED	548	3,938	4,486
DISCHARGE MONTH			
JANUARY	2,754	24,603	27,357
FEBRUARY	2,649	22,968	25,617
MARCH	3,002	25,133	28,135
APRIL	2,767	23,775	26,542
MAY	3,026	24,933	27,959
JUNE	2,951	23,527	26,478
JULY	2,939	24,136	27,075
AUGUST	2,955	23,896	26,851
SEPTEMBER	2,888	22,932	25,820
OCTOBER	2,857	23,834	26,691
NOVEMBER	2,613	22,028	24,641
DECEMBER	2,693	23,671	26,364
TYPE OF ADMISSION			
EMERGENCY	.	122,642	122,642
URGENT	.	63,083	63,083
ELECTIVE	.	71,069	71,069
NEWBORN	34,094	.	34,094
NOT STATED	.	28,642	28,642

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SOURCE OF ADMISSION			
PHYSICIAN REFERRAL	.	93,961	93,961
CLINICAL REFERRAL	.	4,978	4,978
HMO REFERRAL	.	1,084	1,084
TRANSFER FROM HOSPITAL	.	9,780	9,780
TRANSFER FROM SNF	.	1,414	1,414
TRANSFER FROM OTHER	.	2,871	2,871
EMERGENCY ROOM	.	126,704	126,704
COURT/LAW ENFORCEMENT	.	539	501
OTHER	34,094	2,708	36,802
NOT AVAILABLE	.	41,397	41,397
FIRST-LISTED DIAGNOSIS CHAPTER			
CHAPTER 01	.	7,718	7,718
CHAPTER 02	.	14,539	14,539
CHAPTER 03	.	14,768	14,768
CHAPTER 04	.	.	.
CHAPTER 05	.	19,316	19,316
CHAPTER 06	.	4,935	4,935
CHAPTER 07	.	51,972	51,972
CHAPTER 08	.	30,151	30,151
CHAPTER 09	.	27,523	27,523
CHAPTER 10	.	14,924	14,924
CHAPTER 11	.	4,394	4,394
CHAPTER 12	.	5,403	5,403
CHAPTER 13	.	15,352	15,352
CHAPTER 14	.	2,129	2,129
CHAPTER 15	.	1,949	1,949
CHAPTER 16	.	1,914	1,914
CHAPTER 17	.	22,684	22,684
V-CODES	34,094	41,802	75,896

WEIGHTED FREQUENCIES FOR SELECTED VARIABLES

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SURVEY YEAR			
2003	3,875,317	34,738,411	38,613,728
UNITS			
YEARS	.	33,905,013	33,905,013
MONTHS	.	553,615	553,615
DAYS	3,875,317	279,783	4,155,100
AGE			
U15 YEARS	3,875,317	2,571,263	6,446,580
15-44 YEARS	.	10,831,323	10,831,323
45-64 YEARS	.	8,119,593	8,119,593
65 YEARS &UP	.	13,216,232	13,216,232
SEX			
MALE	2,018,078	13,874,228	15,892,306
FEMALE	1,857,239	20,864,183	22,721,422
RACE			
WHITE	2,092,116	21,291,963	23,384,079
BLACK/AFRICAN AMERICAN	426,674	4,101,921	4,528,595
AMERICAN INDIAN//ALASKAN NATIVE	26,356	119,984	146,340
ASIAN	93,406	468,011	561,417
NATIVE HAWAIIAN/OTH PACIFIC ISLANDER	16,367	82,287	98,654
OTHER	119,509	688,772	808,281
MULTIPLE RACE	2,777	31,868	34,645
NOT STATED	1,098,112	7,953,605	9,051,717
MARSTAT			
MARRIED	.	10,032,895	10,032,895
SINGLE	3,875,317	6,781,343	10,656,660
WIDOWED	.	3,378,132	3,378,132
DIVORCED	.	1,467,794	1,467,794
SEPARATED	.	193,917	193,917
NOT STATED	.	12,884,330	12,884,330
DISCHARGE STATUS			
ROUTINE	3,715,319	26,814,884	30,530,203
LEFT AGAINST MEDICAL ADVICE	1,189	334,164	335,353
SHORT-TERM TRANSFER	60,196	1,674,870	1,735,066
LONG-TERM TRANSFER	4,004	3,071,947	3,075,951
ALIVE, OTHER	63,056	1,641,209	1,704,265
DEAD	14,878	808,141	823,019
NOT STATED	16,675	393,196	409,871
LOSFLAG			
LESS THAN 1 DAY	47,022	672,254	719,276
ONE DAY OR MORE	3,828,295	34,066,157	37,894,452

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
REGION			
NORTHEAST	712,347	7,266,500	7,978,847
MIDWEST	748,804	7,785,932	8,534,736
SOUTH	1,408,710	13,055,408	14,464,118
WEST	1,005,456	6,630,571	7,636,027
BEDSIZE			
6-99	585,910	7,775,691	8,361,601
100-199	1,025,419	8,857,811	9,883,230
200-299	767,165	7,082,061	7,849,226
300-499	1,019,270	7,236,918	8,256,188
500&UP	477,553	3,785,930	4,263,483
OWNERSHIP			
PROPRIETARY	500,542	4,473,514	4,974,056
GOVERNMENT	501,315	4,507,848	5,009,163
NOT FOR PROFIT	2,873,460	25,757,049	28,630,509
PRINCIPAL EXPTD SOURCE OF PAYMENT			
WORKER'S COMPENSATION	86	185,257	185,343
MEDICARE	2382	13,672,342	13,674,724
MEDICAID	1,424,872	5,542,354	6,967,226
OTHER GOVERNMENT PAY	66,395	533,045	599,440
BLUE CROSS/BLUE SHIELD	500,225	3,178,878	3,679,103
HMO/PPO	1,049,627	5,446,737	6,496,364
OTHER PRIVATE/COMMERCIAL INS	450,306	3,250,764	3,701,070
SELF PAY	196,150	1,453,496	1,649,646
NO CHARGE	3,799	118,128	121,927
OTHER	98,517	714,883	813,400
SOURCE NOT STATED	82,958	642,527	725,485
DISCHARGE MONTH			
JANUARY	313,959	3,022,156	3,336,115
FEBRUARY	298,227	2,826,916	3,125,143
MARCH	348,793	3,050,855	3,399,648
APRIL	308,728	2,927,568	3,236,296
MAY	340,920	3,024,895	3,365,815
JUNE	352,844	2,886,199	3,239,043
JULY	330,390	2,901,791	3,232,181
AUGUST	325,910	2,891,439	3,217,349
SEPTEMBER	334,350	2,806,956	3,141,306
OCTOBER	315,880	2,883,969	3,199,849
NOVEMBER	307,869	2,637,791	2,945,660
DECEMBER	297,447	2,877,876	3,175,323
TYPE OF ADMISSION			
EMERGENCY	.	13,038,729	13,038,729
URGENT	.	8,945,840	8,945,840
ELECTIVE	.	8,158,996	8,158,996
NEWBORN	3,875,317	.	3,875,317
NOT STATED	.	4,594,846	4,594,846

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SOURCE OF ADMISSION			
PHYSICIAN REFERRAL	.	12,772,675	12,772,675
CLINICAL REFERRAL	.	820,298	820,298
HMO REFERRAL	.	135,328	135,328
TRANSFER FROM HOSPITAL	.	1,070,536	1,070,536
TRANSFER FROM SNF	.	267,249	267,249
TRANSFER FROM OTHER	.	366,562	366,562
EMERGENCY ROOM	.	14,177,397	14,177,397
COURT/LAW ENFORCEMENT	.	125,763	125,763
OTHER	3,875,317	538,426	4,413,743
NOT AVAILABLE	.	4,464,177	4,464,177
FIRST-LISTED DIAGNOSIS CHAPTER			
CHAPTER 01	.	927,508	927,508
CHAPTER 02	.	1,692,341	1,692,341
CHAPTER 03	.	1,785,068	1,785,068
CHAPTER 04	.	.	.
CHAPTER 05	.	2,292,355	2,292,355
CHAPTER 06	.	531,755	531,755
CHAPTER 07	.	6,434,403	6,434,403
CHAPTER 08	.	3,802,279	3,802,279
CHAPTER 09	.	3,467,746	3,467,746
CHAPTER 10	.	1,888,117	1,888,117
CHAPTER 11	.	551,988	551,988
CHAPTER 12	.	656,043	656,043
CHAPTER 13	.	1,853,522	1,853,522
CHAPTER 14	.	182,899	182,899
CHAPTER 15	.	190,849	190,849
CHAPTER 16	.	271,036	271,036
CHAPTER 17	.	2,832,724	2,832,724
V-CODES	3,875,317	4,932,522	8,807,839

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

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL DIAGNOSES	8,413,627	165,907,405	174,321,032
CHAPTER 01	31,252	4,141,737	4,172,989
CHAPTER 02	12,993	4,649,705	4,662,698
CHAPTER 03	22,249	18,683,034	18,705,283
CHAPTER 04	6,071	4,766,692	4,772,763
CHAPTER 05	3,669	11,716,445	11,720,114
CHAPTER 06	14,086	3,866,009	3,880,095
CHAPTER 07	28,840	33,802,139	33,830,979
CHAPTER 08	15,171	11,996,571	12,011,742
CHAPTER 09	26,873	10,868,786	10,895,659
CHAPTER 10	31,592	8,439,701	8,471,293
CHAPTER 11	.	9,745,727	9,745,727
CHAPTER 12	23,725	2,387,913	2,411,638
CHAPTER 13	9,995	6,642,286	6,652,281
CHAPTER 14	246,994	652,123	899,117
CHAPTER 15	2,788,534	603,436	3,391,970
CHAPTER 16	66,482	8,672,466	8,738,948
CHAPTER 17	9,140	6,506,529	6,515,669
ECODES	7,285	4,528,283	4,535,568
VCODES	5,068,676	13,237,823	18,306,499

UNWEIGHTED FREQUENCIES FOR ALL-LISTED DIAGNOSES BY ICD-9-CM CHAPTERS

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL DIAGNOSES	75,991	1,386,883	1,462,874
CHAPTER 01	365	34,010	34,375
CHAPTER 02	102	39,522	39,624
CHAPTER 03	167	154,755	154,922
CHAPTER 04	58	40,723	40,781
CHAPTER 05	22	99,833	99,855
CHAPTER 06	99	32,394	32,493
CHAPTER 07	155	277,673	277,828
CHAPTER 08	113	99,152	99,265
CHAPTER 09	204	88,648	88,852
CHAPTER 10	259	69,844	70,103
CHAPTER 11	.	86,281	86,281
CHAPTER 12	224	20,415	20,639
CHAPTER 13	89	53,728	53,817
CHAPTER 14	2,341	7,532	9,873
CHAPTER 15	24,402	6,220	30,622
CHAPTER 16	617	78,481	79,098
CHAPTER 17	92	52,799	52,891
ECODES	53	28,986	29,039
VCODES	46,629	115,887	162,516

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

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL PROCEDURES	2,875,115	43,888,936	46,764,051
CHAPTER 00*	533	48,063	48,596
CHAPTER 01	23,444	1,240,657	1,264,101
CHAPTER 02	.	93,916	93,916
CHAPTER 03	920	83,149	84,069
CHAPTER 04	162	37,289	37,451
CHAPTER 05	2,078	259,096	261,174
CHAPTER 06	9,962	1,061,985	1,071,947
CHAPTER 07	125,918	6,820,817	6,946,735
CHAPTER 08	345	357,184	357,529
CHAPTER 09	9,970	5,736,540	5,746,510
CHAPTER 10	1,474	1,013,618	1,015,092
CHAPTER 11	1,129,617	248,504	1,378,121
CHAPTER 12	77	2,051,788	2,051,865
CHAPTER 13	.	6,688,912	6,688,912
CHAPTER 14	1,445	3,737,445	3,738,890
CHAPTER 15	7,553	1,403,142	1,410,695
CHAPTER 16	1,561,617	13,006,831	14,568,448

UNWEIGHTED FREQUENCIES FOR ALL-LISTED PROCEDURES BY ICD-9-CM CHAPTERS

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL PROCEDURES	25,314	394,061	419,375
CHAPTER 00*	1	405	406
CHAPTER 01	190	11,615	11,805
CHAPTER 02	.	922	922
CHAPTER 03	8	823	831
CHAPTER 04	6	454	460
CHAPTER 05	23	2,449	2,472
CHAPTER 06	104	9,697	9,801
CHAPTER 07	1,049	60,922	61,971
CHAPTER 08	4	3,156	3,160
CHAPTER 09	87	48,754	48,841
CHAPTER 10	9	9,105	9,114
CHAPTER 11	10,887	2,129	13,016
CHAPTER 12	2	16,878	16,880
CHAPTER 13	.	60,951	60,951
CHAPTER 14	7	31,477	31,484
CHAPTER 15	82	11,758	11,840
CHAPTER 16	12,855	122,566	135,421

* 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 is the first year these codes have been used.

APPENDIX E

NHDS Medical Abstract Form

Form HDS-1

FORM **HDS-1**
(3-27-2003)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR HEALTH STATISTICS

MEDICAL ABSTRACT – NATIONAL HOSPITAL DISCHARGE SURVEY

A. PATIENT IDENTIFICATION

1. Hospital number . . . .

2. HDS number . . . .

3. (Item deleted)

	Month	Day	Year
4. Date of admission			
5. Date of discharge			

6. Residence ZIP Code . . . .

B. PATIENT CHARACTERISTICS

7. Date of birth

Month	Day	Year

8. Age – Complete only if date of birth not given

Units

- 1 ☐ Years
- 2 ☐ Months
- 3 ☐ Days

9. Sex – Mark (X) one

1 ☐ Male   2 ☐ Female   3 ☐ Not stated

10. Ethnicity – Mark (X) one

1 ☐ Hispanic or Latino   2 ☐ Not Hispanic or Latino   3 ☐ Not stated

11. Race – Mark all that apply

- 1 ☐ White
- 2 ☐ Black or African American
- 3 ☐ American Indian or Alaska Native
- 4 ☐ Asian
- 5 ☐ Native Hawaiian or Other Pacific Islander
- 6 ☐ Other – Specify ↘
- 7 ☐ Not stated

12. Marital status – Mark (X) one

1 ☐ Married   3 ☐ Widowed   5 ☐ Separated
2 ☐ Single   4 ☐ Divorced   6 ☐ Not stated

C. ADMINISTRATIVE INFORMATION

13. Type of Admission – Mark (X) one

1 ☐ Emergency   3 ☐ Elective   5 ☐ Items not available/ unknown
2 ☐ Urgent   4 ☐ Newborn

14. Source of Admission – Mark (X) one

- 1 ☐ Physician referral
- 2 ☐ Clinical referral
- 3 ☐ HMO referral
- 4 ☐ Transfer from a hospital
- 5 ☐ Transfer from SNF
- 6 ☐ Transfer from other health facility
- 7 ☐ Emergency room
- 8 ☐ Court/Law enforcement
- 9 ☐ Other – Specify ↘
- 10 ☐ Item not available

15. Status/Disposition of patient – Mark (X) appropriate box(es)

Status

Disposition

1 ☐ Alive ⟶
- a. ☐ Routine discharge/discharged home
- b. ☐ Left against medical advice
- c. ☐ Discharged, transferred to another short-term hospital
- d. ☐ Discharged, transferred to long-term care institution
- e. ☐ Other disposition/not stated

2 ☐ Died

3 ☐ Status not stated

16. Expected source(s) of payment

	Principal – Mark one only	Other additional sources – Mark all that apply
1. Worker's compensation	☐	☐
2. Medicare	☐	☐
3. Medicaid	☐	☐
4. Other government payments	☐	☐
5. Blue Cross/Blue Shield	☐	☐
6. HMO/PPO	☐	
7. Other private or commercial insurance	☐	☐
8. Self pay	☐	☐
9. No charge	☐	☐
10. Other –Specify ↘	☐	☐

☐ No source of payment indicated

(Over)

D. MEDICAL INFORMATION

17. Final Diagnoses (including E-code diagnoses) (Enter ICD-9-CM codes as well as narrative if available)

Principal: _____

Other/additional: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

18. Surgical and Diagnostic Procedures (Enter ICD-9-CM codes as well as narrative if available)	Date of procedure(s)		
	Month	Day	Year

Principal: _____

Other/additional: _____

☐ NONE

Completed by	Date

FORM HDS-1 (3-27-2003)