NATIONAL HOSPITAL DISCHARGE SURVEY

2007

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 2007. Conducted annually by the National Center for Health Statistics (NCHS), NHDS 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 NHDS; methodology, including data collection and medical coding procedures; population estimates; measurement errors and sampling errors.
Section II provides technical details about the file.
Section III provides a detailed description of the contents of each data record.

Appendix A defines certain terms used in this document;
Appendix B lists the ICD-9-CM Addenda;
Appendix C provides population estimates to allow for the calculation of utilization rates;
Appendix D provides unweighted and weighted frequencies for selected variables; and
Appendix E includes a copy of the NHDS Medical Abstract Form.

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I. DESCRIPTION OF THE NATIONAL HOSPITAL DISCHARGE SURVEY

Introduction. This document and its appendices contain information for users of the 2007 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 inpatient discharge records selected from a national probability 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/nhds/nhds_products.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 NCHS began exploring possibilities for surveying morbidity in hospitals. A national advisory group was established. 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 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. NHDS covers discharges from noninstitutional hospitals, excluding 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, are slightly different from those used prior to 1988, specifically with respect to certain aspects of the sampling design. First, third-stage sampling in the 1988 redesign was performed from a subsample of primary sampling units (PSUs) that had been selected for 1985-1994 National Health Interview Survey, and second, facility sampling took into account whether discharge data were available in electronic format.

In 2007, the sample consisted of 501 hospitals. Of these hospitals, 24 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 477 in-scope (eligible) hospitals, 422 hospitals responded to the survey for an unweighted response rate of 88 percent. The weighted response rate is 82 percent.

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. In the original design, a two-stage sampling design was used in which hospitals were sampled at the first stage, with probabilities ranging from certainty for the largest hospitals to 1 in 40 for the smallest hospitals. At the second stage, a systematic random sample of discharges was selected from each sampled hospital. A report on the design and development of the original NHDS has been published (3).

In 1988, NHDS was redesigned to provide geographic sampling comparability with other surveys conducted by NCHS; to update the sample of hospitals selected into the survey; and to maximize the use of data collected through automated systems. The 1988 hospital sample was drawn from a sampling frame that 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.   The hospital sample is updated every three years to allow for hospitals that opened later or changed their eligibility status since the previous sample update. Updates were performed in 1991, 1994, 1997, 2000, 2003 and 2006. The SMG Hospital Market Database became the "Healthcare Market Index" and the "Hospital Market Profiling Solution" when Verispan, LLC, acquired SMG Marketing Group, and so the newly-named products were used in 2003 and 2006 to perform sample updating.

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 sample and statistics based on the sample drawn in 1988 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 55 percent of the responding hospitals.   The second was an automated method, used for approximately 45 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 2007, about 23 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 a contractor for coding and data entry, and then to NCHS for 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. An Admitting diagnosis and a Present on Admission checkbox for all of the diagnosis variables were added to data collection because hospitals were required to collect this information for billing effective in late 2007. These data items were included in the 2007 NHDS data collection but are not reported in the 2007 NHDS data because 12 month estimates were not possible. 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 *International Classification of Diseases, 9th Revision, Clinical Modification,* or ICD-9-CM (4) is the system currently used for coding diagnoses and procedures on the medical abstract forms as well as on the commercial abstracting services data files.

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 the 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.

Data from the medical abstract form is entered into a computer file and then combined with automated data files. A medical edit is conducted first by computer inspection and then a manual review of rejected records. Medical information is given priority in the editing decisions.

Users of the National Hospital Discharge Survey (NHDS) diagnostic and/or procedure data, which is coded to 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 2007 data is consistent with the ICD-9-CM and the addendum which became effective October 1, 2006. Addendum changes for 1986 through 2006 are listed in Appendix B.

In 2002, the ICD-9-CM Coordination and Maintenance Committee created a new procedure chapter to accommodate space limitations in the existing hierarchical classification system and to alleviate inappropriate categorization of new procedures. Chapter 00, Procedures and Interventions, Not Elsewhere Classified, has been coded in NHDS since 2003, as October addendum changes are not implemented in NHDS until the following data collection year.

The Uniform Hospital Discharge Data Set (UHDDS). Starting with 1979 data, 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 States as of July 1, 2007 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 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 2007, 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 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).

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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 of an estimate is the relative standard error of that estimate, and is designated by RSE(X). Using the generalized variance curves, RSE(X) 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 2007 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 151,000. Using the applicable constants from Table 1 for estimates by age produces:

$$RSE (151,000) = SQRT (0.036922 + (167.01187 / 151,000))$$

$$RSE (151,000) = .195$$

When multiplied by 100, the relative standard error for the estimate of interest becomes 19.5 percent. The standard error of the estimate is obtained by multiplying the relative standard error by the estimate itself:

$$SE (151,000) = 151,000 * .195 = 29,445$$

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:

$$(151,000 - 2*29,445) \quad <-> \quad (151,000 + 2*29,445)$$

$$92,110 \quad <-> \quad 209,890$$

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 2007 the estimated number of discharges from short-stay hospitals who were women was 20,535,000. This is 59.7 percent of the estimated 34,369,000 total

discharges for that year. Using the applicable constants from Table 1 for estimates by sex produces:

$$RSE (.597) = SQRT (327.37774 * (1 - .597) / (.597 * 34,369,000))$$

$$RSE (.597) = .00254$$

When multiplied by 100, the relative standard error for the estimate of interest becomes 0.254 percent. The standard error is obtained by multiplying the relative standard error by the estimate itself:

$$SE (.597) = .597 * .00254 = .00152$$

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:

$$(.597 - 2*.00152) <-> (.597 + 2*.00152)$$

$$.594 <-> .600$$

or, equivalently, **59.4% <-> 60.0%**

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 2007, the estimated number of days of care for inpatients with a first-listed diagnosis of septicemia (ICD-9-CM code 038) was 5,545,000. The estimated number of discharges for inpatients with a first-listed diagnosis of septicemia was 592,000. The ALOS for inpatients with a first-listed diagnosis of septicemia was 5,545,000/592,000 = 9.4 days.

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.

$$RSE (5,545,000) = .0606$$

$$RSE (592,000) = .0550$$

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

$$RSE (9.4) = SQRT ((.0606)^2 + (.0550)^2)$$

$$RSE(9.4) = .0818$$

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

$$SE (9.4) = .0818 * 9.4 = .769$$

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:

$$(9.4 - 2*.769) <-> (9.4 + 2*.769)$$

$$7.9 <-> 10.9$$

Table 1. Parameter values for generalized variance curves for National Hospital Discharge Survey aggregate statistics by statistic type: United States, 2007

Characteristic	First-listed diagnosis		Days of care		All-listed diagnosis		All-listed procedures	
	a	b	a	b	a	b	a	b
Total	0.002443	342.61914	0.003475	1112.98308	0.002474	339.654	0.00408	323.65514
Sex								
Male	0.00289	301.68123	0.004171	1184.5069	0.002707	342.4707	0.005296	238.32413
Female	0.002337	327.37774	0.00341	1173.41132	0.002301	379.4878	0.004261	285.96749
Age								
Under 15 years	0.036922	167.01187	0.048887	292.92701	0.037462	163.9782	0.041118	279.07209
15-44 years	0.002411	313.48239	0.004129	919.93718	0.002336	314.6085	0.003392	283.31614
45-64 years	0.002334	345.95717	0.003827	1211.39914	0.002625	338.8644	0.003341	277.65222
65 years and over	0.002633	312.76617	0.004104	1201.55753	0.002689	305.9958	0.009985	234.94189
Region								
Northeast	0.010019	207.19074	0.014699	598.10756	0.011459	192.5123	0.010271	179.20924
Midwest	0.018082	212.65871	0.016363	658.61372	0.013845	297.0225	0.022235	228.38834
South	0.003851	271.58671	0.004757	1156.05356	0.003936	277.7071	0.00544	271.35
West	0.00787	314.47504	0.011682	663.15368	0.008225	294.873	0.009074	386.01639
Race								
White	0.005389	317.52617	0.006985	967.00505	0.005135	342.2367	0.007706	295.10146
Black	0.003969	263.25385	0.006401	920.63563	0.004235	249.9521	0.004774	299.87502
All other	0.008314	280.50197	0.016061	630.7155	0.009154	281.2944	0.013101	248.69546
Race not stated	0.014529	200.66431	0.017563	606.43001	0.016116	211.2379	0.01464	225.51482
Expected source of payment								
Medicare	0.002948	282.57611	0.004388	980.57903	0.003516	294.2974	0.004879	311.16981
Medicaid	0.007526	289.23427	0.010589	1001.18113	0.006088	360.4202	0.006669	344.78712
Worker's compensation and other government payments	0.008947	320.86205	0.014156	1684.8203	0.011358	285.1618	0.010035	363.08726
HMO/PPO	0.006291	234.8893	0.009531	592.17319	0.006086	276.3712	0.006978	282.00722
BC/BS and other private insurance	0.003379	326.13232	0.005593	1036.92043	0.003813	295.8862	0.004338	302.34982
Self pay	0.004124	302.09956	0.008399	874.78641	0.003907	320.3239	0.00506	310.01907
No charge and other	0.02157	234.1159	0.03263	530.80909	0.02044	278.3858	0.017864	289.33343

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, and then a second adjustment was made to account for the excess nonresponse. In the second adjustment, the weights of the discharges in the hospital's respondent months were inflated by ratios that varied by category of first-listed ICD-9-CM diagnostic code. This adjustment ratio was based on the hospital's month(s) of nonresponse and the month-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 2007 NHDS,

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91 percent of the 422 responding hospitals provided data for all twelve months, and 96 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, beginning in 2003, Chapter 00 – Procedures and Interventions, Not Elsewhere Classified – was added to the list of frequencies for all-listed procedures on page 58.

Diagnosis-Related Groups (DRGs).
The Diagnosis Related Groups (DRGs) classification system is used by the Centers for Medicare and Medicaid Services (CMS) to determine payment for inpatient hospital care of Medicare patients. Groupings represent types of hospital cases that are expected to be similar in terms of resource use, and are based on patient demographic characteristics, as well as diagnoses, procedures, and presence of comorbidities or complications.

As a convenience for users, NCHS provides DRGs for discharges in the NHDS files. To assign the DRG, NCHS uses the CMS-DRG Grouper software. For the 2007 NHDS, Version 24.0 of the software was used. Approximately 98 percent of discharges in the file were assigned a DRG consistent with Version 24.0 of the Grouper. For those that could not be assigned a Version 24.0 DRG, the value is left blank. Because the DRGs and the DRG grouper software were developed outside of NCHS, any questions about the code assigned or the methodology for assignment should be directed to CMS.

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
Ambulatory and 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/nhds.htm

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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

REFERENCES

[1]Dennison C, Pokras R. Plan and Operation of the National Hospital Discharge Survey. National Center for Health Statistics. Vital Health Stat 1 (39). 2000. http://www.cdc.gov/nchs/data/series/sr_01/sr01_039.pdf

[2]SMG Marketing Group, Inc. Hospital Market Database. Chicago: Healthcare Information Specialists, Chicago, IL. April 1987, April 1991, April 1994, April 1997, April 2000; Verispan, L.L.C. Healthcare Market Index and Hospital Market Profiling Solution, 2003 and 2006.

[3]Simmons WR, Schnack GA. Development of the Design of the NCHS Hospital Discharge Survey. National Center for Health Statistics. Vital Health Stat 2(39). 1977.

[4]International Classification of Diseases, 9th Revision, Clinical Modification, 6th edition. U.S. Department of Health and Humans Services, National Center for Health Statistics, Health Care Financing Administration. 2006.

[5]Office of the Secretary, Department of Health and Human Services: Health Information Policy Council: 1984 Revision of the Uniform Hospital Discharge Data Set. Federal Register, Volume 50, No. 147. July 31, 1985.

[6]Bieler GS, Williams RL. *Analyzing Survey Data Using SUDAAN Release 7.5*. Research Triangle Institute: Research Triangle Park, N.C. 1997.

II. TECHNICAL DESCRIPTION OF DATA FILE

Data Set Name	NHDS07.PU.TXT
Record Length	88
Number of Records	365,648

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	07
2	3	1	Newborn status	1=Newborn 2=Not newborn
3	4	1	Units for age	1=Years 2=Months 3=Days
4	5-6	2	Age in years, months, or days	If units=years: 00-99* If units=months: 01-11 If units=days: 00-28 *Ages 100 and over were recoded to 99
5	7	1	Sex	1=Male 2=Female
6	8	1	Race	1=White 2=Black/African American 3=American Indian/Alaskan Native 4=Asian 5=Native Hawaiian or other Pacific Isldr 6=Other 8=Multiple race indicated 9=Not stated
7	9	1	Marital status	1=Married 2=Single 3=Widowed 4=Divorced 5=Separated 9=Not stated
8	10-11	2	Discharge month	01-12=January to December
9	12	1	Discharge Status	1=Routine/discharged home 2=Left against medical advice 3=Discharged/transferred to short-term facility 4=Discharged/transferred to long-term care institution 5=Alive, disposition not stated 6=Dead 9=Not stated or not reported
10	13-16	4	Days of care	Use to calculate number of days of care. Values of zero generated by the computer from admission and discharge dates were changed to one. (Discharges for which dates of admission and discharge are the same are identified in Item Number 11)

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

Item Number	Location	Number of Positions	Item description	Code description
				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 24.0
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, and (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).

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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.

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 2007, 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 2007 NHDS involved two data collection modes: manual and automated abstract services. All data collected manually were coded using the sixth edition of the ICD-9-CM, including addendum changes for 1986 through 2006. 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 2007, the ICD-9-CM with addendum changes up to October 1, 2006 was used; but for the last 3 months, the October 2007 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 2007 were converted back to their previous code assignments under the October 2006 addendum.

In 2002, the ICD-9-CM Coordination and Maintenance Committee created a new procedure chapter to accommodate space limitations in the existing hierarchical classification system and to alleviate inappropriate categorization of new procedures. Chapter 00, Procedures and Interventions, Not Elsewhere Classified, has been coded in the NHDS since 2003. As noted above October addendum changes are not implemented in the NHDS until the following data collection year.

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.

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
005.81, 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
038.10-038.11, 038.19	1997	038.1
040.82	2002	040.89
041.00-041.05, 041.09	1992	041.0
041.04 (Code title restated)	1997	041.04
041.10-041.19	1992	041.1
041.81-041.85, 041.89	1992	041.8
041.86	1995	041.84
042	1994	042.0-042.2, 042.9, 043.0-043.3, 043.9, 044.0, 044.9 (codes deleted)
042.0-044.9	1986	279.19
052.2	**2006**	**052.7**
053.14	**2006**	**053.19**
054.74	**2006**	**054.79**
066.4	2002	066.3
066.40-066.42, 066.49	2004	066.4
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
070.54	1994	070.51
070.59	1991	070.5
070.70	2004	070.51

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
070.71	2004	070.41
077.98-077.99	1993	077.9
078.10-078.11, 078.19	1993	078.1
078.88	1993	078.89
079.4	1993	079.8
079.50-079.53, 079.59	1993	079.8
079.6	1996	079.89
079.81	1995	079.89
079.82	2003	079.89
079.88-079.89	1993	079.8
079.98-079.99	1993	079.9
082.40-082.41, 082.49	2000	082.8
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
205.00	1991	205.0

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
238.71-238.76, 238.79	**2006**	**238.7**
250.02	1993	250.90

Changes in ICD-9-CM diagnosis codes, 1986-2006

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
252.00-252.02, 252.08	2004	252.0
255.10-255.14	2003	255.1
256.31-256.39	2001	256.3
259.5	2005	257.8
273.4	2004	277.6
275.40-275.42, 275.49	1997	275.4
276.50-276.52	2005	276.5
277.02-277.03, 277.09	2002	277.00
277.30-277.31, 277.39	**2006**	**277.3**
277.7	2001	277.8
277.81-277.84, 277.89	2003	277.8
277.85-277.86	2004	277.89
277.87	2004	277.89, 758.89
278.00-278.01	1995	278.0
278.02	2005	278.00
282.41-282.42, 282.49	2003	282.4
282.64	2003	282.63

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
282.68	2003	282.69
283.10-283.11, 283.19	1993	283.1
284.01, 284.09	**2006**	**284.0**
284.1	**2006**	**284.8**
284.2	**2006**	**284.8; 285.8**
285.21-285.22, 285.29	2000	285.8
287.30-287.33, 287.39	2005	287.3
288.00-288.04, 288.09	**2006**	**288.0**
288.4	**2006**	**288.0**
288.50-288.51	**2006**	**288.0; 288.8**
288.59	**2006**	**288.0**
288.60-288.65, 288.69	**2006**	**288.8**
289.52	2003	289.59
289.53	**2006**	**288.0**
289.81-289.82	2003	289.8
289.83	**2006**	**289.89**
289.89	2003	289.8
291.81	1996	291.8
291.82	2005	291.89
291.89	1996	291.8
292.85	2005	292.89
293.84	1996	293.89
294.10-294.11	2000	294.1
300.82	1996	300.81
305.1	1994	305.10, 305.11, 305.12, 305.13 (Codes deleted)
312.81-312.82, 312.89	1994	312.8
315.32	1996	315.39
320.81-320.89	1992	320.8
323.01-323.02	**2006**	**320.0**
323.41-323.42	**2006**	**323.4**
323.51-323.52	**2006**	**323.5**
323.61-323.63	**2006**	**323.6**

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
323.71-323.72	**2006**	**323.7**
323.81-323.82	**2006**	**323.8**
327.00	2005	780.51; 780.52
327.01	2005	780.51; 780.52
327.02	2005	307.41
327.09	2005	780.51; 780.52
327.10-327.14	2005	780.53; 780.54
327.15	2005	307.43
327.19	2005	780.53; 780.54
327.20-327.27	2005	780.57
327.29	2005	780.51; 780.53; 780.57
327.30-327.37; 327.39	2005	307.45
327.40-327.44; 327.49	2005	780.59
327.51	2005	780.58
327.52	2005	729.82
327.53	2005	306.8
327.59	2005	780.58
327.8	2005	780.50
331.11, 331.19	2003	331.1
331.82	2003	331.89
331.83	**2006**	**310.1**
333.71-333.72, 333.79	**2006**	**333.7**
333.85	**2006**	**333.82**
333.92-333.93	1994	333.99
333.94	**2006**	**333.99**
337.20-337.22, 337.29	1993	337.9
337.3	1998	337.9
338.0	**2006**	**Code to Pain, by site or 348.8**
338.11-338.12	**2006**	**Code to Pain, by site**
338.18-338.19	**2006**	**Code to Pain, by site**
338.21-338.22	**2006**	**Code to Pain, by site**
338.28-338.29	**2006**	**Code to Pain, by site**
338.3-338.4	**2006**	**Code to Pain, by site**
341.20	**2006**	**323.9**
341.21	**2006**	**323.8**
341.22	**2006**	**323.9**
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

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
347.00-347.01	2004	347
347.10-347.11	2004	347
348.30-348.31, 348.39	2003	348.3
355.71	1993	354.4
355.79	1993	355.7
357.81-357.82, 357.89	2002	357.8
358.00-358.01	2003	358.0
359.81, 359.89	2002	359.8
362.03-362.07	2005	362.02
365.83	2002	365.89
371.82	1992	371.89
372.81, 372.89	2000	372.8
374.87	1990	374.89
377.43	**2006**	**377.49**
379.60-379.63	**2006**	**379.99**

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
380.03	2004	733.99
389.15-389.16	**2006**	**389.18**
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
414.07	2003	414.06
414.12	2002	414.11
415.11	1995	997.3 + 415.1
415.19	1995	415.1
426.82	2005	794.31
428.20-428.23	2002	428.0
428.30-428.33	2002	428.0
428.40-428.43	2002	428.0
429.71, 429.79	1989	410.0-410.9
429.83	**2006**	**429.89**
433.00-433.01	1993	433.0
433.10-433.11	1993	433.1

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
433.20-433.21	1993	433.2
433.30-433.31	1993	433.3
433.80-433.81	1993	433.8
433.90-433.91	1993	433.9
434.00-434.01	1993	434.0
434.10-434.11	1993	434.1
434.90-434.91	1993	434.9
435.3	1995	435.0 + 435.1
437.7	1992	780.9
438.0	1997	294.9 + 438
438.10	1997	784.5 + 438
438.11	1997	784.3 + 438
438.12	1997	784.4 + 438
438.19	1997	784.5 + 438
438.20	1997	342.90 + 438
438.21	1997	342.91 + 438
438.22	1997	342.92 + 438
438.30	1997	344.40 + 438
438.31	1997	344.41 + 438
438.32	1997	344.42 + 438
438.40	1997	344.30 + 438
438.41	1997	344.31 + 438
438.42	1997	344.32 + 438
438.50-438.52	1997	344.89 + 438
438.53	1998	438.50
438.6-438.7	2002	438.89
438.81	1997	784.69 + 438
438.82	1997	787.2 + 438
438.83-438.85	2002	438.89
438.89	1997	438
438.9	1997	438
440.20-440.22	1992	440.2
440.23	1993	440.20 + (707.1 or 707.8 or 707.9)
440.24	1993	440.20 + 785.4
440.29	1993	440.2
440.30-440.32	1994	996.1
441.00-441.03	1994	441.0
441.6	1993	441.1 + 441.3
441.7	1993	441.2 + 441.4
443.21	2002	442.81

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
443.22	2002	442.2
443.23	2002	442.1
443.24, 443.29	2002	442.89
443.82	2005	443.89
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
453.40-453.42	2004	453.8
454.8	2002	454.9
458.2	1995	997.9 + 458.9
458.21, 458.29	2003	458.2
458.8	1997	458.9
459.10-459.13; 459.19	2002	459.1
459.30-459.33; 459.39	2002	459.89
464.00-464.01	2001	464.0
464.50-464.51	2001	464.0
466.11, 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
477.2	2004	477.8
478.11, 478.19	**2006**	**478.1**
480.3	2003	480.8
482.30-482.39	1992	482.3
482.40-482.41, 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

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
491.20-491.21	1991	491.2
491.22	2004	491.21
493.02	2000	493.00
493.12	2000	493.10
493.20	1989	493.90
493.21	1989	493.91
493.22	2000	493.20
493.81	2003	519.1
493.82	2003	493.90-493.91
493.92	2000	493.90
494.0-494.1	2000	494
512.1	1994	997.3
517.3	2003	282.62
518.6	1997	518.89
518.7	**2006**	**997.3**
518.81	1987	799.1
518.82-518.89	1987	518.8
518.83, 518.84	1998	518.81
519.00-519.02; 519.09	1998	519.0
519.11, 519.19	**2006**	**519.1**
521.00-521.05, 521.09	2001	521.0
521.06-521.08	2004	521.09
521.10-521.15	2004	521.1
521.20-521.25	2004	521.2
521.30-521.35	2004	521.3
521.40-521.45	2004	521.4
521.81	**2006**	**873.63; 873.73**
521.89	**2006**	**521.8**
523.00-523.01	**2006**	**523.0**
523.10-523-11	**2006**	**523.1**
523.20-523.25	2004	523.2
523.30-523.33	**2006**	**523.3**
523.40-523.42	**2006**	**523.4**
524.00-524.06, 524.09	1992	524.0
524.07	2004	524.09
524.10-524.12, 524.19	1992	524.1
524.20-524.29	2004	524.2
524.30-524.37, 524.39	2004	524.3
524.50-524.57, 524.59	2004	524.5

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
524.60-524.63, 524.69	1991	524.6
524.64	2004	524.69
524.70-524.77, 524.79	1992	524.8
524.75-524.76	2004	524.79
524.81-524.82, 524.89	2004	524.8
525.10-525.13, 525.19	2001	525.1
525.20-525.26	2004	525.2
525.40-525.44	2005	525.10
525.50-525.54	2005	525.10
525.60-525.67; 525.69	**2006**	**525.8**
526.61-526.63; 526.69	**2006**	**526.8**
528.00-528.02; 528.09	**2006**	**528.0**
528.71-528.72, 528.79	2004	528.7
530.10-530.11, 530.19	1993	530.1
530.12	2001	530.10
530.20-530.21	2003	530.2
530.81	1993	530.1
530.82-530.84, 530.89	1993	530.8
530.85	2003	530.2
530.86-530.87	2004	997.4
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
538	**2006**	**558.9**
556.0-556.6, 556.8-556.9	1994	556
558.3	2000	558.9
562.02	1991	562.00
562.03	1991	562.01

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
562.12	1991	562.10
562.13	1991	562.11
564.00-564.09	2001	564.0
564.81, 564.89	1998	564.8
567.21-567.23, 567.29	2005	567.2
567.31	2005	728.89
567.38	2005	567.2
567.39	2005	567.9
567.81-567.82, 567.89	2005	567.8
569.60-569.61, 569.69	1995	569.6
569.62	1998	569.69
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
585.1-585.6, 585.9	2005	585
588.81, 588.89	2004	588.8
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
599.60, 599.69	2005	599.6
599.81-599.89	1992	599.8
600.0-600.3, 600.9	2000	600
600.00-600.01	2003	600.0
600.10-600.11	2003	600.1
600.20-600.21	2003	600.2
600.90-600.91	2003	600.9

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
602.3	2001	602.8
607.85	2003	607.89
608.20-608.24	**2006**	**608.2**
608.82	2001	608.83
608.87	2001	608.89
616.81; 616.89	**2006**	**616.8**
618.00-618.05, 618.09	2004	618.0
618.81-618.83	2004	618.8
618.84	**2006**	**618.1**
618.89	2004	618.8
621.30-621.33	2004	621.3
622.10-622.12	2004	622.1
629.20-629.23	2004	629.8
629.29	**2006**	**629.20**
629.81	**2006**	**629.9**
629.89	**2006**	**629.8**
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
		645.0-645.1, 645.3
645.00-645.01, 645.03	1991	(amended 10/02/2004)
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
649.00-649.04	**2006**	**648.40-648.44**
649.10-649.14	**2006**	**646.10-646.14**
649.20-649.24	**2006**	**V23.89**
649.30	**2006**	**641.30; 648.90;666.30**
649.31	**2006**	**641.31; 648.91**
649.32	**2006**	**648.92;666.32**
649.33	**2006**	**641.33; 648.93**
649.34	**2006**	**648.94; 666.34**
649.40-649.44	**2006**	**648.90-648.94**
649.50-649.51	**2006**	**641.90-641.91**
649.53	**2006**	**641.93**
649.60-649.64	**2006**	**646.80-646.84**

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
651.70-651.71, 651.73	2005	651.8
654.20-654.21, 654.23	1990	654.2, 654.9
654.90-654.94	1990	654.2, 654.9
655.70-655.71, 655.73	1997	655.8
657.00-657.01, 657.03	1991	657.0-657.1, 657.3 (amended 10/02/2004)
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	665.10-665.12, 665.14[1]
670.00, 670.02, 670.04	1991	670.0-670.1, 670.3 (amended 10/02/2004)
672.00, 672.02, 672.04	1991	672.0-672.1, 672.3 (amended 10/02/2004)
674.50-674.54	2003	674.80, 674.82, 674.84
677	1994	None
686.00-686.01, 686.09	1997	686.0
690.10, 690.18	1995	690
690.11	1995	691.8 + 704.8
690.12	1995	691.8
690.8	1995	690
692.72-692.74	1992	692.79
692.75	2000	692.79
692.76-692.77	2001	692.71
692.82-692.83	1992	692.89
692.84	2004	692.89
702.0-702.8	1991	702
702.11, 702.19	1994	702.1
704.02	1993	704.09

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
705.21-705.22	2004	780.8
707.00-707.07, 707.09	2004	707.0
707.10-707.15, 707.19	2000	707.1
709.00-709.01, 709.09	1994	709.0
710.5	1992	288.3, 729.1
718.70-718.79	2001	718.80-718.89
719.7	2003	719.70, 719.75-719.79 (codes deleted)
727.83	2000	727.89
728.86	1995	729.4
728.87	2003	728.9
728.88	2003	728.89
729.71-729.73;729.79	**2006**	**729.9**
731.3	**2006**	**733.99**
733.10-733.16, 733.19	1993	733.1
733.93	2001	733.16
733.94-733.95	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, 752.69	1996	752.8
752.81, 752.89	2003	752.8
753.10-753.17, 753.19	1990	753.1
753.20-753.23, 753.29	1996	753.2
756.70-756.71, 756.79	1997	756.7
758.31-758.33, 758.39	2004	758.3
758.81	1996	758.8
758.89	1996	758.9

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
759.81-759.82, 759.89	1989	759.8
759.83	1994	759.89
760.75	1991	760.79
760.76	1994	760.79
760.77-760.78	2005	760.79
763.81-763.83, 763.89	1998	763.8
763.84	2005	770.1
764.00-764.09	1988	764.0
764.10-764.19	1988	764.1
764.20-764.29	1988	764.2
764.90-764.99	1988	764.9
765.00-765.09	1988	765.0
765.10-765.19	1988	765.1
765.20-765.24	2002	765.00-765.09
765.25-765.29	2002	765.10-765.19
766.21-766.22	2003	766.2
767.11-767.19	2003	767.1
768.7	**2006**	**768.9**
770.10-770.18	2005	770.1
770.81-770.84, 770.89	2002	770.8
770.85-770.86	2005	770.1
770.87	**2006**	**770.89**
770.88	**2006**	**768.9**
771.81-771.83, 771.89	2002	771.8
772.10-772.14	2001	772.1
775.81, 775.89	**2006**	**775.8**
779.7	2001	772.1
779.81-779.82	2002	779.8
779.83	2003	779.89
779.84	2005	None (omit code)
779.85	**2006**	**779.89**
779.89	2002	779.8
780.01-780.02, 780.09	1992	780.0
780.03	1993	780.01
780.31, 780.39	1997	780.3

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
780.32	**2006**	**780.39**
780.57	1992	780.51, 780.53
780.58	2004	780.59
780.71, 780.79	1998	780.7
780.91-780.92	2002	780.9
780.93-780.94	2003	780.99
780.95	2005	780.99
780.96, 780.97	**2006**	**780.99**
780.99	2002	780.9
781.8	1994	781.9
781.91-781.92, 781.99	2000	781.9
781.93	2002	723.5
781.94	2003	781.99
783.21	2000	783.2
783.22	2000	783.4
783.40-783.43	2000	783.4
783.7	2000	783.4
784.91	**2006**	**473.9**
784.99	**2006**	**784.9**
785.52	2003	785.59
786.03-786.07	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
788.30-788.37; 788.39	1992	788.3
788.38	2004	788.39
788.41-788.43	1993	788.4
788.61-788.62	1993	788.6
788.63	2003	788.69
788.64-788.65	**2006**	**788.69**
788.69	1993	788.6
789.00-789.07, 789.09	1994	789.0
789.30-789.37, 789.39	1994	789.3
789.40-789.47, 789.49	1994	789.4
789.60-789.67, 789.69	1994	789.6
790.01, 790.09	2000	790.0
790.21-790.22, 790.29	2003	790.2
790.91,790.93, 790.99	1993	790.9

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
790.92	1993	286.9
790.94	1997	790.99
790.95	2004	790.99
792.5	2000	792.9
793.80-793.81, 793.89	2001	793.8
793.91; **793.99**	**2006**	**793.9**
795.00-795.02, 795.09	2002	795.0
795.03, 795.04	2004	622.1
795.05, 795.08	2004	795.09
795.06	**2006**	**795.04**
795.31-795.39	2002	795.3
795.71	1994	795.8 (Code deleted)
795.79	1994	795.7
795.8	1986	795.7
795.81-795.82, 795.89	**2006**	**796.9**
796.5	1997	796.9
796.6	2004	796.9
799.01-799.02	2005	799.0
799.81, 799.89	2003	799.8
813.45	2002	813.42
823.40-823.42	2002	823.80-823.82
840.7	2001	840.8
850.11-850.12	2003	850.1
864.05	1992	864.09
864.15	1992	864.19
909.5	1994	909.9
922.31-922.33	1996	922.3
925.1-925.2	1993	925
958.90-958.93; **958.99**	**2006**	**958.8**
959.0 (Code title restated)	1997	959.0
959.01	1997	854.00
959.09	1997	959.0
959.11-959.14, 959.19	2003	959.1

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
965.61, 965.69	1998	965.6
989.81-989.84, 989.89	1995	989.8
995.20-995.23	**2006**	**995.2**
955.27; 995.29	**2006**	**995.2**
995.50-995.55, 995.59	1996	995.5
995.60-995.69	1993	995.0
995.7	2000	None
995.80, 995.82-995.85	1996	995.81
995.81 (Code title restated)	1996	995.81
995.86	1998	995.89
995.90-995.94	2002	038.0-038.9
996.04	1994	996.09
996.40-996.47, 996.49	2005	996.4
996.51-996.59	1987	996.5
996.55	1998	996.52
996.56	1998	996.59
996.57	2003	996.59
996.60-996.69	1989	996.6
996.68	1998	996.69
996.70-996.79	1989	996.7
996.80-996.84, 996.86, 996.89	1987	996.8
996.85	1990	996.89
996.87	2000	996.89
997.00-997.01, 997.09	1995	997.0
997.02	1995	997.9 + 430-434, 436
997.71	2001	997.4
997.72	2001	997.5
997.79	2001	997.2
997.91, 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, 998.59	1996	998.5
998.81-998.82, 998.89	1994	998.8
998.83	1996	998.89
V01.71, V01.79	2004	V01.7
V01.81, V01.89	2002	V01.8
V01.82	2003	V01.89
V01.83-V01.84	2004	V01.89

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V02.51-V02.52, V02.59	1998	V02.5
V02.60-V02.62, V02.69	1997	V02.6
V03.81-V03.82, V03.89	1994	V03.8
V04.81-V04.82, V04.89	2003	V04.8
V05.3-V05.4	1993	V05.8
V06.5-V06.6	1994	V06.8
V07.31, V07.39	1994	V07.3
V07.4	1992	V07.8
V08	1994	044.9, 795.8 (codes deleted)
V09.0-V09.91	1993	None
V10.48	1998	V10.49
V10.53	2001	V10.59
V12.00-V12.03, V12.09	1994	V12.0
V12.40-V12.41, V12.49	1997	V12.4
V12.42	2005	V12.49
V12.50-V12.52, V12.59	1995	V12.5
V12.60-V12.61; V12.69	2005	V12.6
V12.70-V12.72, V12.79	1994	V12.7
V13.00-V13.01, V13.09	1994	V13.0
V13.02-V13.03	2005	V13.09
V13.21, V13.29	2002	V13.2
V13.61, V13.69	1998	V13.6
V15.01-V15.09	2000	V15.0
V15.41-V15.42, V15.49	1996	V15.4
V15.82	1994	305.13 (code deleted)
V15.84-V15.86	1995	V15.89
V15.87	2003	V15.89
V15.88	2005	V15.49
V16.40-V16.43, V16.49	1997	V16.4
V16.51, V16.59	1998	V16.5
V17.81, V17.89	2005	V17.8
V18.51; V18.59	**2006**	**V18.5**
V18.61, V18.69	1998	V18.6
V18.9	2005	V19.8

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V21.30-V21.35	2000	None
V23.41, V23.49	2002	V23.4
V23.7	1989	V23.8
V23.81-V23.84, V23.89	1998	V23.8
V25.03	2003	V25.01
V25.43	1992	V25.49
V25.5	1992	V25.8
V26.21-V26.22, V26.29	2000	V26.2
V26.31-V26.33	2005	V26.3
V26.34-V26.35	**2006**	**V26.31**
V26.39	**2006**	**V26.32**
V26.51, 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
V29.9	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-V42.83, V42.89	1997	V42.8
V42.84	2000	V42.89
V43.21-V43.22	2003	V43.2
V43.60-43.66, V43.69	1994	V43.6
V43.81-V43.82, V43.89	1995	V43.8
V43.83	1998	V43.89
V44.50-V44.52, V44.59	1998	V44.5
V45.00, V45.02, V45.09	1994	V45.89
V45.01	1994	V45.0
V45.51	1994	V45.5

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V45.52, V45.59	1994	V45.89
V45.61, V45.69	1997	V45.6
V45.71	1997	611.8
V45.72	1997	569.89
V45.73	1997	593.89
V45.74	2000	593.89, 596.8
V45.75	2000	V45.89
V45.76	2000	518.89
V45.77	2000	602.8, 607.89, 608.89, 620.8, 621.8, 622.8
V45.78	2000	360.89
V45.79	2000	255.8, 289.59, 388.8, 569.49, 577.8 V45.89
V45.82	1994	V45.89
V45.83	1995	V45.89
V45.84	2001	None
V45.85	2003	V45.89
V45.86	**2006**	**V45.89**
V46.11-V46.12	2004	V46.1
V46.13-V46.14	2005	V46.11
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
V49.83	2004	None
V49.84	2005	V49.89
V49.89	2000	V49.8
V50.41-V50.42, V50.49	1994	V50.8
V53.01-V53.02, V53.09	1997	V53.0
V53.31-V53.32, V53.39	1994	V53.9
V53.90-V53.91, V53.99	2003	V53.9
V54.01-V54.02, V54.09	2003	V54.0
V54.10-V54.17, V54.19	2002	V54.8
V54.20-V54.27, V54.29	2002	V54.8
V54.81, V54.89	2002	V54.8
V56.1	1995	V58.89
V56.1 (Code title restated)	1998	V56.1
V56.2	1998	V56.1
V56.31-V56.32	2000	V56.8
V57.21-V57.22	1994	V57.2

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V58.11	2005	V58.1
V58.12	2005	140-208; 230-239
V58.30-V58.32	**2006**	**V58.3**
V58.41, V58.49	1994	V58.4
V58.42, V58.43	2002	V58.49
V58.44	2004	V58.71-V58.78
V58.61, V58.69	1995	V67.51
V58.62	1998	V58.69
V58.63-V58.65	2003	V58.69
V58.66-V58.67	2004	V58.69
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, V59.09	1995	V59.0
V59.6	1995	V59.8
V59.70-V59.74	2005	V59.8
V61.10-V61.12	1996	V61.1
V61.22	1996	V61.21
V62.83	1996	V65.49
V62.84	2005	V62.89
V64.00-V64.05	2005	V64.0
V64.06	2005	V64.2
V64.07-V64.09	2005	V64.0
V64.4	1997	None
V64.41-V64.43	2003	V64.4
V65.11, V65.19	2003	V65.1
V65.40-V65.45, V65.49	1994	V65.4
V65.46	2003	V65.1
V66.7	1996	None
V67.00-V67.01, V67.09	2000	V67.0
V69.0-V69.3	1994	None
V69.4	2004	V69.8
V69.5	2005	V69.8
V69.8-V69.9	1994	None
V71.81, V71.89	2000	V71.8
V71.82-V71.83	2002	V71.89

Changes in ICD-9-CM diagnosis codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
V72.11,V72.19	**2006**	**V72.1**
V72.31-V72.32	2004	V72.3
V72.40-V72.41	2004	V72.4
V72.42	2005	V22.0-V22.1
V72.81-V72.85	1993	V72.8
V72.86	2005	V72.83
V73.88-V73.89	1993	V73.8
V73.98-V73.99	1993	V73.9
V76.10-V76.12, V76.19	1997	V76.1
V76.44-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
V82.71	**2006**	**V26.31**
V82.79	**2006**	**V26.32**
V82.81, V82.89	2000	V82.8
V83.01-V83.02	2001	None
V83.81	2002	None
V83.89	2002	V19.8
V84.01-V84.04, V84.09	2004	None
V84.8	2004	None
V85.0	2005	None
V85.1	2005	None
V85.21-V85.25	2005	None
V85.30-V85.39	2005	None
V85.4	2005	None
V85.51-V85.54	**2006**	**None**
V86.0-V86.1	**2006**	**None**
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

Changes in ICD-9-CM diagnosis codes, 1986-2006

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

Changes in ICD-9-CM diagnosis codes, 1986-2006

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

[1]The title for the subcategory, 665.1, has been changed, making the fifth-digit subclassification, 665.12 and 665.14, invalid.

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
00.01-00.03, 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
00.15	2003	99.28
00.16	2004	None
00.17	2004	99.29
00.18	2005	99.29
00.21	2004	88.71
00.22	2004	88.73
00.23	2004	88.77
00.24	2004	88.72
00.25	2004	88.75
00.28-00.29	2004	88.79
00.31-00.35, 00.39	2004	None
00.40-00.43	2005	None
00.44	**2006**	**None**
00.45-00.48	2005	None
00.50	2002	37.80-37.87 & 37.70-37.74, 37.76
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
00.56	**2006**	**89.63**
00.57	**2006**	**37.79**
00.61-00.62	2004	39.50
00.63-00.65	2004	00.55, 39.90
00.66	2005	36.01 (deleted), 36.02 (deleted), 36.05 (deleted)
00.70-00.73	2005	81.53
00.74-00.76	2005	None
00.77	**2006**	**None**
00.80-00.84	2005	81.55
00.85	**2006**	**81.51**
00.86- 00.87	**2006**	**81.52**
00.91-00.93	2004	None

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
01.26-01.27	2005	None
01.28	**2006**	**01.26**
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
13.90, 13.91	**2006**	**13.9 (code deleted)**
20.96-20.98	1986	20.95
22.12	1988	22.11
26.12	1988	26.11
27.64	2004	27.69
29.31	1991	83.02
29.32, 29.33, 29.39	1991	29.3
31.45	1988	31.43-31.44
31.95	1989	31.75
32.01, 32.09	1989	32.0
32.22	1995	32.29, 32.9
32.23- 32.26	**2006**	**32.29**
32.28	1989	32.29
33.27	1987	33.22 + 33.27
33.28	1987	33.27
33.29	1987	33.28-33.29
33.50-33.52	1995	33.5
33.6	1990	33.5 + 37.5
33.71, 33.78-33.79	**2006**	**33.22, 96.05**
34.05	1994	34.99
35.55	**2006**	**35.53**
35.84	1988	35.82
35.96	1986	35.03
36.00-36.03	1986	36.0
36.04	1986	39.97

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
36.05	1986	36.01[1], 36.02
36.05	1987	36.01
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, 36.32	1998	36.3
36.33, 36.34	**2006**	**36.32**
36.39	1998	36.3
37.20	**2006**	**37.26**
37.26-37.27	1988	37.29
37.28	2001	88.72
37.34	1988	37.33
37.35	1997	37.33
37.41, 37.49	2005	37.99
37.51	2003	37.5
37.52	2003	37.62
37.53, 37.54	2003	37.63
37.65, 37.66	1995	37.62
37.67	1998	37.4
37.68	2004	37.62
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
37.80-37.87	1992	89.49 (Code deleted; this procedure is included in the code for pacemaker insertion/replacement)
37.80-37.83 (Device only)	1987	37.73-37.77 (Leads/device)
37.85-37.87	1987	37.85
37.89	1987	37.86 + 37.89
37.90	2004	37.99
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)	1989	38.44-38.45
38.95	1989	38.93
39.28	1991	39.29
39.50	1995	39.59

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
39.65	1988	39.61
39.66	1990	39.65
39.71, 39.79	2000	39.52
39.72	2002	39.79
39.73	2005	39.79
39.74	**2006**	**38.01, 38.02**
39.90	1996	39.50
41.00-41.03	1988	41.0
41.04	1994	99.79
41.05, 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, 44.29	1986	44.2
44.22	1986	44.99
44.32	2001	44.39
44.38	2004	44.39
44.43	1989	43.49, 45.32
44.44	1989	38.86
44.49	1989	43.0
44.67	2004	44.66
44.68	2004	44.69
44.93-44.94	1986	44.99
44.95, 44.96	2004	44.69
44.97, 44.98	2004	44.99
45.16	1988	45.14 (45.15 before 1987)
45.30	1989	45.31, 45.32
45.42	1988	45.41
45.43	1989	45.49
45.75	1988	48.66 (Code deleted; Hartmann resection added)
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

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
47.01, 47.09	1996	47.0
47.11, 47.19	1996	47.1
48.36	1995	45.42
49.31, 49.39	1989	49.3
49.75, 49.76	2002	49.79
50.23- 50.26	**2006**	**50.29**
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
52.21-52.22	1989	52.2
52.84-52.86	1996	99.29
52.93	1989	52.93 + 52.91
52.94	1989	52.09
52.97, 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, 54.59	1996	54.5
55.03-55.04	1986	55.02
55.32-55.35	**2006**	**55.39**
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, 58.39	1990	58.3

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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, 60.29	1995	60.2
60.95	1991	60.99
60.96, 60.97	2000	60.29
64.97	1986	64.95
65.01, 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, 65.39	1996	65.3
65.41, 65.49	1996	65.4
65.53	1996	65.51
65.54	1996	65.52
65.63	1996	65.61
65.64	1996	65.62
65.74	1996	65.71
65.75	1996	65.72
65.76	1996	65.73
65.81, 65.89	1996	65.8
66.01	1992	66.0
66.02	1992	66.73
67.51, 67.59	2001	67.5
68.15	1987	68.14
68.16	1987	68.13
68.23	1996	68.29
68.31, 68.39	2003	68.3
68.41,68.49	**2006**	**68.4 (code deleted)**
68.51, 68.59	1996	68.5
68.61. 68.69	**2006**	**68.6 (code deleted)**
68.71, 68.79	**2006**	**68.7 (code deleted)**
68.9	1992	68.4
74.3	1992	69.11 (Code deleted)
75.37	1998	99.29

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
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
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[2]	1987	78.40
78.91[2]	1987	78.41
78.92[2]	1987	78.42
78.93[2]	1987	78.43
78.94[2]	1987	78.44
78.95[2]	1987	78.45
78.96[2]	1987	78.46
78.97[2]	1987	78.47
78.98[2]	1987	78.48
78.99[2]	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
81.18	2005	81.99
81.30-81.39	2001	81.09
81.40	1989	81.69

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment
81.51	1989	81.51, 81.59
81.52	1989	81.61-81.64
81.53	1989	81.51, 81.59, 81.61-81.64
81.54-81.55	1989	81.41
81.56	1989	81.48
81.57	1989	81.31, 81.39
81.59	1989	81.39
81.61[3]	2002	81.00-81.08, 81.30-81.39
81.62-81.64	2003	None
81.65, 81.66	2004	78.49
81.72	1989	81.79
81.73-81.74	1989	81.86 (Code deleted)
81.75	1989	81.87 (Code deleted)
81.79	1989	81.79, 81.87
81.80	1989	81.81
81.97	1992	81.59
84.51, 84.52	2002	None
84.53, 84.54	2004	78.30, 78.32-78.35, 78.37-78.39
84.55, 84.59	2004	None
84.56-84.57	2005	None
84.58	2005	84.59
84.60-84.69	2004	80.51
84.71-84.73	2005	None
85.95, 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
86.94-86.96	2004	02.93, 03.93, 04.92
86.97	2005	86.94
86.98	2005	86.95
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

Changes in ICD-9-CM in procedure codes, 1986-2006

Current code(s) assignment	Effective October 1	Previous code(s) assignment	
89.10, 89.19	1989	89.15	
89.17-89.18	1988	89.15	
89.49	2004	89.59	
89.50	1991	89.54	
89.60	2002	89.65	
92.20	2005	92.28	
92.3	1995	01.59, 04.07, 07.63, 07.68	
92.30-92.33, 92.39	1998	92.3	
93.90	1988	93.92	
94.61-94.69	1989	94.25	
96.29	1998	96.39	
96.6	1986	96.35	
96.70-96.72	1991	93.92	(code deleted)
97.05	1989	51.97	
97.44	2001	37.64	
98.51-98.52, 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[4]	1988	99.07	
99.75	2000	99.29	
99.76	2002	99.79	
99.77	2002	None	
99.78	2004	99.71	
99.85	1987	93.35	
99.86	1987	93.39	
99.88	1988	99.83	

[1]Before October 1986 contents of current code 36.05 would have been assigned to 36.0.

[2]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.

[3]Code 81.61 was deleted effective 10/01/2005.

[4]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".

APPENDIX C

This appendix provides estimates of the civilian population of the United States as of July 1, 2007. 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 and racial groups 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 2007). 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 2007 NHDS, 152 of the 365,648 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, 2007.   [Source: U.S. Bureau of the Census, Population Division.]

Estimates in thousands

	Total	Male	Female		Total	Male	Female
All ages	300,466	147,680	152,786	**15 to 44 years**	125,166	63,236	61,930
White	240,302	118,796	121,506	Northeast	22,396	11,214	11,183
Black/AfAm	38,540	18,323	20,217	Midwest	27,218	13,773	13,444
Other	21,624	10,561	11,063	South	45,553	22,860	22,693
				West	29,999	15,389	14,610
Northeast	54,614	26,544	28,071				
Midwest	66,275	32,607	33,668	**45 to 64 years**	76,524	37,316	39,207
South	109,812	53,714	56,099	45 to 54 years	43,817	21,546	22,271
West	69,765	34,816	34,949	55 to 64 years	32,707	15,771	16,936
Under 15 years	60,888	31,151	29,737				
				White	63,357	31,247	32,110
Under 1 year	4,257	2,179	2,078	Black/AfAm	8,541	3,891	4,650
1 to 4 years	16,467	8,424	8,043	Other	4,625	2,177	2,448
5 to 14 years	40,164	20,549	19,615				
				Northeast	14,578	7,071	7,506
White	46,358	23,769	22,588	Midwest	17,202	8,462	8,740
Black/AfAm	9,291	4,716	4,576	South	27,656	13,363	14,293
Other	5,239	2,666	2,572	West	17,088	8,419	8,668
				65 years and over	37,888	15,976	21,912
Northeast	10,146	5,190	4,957	65 to 74 years	19,352	8,887	10,465
Midwest	13,282	6,794	6,488	75 to 84 years	13,024	5,313	7,711
South	22,719	11,621	11,098	85 years and over	5,512	1,777	3,735
West	14,740	7,547	7,194				
15 to 44 years	125,166	63,236	61,930	White	32,927	13,988	18,939
15 to 24 years	42,080	21,503	20,578	Black/AfAm	3,230	1,243	1,988
25 to 34 years	40,181	20,337	19,844	Other	1,730	746	985
35 to 44 years	42,905	21,396	21,509				
				Northeast	7,494	3,069	4,425
White	97,660	49,791	47,869	Midwest	8,572	3,578	4,995
Black/AfAm	17,477	8,474	9,003	South	13,884	5,869	8,015
Other	10,030	4,972	5,058	West	7,938	3,460	4,477

*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, 2007.
Source: U.S. Bureau of the Census, Population Division.

	Estimates in thousands														
	United States			Northeast Region			Midwest Region			South Region			West Region		
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All	300,466	147,680	152,786	54,614	26,544	28,071	66,275	32,607	33,668	109,812	53,714	56,099	69,765	34,816	34,949
0-4	20,724	10,603	10,121	3,311	1,694	1,617	4,420	2,262	2,158	7,877	4,028	3,849	5,116	2,619	2,497
5-9	19,850	10,149	9,701	3,296	1,684	1,612	4,360	2,227	2,133	7,450	3,810	3,640	4,743	2,427	2,316
10-14	20,314	10,400	9,914	3,540	1,812	1,727	4,502	2,305	2,198	7,392	3,783	3,609	4,881	2,500	2,380
15-19	21,396	10,942	10,454	3,898	1,989	1,909	4,773	2,445	2,328	7,661	3,913	3,748	5,064	2,596	2,468
20-24	20,684	10,561	10,123	3,705	1,870	1,835	4,594	2,339	2,255	7,423	3,780	3,643	4,962	2,572	2,391
25-29	20,811	10,571	10,241	3,389	1,708	1,680	4,524	2,300	2,224	7,725	3,884	3,841	5,174	2,679	2,495
30-34	19,370	9,766	9,603	3,362	1,678	1,684	4,104	2,075	2,029	7,125	3,559	3,565	4,779	2,454	2,325
35-39	21,022	10,521	10,501	3,848	1,903	1,945	4,468	2,244	2,225	7,685	3,812	3,873	5,021	2,562	2,459
40-44	21,883	10,875	11,008	4,195	2,065	2,130	4,754	2,371	2,383	7,935	3,912	4,023	4,999	2,527	2,472
45-49	22,817	11,265	11,552	4,371	2,149	2,222	5,149	2,554	2,595	8,159	3,997	4,162	5,139	2,566	2,573
50-54	20,999	10,281	10,719	3,989	1,948	2,041	4,775	2,361	2,414	7,507	3,637	3,869	4,728	2,333	2,395
55-59	18,231	8,843	9,388	3,451	1,665	1,786	4,099	2,013	2,086	6,616	3,173	3,443	4,065	1,992	2,074
60-64	14,475	6,927	7,548	2,766	1,309	1,457	3,179	1,534	1,646	5,375	2,556	2,819	3,156	1,529	1,627
65-69	10,752	5,019	5,733	2,029	933	1,096	2,389	1,119	1,270	4,038	1,877	2,161	2,296	1,090	1,206
70-74	8,600	3,868	4,732	1,657	733	925	1,916	863	1,054	3,215	1,441	1,774	1,811	832	980
75-79	7,325	3,107	4,218	1,470	608	862	1,655	696	958	2,681	1,136	1,545	1,520	666	854
80-84	5,699	2,206	3,493	1,175	440	735	1,307	501	807	2,034	789	1,245	1,182	477	705
85+	5,512	1,777	3,735	1,163	355	808	1,305	399	907	1,916	626	1,289	1,128	397	732
0-14	60,888	31,151	29,737	10,146	5,190	4,957	13,282	6,794	6,488	22,719	11,621	11,098	14,740	7,547	7,194
15-44	125,166	63,236	61,930	22,396	11,214	11,183	27,218	13,773	13,444	45,553	22,860	22,693	29,999	15,389	14,610
45-64	76,524	37,316	39,207	14,578	7,071	7,506	17,202	8,462	8,740	27,656	13,363	14,293	17,088	8,419	8,668
65+	37,888	15,976	21,912	7,494	3,069	4,425	8,572	3,578	4,995	13,884	5,869	8,015	7,938	3,460	4,477
15+	239,578	116,529	123,049	44,468	21,354	23,114	52,992	25,813	27,179	87,093	42,092	45,001	55,025	27,269	27,755
45+	114,412	53,293	61,119	22,071	10,140	11,931	25,775	12,040	13,735	41,540	19,233	22,307	25,025	11,880	13,145
75+	18,536	7,089	11,446	3,808	1,403	2,405	4,267	1,596	2,672	6,631	2,551	4,079	3,830	1,539	2,291

TABLE 3:   Civilian Population of the United States by sex, age, and race: July 1, 2007.
[Source: U.S. Bureau of the Census, Population Division.]

	ALL RACES			WHITE			BLACK			OTHER		
Estimates in thousands												
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
All ages	300,466	147,680	152,786	240,302	118,796	121,506	38,540	18,323	20,217	21,624	10,561	11,063
0-4	20,724	10,603	10,121	15,717	8,053	7,664	3,153	1,601	1,552	1,855	949	905
0	4,257	2,179	2,078	3,211	1,645	1,566	660	336	324	385	197	188
1	4,182	2,139	2,043	3,154	1,616	1,537	651	330	322	377	193	184
2	4,110	2,104	2,007	3,110	1,594	1,516	629	320	310	372	190	182
3	4,111	2,103	2,009	3,134	1,605	1,529	612	311	301	365	187	178
4	4,063	2,079	1,985	3,108	1,592	1,516	600	305	295	355	182	173
5-9	19,850	10,149	9,701	15,156	7,768	7,388	2,984	1,513	1,471	1,710	867	843
5	4,032	2,060	1,972	3,084	1,579	1,505	606	307	299	342	174	168
6	4,089	2,089	2,000	3,124	1,599	1,525	622	315	307	344	175	169
7	3,936	2,015	1,921	3,005	1,542	1,463	588	298	290	342	174	168
8	3,892	1,990	1,902	2,970	1,523	1,447	580	294	286	342	173	170
9	3,901	1,996	1,906	2,973	1,525	1,448	588	299	289	340	172	169
10-14	20,314	10,400	9,914	15,485	7,948	7,537	3,155	1,602	1,553	1,674	850	824
10	3,927	2,007	1,920	2,997	1,536	1,461	592	300	291	338	170	168
11	4,010	2,052	1,958	3,066	1,574	1,492	604	306	298	340	172	168
12	4,075	2,087	1,987	3,109	1,597	1,513	631	321	310	334	170	164
13	4,109	2,104	2,005	3,125	1,604	1,521	652	331	321	332	169	162
14	4,193	2,150	2,044	3,187	1,637	1,550	676	344	332	330	168	162
15-19	21,396	10,942	10,454	16,368	8,392	7,976	3,399	1,718	1,680	1,630	832	798
15	4,265	2,182	2,083	3,249	1,666	1,583	685	347	338	331	169	162
16	4,334	2,220	2,114	3,307	1,698	1,610	697	354	343	330	169	161
17	4,412	2,262	2,150	3,371	1,733	1,638	709	359	350	332	170	162
18	4,236	2,166	2,070	3,246	1,663	1,582	668	338	330	323	165	158
19	4,149	2,112	2,037	3,195	1,632	1,564	639	321	318	314	160	155
20-24	20,684	10,561	10,123	16,063	8,238	7,826	3,044	1,527	1,517	1,576	796	781
20	4,106	2,089	2,017	3,177	1,622	1,555	621	311	310	308	156	152
21	4,134	2,105	2,029	3,207	1,639	1,568	615	308	307	312	158	154
22	4,159	2,120	2,039	3,235	1,656	1,579	610	306	304	314	158	156
23	4,101	2,099	2,002	3,187	1,639	1,548	597	300	297	317	160	157
24	4,184	2,148	2,036	3,257	1,682	1,576	601	302	299	325	164	161
25-29	20,811	10,571	10,241	16,179	8,301	7,878	2,926	1,425	1,501	1,706	845	861
25	4,226	2,160	2,066	3,288	1,694	1,595	603	300	304	335	167	167
26	4,278	2,169	2,109	3,328	1,702	1,626	605	295	310	345	171	174
27	4,272	2,165	2,107	3,316	1,698	1,619	608	295	312	348	172	176
28	4,073	2,066	2,006	3,161	1,623	1,538	570	275	295	342	169	173
29	3,963	2,010	1,953	3,086	1,585	1,501	540	260	280	337	166	171
30-34	19,370	9,766	9,603	15,017	7,678	7,339	2,580	1,219	1,360	1,772	869	904
30	3,913	1,980	1,932	3,041	1,560	1,481	529	252	277	342	168	174
31	3,818	1,930	1,887	2,961	1,519	1,443	508	241	268	348	171	177
32	3,926	1,981	1,945	3,046	1,560	1,487	519	245	274	361	177	184
33	3,812	1,918	1,894	2,953	1,507	1,446	502	236	266	357	175	182
34	3,902	1,957	1,945	3,016	1,533	1,483	522	246	276	364	178	186

	ALL RACES			WHITE			BLACK			OTHER		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
35-39	21,022	10,521	10,501	16,542	8,386	8,156	2,719	1,274	1,445	1,761	860	901
35	4,087	2,049	2,038	3,181	1,616	1,565	540	254	287	366	179	187
36	4,312	2,154	2,159	3,386	1,713	1,673	563	263	300	363	178	185
37	4,394	2,205	2,189	3,463	1,760	1,702	567	266	301	365	178	186
38	4,152	2,077	2,075	3,288	1,666	1,623	523	245	278	341	166	175
39	4,077	2,036	2,041	3,224	1,631	1,593	526	246	280	326	159	168
40-44	21,883	10,875	11,008	17,491	8,796	8,695	2,809	1,310	1,499	1,584	770	814
40	4,088	2,036	2,052	3,255	1,641	1,613	525	245	280	309	150	159
41	4,204	2,096	2,108	3,339	1,685	1,654	551	258	293	314	153	161
42	4,491	2,238	2,252	3,581	1,806	1,775	586	274	312	323	158	166
43	4,558	2,260	2,298	3,658	1,835	1,823	578	269	309	321	155	166
44	4,542	2,245	2,296	3,657	1,828	1,829	568	264	304	316	153	163
45-49	22,817	11,265	11,552	18,556	9,266	9,291	2,792	1,296	1,496	1,469	703	766
45	4,556	2,254	2,302	3,694	1,848	1,846	562	261	301	300	145	155
46	4,602	2,269	2,332	3,745	1,869	1,876	562	260	302	295	141	154
47	4,682	2,319	2,363	3,791	1,900	1,891	585	273	312	306	146	160
48	4,488	2,211	2,278	3,657	1,822	1,835	547	253	294	284	135	149
49	4,489	2,211	2,278	3,670	1,827	1,843	536	249	287	284	136	148
50-54	20,999	10,281	10,719	17,274	8,557	8,717	2,426	1,113	1,314	1,299	611	688
50	4,434	2,177	2,257	3,633	1,804	1,829	527	243	284	274	130	144
51	4,259	2,087	2,172	3,491	1,732	1,759	500	230	271	268	126	142
52	4,275	2,100	2,175	3,509	1,744	1,765	499	230	269	267	126	141
53	4,085	1,994	2,091	3,371	1,666	1,706	464	212	252	249	117	133
54	3,946	1,922	2,024	3,270	1,611	1,659	436	198	238	240	112	127
55-59	18,231	8,843	9,388	15,188	7,456	7,731	1,962	884	1,078	1,082	503	579
55	3,810	1,855	1,954	3,166	1,562	1,605	416	187	228	228	106	121
56	3,705	1,798	1,907	3,074	1,511	1,564	411	186	226	219	102	118
57	3,686	1,791	1,895	3,047	1,498	1,548	411	187	225	228	106	122
58	3,534	1,709	1,825	2,952	1,445	1,507	373	168	206	209	97	112
59	3,496	1,689	1,807	2,948	1,440	1,508	350	157	193	198	92	106
60-64	14,475	6,927	7,548	12,339	5,969	6,370	1,361	598	763	775	361	414
60	3,666	1,772	1,894	3,146	1,536	1,610	332	148	183	189	88	101
61	2,720	1,304	1,416	2,295	1,113	1,182	268	118	150	158	73	84
62	2,704	1,293	1,410	2,285	1,106	1,180	266	117	150	152	71	81
63	2,651	1,261	1,390	2,260	1,086	1,174	249	109	140	142	66	76
64	2,734	1,297	1,437	2,353	1,128	1,225	246	106	140	135	63	72
65-69	10,752	5,019	5,733	9,165	4,323	4,842	1,017	431	586	570	265	305
65	2,399	1,130	1,269	2,051	977	1,074	222	95	127	127	59	68
66	2,215	1,037	1,178	1,886	893	993	210	89	121	119	55	64
67	2,143	1,000	1,143	1,815	856	959	211	90	121	117	55	62
68	2,024	941	1,082	1,729	812	917	189	80	109	106	49	56
69	1,972	910	1,062	1,685	786	899	185	78	108	102	47	55
70-74	8,600	3,868	4,732	7,368	3,350	4,018	801	327	474	431	191	240
70	1,840	843	998	1,573	727	845	173	72	101	95	43	52
71	1,790	813	978	1,530	702	828	169	70	100	91	41	50
72	1,777	799	977	1,522	692	829	167	68	99	88	39	49
73	1,604	714	890	1,376	620	757	148	60	89	80	35	45
74	1,588	699	889	1,367	609	758	144	57	87	77	33	44

2007 NHDS DATA FILE DOCUMENTATION

	ALL RACES			WHITE			BLACK			OTHER		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
75-79	7,325	3,107	4,218	6,411	2,751	3,660	593	223	370	321	133	188
75	1,548	674	874	1,345	592	752	132	51	81	71	30	41
76	1,510	650	860	1,322	575	746	121	46	75	67	28	39
77	1,510	640	870	1,317	565	752	125	47	78	67	28	39
78	1,394	583	811	1,225	518	707	110	40	70	60	24	35
79	1,363	560	803	1,202	500	702	105	38	67	56	23	33
80-84	5,699	2,206	3,493	5,056	1,972	3,084	424	146	278	218	87	131
80	1,295	523	772	1,144	467	677	99	35	64	51	21	31
81	1,208	475	732	1,068	425	644	92	32	60	47	19	29
82	1,164	448	716	1,032	400	632	87	30	58	45	18	27
83	1,068	402	666	952	360	592	77	26	51	40	16	24
84	965	358	607	860	320	539	69	23	46	35	14	21
85-89	3,477	1,205	2,271	3,116	1,084	2,032	240	76	165	120	46	74
85	891	323	568	798	290	508	62	20	41	32	13	19
86	800	283	516	720	256	464	53	17	36	27	10	17
87	710	244	466	632	218	414	52	16	36	25	10	16
88	563	187	376	504	168	336	40	12	28	20	7	12
89	512	168	345	462	152	310	34	10	24	17	6	11
90-94	1,502	445	1,057	1,345	399	946	107	29	78	50	17	33
90	415	131	284	372	118	255	28	8	20	14	5	9
91	351	106	245	316	96	220	24	7	17	12	4	8
92	300	88	212	269	79	190	22	6	16	10	3	7
93	243	68	175	216	61	156	18	5	13	8	3	5
94	194	52	142	172	46	126	15	4	11	6	2	4
95-99	452	110	342	399	96	303	38	9	29	16	5	10
95	149	39	110	132	34	98	12	3	9	5	2	3
96	114	28	86	101	24	76	10	2	7	4	1	3
97	86	21	65	75	18	57	8	2	6	3	1	2
98	59	13	45	52	11	40	5	1	4	2	1	1
99	46	10	36	40	9	31	4	1	3	1	0	1
100+	81	16	64	68	13	54	10	2	7	4	1	3
0-14	60,888	31,151	29,737	46,358	23,769	22,588	9,291	4,716	4,576	5,239	2,666	2,572
15-44	125,166	63,236	61,930	97,660	49,791	47,869	17,477	8,474	9,003	10,030	4,972	5,058
45-64	76,524	37,316	39,207	63,357	31,247	32,110	8,541	3,891	4,650	4,625	2,177	2,448
65+	37,888	15,976	21,912	32,927	13,988	18,939	3,230	1,243	1,988	1,730	746	985
15+	239,578	116,529	123,049	193,944	95,026	98,918	29,248	13,608	15,641	16,385	7,895	8,491
45+	114,412	53,293	61,119	96,284	45,236	51,049	11,772	5,134	6,638	6,355	2,923	3,432
75+	18,536	7,089	11,446	16,394	6,315	10,079	1,413	485	927	729	290	440
85+	5,512	1,777	3,735	4,927	1,592	3,335	395	116	279	190	69	121

APPENDIX D

UNWEIGHTED FREQUENCIES FOR SELECTED VARIABLES

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SURVEY YEAR			
2007	40,033	325,615	365,648
UNITS			
YEARS	.	318,569	318,569
MONTHS	.	4,779	4,779
DAYS	40,033	2,267	42,300
AGE			
U15 YEARS	40,033	22,359	62,392
15-44 YEARS	.	100,047	100,047
45-64 YEARS	.	83,881	83,881
65 YEARS &UP	.	119,328	119,328
SEX			
MALE	20,563	129,979	150,542
FEMALE	19,470	195,636	215,106
RACE			
WHITE	19,357	171,701	191,058
BLACK/AFRICAN AMERICAN	4,751	46,552	51,303
AMERICAN INDIAN//ALASKAN NATIVE	181	953	1,134
ASIAN	860	3,003	3,863
NATIVE HAWAIIAN/OTH PACIFIC ISLANDER	46	152	198
OTHER	1,697	7,791	9,488
MULTIPLE RACE	32	120	152
NOT STATED	13,109	95,343	108,452
MARITAL STATUS			
MARRIED	.	53,397	53,395
SINGLE	40,033	37,506	77,539
WIDOWED	.	17,905	17,905
DIVORCED	.	8,746	8,746
SEPARATED	.	1,760	1,760
NOT STATED	.	206,301	206,301
DISCHARGE STATUS			
ROUTINE	39,117	252,688	291,805
LEFT AGAINST MEDICAL ADVICE	10	3,632	3,642
SHORT-TERM TRANSFER	411	8,057	8,468
LONG-TERM TRANSFER	17	31,610	31,627
ALIVE, OTHER	242	20,374	20,616
DEAD	139	6,793	6,932
NOT STATED	97	2,461	2,558
LOSFLAG			
LESS THAN 1 DAY	311	5,365	5,676
ONE DAY OR MORE	39,722	320,250	359,972

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
REGION			
NORTHEAST	7,769	74,186	81,955
MIDWEST	9,602	85,392	94,994
SOUTH	14,799	123,951	138,750
WEST	7,863	42,086	49,949
BEDSIZE			
6-99	3,426	35,251	38,677
100-199	8,073	61,847	69,920
200-299	9,599	80,465	90,064
300-499	14,267	108,286	122,553
500&UP	4,668	39,766	44,434
OWNERSHIP			
PROPRIETARY	4,297	32,631	36,928
GOVERNMENT	3,366	28,186	31,552
NOT FOR PROFIT	32,370	264,798	297,168
PRINCIPAL EXPECTED SOURCE OF PAYMENT			
WORKER'S COMPENSATION	8	1,600	1,608
MEDICARE	0	127,292	127,292
MEDICAID	15,168	53,488	68,656
OTHER GOVERNMENT PAYMENT	405	3,857	4,262
BLUE CROSS/BLUE SHIELD	5,727	30,953	36,680
HMO/PPO	10,709	51,298	62,007
OTHER PRIVATE/COMMERCIAL INSUR	4.536	29,167	33,703
SELF PAY	1,581	14,351	15,932
NO CHARGE	8	1,291	1,299
OTHER	1,197	9,035	10,232
SOURCE NOT STATED	694	3,283	3,977
DISCHARGE MONTH			
JANUARY	3,383	28,173	31,556
FEBRUARY	3,112	26,283	29,395
MARCH	3,424	29,406	32,830
APRIL	3,213	27,207	30,420
MAY	3,336	28,057	31,393
JUNE	3,386	27,000	30,386
JULY	3,585	27,265	30,850
AUGUST	3,565	27,962	31,527
SEPTEMBER	3,438	26,374	29,812
OCTOBER	3,263	26,684	29,947
NOVEMBER	3,153	25,545	28,698
DECEMBER	3,175	25,659	28,834
TYPE OF ADMISSION			
EMERGENCY	.	169,830	169,830
URGENT	.	61,878	61,878
ELECTIVE	.	80,297	80,297
NEWBORN	40,033	.	40,033
NOT STATED	.	13,610	13,610

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SOURCE OF ADMISSION			
PHYSICIAN REFERRAL	.	101,825	101,825
CLINICAL REFERRAL	.	5,339	5,339
HMO REFERRAL	.	1,591	1,591
TRANSFER FROM HOSPITAL	.	10,240	10,240
TRANSFER FROM SNF	.	1,811	1,811
TRANSFER FROM OTHER	.	2,338	2,338
EMERGENCY ROOM	.	156,353	156,353
COURT/LAW ENFORCEMENT	.	765	765
OTHER	40,033	16,558	56,591
NOT AVAILABLE	.	28,795	28,795
FIRST-LISTED DIAGNOSIS ICD-9-CM CHAPTER			
CHAPTER 01	.	11,978	11,978
CHAPTER 02	.	16,064	16,064
CHAPTER 03	.	15,961	15,961
CHAPTER 04	.	4,672	4,672
CHAPTER 05	.	21,931	21,931
CHAPTER 06	.	7,534	7,534
CHAPTER 07	.	57,158	57,158
CHAPTER 08	.	30,777	30,777
CHAPTER 09	.	32,119	32,119
CHAPTER 10	.	18,711	18,711
CHAPTER 11	.	4,679	4,679
CHAPTER 12	.	7,231	7,231
CHAPTER 13	.	18,098	18,098
CHAPTER 14	.	1,871	1,871
CHAPTER 15	.	1,832	1,832
CHAPTER 16	.	1,150	1,150
CHAPTER 17	.	26,657	26,657
V-CODES	40,033	47,192	87,225

WEIGHTED FREQUENCIES FOR SELECTED VARIABLES

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SURVEY YEAR			
2007	4,047,423	34,368,888	38,416,311
UNITS			
YEARS	.	33,671,042	33,671,042
MONTHS	.	492,196	492,196
DAYS	4,047,423	205,650	4,253,073
AGE			
U15 YEARS	4,047,423	2,180,985	6,228,408
15-44 YEARS	.	10,571,285	10,571,285
45-64 YEARS	.	8,753,338	8,753,338
65 YEARS &UP	.	12,863,280	12,863,280
SEX			
MALE	2,103,842	13,833,726	15,937,568
FEMALE	1,943,581	20,535,162	22,478,743
RACE			
WHITE	2,137,252	20,482,940	22,620,192
BLACK/AFRICAN AMERICAN	458,741	4,320,948	4,779,689
AMERICAN INDIAN//ALASKAN NATIVE	19,800	112,561	132,361
ASIAN	109,993	456,099	566,092
NATIVE HAWAIIAN/OTH PACIFIC ISLANDER	9,026	41,017	50,043
OTHER	113,271	606,177	719,448
MULTIPLE RACE	7,843	33,171	41,014
NOT STATED	1,191,497	8,315,975	9,507,472
MARITAL STATUS			
MARRIED	.	9,165,829	9,165,829
SINGLE	4,047,423	6,941,256	10,988,679
WIDOWED	.	3,004,749	3,004,749
DIVORCED	.	1,483,099	1,483,099
SEPARATED	.	249,625	249,625
NOT STATED	.	13,524,330	13,524,330
DISCHARGE STATUS			
ROUTINE	3,890,198	26,582,246	30,472,444
LEFT AGAINST MEDICAL ADVICE	689	327,433	328,122
SHORT-TERM TRANSFER	52,116	1,437,359	1,489,475
LONG-TERM TRANSFER	4,335	3,185,905	3,190,240
ALIVE, OTHER	35,294	1,645,075	1,680,369
DEAD	16,785	724,039	740,824
NOT STATED	48,006	466,831	514,837
LOSFLAG			
LESS THAN 1 DAY	43,388	654,360	697,748
ONE DAY OR MORE	4,004,035	33,714,528	37,718,563

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
REGION			
NORTHEAST	701,994	7,361,332	8,063,326
MIDWEST	858,696	7,706,405	8,565,101
SOUTH	1,498,366	12,689,036	14,187,402
WEST	988,367	6,612,115	7,600,482
BEDSIZE			
6-99	734,263	7,405,874	8,140,137
100-199	903,637	7,463,172	8,366,809
200-299	782,809	7,323,436	8,106,245
300-499	1,012,363	7,278,761	8,291,124
500&UP	614,351	4,897,645	5,511,996
OWNERSHIP			
PROPRIETARY	558,273	4,318,960	4,877,233
GOVERNMENT	473,732	3,890,433	4,364,165
NOT FOR PROFIT	3,015,418	26,159,495	29,174,913
PRINCIPAL EXPECTED SOURCE OF PAYMENT			
WORKER'S COMPENSATION	361	166,519	166,880
MEDICARE	.	13,277,650	13,277,650
MEDICAID	1,658,848	5,930,742	7,589,590
OTHER GOVERNMENT PAY	52,574	540,090	592,664
BLUE CROSS/BLUE SHIELD	522,986	3,185,634	3,708,620
HMO/PPO	968,404	4,906,963	5,875,367
OTHER PRIVATE/COMMERCIAL INS	473,690	3,222,983	3,696,673
SELF PAY	175,210	1,562,027	1,737,237
NO CHARGE	1,519	93,439	94,958
OTHER	113,016	907,359	1,020,375
SOURCE NOT STATED	80,815	575,482	656,297
DISCHARGE MONTH			
JANUARY	343,861	3,041,219	3,385,080
FEBRUARY	330,832	2,822,670	3,153,502
MARCH	358,993	3,160,117	3,519,110
APRIL	327,118	2,967,191	3,294,309
MAY	336,203	3,075,930	3,412,133
JUNE	350,074	2,950,938	3,301,012
JULY	348,106	2,845,312	3,193,418
AUGUST	353,709	2,864,328	3,218,037
SEPTEMBER	333,443	2,721,461	3,054,904
OCTOBER	333,236	2,753,199	3,086,435
NOVEMBER	310,806	2,598,477	2,909,283
DECEMBER	321,042	2,568,046	2,889,088
TYPE OF ADMISSION			
EMERGENCY	.	15,305,278	15,305,278
URGENT	.	8,016,350	8,016,350
ELECTIVE	.	8,555,200	8,555,200
NEWBORN	4,047,423	.	4,047,423
NOT STATED	.	2,492,060	2,492,060

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
SOURCE OF ADMISSION			
PHYSICIAN REFERRAL	.	11,878,419	11,878,419
CLINICAL REFERRAL	.	839,382	839,382
HMO REFERRAL	.	129,960	129,960
TRANSFER FROM HOSPITAL	.	1,301,062	1,301,062
TRANSFER FROM SNF	.	233,675	233,675
TRANSFER FROM OTHER	.	235,955	235,955
EMERGENCY ROOM	.	15,186,588	15,186,588
COURT/LAW ENFORCEMENT	.	119,794	119,794
OTHER	4,047,423	1,209,686	5,257,109
NOT AVAILABLE	.	3,234,367	3,234,367
FIRST-LISTED DIAGNOSIS BY ICD-9-CM CHAPTER			
CHAPTER 01	.	1,215,103	1,215,103
CHAPTER 02	.	1,597,759	1,597,759
CHAPTER 03	.	1,816,082	1,816,082
CHAPTER 04	.	526,767	526,767
CHAPTER 05	.	2,386,075	2,386,075
CHAPTER 06	.	794,368	794,368
CHAPTER 07	.	5,889,757	5,889,757
CHAPTER 08	.	3,300,372	3,300,372
CHAPTER 09	.	3,290,164	3,290,164
CHAPTER 10	.	2,091,708	2,091,708
CHAPTER 11	.	497,906	497,906
CHAPTER 12	.	751,633	751,633
CHAPTER 13	.	1,880,979	1,880,979
CHAPTER 14	.	185,347	185,347
CHAPTER 15	.	170,937	170,937
CHAPTER 16	.	188,086	188,086
CHAPTER 17	.	2,855,413	2,885,413
V-CODES	4,047,423	4,930,432	8,977,855

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

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL DIAGNOSES	103,396	1,767,189	1,870,585
CHAPTER 01	83	43,118	43,201
CHAPTER 02	148	45,393	45,541
CHAPTER 03	392	203,094	203,486
CHAPTER 04	96	51,675	51,771
CHAPTER 05	48	125,411	125,459
CHAPTER 06	177	49,741	49,918
CHAPTER 07	205	334,135	334,340
CHAPTER 08	117	119,204	119,321
CHAPTER 09	333	108,777	109,110
CHAPTER 10	308	108,529	108,837
CHAPTER 11	.	108,597	108,597
CHAPTER 12	345	27,737	28,082
CHAPTER 13	162	64,247	64,409
CHAPTER 14	3,395	7,894	11,289
CHAPTER 15	34,077	5,983	40,060
CHAPTER 16	1,164	102,081	103,245
CHAPTER 17	104	66,919	67,023
ECODES	71	26,738	26,809
VCODES	62,171	167,916	230,087

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

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL DIAGNOSES	9,924,721	180,014,523	189,939,244
CHAPTER 01	9,166	4,300,861	4,310,027
CHAPTER 02	13,020	4,443,488	4,456,508
CHAPTER 03	38,602	20,749,271	20,787,873
CHAPTER 04	9,660	5,193,189	5,202,849
CHAPTER 05	3,230	12,887,737	12,890,067
CHAPTER 06	19,520	5,125,922	5,145,442
CHAPTER 07	18,942	33,337,260	33,356,202
CHAPTER 08	13,582	11,740,486	11,754,068
CHAPTER 09	30,368	10,978,212	11,008,580
CHAPTER 10	25,284	10,932,305	10,957,589
CHAPTER 11	.	10,728,804	10,728,804
CHAPTER 12	25,961	2,792,691	2,818,652
CHAPTER 13	15,565	6,818,176	6,833,741
CHAPTER 14	316,061	730,578	1,046,639
CHAPTER 15	3,250,381	494,099	3,744,480
CHAPTER 16	106,514	10,567,394	10,673,908
CHAPTER 17	16,435	7,153,496	7,169,931
ECODES	11,604	3,534,697	3,546,301
VCODES	6,000,826	17,505,857	23,506,683

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

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL PROCEDURES	3,602,114	44,993,243	48,595,357
CHAPTER 00*	716	876,241	876,957
CHAPTER 01	22,363	1,197,014	1,219,377
CHAPTER 02	673	118,175	118,848
CHAPTER 03	302	78,609	78,911
CHAPTER 04	55	41,426	41,481
CHAPTER 05	4,318	257,307	261,625
CHAPTER 06	6,734	1,108,588	1,115,322
CHAPTER 07	129,895	6,941,951	7,071,846
CHAPTER 08	330	369,649	369,979
CHAPTER 09	28,040	5,473,925	5,501,965
CHAPTER 10	1,237	994,890	996,127
CHAPTER 11	1,170,423	229,853	1,400,276
CHAPTER 12	2,630	1,785,403	1,788,033
CHAPTER 13	.	7,003,204	7,003,204
CHAPTER 14	3,446	4,299,645	4,303,091
CHAPTER 15	8,317	1,557,839	1,566,156
CHAPTER 16	2,222,635	12,659,524	14,992,159

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

	NEWBORN INFANTS	NON-NEWBORNS	TOTAL SAMPLE
ALL PROCEDURES	36,541	459,817	496,358
CHAPTER 00*	10	8,653	8,663
CHAPTER 01	226	12,506	12,732
CHAPTER 02	3	1,158	1,161
CHAPTER 03	6	765	771
CHAPTER 04	2	446	448
CHAPTER 05	45	2,489	2,534
CHAPTER 06	75	11,739	11,814
CHAPTER 07	1,138	71,416	72,554
CHAPTER 08	5	3,815	3,820
CHAPTER 09	190	55,866	56,056
CHAPTER 10	14	10,593	10,607
CHAPTER 11	12,298	2,246	14,544
CHAPTER 12	18	17,073	17,091
CHAPTER 13	.	72,290	72,290
CHAPTER 14	32	41,595	41,627
CHAPTER 15	76	14,326	14,402
CHAPTER 16	22,403	132,841	155,244

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

APPENDIX E

NHDS Medical Abstract Form

Form HDS-1

FORM **HDS-1**
(12-15-2006)

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

7299901

MEDICAL ABSTRACT NATIONAL HOSPITAL DISCHARGE SURVEY

A. PATIENT IDENTIFICATION

1. Hospital number . . . .

2. HDS number . . . .

3. *(Item deleted)*

4. Date of admission . . . . . . Month – Day – Year

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

C. ADMINISTRATIVE INFORMATION

13. Type of Admission – *Mark (X) one*
- 1 ☐ Emergency
- 2 ☐ Urgent
- 3 ☐ Elective
- 4 ☐ Newborn
- 5 ☐ Items not available/ unknown

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
- 1 ☐ Alive ⟶

Disposition
- **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. Admitting Diagnosis

	ICD-9-CM Code	Description
Admitting diagnosis		

18. Final diagnoses (up to 7 diagnoses including E-codes) *(Enter ICD-9-CM codes as well as narrative if available.)*

Diagnosis	ICD-9-CM Code	Description	Present on admission
Principal diagnosis			1☐ Yes 2☐ No 3☐ Unknown 4☐ Clinically undetermined 5☐ No information on face sheet
Diagnosis 2			1☐ Yes 2☐ No 3☐ Unknown 4☐ Clinically undetermined 5☐ No information on face sheet
Diagnosis 3			1☐ Yes 2☐ No 3☐ Unknown 4☐ Clinically undetermined 5☐ No information on face sheet
Diagnosis 4			1☐ Yes 2☐ No 3☐ Unknown 4☐ Clinically undetermined 5☐ No information on face sheet
Diagnosis 5			1☐ Yes 2☐ No 3☐ Unknown 4☐ Clinically undetermined 5☐ No information on face sheet
Diagnosis 6			1☐ Yes 2☐ No 3☐ Unknown 4☐ Clinically undetermined 5☐ No information on face sheet
Diagnosis 7			1☐ Yes 2☐ No 3☐ Unknown 4☐ Clinically undetermined 5☐ No information on face sheet

19. Surgical and Diagnostic Procedures (up to 4 procedures) *(Enter ICD-9-CM codes as well as narrative if available.)*

Procedure	ICD-9-CM Code	Description	Date of Procedure(s) Month	Day	Year
Principal procedure					
Procedure 2					
Procedure 3					
Procedure 4					

☐ **No procedures**

Comments

Completed by	Date

FORM HDS-1 (12-15-2006)