HEALTHCARE COST AND UTILIZATION PROJECT — HCUP
A FEDERAL-STATE-INDUSTRY PARTNERSHIP IN HEALTH DATA
Sponsored by the Agency for Healthcare Research and Quality

OVERVIEW OF

THE HCUP NATIONWIDE INPATIENT SAMPLE (NIS) RELEASE 6, 1997

These pages provide only an introductory overview of the NIS package.
Full documentation is provided on the NIS Documentation CD-ROM.

- The NIS package has been updated for distribution through the HCUP Central Distributor.
- The NIS product is now stored on 2 instead of 6 CD-ROMs.
- Updated product information is available in the section labeled "NIS Product Update."
- Original product information is available in the section labeled "NIS 1997 Original Abstract and Introduction."

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Agency for Healthcare Research and Quality
Rockville, Maryland 20852

Phone: (866) 290-HCUP (4287)
E-mail: hcup@ahrq.gov

Table of Contents

HCUP NATIONWIDE INPATIENT SAMPLE (NIS)
SUMMARY OF DATA USE LIMITATIONS

***** REMINDER *****

All users of the NIS must take the on-line HCUP Data Use Agreement (DUA) training course, and read and sign a Data Use Agreement.†

Authorized users of HCUP data agree to the following limitations: ‡

- Will not use the data for any purpose other than research or aggregate statistical reporting.
- Will not re-release any data to unauthorized users.
- Will not redistribute HCUP data by posting on any Website or other publically-accessible online repository.
- Will not identify or attempt to identify any individual, including by the use of vulnerability analysis or penetration testing. Methods that could be used to identify individuals directly or indirectly shall not be disclosed or published.
- Will not publish information that could identify individual establishments (e.g., hospitals) and will not contact establishments.
- Will not use the data concerning individual establishments for commercial or competitive purposes involving those establishments, and will not use the data to determine rights, benefits, or privileges of individual establishments.
- Will not use data elements from the proprietary severity adjustment software packages (3M APR-DRGs, HSS APS-DRGs, and Thomson Reuters Disease Staging) for any commercial purpose or to disassemble, decompile, or otherwise reverse engineer the proprietary software.
- Will acknowledge in reports that data from the "Healthcare Cost and Utilization Project (HCUP)" were used, including names of the specific databases used for analysis.
- Will acknowledge that risk of individual identification of persons is increased when observations (i.e., individual discharge records) in any given cell of tabulated data is less than or equal to 10.

Any violation of the limitations in the Data Use Agreement is punishable under Federal law by a fine of up to $10,000 and up to 5 years in prison. Violations may also be subject to penalties under State statutes..

† The on-line Data Use Agreement training session and the Data Use Agreement are available on the HCUP User Support (HCUP-US) Web site at http://www.hcup-us.ahrq.gov.
‡ Specific provisions are detailed in the Data Use Agreement for Nationwide Databases.

HCUP CONTACT INFORMATION

All HCUP data users, including data purchasers and collaborators, must complete the online HCUP Data Use Agreement (DUA) Training Tool, and read and sign the HCUP Data Use Agreement. Proof of training completion and signed Data Use Agreements must be submitted to the HCUP Central Distributor as described below.

The on-line DUA training course is available at: http://www.hcup-us.ahrq.gov/tech_assist/dua.jsp.

The HCUP Nationwide Data Use Agreement is available on the AHRQ-sponsored HCUP User Support (HCUP-US) Web site at: http://www.hcup-us.ahrq.gov

HCUP Central Distributor

Data purchasers will be required to provide their DUA training completion code and will execute their DUAs electronically as a part of the online ordering process. The DUAs and training certificates for collaborators and others with access to HCUP data should be submitted directly to the HCUP Central Distributor using the contact information below.

The HCUP Central Distributor can also help with questions concerning HCUP database purchases, your current order, training certificate codes, or invoices, if your questions are not covered in the Purchasing FAQs on the HCUP Central Distributor Web site.

Purchasing FAQs:

https://www.distributor.hcup-us.ahrq.gov/Purchasing-Frequently-Asked-Questions.aspx

Phone: 866-556-HCUP (4287) (toll free)
Email: HCUPDistributor@AHRQ.gov
Fax: 866-792-5313 (toll free in the United States)

Mailing address:
HCUP Central Distributor
Social & Scientific Systems, Inc.
8757 Georgia Ave, 12th Floor
Silver Spring, MD 20910

HCUP User Support:

Information about the content of the HCUP databases is available on the HCUP User Support (HCUP-US) Web site (http://www.hcup-us.ahrq.gov). If you have questions about using the HCUP databases, software tools, supplemental files, and other HCUP products, please review the HCUP Frequently Asked Questions or contact HCUP User Support:

HCUP FAQs:
http://www.hcup-us.ahrq.gov/tech_assist/faq.jsp

Phone: 866-290-HCUP (4287) (toll free)
Email: hcup@ahrq.gov

HCUP NATIONWIDE INPATIENT SAMPLE (NIS) PRODUCT UPDATE

This section includes the following information:
• Description of the updated NIS product structure,
• Correction to the 1993 Nationwide Inpatient Sample, Release 2,
• Correction to the 1988-1992 SPSS Load Programs,
• Warning about the SPSS Label Programs Provided with the 1988-1997 NIS, and
• Overview of the other HCUP products.

Updated NIS Product Structure

The Nationwide Inpatient Sample (NIS) product has been updated for distribution through the HCUP Central Distributor. The NIS product was originally distributed on many CD-ROMs. The information on the original CD-ROMs has been compressed and stored in self-extracting PKZIP files (*.exe) as described in the table below. An introduction to the NIS data files is provided in this binder in the section labeled "NIS 1997 Original Abstract and Introduction." Full documentation is provided on the NIS Documentation CD-ROM.

NIS Release	NIS Year	Internal CD_ROM Volume Label	CD #	Self-Extracting PKZIP Files
NIS, Release 1, 1988-1992 (Originally on 26 CDs, now stored on 6 CDs)	1988	NIS1988_DATA	1	NIS1988_QTR1.exe NIS1988_QTR2.exe NIS1988_QTR3.exe NIS1988_QTR4.exe NIS1988_SAMPLE.exe
	1989	NIS1989_DATA	2	NIS1989_QTR1.exe NIS1989_QTR2.exe NIS1989_QTR3.exe NIS1989_QTR4.exe NIS1989_SAMPLE.exe
	1990	NIS1990_DATA	3	NIS1990_QTR1.exe NIS1990_QTR2.exe NIS1990_QTR3.exe NIS1990_QTR4.exe NIS1990_SAMPLE.exe
	1991	NIS1991_DATA	4	NIS1991_QTR1.exe NIS1991_QTR2.exe NIS1991_QTR3.exe NIS1991_QTR4.exe NIS1991_SAMPLE.exe
	1992	NIS1992_DATA	5	NIS1992_QTR1.exe NIS1992_QTR2.exe NIS1992_QTR3.exe NIS1992_QTR4.exe NIS1992_SAMPLE.exe
	1988-92	NIS1988-1992_DOC	6	NIS1988-92_DOCS.exe

NIS Release	NIS Year	Internal CD_ROM Volume Label	CD #	Self-Extracting PKZIP Files
NIS, Release 2, 1993 (Originally on 6 CDs, now stored on 2 CDs)	1993	NIS1993_DATA	1	NIS1993_CD#1.exe NIS1993_CD#2.exe NIS1993_CD#3.exe NIS1993_CD#4.exe NIS1993_CD#5.exe
	1993	NIS1993_DOC	2	NIS1993_CD#6.exe
NIS, Release 3, 1994 (Originally on 6 CDs, now stored on 2 CDs)	1994	NIS1994_DATA	1	NIS1994_CD#1.exe NIS1994_CD#2.exe NIS1994_CD#3.exe NIS1994_CD#4.exe NIS1994_CD#5.exe
	1994	NIS1994_DOC	2	NIS1994_CD#6.exe
NIS, Release 4, 1995 (Originally on 6 CDs, now stored on 2 CDs)	1995	NIS1995_DATA	1	NIS1995_CD#1.exe NIS1995_CD#2.exe NIS1995_CD#3.exe NIS1995_CD#4.exe NIS1995_CD#5.exe
	1995	NIS1995_DOC	2	NIS1995_CD#6.exe
NIS, Release 5, 1996 (Originally on 6 CDs, now stored on 2 CDs)	1996	NIS1996_DATA	1	NIS1996_CD#1.exe NIS1996_CD#2.exe NIS1996_CD#3.exe NIS1996_CD#4.exe NIS1996_CD#5.exe
	1996	NIS1996_DOC	2	NIS1996_CD#6.exe
NIS, Release 6, 1997 (Originally on 6 CDs, now stored on 2 CDs)	1997	NIS1997_DATA	1	NIS1997_CD#1.exe NIS1997_CD#2.exe NIS1997_CD#3.exe NIS1997_CD#4.exe NIS1997_CD#5.exe
	1997	NIS1997_DOC	2	NIS1997_CD#6.exe

In order to load NIS data onto your PC, you will need at least 500 megabytes of space available for the compressed files and at least 3.1 gigabytes of space available for the decompressed files. To decompress the self-extracting PKZIP compressed files (*.exe), you should follow these steps:

1. Create a directory for the NIS on your hard drive.
2. Copy the self-extracting data files from the NIS Data CD-ROM into the new directory.
3. Unzip each file by running the corresponding *.exe file.
   - Type the file name within DOS or click on the name within Windows Explorer.
   - Edit the name of the "Unzip To Folder" in the WinZip Self-Extractor dialog to select the desired destination directory for the extracted file.
   - Click on the "Unzip" button.

The ASCII data files will then be uncompressed into this directory. After the files are uncompressed, the *.exe files can be deleted.

Correction to the 1993 Nationwide Inpatient Sample

A programming error caused a problem with some of the diagnosis codes for the discharge abstracts from New Jersey hospitals in the 1993 Nationwide Inpatient Sample (NIS), Release 2. Some of the hospitals' data have three- or four-digit diagnoses with trailing zeros that render otherwise valid codes invalid. A SAS program to fix the principal diagnosis on the NIS Core A file and the complete diagnosis vector on the diagnosis file (DX) is available on the AHRQ Web site http://www.ahrq.gov/data/hcup/njnisfix.htm.

Correction to the 1988-1992 SPSS Load Programs

Included on the Documentation CD for NIS, Release 1, 1988-1992, are programs to load the ASCII data files into SPSS. These programs have an error in the SPSS code and need the following corrections.

Three changes must be made to the 1988-1992 SPSS syntax files (LOADIP.ASC and LOADWT.ASC) in the SPSS Syntax Editor prior to loading them. Once changed, the two programs correctly load the 1988-1992 NIS data into SPSS.

1. Change the programs' extensions from LOADIP.ASC and LOADWT.ASC to LOADIP.SPS and LOADWT.SPS.

2. Perform a Find and Replace in the SPSS Syntax editor, change all occurrences of "$SYSMIS" to "SYSMIS".

3. Replace the initial command line in each program from

    DATA LIST FILE "** file name**" FIXED /

    To

    DATA LIST FILE='Drive:\Path\Directory\Filename.ASC' FIXED /

To save time, you may add the following command line to save the data file at the end of the load programs (right after the recodes.) Saving the data file by doing a (File, Save As) after creating the file doubles the time it takes to create the file.

    SAVE OUTFILE='Drive:\Path\Directory\Filename.SAV' /COMPRESSED.

Beginning with the NIS, Release 2, 1993, the SPSS load programs provided on the Documentation CD are correct.

SPSS Label Programs Provided with the 1988-1997 NIS

Included on the Documentation CD for the 1988-1997 NIS is a program (VLABEL) to label the data elements. This program contains errors and should not be used. Value labels in SPSS can be entered into the data interactively via the data editor or entered and contained in pivot tables.

OTHER HCUP PRODUCTS

The AHRQ Home Page on the World Wide Web is a source of information about HCUP databases and aggregate statistics from HCUP.

The address is: http://www.ahrq.gov/data/hcup/.

Data

Nationwide Inpatient Sample (NIS) releases are currently available through the HCUP Central Distributor.

> HCUP Central Distributor
> Social and Scientific Systems, Inc.
> Phone: (866) 556-4287 (toll-free)
> Fax: (301) 628-3201
> E-mail: hcup@s-3.com

An online application is available on the HCUP section of the AHRQ Website at http://www.ahrq.gov/data/hcup/.

State Inpatient Databases (SID) are hospital databases from Data Organizations participating in HCUP. The SID contain the universe of the inpatient discharge abstracts in the participating HCUP States, translated into a uniform format to facilitate multi-State comparisons and analyses. Together, the SID encompass about 80 percent of all U.S. community hospital discharges. For more information, visit: http://www.ahrq.gov/data/hcup/hcupsid.htm or contact the HCUP Central Distributor (see below).

State Ambulatory Surgery Databases (SASD) are databases from Data Organizations in participating HCUP States, which capture surgeries performed on the same day in which patients are admitted and released. The SASD contain the ambulatory surgery encounter abstracts in participating States, translated into a uniform format to facilitate multi-State comparisons and analyses. All of the databases include abstracts from hospital-affiliated ambulatory surgery sites. Some contain the universe of ambulatory surgery encounter abstracts for that State, including records from both hospital-affiliated and freestanding surgery centers. Composition and completeness of data files may vary from State to State. For more information, visit: http://www.ahrq.gov/data/hcup/hcupsasd.htm or contact the HCUP Central Distributor (see below).

Kids' Inpatient Database (KID) is a unique database of hospital inpatient stays for children 18 years of age and younger. The KID was specifically designed to permit researchers to study a broad range of conditions and procedures related to child health issues. KID files for 1997 data are available through the AHRQ-sponsored HCUP Central Distributor (contact information below). For more information, visit: http://www.ahrq.gov/data/hcup/hcupkid.htm or contact the HCUP Central Distributor (see below).

HCUP Central Distributor. HCUP databases are available for purchase through the AHRQ-sponsored HCUP Central Distributor. Many of the HCUP State Partners allow the public release of the State Inpatient Databases (SID) and State Ambulatory Surgery Databases (SASD) through

the AHRQ-sponsored HCUP Central Distributor. In addition, the NIS and the KID are released through the HCUP Central Distributor. Information on how to obtain uniformly-formatted HCUP files from States not participating in the HCUP Central Distributor is also available from the HCUP Central Distributor:

> HCUP Central Distributor
> Social and Scientific Systems, Inc.
> Phone: (866) 556-4287 (toll-free)
> Fax: (301) 628-3201
> E-mail: hcup@s-3.com

HCUPnet

HCUPnet is a Web-based query tool for identifying, tracking, analyzing, and comparing statistics on hospitals at the national, regional, and state level. With HCUPnet you have easy access to national statistics and trends and selected state statistics about hospital stays. HCUPnet guides you step-by-step to obtain the statistics you need. HCUPnet generates statistics using the Nationwide Inpatient Sample (NIS), the Kids' Inpatient Database (KID), and the State Inpatient Databases (SID) for those states that have agreed to participate. HCUPnet can be found at: http://www.ahrq.gov/data/hcup/hcupnet.htm.

Tools

AHRQ Quality Indicators (QIs) are clinical performance measures for use with readily available inpatient data. Methods and software for the AHRQ Quality Indicators can be downloaded from http://www.ahrq.gov/data/hcup/qinext.htm.

Clinical Classifications Software (CCS), formerly known as the Clinical Classifications for Health Policy Research (CCHPRs), are classification systems that group ICD-9-CM diagnoses and procedures into a limited number of clinically meaningful categories. Methods and software can be downloaded from http://www.ahrq.gov/data/hcup/ccs.htm.

Comorbidity Software assigns variables that identify comorbidities in hospital discharge records using ICD-9-CM diagnosis codes (International Classification of Diseases, Ninth Revision, Clinical Modification). Methods and software can be downloaded from http://www.ahrq.gov/data/hcup/comorbid.htm.

Publications

HCUP Research Notes report aggregate statistics and detailed analyses using HCUP data. To request copies, contact the AHRQ Publications Clearinghouse at (800) 358-9295 or send a postcard to: AHRQ Publications Clearinghouse, P.O. Box 8547, Silver Spring, MD 20907 or visit the AHRQ Home Page.

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For information on HCUP products:

Email: hcup@ahrq.gov Phone:

(301) 594-3075

Fax: (301) 594-2166

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DATA USE AGREEMENT FOR THE NATIONWIDE INPATIENT SAMPLE

The most current Data Use Agreement for the Nationwide Inpatient Sample (NIS) is available on the HCUP User Support Website (www.hcup-us.ahrq.gov) under NIS Database Documentation.

The Agency for Healthcare Research and Quality and the staff of the Healthcare Cost and Utilization Project (HCUP) thank you for purchasing the HCUP Nationwide Inpatient Sample (NIS) Release 6 on CD-ROM.

HCUP Nationwide Inpatient Sample (NIS) Release 6, 1997

ABSTRACT

The Nationwide Inpatient Sample (NIS) Release 6 is part of the Healthcare Cost and Utilization Project (HCUP), sponsored by the Agency for Healthcare Research and Quality, formerly the Agency for Health Care Policy and Research.

NIS Release 6 approximates a 20-percent sample of U.S. community hospitals for 1997. It is based on a stratified probability sample of hospitals, with sampling probabilities proportional to the number of U.S. community hospitals in each stratum.

NIS Release 6 is drawn from 22 States and contains information on all inpatient stays from over 1,000 hospitals, totaling about 7.1 million records in 1997. Inpatient stay records include clinical and resource use information typically available from discharge abstracts. Hospital and discharge weights are provided for producing national and State-level estimates. The NIS can be linked to hospital-level data from the American Hospital Association's Annual Survey of Hospitals and county-level data from the Bureau of Health Professions' Area Resource File (except for hospitals in Georgia, Hawaii, Kansas, South Carolina, and Tennessee).

Access to the NIS is open to users who sign data use agreements. Uses are limited to research and aggregate statistical reporting.

INTRODUCTION TO THE HCUP
NATIONWIDE INPATIENT SAMPLE (NIS)

There are five sections to the Introduction to the HCUP Nationwide Inpatient Sample (NIS), which are:

- < OVERVIEW OF NIS DATA
- < CONTENTS OF CD-ROM SET CONTAINING NIS RELEASE 6
- < NIS DATA ELEMENTS
- < GETTING STARTED
- < OTHER HCUP PRODUCTS

OVERVIEW OF NIS DATA

The HCUP Nationwide Inpatient Sample contains all-payer data on hospital inpatient stays from selected States. Each year of the NIS provides information on approximately 5 million to 7.1 million inpatient stays from over 900 hospitals. All discharges from sampled hospitals are included in the NIS database.

The NIS contains patient-level clinical and resource use information included in a typical discharge abstract. The NIS can be linked directly to hospital-level data from the American Hospital Association (AHA) Annual Survey of Hospitals and to county-level data from the Health Resources and Services Administration Bureau of Health Professions' Area Resource File (ARF), except for hospitals from Georgia, Hawaii, Kansas, South Carolina, and Tennessee.

The NIS is designed to approximate a 20-percent sample of U.S. community hospitals, defined by the AHA to be "all nonfederal, short-term, general, and other specialty hospitals, excluding hospital units of institutions." Included among community hospitals are specialty hospitals such as obstetrics-gynecology, ear-nose-throat, short-term rehabilitation, orthopedic, and pediatric. Excluded are long-term hospitals, psychiatric hospitals, and alcoholism/chemical dependency treatment facilities.

Six releases of NIS data are currently available, as shown in Table 1. Each release of the NIS includes:

- C Data in ASCII format on CD-ROM
- C Patient-level hospital discharge abstract data for 100 percent of discharges from a sample of hospitals in participating States
- C 5 million to 7.1 million inpatient records per year
- C 800-1,000 hospitals per year
- C Two 10% Subsamples of discharges from all NIS hospitals
- C Hospital Weights File to produce national estimates and to link the NIS to data from the American Hospital Association Annual Survey of Hospitals
- C Hospital-Level Casemix Counts – small data files useful for generating estimates of discharges, length of stay, and charges, by diagnosis-related group or diagnosis and procedure categories
- C NIS Documentation and NIS Tools, also on CD-ROM – including programming source code for loading ASCII data into SAS and SPSS, and value labels

Table 1. Summary of NIS Releases 1-6

	Data from	Media/format options	Structure of Releases
Release 1	Ȼ 1988-1992 Ȼ 8 States in 1988 Ȼ 11 States in 1989-1992	On CD-ROM, in ASCII format	5 years of NIS data in a 26-CD set 4 CDs per year (one quarter per disk) Two 10% Subsamples of discharges for each year
		On magnetic tape, in EBCDIC or SAS transport format	Each year sold separately
Release 2	Ȼ 1993 Ȼ 17 States		
Release 3	Ȼ 1994 Ȼ 17 States		
Release 4	Ȼ 1995 Ȼ 19 States	On CD-ROM, in ASCII format	1 year of data in a 6-CD set, structured for use on microcomputers Two 10% Subsamples of discharges
Release 5	Ȼ 1996 Ȼ 19 States		
Release 6	Ȼ 1997 Ȼ 22 States		

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NIS Data Sources, Hospitals, and Inpatient Stays

Table 2 summarizes the data sources, number of hospitals, and number of inpatient stays in NIS data.

Table 2. Summary of NIS Data Sources, Hospitals and Inpatient Stays for Releases 1-6

Calendar year	Data sources	Number of hospitals	Number of inpatient stays
NIS Release 1			
1988	CA CO FL IL IA MA NJ WA	759	5,265,756
1989	AZ CA CO FL IL IA MA NJ PA WA WI *(added AZ, PA, WI)*	882	6,110,064
1990	AZ CA CO FL IL IA MA NJ PA WA WI *(no change)*	871	6,268,515
1991	AZ CA CO FL IL IA MA NJ PA WA WI *(no change)*	859	6,156,188
1992	AZ CA CO FL IL IA MA NJ PA WA WI *(no change)*	856	6,195,744
NIS Release 2			
1993	AZ CA CO CT FL IL IA KS MD MA NJ NY OR PA SC WA WI *(added CT, KS, MD, NY, OR, SC)*	913	6,538,976
NIS Release 3			
1994	AZ CA CO CT FL IL IA KS MD MA NJ NY OR PA SC WA WI *(no change)*	904	6,385,011
NIS Release 4			
1995	AZ CA CO CT FL IL IA KS MD MA MO NJ NY OR PA SC TN WA WI *(added MO, TN)*	938	6,714,935
NIS Release 5			
1996	AZ CA CO CT FL IL IA KS MD MA MO NJ NY OR PA SC TN WA WI *(no change)*	906	6,542,069
NIS Release 6			
1997	AZ CA CO CT FL GA HI IL IA KS MD MA MO NJ NY OR PA SC TN UT WA WI *(added GA, HI, UT)*	1,012	7,148,420

CONTENTS OF CDROM SET CONTAINING NIS RELEASE 6

There are two types of files included in each NIS release: 1) data files and 2) documentation and tools files. The following is a brief description of these types of files:

1) Data Files - five types of ASCII formatted data files are included:

Inpatient Core Files: These inpatient discharge-level files contain data for 100% of the discharges from a sample of hospitals in participating states. Core File A contains the most commonly used data elements and Core Files B and C contain less commonly used data elements.

Normalized Inpatient Diagnoses File: This diagnosis-level file contains one record per diagnosis per discharge record, along with the data element necessary to link to the discharge record in the Core Files; each discharge record can have up to 15 diagnoses linked to it.

Normalized Inpatient Procedures File: This procedure-level file contains one record per procedure per discharge record, along with the data element necessary to link to the discharge record in the Core Files; each discharge record can have up to 15 procedures linked to it.

Subsample Inpatient Core Files: Each of these discharge-level files contain all data elements from the Core Files, for a 10% subsample of the NIS; these can be combined to create a 20% NIS subsample.

Weights File: This hospital-level file contains weights and variance estimation data elements, as well as hospital name, location and linkage data elements.

2) Documentation and Tools Files

Documentation: Complete file documentation, including codebooks and variable notes, is provided in a series of Portable Document Format (.PDF) files. See Section on Getting Started.

SAS source code: Code is included for the format library for the variables, for loading ASCII data into SAS format, and for reassembling the diagnosis and procedure normalized files into original format.

SPSS source code: Code is included for the variable library, for loading ASCII data into SPSS format, and for reassembling the diagnosis and procedure normalized files into original format.

Labels: Labels for the Clinical Classifications Software (CCS), formerly called the Clinical Classifications for Health Policy Research (CCHPR), and for the Diagnosis-Related Groups (multiple versions).

Record Layouts: Record layouts for all data files.

Hospital-level casemix and counts files: Contains Hospital-Level Casemix Counts files with total number of discharges, sum of edited LOS, sum of edited TOTCHG, number of discharges reporting LOS, number of discharges reporting TOTCHG.

The data files are provided on a set of five CD-ROMs and the documentation and tools are on CD # 6; The contents of each CD are shown in Table 3.

Because of the file size this year, the data on three of the CD-ROMs had to be compressed into self-extracting zipped files. These CDs are noted below and are characterized by having the data in files named **NIS97CDn.exe** where the n denotes the CD number. To decompress these files, you should follow these steps:

1. Create a directory for the NIS.
2. Copy the self-extracting file from the CD into the new directory.
3. Unzip the file, by typing its name (e.g., NIS97CD1, NIS97CD3, or NIS97CD4) within DOS or clicking on the name within Windows Explorer.

The ASCII files mentioned below will then be uncompressed into this directory. After the file is uncompressed, the .exe file can be deleted.

Table 3. Contents of NIS, Release 6, 1997, on CD-ROM – 6-CD Set

CD #1.   (NIS97CD1.exe)

1997, Inpatient Stay Core File A, includes most commonly used data elements[†]:

C Patient age, sex, race
C Expected primary source of payment
C Discharge status
C Discharge quarter
C Linkages to other core files and to Hospital Weights File
C Principal diagnosis and procedure (with validity indicators)
C Classifications based on diagnoses and procedures (CCS, DRG, MDC)

C Length of stay (edited)
C Total charges (edited)
C Total number of diagnoses and procedures
C Discharge weight

1997, Hospital Weights File, includes:

C Hospital name, location, and linkages to core files, AHA Survey, and Area Resource File
C Weights and other variables required to calculate weighted estimates and variances

CD #2.

1997, Inpatient Stay Core File B, includes less commonly used data elements:

C Admission source
C Admission type
C Neonatal/maternal indicator
C Physician identifiers (encrypted)

C Length of stay (unedited)
C Total charges (unedited)
C Day of principal procedure
C Linkages to other core files

CD #3.   (NIS97CD3.exe)

1997, Inpatient Stay Core File C, includes less commonly used data elements:

C Admission day of week
C Admission month
C Linkages to other core files and Area Resource File

C Data source identifiers (State and hospital)
C Expected sources of payment

1997, Inpatient Stay Core File PR, normalized procedure file, includes:

C All procedures, validity indicators, and linkages to other core files

CD #4.   (NIS97CD4.exe)

1997, Inpatient Stay Core File DX, normalized diagnosis file, includes:

C All diagnoses, validity indicators, and linkages to other core files

CD #5.

Two 10% Subsamples

C All data elements, including discharge weight, adjusted for subsampling
C These two non-overlapping samples can be combined to form one 20% sample of NIS
  discharges

CD #6.

1997, Hospital Weights File (same as on CD #1)
1997, Hospital-Level Casemix Counts by DRG10, DCCS1, PCCS1
NIS Documentation and Tools

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† See Table 4 for explanation of data elements.

NIS Documentation and NIS Tools provide important resources for the user. Refer to these resources to understand the structure and content of the NIS and to aid in using the NIS.

NIS Documentation
C on CD-ROM #6
C in *.pdf (*portable document format*) files. Files with the *.pdf extension can be viewed, searched, and printed using the Adobe™ Acrobat™ Reader (see "Getting Started")
C in printed copy for magnetic tape users (Release 1 only)

NIS Tools, developed to assist users, are available in ASCII text files:
C   on CD-ROM #6
C   on diskette for magnetic tape users (Release 1 only)
C   SAS and SPSS tools:
         - source code to load EBCDIC/ASCII data into SAS and SPSS formats
         - SAS and SPSS source code to create value labels
         - source code to reassemble diagnosis (DX) and procedure (PR) normalized files
             into original format
C   Labels for Clinical Classifications Software (formerly Clinical Classifications for Health Policy Research, Version 2)
C   Labels for Diagnosis-Related Groups, multiple versions

See "Getting Started," later in this document, for more information on documentation and tools.

NIS DATA ELEMENTS

All releases of the NIS contain two types of data: inpatient stay records and hospital information with weights. Later releases of the NIS (from Release 2 on) use the *Quick Reference* format, which may reduce the need to use multiple CDs for some projects. The Quick Reference format is described in detail under *General Information* (GENINFO.pdf).

The following table illustrates the file structure of the NIS for Releases 2 through 6 and identifies the data elements that can be found in each file.

Table 4. File Locations of Data Elements in the HCUP NIS

Data element	Description (numbers in brackets indicate variable coding)
CD #1	**Compressed file: NIS97CD1.EXE contains:**
Inpatient Stay Core File A (filename: NIS97_A.ASC)	
HOSPID	HCUP hospital number (links to Hospital Weights file)
SEQ	Unique sequence number indicates the order in which the data file is sorted (links across files)
AGE	Age in years at admission
AGEDAY	Age in days (coded only when the age in years is less than 1)
RACE	Race includes (1) white, (2) black, (3) Hispanic, (4) Asian or Pacific Islander, (5) Native American, (6) other
SEX	Sex includes (1) male, (2) female
ZIPINC4	Median income for patient's ZIP Code: (1) $0-25,000, (2) $25,001-$30,000, (3) $30,001-$35,000, (4) $35,001+
DX1	Principal diagnosis
DXV1	Validity flag for principal diagnosis – indicates (0) valid, (1) invalid codes
NDX	Number of diagnoses coded on the original record
PR1	Principal procedures
PRV1	Validity flag for principal procedure – indicates (0) valid, (1) invalid codes
NPR	Number of procedures coded on the original record
DRG	Diagnosis Related Group (DRG) in use on discharge date
MDC	Major Diagnosis Category (MDC) in use on discharge date
DRGVER	Grouper version in use on discharge date
DRG10	DRG Version 10 (October 1992)

Table 4. File Locations of Data Elements in the HCUP NIS (Continued)

Data element	Description (numbers in brackets indicate variable coding)
MDC	Major Diagnosis Category (MDC) in use on discharge date
DRGVER	Grouper version in use on discharge date
DRG10	DRG Version 10 (October 1992)
MDC10	MDC Version 10 (October 1992)
DCCS1	Clinical Classifications Software (CCS) for principal diagnosis
PCCS1	CCS for principal procedure
DQTR	Discharge quarter
LOS	Length of stay, edited
DIED	Indicates in-hospital death: (0) did not die during hospitalization, (1) died during hospitalization
DISP	Disposition of patient (discharge status): (1) routine, (2) short term hospital, (3) skilled nursing facility, (4) intermediate care, (5) another type of facility, (6) home health care, (7) against medical advice, (20) died
PAY1	Expected primary payer, uniform: (1) Medicare, (2) Medicaid, (3) private including HMO, (4) self-pay, (5) no charge, (6) other
TOTCHG	Total charges, edited
DISCWT_U	Weight to discharges in universe

Hospital Weights File (filename: NIS97WT.ASC)-- see CD #6 for contents

CD #2

Inpatient Stay Core File B (filename: NIS97_B.ASC)

SEQ	Unique sequence number indicates the order in which the data file is sorted (links across files)
MDID_S	Synthetic attending physician number
SURGID_S	Synthetic primary surgeon number
DSHOSPID	Hospital number as received from the data source
ZIPINC8	Median income for patient's ZIP Code: (1) $0-$15,000, (2) $15,001-$20,000, (3) $20,001-$25,000, (4) $25,001-$30,000, (5) $30,001-$35,000, (6) $35,001-$40,000, (7) $40,001-$45,000, (8) $45,001+
NEOMAT	Neonatal/maternal flag: (0) not maternal or neonatal, (1) maternal diagnosis or procedure, (2) neonatal diagnosis, (3) maternal and neonatal on same record
LOS_X	Length of stay, unedited
PRDAY1	Days from admission of principal procedure

Table 4. File Locations of Data Elements in the HCUP NIS (Continued)

Data element	Description (numbers in brackets indicate variable coding)
ASOURCE	Admission source: (1) ER, (2) another hospital, (3) another facility incl long term care, (4) court/law enforcement, (5) routine/birth/other
ATYPE	Admission type: (1) emergency, (2) urgent, (3) elective, (4) newborn, (5) delivery, (6) other
TOTCHG_X	Total charges, unedited

CD #3	**Compressed file: NIS97CD3.EXE contains:**

Inpatient Stay Core File C (filename: NIS97_C.ASC)

SEQ	Unique sequence number indicates the order in which the data file is sorted (links across files)
PROCESS	Processing number assigned for tracking records throughout data processing
SEQ_SID	Unique sequence number assigned for processing original data file (only after Release 3, 1994)
DSNUM	Data source number
DSTYPE	Data source type indicates state data organization, hospital association, consortium, and other
HOSPST	State postal code for hospital (e.g., AZ for Arizona)
HOSPSTCO	Modified Federal Information Processing Standards (FIPS) State/county code for hospital, links to Area Resource File
DSNDX	Maximum number of diagnosis codes available from this data source
DSNPR	Maximum number of procedure codes available from this data source
DXSYS	Diagnosis coding system, usually ICD-9-CM
PRSYS	Procedure coding system, usually ICD-9-CM
ADAYWK	Admission day of week
AMONTH	Admission month
PAY1_N	Expected primary payer, nonuniform: (1) Medicare, (2) Medicaid, (3) Blue Cross, (4) commercial, (5) alternative delivery system, incl HMO, (6) self-pay, (7) no charge, (8) Title V, (9) Worker's Compensation, (10) CHAMPUS/CHAMPVA, (11) other government, (12) other
PAY2	Expected secondary payer, uniform: (1) Medicare, (2) Medicaid, (3) private including HMO, (4) self-pay, (5) no charge, (6) other
PAY2_N	Expected secondary payer, nonuniform: (1) Medicare, (2) Medicaid, (3) Blue Cross, (4) commercial, (5) alternative delivery system incl HMO, (6) self-pay, (7) no charge, (8) Title V, (9) Worker's Compensation, (10) CHAMPUS/CHAMPVA, (11) other government, (12) other

Inpatient Stay Core File PR (filename: NIS97_PR.ASC)

SEQ	Unique sequence number indicates the order in which the data file is sorted (links across files)
PR	Principal and secondary procedures
PRV	Validity flag for principal and secondary procedures – indicates valid, invalid, or missing procedure

Table 4. File Locations of Data Elements in the HCUP NIS (Continued)

Data element	Description (numbers in brackets indicate variable coding)
CD #4	**Compressed file: NIS97CD1.EXE contains:**

Inpatient Stay Core File DX (filename: NIS97_DX.ASC)

SEQ	Unique sequence number indicates the order in which the data file is sorted (links across files)
DX	Principal and secondary diagnoses
DXV	Validity flag for principal and secondary diagnoses

CD #5

Two 10% Subsamples
(filenames: N97S1ABC.ASC, N97S1_DX.ASC, N97S1_PR. ASC, N97S2ABC.ASC, N97S2_DX.ASC, N97S2_PR. ASC)
All data elements, including discharge weight adjusted for subsampling
Data elements for Core Files A, B, C are in one file for each sample; diagnoses and procedures are in separate files

CD #6

Hospital Weights File (filename: NIS97WT.ASC)

YEAR	Discharge year (calendar)
HOSPID	HCUP hospital number (links to Inpatient Stay Core File A)
IDNUMBER	AHA ID number (without the leading 6)
AHAID	AHA ID number (with the leading 6 normally included in the AHA identifier), links to AHA Annual Survey
HOSPST	State postal code for hospital
HOSPNAME	Hospital name from AHA Survey
HOSPADDR	Hospital address from AHA Survey
HOSPCITY	Hospital city from AHA Survey
HOSPZIP	Hospital ZIP Code address from AHA Survey
STRAT_ST	Stratum for State-specific weights
STRATUM	Stratum used to post-stratify hospitals
DISCWT_F	Weight to discharges in the frame States
DISCWT_S	Weight to discharges in the State
DISCWT_U	Weight to discharges in the universe
HOSPWT_F	Weight to hospitals in the frame States
HOSPWT_S	Weight to hospitals in the State
HOSPWT_U	Weight to hospitals in the universe
N_DISC_F	Number of frame State discharges in STRATUM
N_DISC_S	Number of State's discharges in STRAT_ST

Table 4. File Locations of Data Elements in the HCUP NIS (Continued)

Data element	Description (numbers in brackets indicate variable coding)
N_DISC_U	Number of universe discharges in STRATUM
N_HOSP_F	Number of frame State hospitals in STRATUM
N_HOSP_S	Number of State's hospitals in STRAT_ST
N_HOSP_U	Number of universe hospitals in STRATUM
S_DISC_S	Number of sample discharges in STRAT_ST
S_DISC_U	Number of sample discharges in STRATUM
S_HOSP_S	Number of sample hospitals in STRAT_ST
S_HOSP_U	Number of sample hospitals in STRATUM
TOTDSCHG	Total hospital discharges
H_BEDSZ	Bedsize of hospital: (1) small, (2) medium, (3) large
H_CONTRL	Control/ownership of hospital: (1) government/nonfederal, (2) private not-for-profit, (3) private investor-owned
H_REGION	Region of hospital: (1) northeast, (2) midwest, (3) south, (4) west
H_LOCTCH	Location/teaching status of hospital: (1) rural, (2) urban nonteaching, (3) urban teaching
H_LOC	Location of hospital: (0) rural, (1) urban
H_TCH	Teaching status of hospital: (0) nonteaching, (1) teaching

Hospital-Level Casemix Counts by DRG, DCCS1, PCCS1
(filenames: N97_HDC1.ASC, N97_HPC1.ASC, N97_HDRG.ASC)

Total number of discharges
Sum of edited length of stay (LOS)
Sum of edited total charges (TOTCHG)
Number of discharges reporting LOS
Number of discharges reporting TOTCHG

NIS Documentation (see Table 5)

NIS Tools (see Table 5)

GETTING STARTED

In order to load NIS data onto your PC, you will need 3,343 megabytes of space available. For individual file requirements, please consult D_Filesp.pdf.

Documentation Using Adobe™ Acrobat™

The documentation for the HCUP Nationwide Inpatient Sample is distributed as portable document format (*.pdf) files along with the Adobe™ Acrobat™ Reader. The documentation on CD #6 contains comprehensive information for Release 6 for the 1997 data.

You must have the Adobe™ Acrobat™ Reader software on your computer to access the NIS documentation. If you don't have Adobe™ Acrobat™ Reader software on your computer, see the README.TXT file on CD #6 for instructions on installing or obtaining the software. The Acrobat™ Reader gives you electronic access to documents in their original form, independent of computer platform or application software. With the Acrobat™ Reader, you can view, navigate through, and print any .pdf file.

The Acrobat™ Reader provided on CD #6 is for IBM-compatible microcomputers running Microsoft Windows. More information and Reader software for other platforms (DOS, Macintosh, Sun Systems, etc.) may be obtained from the Adobe Home Page at http://www.adobe.com/. For further assistance in installing and running the Adobe™ Acrobat™ Reader on your computer platform, please consult your local support personnel.

NIS Documentation and NIS Tools

Table 5 describes the documentation and tools files that can be found on CD #6 and illustrates the structure of the directories and subdirectories on the CD.