



# STATISTICAL BRIEF #148

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# **Most Frequent Conditions in U.S. Hospitals, 2010**

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# Introduction

A patient can be admitted to the hospital with multiple conditions or diagnoses. The *principal diagnosis* is the condition that is primarily responsible for a patient's hospitalization. This condition can affect other components of the patient's hospital stay, including the length of stay, health care costs, and procedures performed.

This Statistical Brief presents data from the Healthcare Cost and Utilization Project (HCUP) on the most common principal diagnoses in 2010 for all hospital stays in the United States, as well as for stays by age and primary payer. Changes in the overall number of stays and the rate of hospitalization in the population are presented for the most common conditions in 1997 and 2010. All differences between estimates noted in the text are statistically significant at the .001 level or better.

# **Findings**

Most frequent principal diagnoses during hospital stays, 2010 Table 1 shows the most frequent principal diagnoses during hospital stays in 2010. In 2010, there were 39 million hospital stays in the U.S.—1,261 stays per 10,000 population. The 10 most frequent principal diagnoses accounted for 30 percent of all stays in 2010.

Liveborn (newborn infant) was the most common reason for hospitalization, accounting for more than 3.9 million stays in 2010 (10 percent of all stays).

Two respiratory illnesses—pneumonia and chronic obstructive pulmonary disease (COPD)—were among the 10 most frequent principal diagnoses in 2010. Pneumonia was the second most common reason for hospitalization in 2010 (2.8 percent of all stays).

Two circulatory conditions—congestive heart failure (CHF) and cardiac dysrhythmias—were also among the 10 most common principal diagnoses in 2010.

# **Highlights**

- Liveborn (newborn infant) was the most common reason for hospitalization in 2010 (3.9 million stays) and accounted for about 10 percent of all hospital stays.
- Pneumonia was the second most common diagnosis in 2010 and accounted for about 2.8 percent of all stays.
- Acute renal failure was the most rapidly growing condition between 1997 and 2010, with an increase of 264 percent in the rate of hospitalization.
- Mood disorders was the most common principal diagnosis among children ages 1–17.
- Obstetrics-related trauma was the most common diagnosis among adults ages 18–44.
- Osteoarthritis was the most common diagnosis among adults ages 45–64 and 65–84.
- Among adults ages 18–44, the rate of hospitalization for normal pregnancy and/or delivery fell 56 percent between 1997 and 2010, but the rate of hospitalization for delivery following a Cesarean section increased 82 percent.
- Four of the most common conditions for uninsured hospital stays increased by 50 percent or more from 1997 to 2010: skin and subcutaneous tissue infections, mood disorders, nonspecific chest pain, and alcohol-related disorders.

Table 1. Number of stays and stays per 10,000 population for the most frequent principal diagnoses for hospital stays, 2010

Principal CCS diagnosis	Number of stays in thousands	Stays per 10,000 population		
All stays	39,008	1,261		
Liveborn	3,906	126		
Pneumonia*	1,103	36		
Osteoarthritis	974	31		
Congestive heart failure; nonhypertensive	967	31		
Septicemia (except in labor)	934	30		
Mood disorders	887	29		
Cardiac dysrhythmias	764	25		
Chronic obstructive pulmonary disease and bronchiectasis	703	23		
Complication of device; implant or graft	684	22		
Obstetrics-related trauma to perineum and vulva	674	22		

CCS: Clinical Classifications Software

# Principal diagnoses with the most rapid growth, 1997–2010

Although the rate of hospitalization overall remained stable between 1997 and 2010, the hospitalization rate for some principal diagnoses experienced rapid growth (table 2). Acute renal failure was the most rapidly growing condition between 1997 and 2010, with an increase of 264 percent in the hospitalization rate (from 3.6 to 13.1 stays per 10,000 population). The hospitalization rate for 5 conditions—prolonged pregnancy, pulmonary heart disease, osteoarthritis, anemia, and septicemia—also doubled during this time period.

Table 2. Number of stays, stays per 10,000 population, and percentage change in rate of selected principal diagnoses for hospital stays, 1997 and 2010

	Number of stays in thousands			r 10,000 ation	Percentage change in rate
Principal CCS diagnosis	1997	2010	1997	2010	1997–2010
All stays	34,681	39,008	1,272	1,261	-1%
Diagnoses with most rapid growth in stays per population*					
Acute and unspecified renal failure	98	404	3.6	13.1	264%
Prolonged pregnancy	104	278	3.8	9.0	136%
Pulmonary heart disease	80	193	2.9	6.2	112%
Osteoarthritis	418	974	15.3	31.5	106%
Deficiency and other anemia	100	230	3.7	7.4	103%
Septicemia (except in labor)	413	934	15.2	30.2	99%
Skin and subcutaneous tissue infections	330	656	12.1	21.2	75%
Previous Cesarean section	271	503	10.0	16.3	63%
Respiratory failure; insufficiency; arrest					
(adult)	199	363	7.3	11.7	61%
Intestinal infection	136	237	5.0	7.7	54%

CCS: Clinical Classifications Software

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2010

<sup>\*</sup> Pneumonia: except that caused by tuberculosis or sexually transmitted disease

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2010

<sup>\*</sup> Includes only conditions with at least 100,000 stays in either 1997 or 2010

Most frequent principal diagnoses by age during hospital stays, 2010

Table 3 highlights the 5 most frequent reasons for hospitalization for each age group in 2010 as well as the change in the rate of hospitalization for these diagnoses since 1997. Overall, the hospitalization rate increased with age—with the exception of infants, who had a high hospitalization rate (11,438 per 10,000 population) primarily because of newborn births, which accounted for 86 percent of stays for children younger than 1 year.

For children ages 1–17, the top 3 principal diagnoses in 2010—mood disorders, pneumonia, and asthma—each occurred in 17 stays per 10,000 population. The rate of hospitalization for asthma fell by 30 percent and doubled for skin and subcutaneous tissue infections between 1997 and 2010.

Among adults ages 18–44, 4 of the top 5 conditions were related to pregnancy and childbirth: trauma to the perineum and vulva due to childbirth, maternal stay with a previous Cesarean section, prolonged pregnancy, and hypertension complicating pregnancy and childbirth. The rate of hospitalization for delivery following a Cesarean section increased 82 percent; however, the rate of hospitalization for normal pregnancy and/or delivery fell 56 percent between 1997 and 2010 (data not shown).

In 2010, osteoarthritis was the most common principal diagnosis among adults ages 45–64 and 65–84. The rate of hospitalization for this condition increased 164 percent and 60 percent, respectively, among these age groups between 1997 and 2010. Cardiovascular conditions were also common among adults age 45 and older. The rate of hospitalization for nonspecific chest pain and coronary atherosclerosis for adults ages 45–64 decreased 16 percent and 64 percent, respectively, between 1997 and 2010.

Congestive heart failure (CHF), pneumonia, septicemia, and cardiac dysrhythmias accounted for 4 of the top 5 conditions among adults ages 65–84 and age 85 and older. Hospitalization rates for CHF, pneumonia, and septicemia were higher by a factor of 2 or more for adults age 85 and older, compared to rates among adults ages 65–84. From 1997 to 2010, the hospitalization rate for CHF and pneumonia decreased among adults age 65 and older. In contrast, hospitalization rates for septicemia increased by 80 percent among adults ages 65–84 and by 56 percent among adults age 85 and older.

Table 3. Number of stays, stays per 10,000 population, and percentage change in rate of the most frequent principal diagnoses for hospital stays by age, 1997 and 2010

		of stays usands	Stays per 10,000 population		Percentage change in rate	
Age group and principal CCS diagnosis	1997	2010	1997	2010	1997–2010	
All ages, total stays	34,681	39,008	1,272	1,261	-1%	
< 1 year, total stays	4,436	4,521	11,825	11,438	-3%	
Liveborn	3,777	3,906	10,070	9,881	-2%	
Acute bronchitis	109	94	290	238	-18%	
Hemolytic jaundice and perinatal jaundice	33	41	88	104	17%	
Pneumonia*	56	36	151	90	-40%	
Short gestation; low birth weight; and fetal growth retardation	22	22	59	56	-5%	
1–17 years, total stays	1,821	1,754	271	250	-8%	
Mood disorders	64	120	10	17	80%	
Pneumonia*	135	119	20	17	-16%	
Asthma	159	116	24	17	-30%	
Appendicitis and other appendiceal conditions	65	85	10	12	25%	
Skin and subcutaneous tissue infections	29	62	4	9	107%	
18–44 years, total stays	9,444	9,706	850	859	1%	
Obstetrics-related trauma to perineum and vulva	676	648	61	57	-6%	
Previous Cesarean-section	270	500	24	44	82%	
Mood disorders	335	426	30	38	25%	
Prolonged pregnancy	99	268	9	24	167%	
Hypertension complicating pregnancy; childbirth and the puerperium	172	238	15	21	36%	
45–64 years, total stays	6,496	9,755	1,154	1,193	3%	
Osteoarthritis	105	404	19	49	164%	
Spondylosis; intervertebral disc disorders; other back problems	190	299	34	37	8%	
Nonspecific chest pain	242	295	43	36	-16%	
Coronary atherosclerosis and other heart disease	526	276	93	34	-64%	
Mood disorders	136	265	24	32	34%	
65–84 years, total stays	10,121	10,169	3,319	2,913	-12%	
Osteoarthritis	281	514	92	147	60%	
Congestive heart failure; nonhypertensive	581	467	191	134	-30%	
Pneumonia*	514	410	168	118	-30%	
Septicemia (except in labor)	195	402	64	115	80%	
Cardiac dysrhythmias	333	387	109	111	2%	
85+ years, total stays	2,362	3,103	6,049	5,608	<b>-7</b> %	
Congestive heart failure; nonhypertensive	202	235	517	424	-18%	
Pneumonia*	197	183	504	331	-34%	
Septicemia (except in labor)	76	169	196	305	56%	
Urinary tract infections	75	145	191	262	37%	
Cardiac dysrhythmias	70	125	179	225	26%	

CCS: Clinical Classifications Software

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2010

Bipolar disorders and depressive disorders among children ages 1–17, 1997 and 2010

<sup>\*</sup>Pneumonia: except that caused by tuberculosis or sexually transmitted disease

One age-related finding of particular interest warranted further analysis—mood disorders, the fourth-ranked principal diagnosis among children ages 1–17 in 1997, was the most frequent principal diagnosis in 2010. Table 4 shows the number of stays and rate of hospitalization for the two specific diagnoses that constitute mood disorders—bipolar disorders and depressive disorders—by age within the 1–17 age group.

Overall, depressive disorders comprised the largest share of mood disorders, with the rate of hospitalization highest among children ages 15–17 (29 stays per 10,000 population in 2010). The rate of hospitalization for depressive disorders among children remained relatively stable between 1997 and 2010. In contrast, there was more than a four-fold increase in the rate of hospitalization for bipolar disorders among children ages 1–17 between 1997 and 2010. This increase occurred for all ages (where data were available), with the highest rates among children ages 10–14 and 15–17 (11 and 21 stays per 10,000 population, respectively, in 2010). Bipolar disorders accounted for an increasing share of hospital stays for mood disorders among children ages 1–17 in 2010 (48 percent) versus 1997 (16 percent).

Table 4. Number of stays, stays per 10,000 population, and percentage change in rate of principal bipolar disorders and depressive disorders among children ages 1–17, 1997 and 2010

	Number of stays		Stays pe popul		Percentage change in rate	
Multi-level principal CCS diagnosis	1997	2010	1997	2010	1997–2010	
Bipolar disorders						
1–17 years, total stays	10,300	57,300	1.5	8.2	434%	
1–4 years	*	300	*	0.2	*	
5–9 years	800	6,500	0.4	3.2	696%	
10–14 years	3,800	23,200	2.0	11.2	475%	
15–17 years	5,600	27,300	4.8	21.1	345%	
Depressive disorders						
1–17 years, total stays	53,800	62,900	8.0	9.0	12%	
1–4 years	42	*	0.0	*	*	
5–9 years	3,100	2,200	1.5	1.1	-28%	
10–14 years	21,200	23,300	10.8	11.2	4%	
15–17 years	29,400	37,400	24.9	29.0	17%	

CCS: Clinical Classifications Software. The single-level CCS diagnosis category, mood disorders, comprises two multi-level CCS categories: bipolar disorders and depressive disorders.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and 2010

Most frequent principal diagnoses by payer during hospital stays, 2010

Table 5 shows the top 5 principal diagnoses for hospital stays by primary payer. The principal diagnoses for hospitalizations by primary payer generally varied, although some conditions were common across all payer types.

There were 14.5 million stays with Medicare as the primary payer in 2010. CHF was the most common principal diagnosis, accounting for 5 percent of all Medicare stays. The number of stays for pneumonia decreased slightly between 1997 and 2010 (12 percent), but there was an increase in the number of stays billed to Medicare for septicemia (122 percent), osteoarthritis (87 percent), and cardiac dysrhythmias (32 percent).

Medicaid was the primary payer for 8.3 million stays in 2010—an increase of 47 percent from 1997. Three pregnancy- and childbirth-related conditions accounted for nearly 30 percent of all Medicaid stays in 2010: newborn birth, trauma to the perineum and vulva caused by childbirth, and previous Cesarean

<sup>\*</sup> Data are not available.

section. The number of stays for newborn birth and previous Cesarean section both grew from 1997 to 2010 (48 percent and 169 percent, respectively). Mood disorders was the third most common condition with Medicaid as the primary payer, increasing 78 percent from 1997 to 2010.

Private insurance was the primary payer for 12.5 million stays in 2010. Newborn birth was the most common reason for stays billed to private insurance, accounting for 15 percent of stays. Osteoarthritis was the second most common principal diagnosis among private insurance stays and more than tripled between 1997 and 2010.

The uninsured accounted for 2.3 million stays in 2010—a 40-percent increase since 1997. Newborn births accounted for 7 percent of all uninsured stays in 2010. Four of the most common conditions for uninsured hospital stays increased by more than 50 percent from 1997 to 2010: alcohol-related disorders and nonspecific chest pain grew by 52 percent and 68 percent, respectively; stays for mood disorders nearly doubled; and skin and subcutaneous tissue infections nearly tripled.

Table 5. Number of stays, percentage distribution, and percentage change in stays of the most

frequent principal diagnoses for hospital stays by payer, 1997 and 2010

	Number o thous	•	Percentage of payer-specific total stays		Percentage change in number of stays
Payer* and principal CCS diagnosis	1997	2010	1997	2010	1997–2010
All payers, total stays	34,681	39,008	100%	100%	12%
Medicare	12,618	14,545	100%	100%	15%
Congestive heart failure; nonhypertensive	757	712	6%	5%	-6%
Pneumonia**	703	622	6%	4%	-12%
Septicemia (except in labor)	276	613	2%	4%	122%
Osteoarthritis	279	522	2%	4%	87%
Cardiac dysrhythmias	375	494	3%	3%	32%
Medicaid	5,645	8,273	100%	100%	47%
Liveborn	1,225	1,812	22%	22%	48%
Obstetrics-related trauma to perineum and					
vulva	224	267	4%	3%	19%
Mood disorders	147	262	3%	3%	78%
Previous Cesarean section	84	226	1%	3%	169%
Pneumonia**	166	177	3%	2%	6%
Private insurance	13,388	12,454	100%	100%	-7%
Liveborn	2,205	1,807	16%	15%	-18%
Osteoarthritis	117	390	1%	3%	234%
Obstetrics-related trauma to perineum and					
vulva	431	362	3%	3%	-16%
Spondylosis; intervertebral disc disorders;					
other back problems	258	289	2%	2%	12%
Mood disorders	227	266	2%	2%	17%
Uninsured	1,677	2,341	100%	100%	40%
Liveborn	191	169	11%	7%	-12%
Mood disorders	55	108	3%	5%	96%
Skin and subcutaneous tissue infections	28	80	2%	3%	184%
Alcohol-related disorders	48	73	3%	3%	52%
Nonspecific chest pain	39	66	2%	3%	68%

CCS: Clinical Classifications Software

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 1997 and

<sup>\*</sup>Population denominators are not available by payer

<sup>\*\*</sup> Pneumonia: except that caused by tuberculosis or sexually transmitted disease

# **Data Source**

The estimates in this Statistical Brief are based upon data from the HCUP 2010 NIS. Historical data were drawn from the 1997 NIS. Supplemental sources included data on national population estimates from "Intercensal Estimates of the Resident Population by Single Year of Age, Sex, Race, and Hispanic Origin for the United States: April 1, 2000 to July 1, 2010," Population Division, U.S. Census Bureau, Release date: September 2011. Available at (<a href="http://www.census.gov/popest/data/intercensal/national/nat2010.html">http://www.census.gov/popest/data/intercensal/national/nat2010.html</a>). (Accessed September 17, 2012).

Supplemental sources also included data on national population estimates from "Intercensal Estimates of the United States Resident Population by Age and Sex, 1990-2000: Selected Months," Population Division, U.S. Census Bureau, Release date: August 2004. Available at (<a href="http://www.census.gov/popest/data/intercensal/national/index.html">http://www.census.gov/popest/data/intercensal/national/index.html</a>). (Accessed September 17, 2012).

Many hypothesis tests were conducted for this Statistical Brief. Thus, to decrease the number of false-positive results, we reduced the significance level to .001 for individual tests.

## **Definitions**

Diagnoses, ICD-9-CM, and Clinical Classifications Software (CCS)

The *principal diagnosis* is that condition established after study to be chiefly responsible for the patient's admission to the hospital. *Secondary diagnoses* are concomitant conditions that coexist at the time of admission or that develop during the stay.

ICD-9-CM is the International Classification of Diseases, Ninth Revision, Clinical Modification, which assigns numeric codes to diagnoses. There are about 14,000 ICD-9-CM diagnosis codes.

CCS categorizes ICD-9-CM diagnoses into a manageable number of clinically meaningful categories. This "clinical grouper" makes it easier to quickly understand patterns of diagnoses. CCS categories identified as "Other" are typically not reported; these categories include miscellaneous, otherwise unclassifiable diagnoses that may be difficult to interpret as a group.

The single-level diagnosis CCS aggregates illnesses and conditions into 285 mutually exclusive categories. The multi-level CCS groups single-level CCS categories into broader categories (e.g., "Diseases of the Circulatory System", "Mental Disorders", and "Injury") and also splits single-level CCS categories to provide more detail about particular groupings of codes.

## Types of hospitals included in HCUP

HCUP is based on data from community hospitals, defined as short-term, non-Federal, general and other hospitals, excluding hospital units of other institutions (e.g., prisons). HCUP data include obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded are long-term care, rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals. However, if a patient received long-term care, rehabilitation, or treatment for psychiatric or chemical dependency conditions in a community hospital, the discharge record for that stay will be included in the NIS.

# Unit of analysis

The unit of analysis is the hospital discharge (i.e., the hospital stay), not a person or patient. This means that a person who is admitted to the hospital multiple times in one year will be counted each time as a separate "discharge" from the hospital.

# Payer

Payer is the expected primary payer for the hospital stay. To make coding uniform across all HCUP data sources, payer combines detailed categories into more general groups:

Medicare: includes fee-for-service and managed care Medicare patients

- Medicaid: includes fee-for-service and managed care Medicaid patients. Patients covered by the State Children's Health Insurance Program (SCHIP) may be included here. Because most State data do not identify SCHIP patients specifically, it is not possible to present this information separately.
- Private Insurance: includes Blue Cross, commercial carriers, and private HMOs and PPOs
- Other: includes Worker's Compensation, TRICARE/CHAMPUS, CHAMPVA, Title V, and other government programs
- Uninsured: includes an insurance status of "self-pay" and "no charge."

When more than one payer is listed for a hospital discharge, the first-listed payer is used.

#### **About HCUP**

HCUP is a family of powerful health care databases, software tools, and products for advancing research. Sponsored by the Agency for Healthcare Research and Quality (AHRQ), HCUP includes the largest all-payer encounter-level collection of longitudinal health care data (inpatient, ambulatory surgery, and emergency department) in the United States, beginning in 1988. HCUP is a Federal-State-Industry Partnership that brings together the data collection efforts of many organizations—such as State data organizations, hospital associations, private data organizations, and the Federal government—to create a national information resource.

HCUP would not be possible without the contributions of the following data collection Partners from across the United States:

Alaska State Hospital and Nursing Home Association

Arizona Department of Health Services

**Arkansas** Department of Health

California Office of Statewide Health Planning and Development

Colorado Hospital Association

**Connecticut** Hospital Association

Florida Agency for Health Care Administration

**Georgia** Hospital Association

Hawaii Health Information Corporation

Illinois Department of Public Health

Indiana Hospital Association

Iowa Hospital Association

Kansas Hospital Association

Kentucky Cabinet for Health and Family Services

Louisiana Department of Health and Hospitals

Maine Health Data Organization

Maryland Health Services Cost Review Commission

Massachusetts Center for Health Information and Analysis

Michigan Health & Hospital Association

Minnesota Hospital Association

Mississippi Department of Health

Missouri Hospital Industry Data Institute

Montana MHA - An Association of Montana Health Care Providers

Nebraska Hospital Association

Nevada Department of Health and Human Services

New Hampshire Department of Health & Human Services

New Jersey Department of Health

New Mexico Department of Health

New York State Department of Health

North Carolina Department of Health and Human Services

**Ohio** Hospital Association

Oklahoma State Department of Health

Oregon Association of Hospitals and Health Systems

Oregon Health Policy and Research

Pennsylvania Health Care Cost Containment Council Rhode Island Department of Health South Carolina Budget & Control Board South Dakota Association of Healthcare Organizations Tennessee Hospital Association Texas Department of State Health Services Utah Department of Health Vermont Association of Hospitals and Health Systems Virginia Health Information Washington State Department of Health West Virginia Health Care Authority Wisconsin Department of Health Services Wyoming Hospital Association

#### **About the NIS**

The HCUP Nationwide Inpatient Sample (NIS) is a nationwide database of hospital inpatient stays. The NIS is nationally representative of all community hospitals (i.e., short-term, non-Federal, nonrehabilitation hospitals). The NIS is a sample of hospitals and includes all patients from each hospital, regardless of payer. It is drawn from a sampling frame that contains hospitals comprising more than 95 percent of all discharges in the United States. The vast size of the NIS allows the study of topics at both the national and regional levels for specific subgroups of patients. In addition, NIS data are standardized across years to facilitate ease of use.

## **About HCUPnet**

HCUPnet is an online query system that offers instant access to the largest set of all-payer health care databases publicly available. HCUPnet has an easy step-by-step query system, allowing for tables and graphs to be generated on national and regional statistics, as well as trends for community hospitals in the United States. HCUPnet generates statistics using data from HCUP's Nationwide Inpatient Sample (NIS), the Kids' Inpatient Database (KID), the Nationwide Emergency Department Sample (NEDS), the State Inpatient Databases (SID), and the State Emergency Department Databases (SEDD).

## For More Information

For more information about HCUP, visit http://www.hcup-us.ahrq.gov/.

For additional HCUP statistics, visit HCUPnet, our interactive query system, at  $\underline{\text{http://hcupnet.ahrq.gov/}}$ .

For information on other hospitalizations in the United States, download *HCUP Facts and Figures:* Statistics on Hospital-Based Care in the United States in 2009, located at <a href="http://www.hcup-us.ahrq.gov/reports.jsp">http://www.hcup-us.ahrq.gov/reports.jsp</a>.

For a detailed description of HCUP, more information on the design of the NIS, and methods to calculate estimates, please refer to the following publications:

Introduction to the HCUP Nationwide Inpatient Sample, 2010. Online. May 2012. U.S. Agency for Healthcare Research and Quality. Available at <a href="http://www.hcup-us.ahrq.gov/db/nation/nis/NISIntroduction2010.pdf">http://www.hcup-us.ahrq.gov/db/nation/nis/NISIntroduction2010.pdf</a>. (Accessed January 7, 2013).

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http://www.hcup-us.ahrq.gov/reports/methods/2006\_05\_NISTrendsReport\_1988-2004.pdf. (Accessed January 7, 2013).

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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other HCUP data and tools, and to share suggestions on how HCUP products might be enhanced to further meet your needs. Please e-mail us at <a href="https://hcup.gov">hcup.gov</a> or send a letter to the address below:

Irene Fraser, Ph.D., Director Center for Delivery, Organization, and Markets Agency for Healthcare Research and Quality 540 Gaither Road Rockville, MD 20850

<sup>&</sup>lt;sup>1</sup> HCUP Clinical Classifications Software (CCS). Healthcare Cost and Utilization Project (HCUP). U.S. Agency for Healthcare Research and Quality, Rockville, MD. Available at <a href="http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp">http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp</a>. Updated March 2012. (Accessed January 7, 2013).