

STATISTICAL BRIEF #199

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All-Cause Readmissions by Payer and Age, 2009–2013

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Introduction

Hospital readmissions have been used increasingly as an outcome measure for assessing performance of the health care system. For example, Partnership for Patients, a national initiative sponsored by the Department of Health and Human Services, is tracking changes in all-cause 30-day hospital readmissions.¹ Efforts to reduce hospital readmissions range from reengineering discharge practices² and improving care transition³ to building community-wide partnerships for addressing health and social service needs.⁴

Developing national benchmarks for hospital readmissions can help identify those patient populations with relatively high readmission rates for targeted improvement efforts. Furthermore, tracking changes in these benchmarks over time allows policymakers to monitor progress made toward reducing readmissions.

This Healthcare Cost and Utilization Project (HCUP) Statistical Brief presents data on 30-day all-cause readmissions among patients aged 1 year and older by expected payer and patient age group. Trends in readmissions by payer are provided from 2009 through 2013. Changes in readmission rates from 2009 through 2013 and costs for index admissions (the initial inpatient stays) and readmissions for 2013 also are presented by payer and age group. The expected payer is determined by the index admission, although the expected payer of the readmission may be different.

Highlights

- Readmissions among all patients covered by Medicare declined from 18.1 per 100 admissions in 2011 to 17.3 per 100 in 2013, after being essentially unchanged from 2009 to 2011. In contrast, the readmission rate among patients who were covered by private insurance or Medicaid did not change appreciably from 2011 to 2013.
- Among uninsured individuals, both the number and rate of readmissions increased between 2009 and 2013 (10.6 percent increase in readmission count and 8.9 percent increase in readmission rate).
- The readmission rate among nonmaternal patients aged 1–20 years increased substantially between 2009 and 2013: 22 percent increase for uninsured patients, 15 percent increase for those with private insurance, and 8 percent increase for Medicaid patients.
- The average cost of a readmission was higher than the average cost of an index admission for all types of payers: 5 percent higher for patients covered by Medicare, 11 percent higher for uninsured patients, and about 30 percent higher for patients covered by Medicaid or private insurance.

¹ U.S. Department of Health and Human Services, National Quality Strategy. 2013 Annual Progress Report to Congress: National Strategy for Quality Improvement in Health Care. July 2013, Updated July 2014.

<http://www.ahrq.gov/workingforquality/reports/annual-reports/nqs2013annlrpt.htm#tab1>. Accessed November 13, 2015.

² Agency for Healthcare Research and Quality. Re-Engineered Discharge (RED) Toolkit. June 2015. Rockville, MD: Agency for Healthcare Research and Quality. <http://www.ahrq.gov/professionals/systems/hospital/red/toolkit/index.html>. Accessed November 13, 2015.

³ Coleman EA, Parry C, Chalmers S, Min SJ. The care transitions intervention: results of a randomized controlled trial. *Arch Intern Med.* 2006;166(17):1822-8.

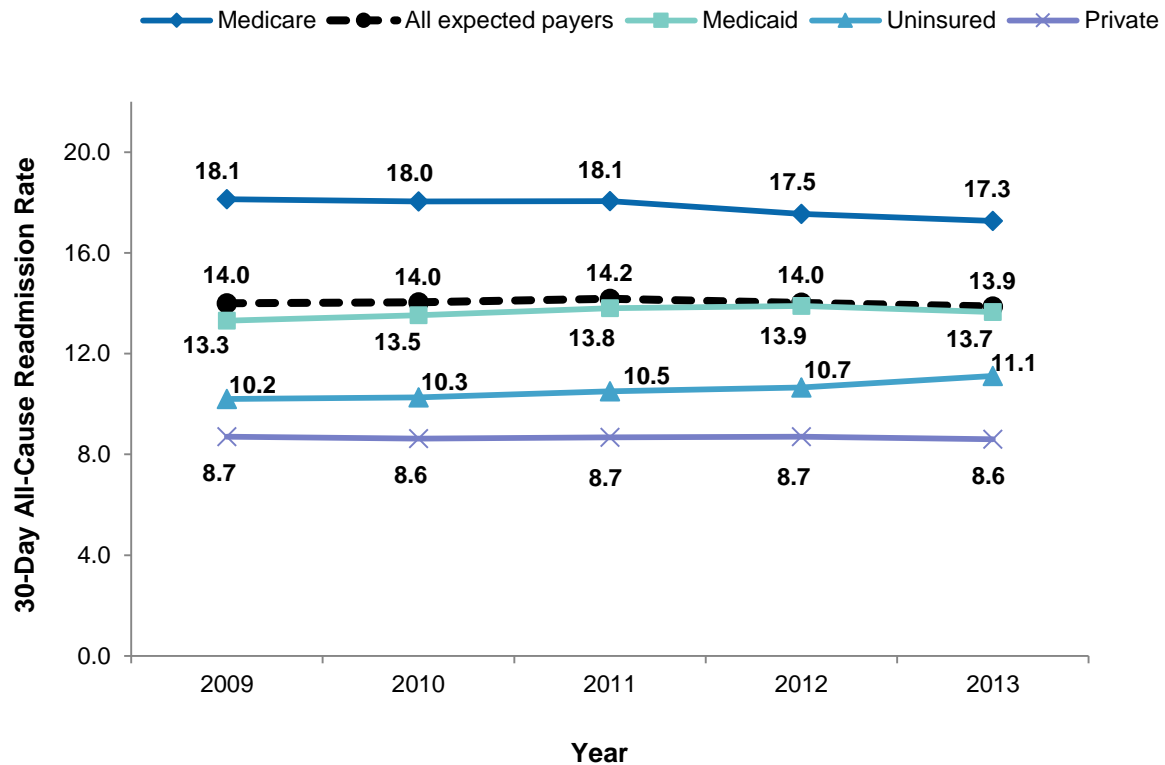
⁴ Agency for Healthcare Research and Quality. Hospital Guide to Reducing Medicaid Readmissions. August 2014. Rockville, MD: Agency for Healthcare Research and Quality. <http://www.ahrq.gov/professionals/systems/hospital/medicaidreadmitguide/index.html>. Accessed November 13, 2015.

Findings

Trends in hospital readmissions by payer, 2009–2013

Figure 1 presents trends in 30-day all-cause readmission rate by expected payer from 2009 through 2013. For each expected payer, all patients aged 1 year and older are included in the readmission rate.

Figure 1. Rate of 30-day all-cause readmissions by expected payer, 2009–2013



Note: The expected payer is determined by the index admission, not the readmission. Rates by expected payer include all patients aged 1 year and older.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), 2013 Nationwide Readmissions Database (NRD), and readmissions analysis files derived from the 2009–2012 State Inpatient Databases (SID)

- **Readmissions among patients covered by Medicare declined from 2011 to 2013.**

The 30-day all-cause readmission rate among patients covered by Medicare declined from 18.1 per 100 admissions in 2011 to 17.3 per 100 admissions in 2013, after being essentially unchanged from 2009 to 2011. In contrast, the readmission rate among patients who were covered by private insurance or Medicaid did not change appreciably from 2011 to 2013.

- **The overall rate of readmissions was highest for patients covered by Medicare.**

The 30-day all-cause readmission rate was consistently highest among patients covered by Medicare, followed by those covered by Medicaid, uninsured individuals, and those covered by private insurance. The 30-day all-cause readmission rate was more than twice as high among those covered by Medicare (17.3 percent in 2013) compared with those who had private insurance (8.6 percent in 2013).

- **The overall readmission rate increased among those who were uninsured.**

From 2009 to 2013, the readmission rate for uninsured patients rose by 8.9 percent, from 10.2 to 11.1 per 100 admissions.

- **The overall readmission rate for all expected payers combined did not change appreciably.**

From 2009 to 2013, the readmission rate for all payers combined stayed at about 14.0 per 100 admissions.

Readmission rates by payer and patient age, 2009 and 2013

Table 1 presents the readmission rate and the number of readmissions by expected payer and patient age group for 2009 and 2013. The percentage change in the readmission rate from 2009 to 2013 also is shown.

Table 1. Rate of 30-day all-cause readmissions by expected payer and patient age group, 2009 and 2013

Expected payer and age group ^a	Readmission rate			Number of readmissions (thousands)		
	2009	2013	Percentage change, 2009–2013	2009	2013	Percentage change, 2009–2013
Medicare						
Total ^b	18.1	17.3	–4.8	2,581	2,427	–6.0
Aged 21–64 years	21.5	21.2	–1.4	608	614	1.0
Aged 65 years and above	17.3	16.2	–6.1	1,970	1,810	–8.1
Medicaid						
Total	13.3	13.7	2.6	784	769	–1.9
Nonmaternal pediatric, aged 1–20 years	11.1	11.9	8.1	111	105	–5.3
Nonmaternal adults, aged 21–44 years	18.9	19.2	1.7	233	232	–0.4
Nonmaternal adults, aged 45–64 years	21.8	21.6	–0.9	334	341	2.1
Maternal, any age	5.0	4.6	–8.5	106	90	–15.4
Private						
Total	8.7	8.6	–1.2	765	643	–15.9
Nonmaternal pediatric, aged 1–20 years	9.4	10.8	14.9	68	63	–6.0
Nonmaternal adults, aged 21–44 years	9.4	9.9	6.2	182	151	–16.8
Nonmaternal adults, aged 45–64 years	10.9	10.8	–1.0	445	372	–16.4
Maternal, any age	3.5	3.0	–15.3	72	57	–20.5
Uninsured						
Total	10.2	11.1	8.9	167	185	10.6
Nonmaternal pediatric, aged 1–20 years	6.1	7.4	22.0	6	5	–11.6
Nonmaternal adults, aged 21–44 years	9.8	11.1	13.9	74	83	12.9
Nonmaternal adults, aged 45–64 years	11.9	12.2	2.1	83	93	11.0
Maternal, any age	4.7	4.2	–9.3	4	3	–9.7

^a The expected payer is determined by the index admission, not the readmission. Information is not presented for three types of patients: (1) patients aged 0 years, (2) patients aged 1 year and above with other types of expected payer (e.g., local government programs, TRICARE, worker's compensation), and (3) patients aged 65 years and above for Medicaid, private, and uninsured.

^b Medicare patients under age 21 years are included in the Medicare total but are not reported separately because of the small number of cases. There is no maternal breakout for Medicare because of the small number of maternal stays in this group.

Note: Percentage change was calculated from data that were not rounded.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), 2013 Nationwide Readmissions Database (NRD), and a readmissions analysis file derived from the 2009 State Inpatient Databases (SID)

- **Both the number and rate of readmissions among patients aged 65 years and older covered by Medicare decreased from 2009 to 2013.**

From 2009 to 2013, there was a 6.1 percent decrease in the readmission rate among Medicare patients aged 65 years and older, from 17.3 to 16.2 per 100 index admissions. The number of readmissions for these patients decreased by 8.1 percent, from nearly 2 million to 1.8 million.

- **Readmission rates decreased among maternal patients covered by Medicaid, those covered by private insurance, and those who were uninsured.**

Among maternal patients of any age, the readmission rate between 2009 and 2013 decreased by 15.3 percent for those covered by private insurance, by 9.3 percent for uninsured patients, and by 8.5 percent for those covered by Medicaid. The readmission rate among maternal patients was lower in 2013 for privately insured patients (3.0 per 100 index admissions) compared with those who were covered by Medicaid or who were uninsured (4.6 and 4.2 per 100 index admissions, respectively).

- **Across all payer categories, the largest percentage decrease in the number of readmissions was among patients with private insurance.**

The number of readmissions decreased among all patients with insurance coverage. The rate of decrease was greatest for privately insured patients, 15.9 percent, compared with patients covered by Medicare (6.0 percent) or Medicaid (1.9 percent).

- **The largest increase in the readmission rate between 2009 and 2013 was among nonmaternal patients aged 1–20 years who were covered by Medicaid or private insurance or were uninsured.**

The readmission rate increased between 2009 and 2013 for nonmaternal patients aged 1–20 years with Medicaid (8.1 percent) or private insurance (14.9 percent), or who were uninsured (22.0 percent).

- **Among uninsured patients, both the total number and rate of readmissions increased substantially between 2009 and 2013.**

The readmission rate among patients who were uninsured increased by 8.9 percent, and the number of readmissions increased by 10.6 percent. The readmission rate for uninsured patients increased between 2009 and 2013 for nonmaternal patients aged 1–20 years (22.0 percent) and 21–44 years (13.9 percent), remained relatively stable for nonmaternal adults aged 45–64 years, and decreased for maternal patients (9.3 percent).

- **Among patients covered by Medicaid, the total number and rate of readmissions remained relatively stable between 2009 and 2013.**

The readmission rate and the number of readmissions among patients covered by Medicaid remained relatively stable. The readmission rate for nonmaternal pediatric patients aged 1–20 years covered by Medicaid increased (8.1 percent), but there was a decrease in the number of readmissions (5.3 percent). Among maternal patients, there was a decrease in the rate of readmissions (8.5 percent) and number of readmissions (15.4 percent).

Average cost of readmissions by payer and age, 2013

Table 2 presents the average cost of index admissions, the average cost of readmissions, and the marginal and percentage increase in costs for readmissions, by expected payer and patient age group for 2013.

Table 2. Average costs of 30-day admissions and all-cause readmissions by expected payer and age group, 2013

Expected payer and age group ^a	2013			
	Average cost of index admission, \$	Average cost of readmission, \$	Marginal difference in cost of readmission, \$	Change in cost of readmission, %
Medicare				
Total ^b	13,100	13,800	700	5.3
Aged 21–64 years	12,900	13,600	700	5.4
Aged 65 years and above	13,100	13,800	700	5.3
Medicaid				
Total	9,500	12,300	2,800	29.5
Nonmaternal pediatric, aged 1–20 years	11,300	15,600	4,300	38.1
Nonmaternal adults, aged 21–44 years	11,000	11,500	500	4.5
Nonmaternal adults, aged 45–64 years	13,400	13,300	–100	–0.7
Maternal, any age	4,700	6,400	1,700	36.2
Private				
Total	10,800	14,200	3,400	31.5
Nonmaternal pediatric, aged 1–20 years	10,600	14,700	4,100	38.7
Nonmaternal adults, aged 21–44 years	11,100	13,200	2,100	18.9
Nonmaternal adults, aged 45–64 years	14,100	15,700	1,600	11.3
Maternal, any age	4,700	6,900	2,200	46.8
Uninsured				
Total	9,100	10,100	1,000	11.0
Nonmaternal pediatric, aged 1–20 years	7,500	9,200	1,700	22.7
Nonmaternal adults, aged 21–44 years	8,100	8,600	500	6.2
Nonmaternal adults, aged 45–64 years	10,800	11,700	900	8.3
Maternal, any age	4,200	6,100	1,900	45.2

^a The expected payer is determined by the index admission, not the readmission. Information is not presented for three types of patients: (1) patients aged 0 years, (2) patients aged 1 year and above with other types of expected payer (e.g., local government programs, TRICARE, worker’s compensation), and (3) patients aged 65 years and above for Medicaid, private, and uninsured.

^b Medicare patients under age 21 are included in the Medicare total but are not reported separately because of the small number of cases. There is no maternal breakout for Medicare because of the small number of maternal stays in this group.

Note: Percentage change was calculated from data that were not rounded.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), Nationwide Readmissions Database (NRD), 2013

■ **The average cost of a readmission was higher than the average cost of an index admission for each type of expected payer.**

In 2013, the average cost of a readmission was about \$3,000 higher than the average cost of an index admission among patients covered by Medicaid or private insurance (\$2,800 and \$3,400, respectively). For uninsured patients, on average readmissions cost \$1,000 more than index

admissions. The marginal increase in the average cost of a readmission was lowest among patients covered by Medicare (readmissions were \$700 more costly, on average, than the index admissions).

- **The increase in the average cost of a readmission varied by age group and payer.**

Among nonmaternal patients aged 1–20 years, the average cost of a readmission was \$4,300 (or 38.1 percent) higher than the average cost of an index admission for patients covered by Medicaid and \$4,100 (or 38.7 percent) higher for those covered by private insurance. Among nonmaternal adults aged 21–44 years and 45–64 years, the increase in the average cost of a readmission over the average cost of an index admission was highest for those covered by private insurance (\$2,100 and \$1,600, respectively). In comparison, the marginal difference in the average cost of a readmission for those covered by Medicaid in these two age groups was negligible (\$500 and –\$100, respectively). Among maternal patients, the marginal increase in the average cost of a readmission was highest among those with private insurance (\$2,200), followed by those who were uninsured (\$1,900) or covered by Medicaid (\$1,700).

Data Source

The estimates in this Statistical Brief are based upon data from the Healthcare Cost and Utilization Project (HCUP) 2013 Nationwide Readmissions Database (NRD) and the 2009–2012 State Inpatient Databases (SID). The SID were used to create readmissions analysis files consistent with the design of the 2013 NRD and weighted for national estimates. Patients younger than 1 year were excluded from the analysis because the patient linkage numbers for infants are available for less than half of the States. Infants account for about 12 percent of all admissions. Patients aged 1 year and above with an expected payer other than Medicare, Medicaid, private insurance, or uninsured and patients aged 65 years and above with an expected primary payer of Medicaid, private insurance, or uninsured also were excluded because of small sample size. Combined, these patients account for about 5 percent of all admissions.

Definitions

Index admissions, readmissions, and readmission rates

The methodology used in this Statistical Brief for counting index admissions and 30-day readmissions is consistent with the methods used for the all-payer 30-day readmission rate reported by Partnership for Patients.⁵ An *index admission* is defined as an inpatient stay discharged alive with a nonmissing length of stay (LOS). LOS is critical to determining the timing between inpatient stays. A patient is allowed to have multiple index admissions, regardless of the time elapsed between events. Consider a patient with four inpatient stays in 2013. If one stay starts on January 10, the next stay begins on January 20, the third stay begins on January 27th, and the fourth starts on March 30th, all four are counted as index admissions. Index admission counts presented in this Statistical Brief include inpatient stays that qualify as an index admission from January through December 2013 (12 months). An index admission also can be a readmission.

A *readmission* is an inpatient stay that begins within 30 days of the discharge date of an index admission and can be to the same or a different hospital. The readmission can be for any cause and may or may not be related to the care received at the index admission. No more than one readmission is counted within the 30-day period. In the case of index admissions for which there was more than one readmission in the 30-day period, the data presented in this Statistical Brief reflect the characteristics and costs of the first readmission. Because the NRD and SID are calendar-year files, readmissions are identified using index admissions discharged in January through November 2013. This allows an equal opportunity to find a readmission within 30 days. In this Statistical Brief, the readmission counts are 12-month counts calculated by multiplying the readmission rate by the 12-month index admission counts.

Table 3 demonstrates how index admissions and readmissions are identified for a patient with five inpatient stays in a year.

⁵ U.S. Department of Health and Human Services, National Quality Strategy. 2013 Annual Progress Report to Congress: National Strategy for Quality Improvement in Health Care. July 2013, Updated July 2014. <http://www.ahrq.gov/workingforquality/reports/annual-reports/nqs2013annlrpt.htm#tab1>. Accessed November 13, 2015.

Table 3. Example of counting index admissions and readmissions for patient with five inpatient stays in 2013

Date in 2013	Counted as an index admission?	Counted as a 30-day all-cause readmission?
January 10	Yes	No, no prior stay
January 20	Yes	Yes, counted as readmission to stay on January 10
January 27	Yes	Yes, counted as readmission to stay on January 20. Not counted as readmission to stay on January 10 because only 1 readmission is counted per index.
March 30	Yes	No, no index event in prior 30 days
December 15	No, because 30-day follow-up period is not available	No
Total	4 index admissions	2 readmissions

If a patient was transferred to a different hospital on the same day or was transferred within the same hospital, the two events were considered a continuation of care and the second stay was not counted as a readmission. In contrast to an index admission, a readmission may result in discharge alive or dead and does not require the LOS to be nonmissing.

The *readmission rate* is the percentage of index admissions that are readmitted within 30 days. The denominator is the number of index admissions discharged in January through November 2013. The numerator is the number of index admissions in the denominator that had a readmission for any cause within 30 days. Table 3 demonstrates that the readmission rate is 50 percent (2 readmissions / 4 index events) for a patient seen in the hospital five times in the year.

Types of hospitals included in the HCUP Nationwide Readmissions Database

The NRD is based on data from community hospitals, which are defined as short-term, non-Federal, general, and other hospitals, excluding hospital units of other institutions (e.g., prisons). The NRD includes obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded are long-term care facilities such as rehabilitation, long-term acute care, 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 is included in the NRD.

Types of hospitals included in HCUP State Inpatient Databases

This analysis used SID limited to data from community hospitals, which are defined as short-term, non-Federal, general, and other hospitals, excluding hospital units of other institutions (e.g., prisons). Community hospitals include obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded for this analysis are long-term care facilities such as 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 was included in the analysis.

Unit of analysis

The unit of analysis is the individual patient identified by the synthetic patient-level identifier. A patient will have multiple records in the NRD or SID if he or she has multiple hospital admissions in the year.

Costs and charges

Total hospital charges were converted to costs using HCUP Cost-to-Charge Ratios based on hospital accounting reports from the Centers for Medicare & Medicaid Services (CMS).⁶ *Costs* reflect the actual expenses incurred in the production of hospital services, such as wages, supplies, and utility costs; *charges* represent the amount a hospital billed for the case. For each hospital, a hospital-wide cost-to-

⁶ Agency for Healthcare Research and Quality. HCUP Cost-to-Charge Ratio (CCR) Files. Healthcare Cost and Utilization Project (HCUP). 2001–2012. Rockville, MD: Agency for Healthcare Research and Quality. Updated December 2014. <http://www.hcup-us.ahrq.gov/db/state/costtocharge.jsp>. Accessed January 7, 2015.

charge ratio is used. Hospital charges reflect the amount the hospital billed for the entire hospital stay and do not include professional (physician) fees. For the purposes of this Statistical Brief, costs are reported to the nearest hundred.

Payer

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

- Medicare: includes patients covered by fee-for-service and managed care Medicare
- Medicaid: includes patients covered by fee-for-service and managed care Medicaid
- Private Insurance: includes Blue Cross, commercial carriers, and private health maintenance organizations (HMOs) and preferred provider organizations (PPOs)
- Uninsured: includes an insurance status of *self-pay* and *no charge*
- Other: includes Workers' Compensation, TRICARE/CHAMPUS, CHAMPVA, Title V, and other government programs.

Hospital stays billed to the State Children's Health Insurance Program (SCHIP) may be classified as Medicaid, Private Insurance, or Other, depending on the structure of the State program. Because most State data do not identify patients in SCHIP specifically, it is not possible to present this information separately.

For this Statistical Brief, a hierarchy was used to assign the payer category based on the primary and secondary expected payer:⁷

- If the primary or secondary expected payer indicates Medicare, then the payer category is assigned to Medicare. This categorization includes patients who are dually eligible for Medicare and Medicaid under Medicare.
- If not Medicare and the primary or secondary expected payer indicates Medicaid, then the payer category is Medicaid.
- If not Medicare or Medicaid and the primary or secondary expected payer indicates private insurance, then the payer category is private.
- If not Medicare, Medicaid, or private and the primary expected payer indicates self-pay or no charge, then the payer category is uninsured.
- Stays for other types of payers are not reported in this Statistical Brief because this is a small group of mixed payers such as State and local programs.

Categorization of the readmission counts and costs by expected payer was based on the index stay. The concordance between the expected payer coded at the index stay and the expected payer coded at readmission varies by payer: 98 percent for Medicare, 95 percent for Medicaid, 93 percent for private, and 80 percent for uninsured (percentages based on the 2013 NRD).

About HCUP

The Healthcare Cost and Utilization Project (HCUP, pronounced "H-Cup") is a family of health care databases and related software tools and products developed through a Federal-State-Industry partnership and sponsored by the Agency for Healthcare Research and Quality (AHRQ). HCUP databases bring together the data collection efforts of State data organizations, hospital associations, and private data organizations (HCUP Partners) and the Federal government to create a national information resource of encounter-level health care data. HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. These databases enable research on a broad range of health policy issues, including cost and quality of health services, medical practice patterns, access to health care programs, and outcomes of treatments at the national, State, and local market levels.

⁷ The 2013 NRD available for purchase through the HCUP Central Distributor includes the data element for the primary expected payer but not the data element for secondary expected payer.

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
District of Columbia 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
North Dakota (data provided by the Minnesota Hospital Association)
Ohio Hospital Association
Oklahoma State Department of Health
Oregon Association of Hospitals and Health Systems
Oregon Office of Health Analytics
Pennsylvania Health Care Cost Containment Council
Rhode Island Department of Health
South Carolina Revenue and Fiscal Affairs Office
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 Statistical Briefs

HCUP Statistical Briefs are descriptive summary reports presenting statistics on hospital inpatient and emergency department use and costs, quality of care, access to care, medical conditions, procedures, patient populations, and other topics. The reports use HCUP administrative health care data.

About the NRD

The HCUP NRD is a calendar-year, discharge-level database constructed from the HCUP SID with verified patient linkage numbers that can be used to track a person across hospitals within a State. The 2013 NRD is available for purchase through the HCUP Central Distributor. The NRD is designed to support various types of analyses of national readmission rates. The database includes discharges for patients with and without repeat hospital visits in a year and those who have died in the hospital. Repeat stays may or may not be related. The criteria to determine the relationship between hospital admissions are left to the analyst using the NRD. The NRD was constructed as a sample of convenience consisting of 100 percent of the eligible discharges. Discharge weights for national estimates are developed using the target universe of community hospitals (excluding rehabilitation and long-term acute care hospitals) in the United States. Over time, the sampling frame for the NRD will change; thus, the number of States contributing to the NRD will vary from year to year. The NRD is intended for national estimates only; no regional, State-, or hospital-specific estimates can be produced.

About the SID

The HCUP SID are hospital inpatient 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 multistate comparisons and analyses. Together, the SID encompass more than 95 percent of all U.S. community hospital discharges. The SID can be used to investigate questions unique to one State, to compare data from two or more States, to conduct market-area variation analyses, and to identify State-specific trends in inpatient care utilization, access, charges, and outcomes.

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 <http://hcupnet.ahrq.gov/>.

For information on readmissions-related topics in the United States, refer to the following HCUP Statistical Briefs located at <http://www.hcup-us.ahrq.gov/reports/statbriefs/statbriefs.jsp>:

- Statistical Brief #196, Trends in Hospital Readmissions for Four High-Volume Conditions, 2009–2013
- Statistical Brief #190, Characteristics of Hospital Stays for Super-Utilizers by Payer, 2012
- Statistical Brief #189, Hospital Readmissions Involving Psychiatric Disorders, 2012
- Statistical Brief #184, Characteristics of Hospital Stays for Nonelderly Medicaid Super-Utilizers, 2012
- Statistical Brief #172, Conditions With the Largest Number of Adult Hospital Readmissions by Payer, 2011

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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 hcup@ahrq.gov or send a letter to the address below:

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