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Characteristics of Emergency Department Visits for Super-Utilizers by Payer, 2014

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Introduction

Over the last several years, health care stakeholders have paid increasing attention to issues specific to high-need, high-cost patients who constitute a very small percentage of the population but account for a disproportionately high amount of health care utilization. These patients, dubbed *super-utilizers*, represent a broad spectrum of demographic and clinical characteristics and socioeconomic conditions. Programs designed to improve care for super-utilizers need to be tailored to the specific needs of the different subgroups of these patients. As part of this effort, it is important to examine differences in utilization patterns among different types of super-utilizers, in comparison to national benchmarks.

In a series of Statistical Briefs, the Agency for Health Care Research and Quality (AHRQ) is providing descriptive information on demographic and clinical characteristics of super-utilizers of hospital services, using nationwide data from the Healthcare Cost and Utilization Project (HCUP).^{1,2} For example, AHRQ reported that, in 2012, congestive heart failure and septicemia were among the 10 most common reasons for hospitalization among super-utilizers across all payers.³ Mental health disorders and diabetes with complications also were common reasons for hospitalization among super-utilizers aged 1–64 years.⁴

This HCUP Statistical Brief extends AHRQ's earlier work on super-utilizers by shifting focus from hospital inpatient stays to emergency department (ED) visits. In this Statistical Brief, we limited our analysis to ED visits among patients who were treated in the ED and then released from the ED, transferred to another

Highlights

- Emergency department (ED) super-utilizers were defined as those patients with the highest number of ED visits in 2014, by payer: four or more visits for privately insured patients aged 1–64 years or Medicare patients aged 65 years and older; six or more visits for Medicaid or Medicare patients aged 1–64 years.
- In 2014, although super-utilizers constituted a relatively small proportion of all patients seen in the ED (2.6 to 6.1 percent, depending on the payer-age group), they accounted for a large share of all ED visits (10.5 to 26.2 percent).
- Among Medicare patients aged 65 years and older, those with three or more chronic conditions constituted 33.3 percent of all ED visits among super-utilizers compared with 26.7 percent of ED visits among other patients.
- ED super-utilizers accounted for 15 to 34 percent of all ED visits for abdominal pain and 13 to 29 percent of all ED visits for back pain.
- ED super-utilizers aged 65 years and older accounted for 19 percent of all ED visits for urinary tract infections, 16 percent of ED visits for nonspecific chest pain, and 14 percent of ED visits for superficial injury.
- Super-utilizers under age 65 years accounted for 19 to 40 percent of all ED visits for headaches.

¹ Jiang HJ, Barrett ML, Sheng M. Characteristics of Hospital Stays for Nonelderly Medicaid Super-Utilizers, 2012. HCUP Statistical Brief #184. November 2014. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb184-Hospital-Stays-Medicaid-Super-Utilizers-2012.pdf>. Accessed October 6, 2016.

² Jiang HJ, Weiss AJ, Barrett ML, Sheng M. Characteristics of Hospital Stays for Super-Utilizers by Payer, 2012. HCUP Statistical Brief #190. May 2015. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb190-Hospital-Stays-Super-Utilizers-Payer-2012.pdf>. Accessed September 27, 2016.

³ Ibid.

⁴ Ibid.

type of nonhospital health facility, or died in the ED. Patients who were treated in the ED and then admitted to the same or a different hospital for inpatient services were not included, because they represent a different type of patient (e.g., in terms of condition severity or treatment needs). The earlier HCUP Statistical Briefs that focused on inpatient stays included admitted patients who were initially treated in the ED.

For this report, *ED super-utilizers* were defined on the basis of a consistent cut-off rule of approximately 2 standard deviations above the mean number of ED visits during 2014, applied to the statistical distribution specific to each payer and age group:

- Medicare aged 65+ years: four or more ED visits per year
- Medicare aged 1–64 years: six or more ED visits per year
- Private insurance aged 1–64 years: four or more ED visits per year
- Medicaid aged 1–64 years: six or more ED visits per year

This Statistical Brief presents pooled 2014 ED data across 13 geographically dispersed States, representing approximately 28 percent of the U.S. population. Patient demographics, resource use, and outcomes of ED visits for super-utilizers are compared with visits for other patients by primary expected payer (Medicare, private insurance, and Medicaid). The five most common first-listed diagnoses for ED visits are also identified for these super-utilizers. Differences greater than 20 percent between estimates are noted in the text.

Findings

Patient demographics and outcomes of ED visits among super-utilizers by payer, 2014

Table 1 presents patient demographic characteristics for ED visits among super-utilizers compared with other patients by payer in 2014.

Table 1. Demographic characteristics and outcomes for ED visits among super-utilizers^a by payer, 13 States, 2014

Characteristic ^b	Medicare aged 65+ years		Medicare aged 1–64 years		Private insurance aged 1–64 years		Medicaid aged 1–64 years	
	Super-utilizers ^a	Other patients	Super-utilizers ^a	Other patients	Super-utilizers ^a	Other patients	Super-utilizers ^a	Other patients
Total number of ED visits, thousands	606	3,144	568	1,602	937	7,996	1,762	8,766
Mean age, years	76.7	76.8	46.3	48.6	34.9	34.2	32.3	24.2
Female, %	59.7	60.0	57.0	55.9	66.2	56.5	69.3	61.8
Number of chronic conditions, %								
0	27.1	31.2	39.3	44.3	63.7	72.7	60.7	76.6
1–2	39.6	42.1	40.6	39.0	31.0	24.0	32.0	20.6
3+	33.3	26.7	20.1	16.7	5.3	3.3	7.3	2.7
Discharge disposition, ^c %								
Discharged to home or self-care	92.0	92.7	93.8	94.3	96.7	97.5	95.4	97.1
Transfer to a nonhospital facility	4.7	3.9	2.2	2.3	0.8	0.7	1.1	0.8
Home health care	1.2	0.9	0.3	0.3	0.1	0.1	0.1	0.1
Against medical advice	1.7	1.5	3.5	2.6	2.2	1.5	3.2	1.9
Died in hospital	0.1	0.8	0.0	0.3	0.0	0.1	0.0	0.0

Abbreviations: ED, emergency department

Note: ED visits comprise patients who were treated in the ED and then released from the ED, transferred to another nonhospital health facility, or died in the ED. Patients who were treated in the ED and then admitted to a hospital for inpatient services were not included.

^a Super-utilizers are patients aged 1–64 years covered by Medicare or Medicaid with six or more ED visits and privately insured patients aged 1–64 years or Medicare patients aged 65 years and older with four or more ED visits in 2014 (approximately 2 standard deviations above the mean within each payer group).

^b Patient demographic characteristics are reported across ED visits, not across patients. All ED visits for a patient in 2014 are included in the analysis. The payer-age group classification was identified on the basis of the patient's first ED visit during the year and applied to all subsequent visits. The statistics presented on patient age, sex, and chronic conditions were identified on the basis of each individual ED visit.

^c Missing, invalid, or unknown discharge dispositions are not reported in the table.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) from 13 States, 2014

- **For ED visits covered by Medicaid, super-utilizers were older than other patients, on average.**

Among ED visits for patients with Medicaid coverage, on average super-utilizers were older than other patients (average age of 32.3 vs. 24.2 years). There was no substantial age difference between ED visits for super-utilizers and other patients covered by Medicare or private insurance.

- **Patients with three or more chronic conditions accounted for a greater share of all ED visits among super-utilizers than among other patients.**

For all payers, patients with three or more chronic conditions contributed to a greater share of all ED visits among super-utilizers than among other patients (Medicare aged 65+ years: 33.3 vs. 26.7 percent; Medicare aged 1–64 years: 20.1 vs. 16.7 percent; private insurance: 5.3 vs. 3.3 percent; Medicaid: 7.3 vs. 2.7 percent). For ED visits covered by private insurance and Medicaid, patients with one or two chronic conditions also had a higher share of ED visits among super-utilizers than among other patients (private insurance: 31.0 vs. 24.0 percent; Medicaid: 32.0 vs. 20.6 percent).

- **For patients under age 65 years, a greater share of ED visits among super-utilizers were discharged against medical advice compared with ED visits among other patients.**

For patients under age 65 years, a greater share of ED visits were discharged against medical advice among super-utilizers than among other patients across all payers (Medicare: 3.5 vs. 2.6 percent; private insurance: 2.2 vs. 1.5 percent; Medicaid: 3.2 vs. 1.9 percent).

Resource use and types of ED visits for super-utilizers by payer, 2014

Table 2 presents information on the number of ED visits, ED charges, and types of ED visits among super-utilizers compared with other patients by payer in 2014. Figure 1 presents the share of total ED visits and ED charges that were attributable to super-utilizers by payer in 2014.

Table 2. Resource use and types of ED visits for super-utilizers^a by payer, 13 States, 2014

Resource use, outcome	Medicare aged 65+ years		Medicare aged 1–64 years		Private insurance aged 1–64 years		Medicaid aged 1–64 years	
	Super-utilizers ^a	Other patients	Super-utilizers ^a	Other patients	Super-utilizers ^a	Other patients	Super-utilizers ^a	Other patients
Mean number of ED visits per year	5.4	1.3	10.2	1.9	6.1	1.4	9.5	1.8
Average total charge per ED visit, ^b \$	4,200	5,000	3,400	3,800	3,200	3,300	2,700	2,300
Aggregate ED charges, ^b \$ billions	2.6	15.6	1.9	6.0	3.0	26.4	4.6	19.9
Type of ED visit, %								
Medical	82.2	76.7	79.9	76.8	78.6	68.9	74.2	72.3
Mental health	3.7	1.9	8.2	5.4	4.4	3.2	7.0	3.5
Injury	14.1	21.4	11.2	17.0	12.0	24.8	11.5	18.4
Maternal/neonatal	0.0	0.0	0.7	0.7	4.9	3.1	7.4	5.8

Abbreviations: ED, emergency department

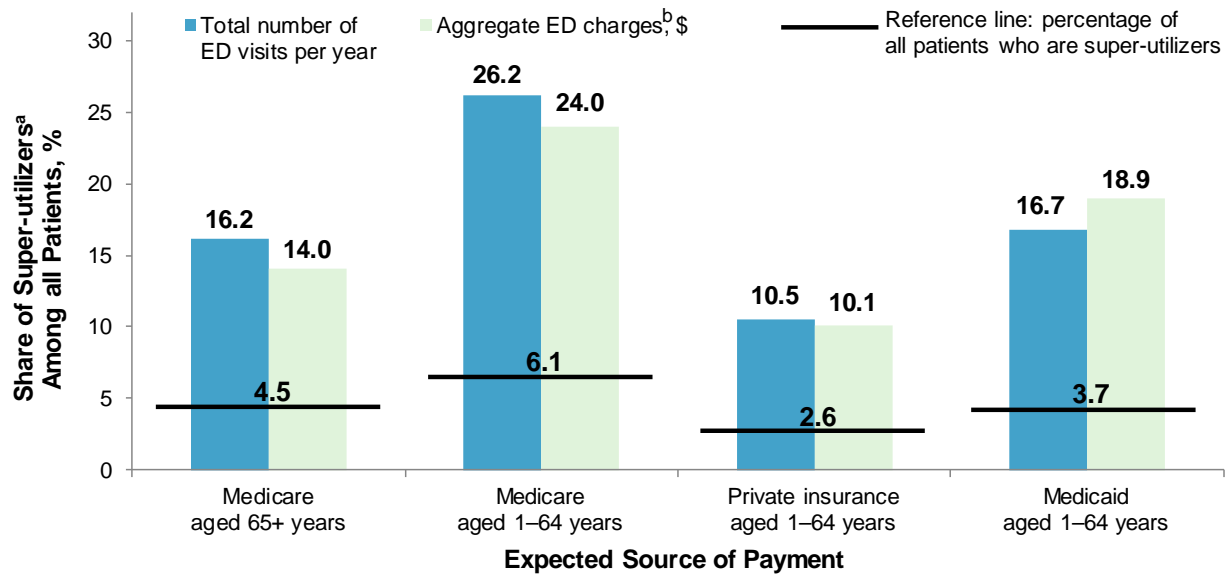
Note: ED visits comprise patients who were treated in the ED and then released from the ED, transferred to another nonhospital health facility, or died in the ED. Patients who were treated in the ED and then admitted to a hospital for inpatient services were not included.

^a Super-utilizers are patients aged 1–64 years covered by Medicare or Medicaid with six or more ED visits and privately insured patients aged 1–64 years or Medicare patients aged 65 years and older with four or more ED visits in 2014 (approximately 2 standard deviations above the mean within each payer group).

^b Charges represent the total charges for ED services. ED costs are not presented because ED cost-to-charge ratios are not available.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) from 13 States, 2014

Figure 1. Share of ED super-utilizers^a among all patients by payer, 13 States, 2014



Abbreviations: ED, emergency department

Note: ED visits comprise patients who were treated in the ED and then released from the ED, transferred to another nonhospital health facility, or died in the ED. Patients who were treated in the ED and then admitted to a hospital for inpatient services were not included.

^a Super-utilizers are patients aged 1-64 years covered by Medicare or Medicaid with six or more ED visits and privately insured patients aged 1-64 years or Medicare patients aged 65 years and older with four or more ED visits in 2014 (approximately 2 standard deviations above the mean within each payer group).

^b Charges represent the total charges for ED services. ED costs are not presented because ED cost-to-charge ratios are not available.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) from 13 States, 2014

■ **Super-utilizers accounted for a disproportionate share of ED visits, with an average of 4 to 5 times as many ED visits per year, compared with other patients.**

Super-utilizers visited the ED an average of 5 to 10 times in 1 year, depending on the payer:

- Medicare aged 65+ years: 5.4 visits per year
- Medicare aged 1-64 years: 10.2 visits per year
- Private insurance: 6.1 visits per year
- Medicaid: 9.5 visits per year

Although there were relatively few super-utilizers of the ED, these patients accounted for a high proportion of ED visits. As indicated by the reference line in Figure 1, only 2.6 to 6.1 percent of all ED patients were super-utilizers, but they constituted a much larger share of all ED visits. For example, among Medicare patients aged 65+ years, 4.5 percent were super-utilizers but they accounted for 16.2 percent of all ED visits in this payer-age group. Similarly, among patients covered by Medicare who were under 65 years old, 6.1 percent were super-utilizers but they accounted for 26.2 percent of all ED visits. Similar patterns were seen for patients covered by private insurance and Medicaid.

Further, although super-utilizers did not differ substantially from other patients on average total charges per ED visit, they did account for a disproportionate share of aggregate ED charges. For example, only 3.7 percent of all Medicaid ED patients were super-utilizers, but they accounted for more than 5 times as much aggregate ED charges (18.9 percent).

- **Mental health visits constituted a greater share and injury visits constituted a smaller share of ED visits among super-utilizers than among other patients, regardless of payer.**

Table 2 also shows the type of ED visit by service line. Mental health ED visits were more common for super-utilizers than for other patients across all payers (Medicare aged 65+ years: 3.7 vs. 1.9 percent; Medicare aged 1–64 years: 8.2 vs. 5.4 percent; private insurance: 4.4 vs. 3.2 percent; Medicaid 7.0 vs. 3.5 percent).

In contrast, injury ED visits were less common for super-utilizers than for other patients across payers (Medicare aged 65+ years: 14.1 vs. 21.4 percent; Medicare aged 1–64 years: 11.2 vs. 17.0 percent; private insurance: 12.0 vs. 24.8 percent; Medicaid 11.5 vs. 18.4 percent).

Finally, maternal and neonatal ED visits were more common among super-utilizers than among other patients for those with private insurance (4.9 vs. 3.1 percent) or Medicaid coverage (7.4 vs. 5.8 percent).

Common first-listed diagnoses for ED visits among super-utilizers by payer, 2014

Table 3 lists the five most common first-listed diagnoses for ED visits among super-utilizers by payer in 2014. The share of ED visits attributed to super-utilizers by payer also is provided for each of the top five first-listed diagnoses.

Table 3. Top five first-listed diagnoses for ED visits among super-utilizers^a by payer, 13 States, 2014

First-listed diagnosis ^a	Rank of diagnosis based on ED visits by payer				Share of ED visits attributed to super-utilizers by payer, %			
	Medicare 65+ years	Medicare 1–64 years	Private 1–64 years	Medicaid 1–64 years	Medicare 65+ years	Medicare 1–64 years	Private 1–64 years	Medicaid 1–64 years
All ED visits	—	—	—	—	16	26	11	17
Nonspecific chest pain	1	2	5		16	28	10	
Superficial injury; contusion	2				14			
Abdominal pain	3	1	1	1	21	34	15	24
Urinary tract infections	4				19			
Spondylosis; intervertebral disc disorders; other back problems	5	3	3	3	18	29	13	25
Headache; including migraine		4	2	5		40	19	25
Sprains and strains		5	4			22	7	
Other complications of pregnancy				2				22
Other upper respiratory infections				4				10

Abbreviations: ED, emergency department

Note: ED visits comprise patients who were treated in the ED and then released from the ED, transferred to another hospital or health facility, or died in the ED. Patients who were treated in the ED and then admitted to the same hospital for inpatient services were not included.

^a Super-utilizers are patients aged 1–64 years covered by Medicare or Medicaid with six or more ED visits and privately insured patients aged 1–64 years or Medicare patients aged 65 years and older with four or more ED visits in 2014 (approximately 2 standard deviations above the mean within each payer group).

^b Diagnoses are from the Clinical Classifications Software (CCS) categories based on International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnoses. All ED visits for a patient in 2014 are included in the analysis. First-listed diagnoses were identified on the basis of each individual ED visit.

Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) from 13 States, 2014

■ **Abdominal pain and back pain were leading diagnoses for ED visits among super-utilizers across payers; abdominal pain was the most common first-listed diagnosis for patients under age 65 years regardless of payer.**

Abdominal pain was the most common first-listed diagnosis for ED visits among super-utilizers aged 1–64 years and the third most common among super-utilizers aged 65 years and older. Although super-utilizers accounted for 2.6 to 6.1 percent of all patients seen in the ED (as shown in Figure 1), they accounted for 15 to 34 percent of all ED visits for abdominal pain, depending on the payer-age group.

Back pain also was in the top five first-listed diagnoses for ED visits across all payers—it ranked third among patients under age 65 years across all payers and fifth among Medicare patients aged 65 years and older. Super-utilizers accounted for 13 to 29 percent of all ED visits for back pain, depending on the payer-age group.

- **Nonspecific chest pain was the most common first-listed diagnosis for ED visits among Medicare super-utilizers aged 65 years and older.**

Nonspecific chest pain was the most common first-listed diagnosis for ED visits among Medicare super-utilizers aged 65 years and older. Super-utilizers accounted for 16 percent of all ED visits for nonspecific chest pain by Medicare patients aged 65 years and older. Nonspecific chest pain also was among the top five first-listed diagnoses for super-utilizers aged 1–64 years with Medicare or private insurance, accounting for 28 percent and 10 percent, respectively, of ED visits with this condition covered by these payers.

- **Headache was a common first-listed diagnosis for ED visits among super-utilizers under age 65 years.**

Headache was a common first-listed diagnosis for ED visits among super-utilizers under age 65 years across all payers. Super-utilizers accounted for a larger share of ED visits for headaches than for any of the other five most common diagnoses, ranging from 19 percent (private insurance) to 40 percent (Medicare aged 1–64 years).

- **Superficial injury and sprains/strains also were in the top five first-listed diagnoses for ED visits among Medicare super-utilizers.**

Superficial injury was the second most common diagnosis for ED visits among Medicare super-utilizers aged 65 years and older. Sprains and strains were the fifth most common diagnosis for ED visits among Medicare super-utilizers under age 65 years, accounting for 22 of all ED visits with this diagnosis for this younger Medicare age group.

- **Urinary tract infection was the fourth most common first-listed diagnosis for ED visits among Medicare super-utilizers aged 65 years and older.**

Urinary tract infection ranked fourth among common first-listed diagnoses of ED visits for Medicare super-utilizers aged 65 years and older, accounting for 19 percent of all ED visits for this condition among older Medicare patients.

Data Source

The estimates in this Statistical Brief are based upon data from the Healthcare Cost and Utilization Project (HCUP) 2014 State Emergency Department Databases (SEDD) from 13 States: Florida, Georgia, Iowa, Maryland, Missouri, Nebraska, Nevada, New York, South Carolina, South Dakota, Tennessee, Vermont, and Wisconsin. Only patients aged 1 year and older were included in the analysis. Verified patient linkage numbers tend to be less reliable and less complete for patients less than 1 year old, which makes it difficult to track multiple ED visits.

Definitions

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

The *first-listed diagnosis* is the condition, symptom, or problem identified in the medical record to be chiefly responsible for the emergency department services provided.

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

CCS categorizes ICD-9-CM diagnosis codes into a manageable number of clinically meaningful categories.⁵ This clinical grouper makes it easier to quickly understand patterns of diagnoses. CCS categories identified as Other typically are not reported; these categories include miscellaneous, otherwise unclassifiable diagnoses that may be difficult to interpret as a group.

Types of hospitals included in HCUP State Emergency Department Databases

This analysis used State Emergency Department Databases (SEDD) limited to data from community hospitals with a hospital-owned emergency department. Community hospitals are defined as short-term, non-Federal, general, and other hospitals, excluding hospital units of other institutions (e.g., prisons). Community hospitals include specialty, 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.

Unit of analysis

The unit of analysis is the emergency department (ED) encounter, not a person or patient. This means that a person who is seen in the ED multiple times in 1 year will be counted each time as a separate encounter in the ED.

In this Statistical Brief, ED visits comprise patients who are treated in the ED and are not admitted to the same hospital or transferred to another acute care hospital for further treatment. Patients may be released home from the ED, be referred to home health care, go to another type of long-term or intermediate care facility (nursing home or psychiatric treatment facility), leave against medical advice, die, or be released alive but the destination is unknown.

ED visit use in the year determined which category a patient was assigned to for all of their visits (e.g., Medicare super-utilizers aged 1–64 years). The payer-age group for the patient was defined by the first ED visit in the year. For example, a Medicare patient who was 64 years old for a January ED visit and 65 years old for a September ED visit would be included in the Medicare aged 1–64 years group. After each patient was assigned to a payer-age group, the total number of ED visits in 2014 was determined for each unique patient. Using the distribution of total number of ED visits within each payer-age group, the cut-off for super-utilizers was defined as approximately 2 standard deviations above the average total number of ED visits. The assignment of the payer-age group and whether the patient qualified as a super-utilizer in that group was then added to each ED visit record for that patient. The analysis considered all ED visits in the year.

⁵ Agency for Healthcare Research and Quality. HCUP Clinical Classifications Software (CCS). Healthcare Cost and Utilization Project (HCUP). Rockville, MD: Agency for Healthcare Research and Quality. Updated June 2015. <http://www.hcup-us.ahrq.gov/toolsoftware/ccs/ccs.jsp>. Accessed February 17, 2016.

Charges

Charges represent what the hospital billed for the ED visit. ED total charges reflect the amount the hospital charged for the ED services, excluding professional (physician) fees. For the purposes of this Statistical Brief, charges are reported to the nearest hundred dollars.

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 the purpose of this analysis, the expected payer designation was assigned on the basis of a hierarchy of Medicare, Medicaid, and then privately insured. Medicare was identified on the basis of a payer code of Medicare as a primary, secondary, or tertiary payer regardless of any other reported payers. This means that individuals who were dually eligible for Medicare and Medicaid were categorized as Medicare. If not already assigned to Medicare, Medicaid was identified on the basis of a payer code of Medicaid as a primary, secondary, or tertiary payer regardless of any other reported payers. If not already assigned to Medicare or Medicaid, private insurance was identified on the basis of a payer code of private insurance as a primary, secondary, or tertiary payer.

Number of chronic conditions per patient

All diagnoses on all records were determined to be either chronic or nonchronic. The definition of chronic conditions was based on the Chronic Condition Indicator, which can be found at <http://www.hcup-us.ahrq.gov/toolssoftware/chronic/chronic.jsp>.

Discharge status

Discharge status reflects the disposition of the patient at discharge from the ED and includes the following six categories: routine (to home or self-care); transfer to another acute care hospital; transfer to a nonhospital facility (including skilled nursing facility, intermediate care, and another type of facility such as a nursing home); home health care; against medical advice (AMA); or died in the hospital. Transfers to another acute care hospital were excluded from this analysis to ensure that ED visits for transferred patients were not double counted.

Type of ED visit

Coding criteria for the four ED visit types are based on ICD-9-CM and CCS categories.⁶ Each visit was assigned to a single ED visit type, hierarchically, based on the following order: maternal/neonatal, mental health, injury, and medical.

⁶ ED visit types were adapted from the hospital service line variable used in the HCUP State Inpatient Databases (SID). Diagnosis-related groups (DRGs), which are used to distinguish surgical and medical stays with inpatient data, are not available with ED visit data; all ED visits that did not fall into one of the other ED visit types (maternal/neonatal, mental health, or injury) were categorized as medical. Agency for Healthcare Research and Quality. Central Distributor SID: Description of Data Elements—SERVICELINE. Healthcare Cost and Utilization Project (HCUP). Rockville, MD: Agency for Healthcare Research and Quality. Updated August 2008. <https://www.hcup-us.ahrq.gov/db/vars/siddistnote.jsp?var=serviceline>. Accessed January 27, 2017.

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.

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

Alaska Department of Health and Social Services
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
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 State 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, ambulatory surgery, 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 SEDD

The HCUP State Emergency Department Databases (SEDD) include information from hospital-owned emergency departments (EDs) from data organizations participating in HCUP, translated into a uniform format to facilitate multistate comparisons and analyses. The SEDD capture information on ED visits that do not result in an admission to the same hospital (i.e., patients who are treated in the ED and then discharged, transferred to another hospital, left against medical advice, or died). The SEDD contain a core set of clinical and nonclinical information on all patients, including individuals covered by Medicare, Medicaid, or private insurance, as well as those who are uninsured. The SEDD 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 injury surveillance, emerging infections, and other conditions treated in the ED.

For More Information

For other information on readmissions and revisits, including super-utilizers, refer to the HCUP Statistical Briefs located at http://www.hcup-us.ahrq.gov/reports/statbriefs/sb_readmission.jsp.

For additional HCUP statistics, visit:

- HCUP Fast Stats at <http://www.hcup-us.ahrq.gov/faststats/landing.jsp> for easy access to the latest HCUP-based statistics for health information topics
- HCUPnet, HCUP's interactive query system, at <http://hcupnet.ahrq.gov/>

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

For a detailed description of HCUP and more information on the design of the State Emergency Department Databases (SEDD), please refer to the following database documentation:

Agency for Healthcare Research and Quality. Overview of the State Emergency Department Databases (SEDD). Healthcare Cost and Utilization Project (HCUP). Rockville, MD: Agency for Healthcare Research and Quality. Updated June 2016. <http://www.hcup-us.ahrq.gov/seddoverview.jsp>. Accessed January 5, 2017.

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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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