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Emergency Department Visits for Adults in Community Hospitals from Selected States, 2005

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Introduction

During 2005, Americans made an estimated 115.3 million visits to hospital-affiliated emergency departments (EDs) which translates to 39.6 visits per 100 persons.[1] Policymakers are concerned that high ED use may be a result of inadequate health insurance or limited access to primary care—and, result in ED overcrowding. People who are under-insured or uninsured often turn to EDs for treatment of acute conditions because they lack access to regular medical care. Also, the scarcity of primary care practitioners in cities and rural areas may contribute to an increasing reliance on EDs. Understanding the conditions for which individuals are visiting EDs may provide much needed insight into the accessibility of preventive and ambulatory care.

This Statistical Brief presents data from the Healthcare Cost and Utilization Project (HCUP) on ED visits for adults, ages 18 years and older, in 23 states that provided 2005 ED data to HCUP.[2] The information focuses on the reasons why people visited the ED. Variations in ED visits based on demographic characteristics, disposition status, and expected payer are also discussed.

This brief is the first report of a two-part series on ED visits in community hospitals in selected states. Because adults and children are treated in the ED for very different reasons, discussion of ED visits by adults and children are presented in two separate HCUP Statistical Briefs. This initial report focuses on adult ED visits, while HCUP Statistical Brief #53 will focus on pediatric ED visits.

Highlights

- In the 23 states included in this brief, there were about 55 million visits to EDs in 2005. More than three-quarters of these visits—over 42 million—were for adults ages 18 years and older.
- Rates of ED visits were inversely related to wealth: the poorest communities had a nearly 2 times higher rate of ED visits compared to the wealthiest communities (481.4 visits per 1,000 persons in the poorest communities compared to 260.7 visits per 1,000 persons in the wealthiest communities).
- Among adults, three of the top ten reasons for ED visits were for injuries: sprains and strains, superficial injuries such as bruises, and open wounds.
- A number of chronic conditions frequently result in hospital admissions through the ED. Notably, 81.6 percent of ED visits for congestive heart failure, 74.8 percent for coronary artery disease, and 30.7 percent for chronic obstructive pulmonary disease (COPD) were admitted to the hospital.
- Forty percent of Medicare ED visits resulted in hospital admission, compared to about 14 percent each of Medicaid and privately-insured visits.
- About 15 percent of adults in the 23 study states lacked health insurance in 2005 and 18.1 percent of ED visits were uninsured. Uninsured ED visits were the least likely cases to be admitted to the hospital, with only 7.4 percent of uninsured visits resulting in a hospital stay.

[1]Nawar EW, Niska RW, Xu J. National Hospital Ambulatory Medical Care Survey: 2005 Emergency Department Summary. Advance data from vital and health statistics; no. 386. Hyattsville, MD: National Center for Health Statistics. 2007.

[2]AHRQ is evaluating the feasibility of producing a national ED database that samples from the states that provide ED data to HCUP. The following 23 states are covered in this brief: Arizona, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Tennessee, Utah, Vermont, and Wisconsin. These states comprise 51 percent of the U.S. population and 47 percent of ED visits in the U.S.

Findings

General findings
In the 23 states included in this brief, individuals made about 55 million visits to EDs in 2005. More than three-quarters of these visits—over 42 million—were for adults ages 18 years and older (table 1). Four out of five of these were "treat-and-release" cases* in which the patient was released from the ED rather than being admitted to that hospital for further care. However, a substantial portion of ED visits (about 20 percent) resulted in hospital admission.

Rates of ED visits varied by demographic characteristics with rates being highest among women and the elderly, as well as by patients residing in micropolitan areas and the poorest communities. Rates of ED visits were 21.0 percent greater among women than men (412.5 visits per 1,000 women compared to 340.9 visits per 1,000 men), but this gender difference decreased to 11.4 percent for those ED visits that resulted in hospitalization (75.6 admissions per 1,000 women compared to 67.9 admissions per 1,000 men). The elderly population, 65 years and older, displayed the highest rate of ED visits compared to younger adult age groups (488.0 visits per 1,000 elderly persons compared to 386.3 and 306.9 visits per 1,000 persons 18–44 and 45–64 years, respectively). This age difference was even more striking for ED visits that resulted in hospitalization: rates of admission were nearly 7 times greater among the elderly compared to the youngest adult age group (208.1 admissions per 1,000 elderly persons compared to 31.2 admissions per 1,000 persons 18–44 years of age). In fact, while the mean age of adults seen in the ED was 47 years, those who were admitted to the hospital were about 20 years older (62 years) than those who were treated-and-released* from the ED (43 years).

In terms of place of residence, overall rates of ED visits were highest in micropolitan areas (439.2 visits per 1,000 residents) and lowest in large metropolitan areas (350.0 visits per 1,000 residents). However, this pattern did not hold true for ED visits that resulted in hospitalization—in fact, the rate of admission was highest in large metropolitan areas (74.1 admissions per 1,000 residents) compared to all other locations (ranging from 64.2 to 69.5 admissions per 1,000 residents). Lastly, rates of ED visits were inversely related to wealth: the poorest communities had a nearly 2 times higher rate of ED visits compared to the wealthiest communities (481.4 visits per 1,000 persons in the poorest communities compared to 260.7 visits per 1,000 persons in the wealthiest communities). While this relationship persisted with treat-and-release* and admitted ED cases, the magnitude of difference between the poorest and wealthiest communities decreased for ED visits that resulted in hospital admission.

Most common reasons for ED visits among adults
The top ten reasons for ED visits among adults were mostly acute conditions—conditions with sudden onset, relatively short duration, rapid progression, and in need of urgent care (table 2). Injuries, accounting for over one-third of all ED visits, have a substantial effect on the health of millions of Americans as well as a significant impact on the health care system.[3] Among adults, three of the top ten reasons for ED visits were for injuries: sprains and strains, superficial injuries such as bruises, and open wounds. While injuries were common reasons for ED visits, only a small portion of each of these injuries (about 1 percent each) resulted in admission to the hospital—most patients were treated and released* from the ED. Other common reasons for ED visits among adults included abdominal pain and chest pain: each accounting for 4 percent of ED visits in the 23 study states. The following conditions were each responsible for 2 to 3 percent of ED visits: back problems (3.3 percent), headaches (2.8 percent), and infections, such as upper respiratory (2.7 percent), skin (2.5 percent), and urinary tract infections (2.4 percent).

Most common conditions seen in the ED that resulted in hospital admission among adults
While the majority of ED visits were treat-and-release cases* (table 3), about 20 percent of ED visits resulted in hospital admission (table 4). Circulatory disorders were the most common reasons that people were admitted to the hospital after being seen in the ED. Six of the ten most common admitted conditions were related to the circulatory system—congestive heart failure, chest pain, heart attack, irregular heart

*While the majority of patients (94.7%) were discharged home, some were transferred to another acute care facility (1.3%), left against medical advice (1.8%), went to another type of long-term or intermediate care facility (nursing home or psychiatric treatment facility) (1.8%), or died (< 1%).
[3]Owens, P., Russo, C. A., Stocks, C. Frequency and Costs of Hospital Admissions for Injury, 2004. HCUP Statistical Brief #18. November 2006. Agency for Healthcare Research and Quality, Rockville, MD. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb18.pdf

beat, coronary artery disease, and stroke—collectively accounting for more than 1.6 million hospital stays that began in the ED. Respiratory conditions, such as pneumonia and chronic obstructive pulmonary disease (COPD), also accounted for a large number of hospital stays that started in the ED (433,500 stays and 222,100 stays, respectively). Two infections—blood (sepsis) and urinary tract infections—were among the top conditions for which people were seen in the ED and subsequently admitted to the same hospital. Urinary tract infections accounted for over 1 million ED visits with 17.8 percent (181,700 visits) resulting in hospital admission. Blood infections were less frequently identified, accounting for 217,100 visits, but nearly 97 percent of these cases (210,100 visits) resulted in hospital admission.

Unlike most treat-and-release ED cases*, many conditions seen in the ED that resulted in the patient being hospitalized were chronic in nature. Chronic conditions are illnesses that generally last longer than one year, have some impact on behavior or lifestyle, and for which a patient should be under medical care. Among the 23 study states, 81.6 percent of ED visits for congestive heart failure, 74.8 percent for coronary artery disease, and 30.7 percent for COPD resulted in hospital admission.

ED visits among adults, by expected payer
In the 23 study states, government payers were the most frequent expected source of payment for adult ED visits, with Medicare and Medicaid (combined) being billed for 41.6 percent of ED visits even though these public payers insured only 23.3 percent of people (figure 1). While 15.9 percent of adults were covered by Medicare, 25.7 percent of ED visits were billed to Medicare. Similarly, 7.4 percent of the adult population was covered by Medicaid, but 15.9 percent of ED visits were billed to Medicaid. ED visits that were covered by commercial insurance showed the opposite pattern: 61.9 percent of adult patients in the 23 study states had some type of commercial insurance coverage, but private insurance was billed for only 34.1 percent of ED visits. About 14.8 percent of adults lacked health insurance in 2005—these uninsured individuals accounted for 18.1 percent of ED visits in the 23 study states.

ED disposition—treat-and-release or hospital admission—among adults, by expected payer*
Recent literature suggests that insurance status may influence ED disposition (i.e., whether a patient is treated-and-released* from the ED or admitted to the hospital) even after adjusting for demographic, clinical, and hospital characteristics.[4,5] In the 23 study states, ED disposition varied by payer category (figure 2). In general, without adjusting for severity of illness, ED visits billed to Medicare were much more likely to result in hospital admission compared to visits billed to other payers or uninsured visits. Forty percent of Medicare ED visits resulted in hospital admission, compared to only about 14 percent each of Medicaid and privately insured visits. The high portion of Medicare ED visits resulting in hospitalization may be influenced by the older mean age of patients who are insured under Medicare. The mean patient age of all adult ED visits that resulted in hospital admission was nearly 20 years older than the mean age for treat-and-release ED visits (62 years versus 43 years). Uninsured visits were the least likely cases to be admitted, with only 7.4 percent of uninsured visits resulting in a hospital stay. This finding is consistent with previous research that concluded that uninsured patients were significantly less likely to be hospitalized compared with insured patients.[4,5]

When looking at the overall picture of ED visits in the 23 study states, the two government payers—Medicare and Medicaid—were billed for less than half of all ED visits, but they were billed for about two-thirds of ED visits that resulted in admission to the hospital (data not shown). As indicated above, Medicare ED visits had higher hospital admission rates compared to Medicaid. Private insurance was billed for about a third of ED visits, but only a quarter of visits that resulted in hospitalization. The largest difference was for uninsured ED visits, which accounted for 18.1 percent of all ED visits, but only 7.0 percent of those visits resulted in hospitalization.

Data Source

The estimates in this Statistical Brief are based upon data from the HCUP 2005 State Emergency Department Databases (SEDD) and 2005 State Inpatient Databases (SID) for the following 23 states: Arizona, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Tennessee, Utah, Vermont, and Wisconsin.

[4]Selassie, AW, Pickelsimer EE, Frazier L, Jr., Ferguson PL. The effect of insurance status, race, and gender on ED disposition of persons with traumatic brain injury. American Journal of Emergency Medicine. October 2004, 22(6): 465–473.
[5]Selassie AW, McCarthy ML, Pickelsimer EE. The influence of insurance, race, and gender on emergency department disposition. Academic Emergency Medicine. November 2003, 10(11):1260–70.

Supplemental sources included:

1) State population estimates from the Annual Estimates of the Resident Population by Single-Year of Age and Sex for the United States and States: April 1, 2000 to July 1, 2006 (SC-EST2006-AGESEX_RES), Population Division, U.S. Census Bureau, Release date: May 17, 2007 (http://www.census.gov/popest/states/asrh/files/SC_EST2006_AGESEX_RES.csv)

2) Denominator data for the population rates presented in Table 1 were derived from 2005 Claritas data.

3) Health insurance coverage estimates from the Current Population Survey (CPS) Table Creator for the 23 study states in the 2005 data year (http://www.census.gov/hhes/www/cpstc/cps_table_creator.html).

Definitions

Case Definition

ED visits
ED visits includes information on all visits to hospital-affiliated emergency rooms in the 23 study states regardless of whether the patient was treated-and-released from that ED or admitted to that hospital from the ED. This information was obtained by combining the State Emergency Department Databases (SEDD) with the State Inpatient Databases (SID) to get a complete enumeration of hospital-based ED visits within each participating state.

Treat-and-release ED visits
Treat-and-release ED visits were those ED visits in which patients are treated-and-released from that ED— i.e., they are not admitted to that specific hospital. While the majority of patients (94.7%) were discharged home, some were transferred to another acute care facility (1.3%), left against medical advice (1.8%), went to another type of long-term or intermediate care facility (nursing home or psychiatric treatment facility) (1.8%), or died (< 1%). Information on treat-and-release cases is included in the State Emergency Department Databases (SEDD).

ED visits resulting in a hospital stay
ED visits resulting in a hospital stay included those patients initially seen in the ED and then admitted to the hospital. This information is included in the State Inpatient Databases (SID).

Diagnoses, ICD-9-CM, and Clinical Classifications Software (CCS)
For ED hospital records that were treat-and-release cases, this brief reports the first-listed diagnosis which is the diagnosis that appears first on the record and may not be the principal diagnosis. For ED visits that result in hospital admission, this brief reports the principal diagnosis that appears on the inpatient hospital record. The principal diagnosis is that condition established after study to be chiefly responsible for admission to the hospital.

ICD-9-CM is the International Classification of Diseases, Ninth Revision, Clinical Modification, which assigns numeric codes to diagnoses. There are about 3,500 procedure codes and 12,000 ICD-9-CM diagnosis codes.

CCS categorizes ICD-9-CM diagnosis and procedure codes into clinically meaningful categories.[6] This "clinical grouper" makes it easier to quickly understand patterns of procedure use. Data in this brief are based on the principal CCS diagnosis.

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 OB-GYN, ENT, orthopedic, cancer, pediatric, public, and academic medical hospitals. They exclude long-term care, rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals, but these types of discharges are included if they are from community hospitals.

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[6]U.S. Agency for Healthcare Research and Quality. HCUP CCS. Healthcare Cost and Utilization Project (HCUP). Rockville, MD: August 2006. http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp.

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

Median community-level income
Median community-level income is the median household income of the patient's ZIP Code of residence. The cut-offs for the quartile designation is determined using ZIP Code demographic data obtained from Claritas. The income quartile value is missing for homeless and foreign patients.

Payer
Payer is the expected 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 and non-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 (asterisk indicates states that are included in this brief):

Arizona Department of Health Services*
Arkansas Department of Health & Human Services
California Office of Statewide Health Planning & Development*
Colorado Health & Hospital Association
Connecticut Integrated Health Information (Chime, Inc.)*
Florida Agency for Health Care Administration*
Georgia GHA**:** An Association of Hospitals & Health Systems*
Hawaii Health Information Corporation*
Illinois Health Care Cost Containment Council and Department of Public Health
Indiana Hospital & Health Association*
Iowa Hospital Association*
Kansas Hospital Association*
Kentucky Cabinet for Health and Family Services
Maryland Health Services Cost Review Commission*
Massachusetts Division of Health Care Finance and Policy*
Michigan Health & Hospital Association
Minnesota Hospital Association*
Missouri Hospital Industry Data Institute*
Nebraska Hospital Association*
Nevada Division of Health Care Financing and Policy, Department of Human Resources
New Hampshire Department of Health & Human Services*
New Jersey Department of Health & Senior Services*
New York State Department of Health

North Carolina Department of Health and Human Services
Ohio Hospital Association*
Oklahoma Health Care Information Center for Health Statistics
Oregon Association of Hospitals and Health Systems
Rhode Island Department of Health
South Carolina State 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 & Family Services*

About the SEDD

The State Emergency Department Databases (SEDD) are hospital databases, from data organizations in participating States, that capture discharge information on all emergency department visits that do not result in an admission. Information on patients initially seen in the emergency room and then admitted to the hospital is included in the State Inpatient Databases (SID). The SEDD contain a core set of clinical and non-clinical information on all patients, regardless of payer. SEDD data can be combined with SID discharges that originate in the emergency department to enumerate all emergency department visits in a given state or market area. 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 ED care utilization, access, charges, and outcomes.

About the SID

The HCUP State Inpatient Databases (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 about 90 percent of all U.S. community hospital discharges in 2005. 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.

About HCUPnet

HCUPnet is an online query system that offers instant access to the largest set of all-payer health care databases that are 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 U.S. HCUPnet generates statistics using data from HCUP's Nationwide Inpatient Sample (NIS), the Kids' Inpatient Database (KID), the State Inpatient Databases (SID) and the State Emergency Department Databases (SEDD).

For More Information

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

For additional HCUP statistics, visit HCUPnet, our interactive query system, at www.hcup.ahrq.gov.

For information on other hospitalizations in the U.S., download *HCUP Facts and Figures: Statistics on Hospital-based Care in the United States in 2005*, located at http://www.hcup-us.ahrq.gov/reports.jsp.

For a detailed description of HCUP and more information on the SEDD please refer to the following publications:

Steiner, C., Elixhauser, A., Schnaier, J. The Healthcare Cost and Utilization Project: An Overview. *Effective Clinical Practice* 5(3):143–51, 2002.

Introduction to the HCUP State Emergency Department Databases (SEDD). Online. December 2007. U.S. Agency for Healthcare Research and Quality. http://www.hcup-us.ahrq.gov/db/state/sedddist/Introduction_to_SEDD.pdf

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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:

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

Table 1. Overview of ED visits for adults in 23 selected states, 2005			
	All ED visits	**Treat-and-release ED visits****	**ED visits resulting in hospital admission**
Number of visits (percent of all ED visits)	42,151,400 (100.0%)	34,077,400 (80.8%)	8,074,000 (19.2%)
Mean adult age	47 years	43 years	62 years
Rates per 1,000 persons			
Age			
18–44	386.3	355.1	31.2
45–64	306.9	242.7	64.2
65+	488.0	279.9	208.1
Gender			
Female	412.5	336.9	75.6
Male	340.9	273.0	67.9
Patient residence*			
Large metropolitan	350.0	276.0	74.1
Small metropolitan	396.6	328.2	68.3
Micropolitan	439.2	369.7	69.5
Non-metropolitan, non-micropolitan	412.5	348.2	64.2
Median community-level income*			
Bottom quartile (Poorest)	481.4	394.5	86.8
Second quartile	394.7	321.7	73.1
Third quartile	336.7	270.1	66.6
Top quartile (Wealthiest)	260.7	206.0	54.7

*The small percentage of ED records that were missing patient residence or median community-level income information (0.9 percent to 2.6 percent, respectively) were excluded from rate calculations.

**Overall, with treat-and-release cases, the majority of patients (94.7%) were discharged home, some were transferred to another acute care facility (1.3%), left against medical advice (1.8%), went to another type of long-term or intermediate care facility (nursing home or psychiatric treatment facility) (1.8%), or died (< 1%).

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) and State Inpatient Databases (SID) for the following 23 states: Arizona, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Tennessee, Utah, Vermont, and Wisconsin; Denominator data for rates were based on 2005 Claritas data for the 23 study states.

Table 2. Top 10 most common reasons for all ED visits for adults in 23 study states, 2005*

Rank	First-listed/principal CCS diagnosis	Number of ED visits for this condition (percentage of all adult ED visits)	Number of ED visits for this condition that were treat-and-release (percentage of ED visits for this condition that were treat-and-release)**	Number of ED visits for this condition that resulted in admission to the hospital (percentage of ED visits for this condition that resulted in admission)
1	Sprains and strains	2,371,900 (5.6%)	2,360,900 (99.5%)	11,000 (0.5%)
2	Superficial injury, bruise	1,958,100 (4.6%)	1,937,700 (99.0%)	20,400 (1.0%)
3	Abdominal pain	1,665,400 (4.0%)	1,598,700 (96.0%)	66,700 (4.0%)
4	Nonspecific chest pain	1,630,300 (3.9%)	1,285,800 (78.9%)	344,500 (21.1%)
5	Spondylosis, intervertebral disc disorders (back problems, disorders of intervertebral discs and bones in spinal column)	1,396,900 (3.3%)	1,333,900 (95.5%)	63,000 (4.5%)
6	Open wounds of extremities	1,343,500 (3.2%)	1,325,800 (98.7%)	17,600 (1.3%)
7	Headache, including migraine	1,165,200 (2.8%)	1,140,700 (97.9%)	24,600 (2.1%)
8	Other upper respiratory infections (nose, throat, trachea)±	1,133,700 (2.7%)	1,120,400 (98.8%)	13,300 (1.2%)
9	Skin and subcutaneous tissue infections	1,067,600 (2.5%)	903,100 (84.6%)	164,400 (15.4%)
10	Urinary tract infections	1,018,000 (2.4%)	836,300 (82.2%)	181,700 (17.8%)

*Reasons for treat-and-release visits were based on the first-listed diagnosis on the ED record; hospital-admitted cases were based on principal diagnosis on the inpatient record.

**Overall, with treat-and-release cases, the majority of patients (94.7%) were discharged home, some were transferred to another acute care facility (1.3%), left against medical advice (1.8%), went to another type of long-term or intermediate care facility (nursing home or psychiatric treatment facility) (1.8%), or died (< 1%).

± The "other upper respiratory infections" category includes a mix of nose, throat, and trachea infections, such as sinusitis, acute pharyngitis, and strep sore throat.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) and State Inpatient Databases (SID) for the following 23 states: Arizona, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Tennessee, Utah, Vermont, and Wisconsin.

Table 3. Top 10 most common reasons for treat-and-release ED visits for adults in 23 study states, 2005*

Rank	First-listed/principal CCS diagnosis	Number of ED visits for this condition (percentage of all adult ED visits)	Number of ED visits for this condition that were treat-and-release (percentage of ED visits for this condition that were treat-and-release)**	Number of ED visits for this condition that resulted in admission to the hospital (percentage of ED visits for this condition that resulted in admission)
1	Sprains and strains	2,371,900 (5.6%)	2,360,900 (99.5%)	11,000 (0.5%)
2	Superficial injury, bruise	1,958,100 (4.6%)	1,937,700 (99.0%)	20,400 (1.0%)
3	Abdominal pain	1,665,400 (4.0%)	1,598,700 (96.0%)	66,700 (4.0%)
4	Spondylosis, intervertebral disc disorders (back problems, disorders of intervertebral discs and bones in spinal column)	1,396,900 (3.3%)	1,333,900 (95.5%)	63,000 (4.5%)
5	Open wounds of extremities	1,343,500 (3.2%)	1,325,800 (98.7%)	17,600 (1.3%)
6	Nonspecific chest pain	1,630,300 (3.9%)	1,285,800 (78.9%)	344,500 (21.1%)
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8	Other upper respiratory infections (nose, throat, trachea)±	1,133,700 (2.7%)	1,120,400 (98.8%)	13,300 (1.2%)
9	Skin and subcutaneous tissue infections	1,067,600 (2.5%)	903,100 (84.6%)	164,400 (15.4%)
10	Urinary tract infections	1,018,000 (2.4%)	836,300 (82.2%)	181,700 (17.8%)

*Reasons for treat-and-release visits were based on the first-listed diagnosis on the ED record; hospital-admitted cases were based on principal diagnosis on the inpatient record.

**Overall, with treat-and-release cases, the majority of patients (94.7%) were discharged home, some were transferred to another acute care facility (1.3%), left against medical advice (1.8%), went to another type of long-term or intermediate care facility (nursing home or psychiatric treatment facility) (1.8%), or died (< 1%).

± The "other upper respiratory infections" category includes a mix of nose, throat, and trachea infections, such as sinusitis, acute pharyngitis, and strep sore throat.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) and State Inpatient Databases (SID) for the following 23 states: Arizona, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Tennessee, Utah, Vermont, and Wisconsin.

Table 4. Top 10 most common reasons for ED visits that resulted in a hospital stay for adults in 23 study states, 2005*

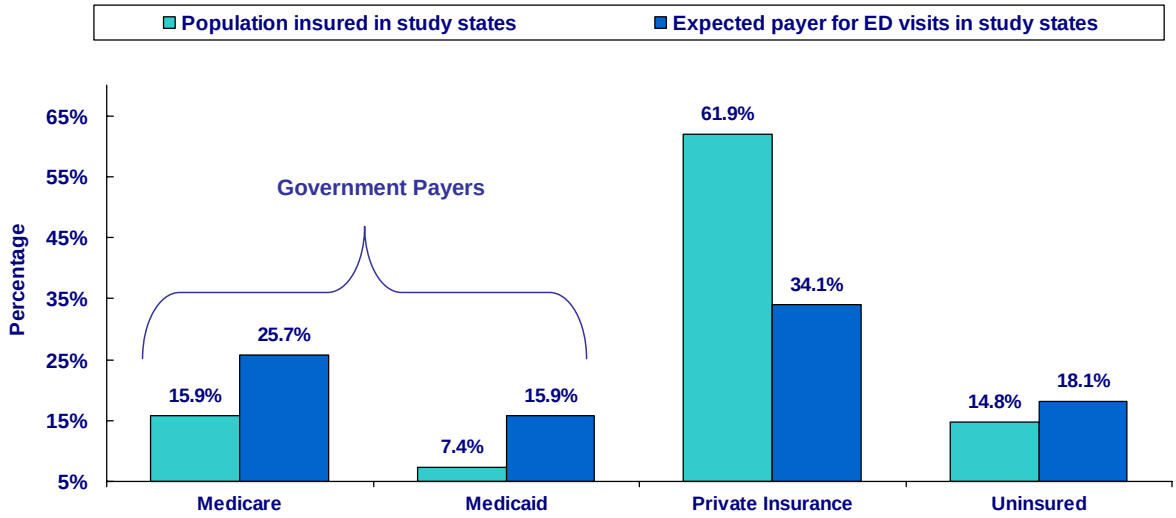
Rank	First-listed/principal CCS diagnosis	Number of ED visits for this condition (percentage of all adult ED visits)	Number of ED visits for this condition that were treat-and-release (percentage of ED visits for this condition that were treat-and-release)**	Number of ED visits for this condition that resulted in admission to the hospital (percentage of ED visits for this condition that resulted in admission)
1	Pneumonia	669,500 (1.6%)	235,900 (35.2%)	433,500 (64.8%)
2	Congestive heart failure, nonhypertensive	485,800 (1.2%)	89,200 (18.4%)	396,600 (81.6%)
3	Nonspecific chest pain	1,630,300 (3.9%)	1,285,800 (78.9%)	344,500 (21.1%)
4	Heart attack (acute myocardial infarction)	259,300 (0.6%)	35,800 (13.8%)	223,600 (86.2%)
5	Chronic obstructive pulmonary disease (COPD) and bronchiectasis	724,100 (1.7%)	502,000 (69.3%)	222,100 (30.7%)
6	Irregular heart beat (cardiac dysrhythmias)	547,400 (1.3%)	327,400 (59.8%)	220,000 (40.2%)
7	Coronary atherosclerosis (coronary artery disease)	291,000 (0.7%)	73,200 (25.2%)	217,800 (74.8%)
8	Stroke (acute cerebrovascular disease)	256,100 (0.6%)	39,600 (15.5%)	216,500 (84.5%)
9	Infection of the blood (sepsis)	217,100 (0.5%)	7,000 (3.2%)	210,100 (96.8%)
10	Urinary tract infections	1,018,000 (2.4%)	836,300 (82.2%)	181,700 (17.8%)

*Reasons for treat-and-release visits were based on the first-listed diagnosis on the ED record; hospital-admitted cases were based on principal diagnosis on the inpatient record.

**Overall, with treat-and-release cases, the majority of patients (94.7%) were discharged home, some were transferred to another acute care facility (1.3%), left against medical advice (1.8%), went to another type of long-term or intermediate care facility (nursing home or psychiatric treatment facility) (1.8%), or died (< 1%).

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD) and State Inpatient Databases (SID) for the following 23 states: Arizona, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Tennessee, Utah, Vermont, and Wisconsin.

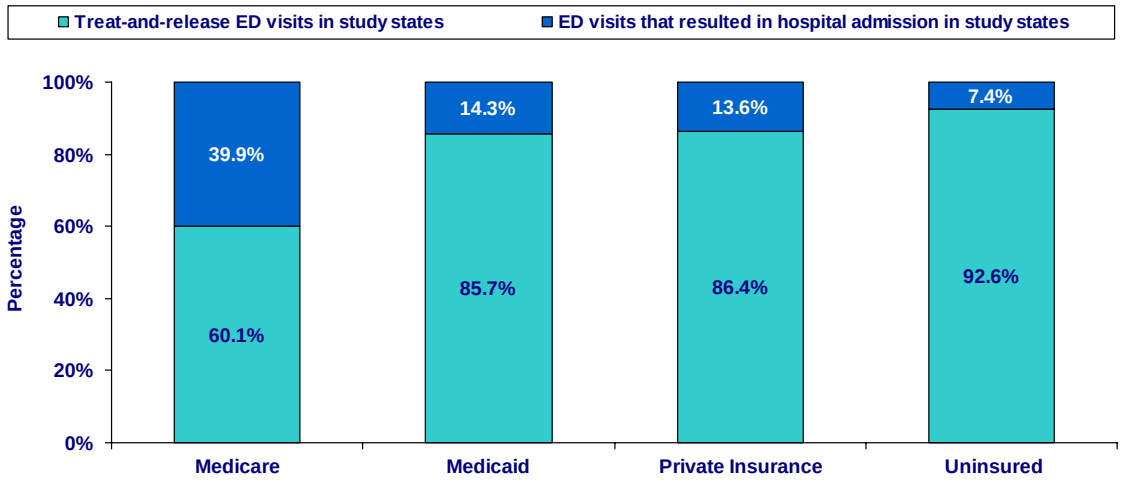
Figure 1. Government payers and the uninsured were billed for disproportionately more ED visits compared to private insurers, 2005*



*About 6 percent of ED visits are insured by "other insurance" which includes Worker's Compensation, TRICARE/CHAMPUS, CHAMPVA, Title V, and other government programs. They are not represented in this figure.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, 2005 State Emergency Department Databases (SEDD) for the following 23 states: Arizona, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Tennessee, Utah, Vermont, and Wisconsin; 2005 U.S. Census Bureau Current Population Survey (CPS) Table Creator.

Figure 2. Uninsured ED visits were much less likely to be admitted to the hospital compared to insured visits, 2005



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