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Emergency Department Visits by Homeless Status and Sex: United States, 2016–2021

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Abstract

Objective—This report describes emergency department (ED) visits by homeless status and sex.

Methods—Nationally representative estimates were calculated from data collected in the 2016–2021 National Hospital Ambulatory Medical Care Survey, an annual national probability sample survey of ED visits in the United States. Visits by people experiencing homelessness were defined using data on patient residence from medical records. Visits by males and females experiencing homelessness are compared with each other and with visits by males and females not experiencing homelessness.

Results—During 2016–2021, approximately 981,000 and 460,000 ED visits were made annually by males and females experiencing homelessness, respectively. Significant differences by sex were found for this population for many ED visit characteristics, including arrival by ambulance, diagnoses, and chronic conditions. ED visits by males and females experiencing homelessness also differed significantly from ED visits by males and females not experiencing homelessness based on age, geographic region, expected source of payment, primary diagnosis, chronic conditions, and other characteristics.

Conclusion—This report highlights certain differences by sex among the population experiencing homelessness who visited the ED and compares them with people who visited the ED but were not experiencing homelessness.

Keywords: health care access • homelessness • hospital use • National Hospital Ambulatory Medical Care Survey

Introduction

Each year, the U.S. Department of Housing and Urban Development produces its "Annual Homelessness Assessment Report" (1–6) for the U.S. Congress. According to the 2022 edition (7), about 582,462 people were experiencing homelessness, both sheltered and unsheltered, or 18 of every 10,000 people. This reflects a point-in-time estimate as of a single night in January 2022. Estimates of people experiencing homelessness decreased each year, from 657,248 in 2007 to 549,298 in 2016. Since 2016, these numbers have increased annually (excluding 2021, when data were incomplete because of COVID-19) (1–7).

It has long been recognized that experiencing homelessness places people at increased risk for preventable morbidity and mortality when compared with those not experiencing homelessness (8–13). More recently, research has shown that homelessness may be underrecognized in the emergency department (ED) setting and that more research would help determine the extent and characteristics of homelessness in the ED (14).

A review of several large databases for 2009-2020 identified 36 studies, most from the United States, that analyzed ED use by people experiencing homelessness (15). Seven of these studies used data from the National Hospital Ambulatory Medical Care Survey (NHAMCS) (16–22). An additional study using NHAMCS data was found outside of this review (23). None of these eight studies used data more recent than 2015 and, with one exception that compared younger and older adults experiencing homelessness (18), the focus was the population experiencing homelessness in general rather than on comparisons between subgroups.

Several studies have examined homelessness and health among other population subgroups such as children



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(24,25), but there appear to be few national studies that focus on differences by sex. Research shows that the female population experiencing homelessness differs in important ways from the male population experiencing homelessness (26,27). A recent study by Yue et al. (28) examined both race and sex differences in ED and hospital use among Medicaid beneficiaries in California experiencing and not experiencing homelessness. However, other studies involving sex are typically smaller in scale, local in nature, and focus on a specific issue like postpartum care (29,30) or violence (31).

This study uses nationally representative NHAMCS data to examine differences by sex in ED visits within the population of people experiencing homelessness and to compare with the population not experiencing homelessness.

Methods

Data source

This study is based on 6 years of data (2016-2021) from NHAMCS, an annual probability sample of visits to the EDs of nonfederal, general, and short-stay hospitals in the United States. Data collection occurred in two stages, both conducted by field representatives from the U.S. Census Bureau. First, participating hospitals completed an induction survey about characteristics of their facilities and services. Second, field representatives collected data from patient medical records to create a sample of visits during a 4-week reporting period. Sample data were weighted to produce national estimates. Weighted response rates for NHAMCS from 2016 through 2021 were 56.2%, 48.4%, 60.3%, 59.4%, 35.1%, and 46.0%, respectively. More information on the NHAMCS sampling design and survey methodology is available (32-37).

The survey instrument (Patient Record form) contains an item on patient residence. For each sampled visit, the field representative was asked to mark one box from the following choices: private residence, nursing home, homeless/homeless shelter, and other. For this report, people experiencing homelessness were defined as those with records where the "homeless/homeless shelter" category was marked. All records with private residence, nursing home, or other marked were used to define people not experiencing homelessness. Records with a missing response to the question were excluded from the present analysis. For 2016–2021, weighted percentages for missing data for patient residence were 2.9%, 1.8%, 2.3%, 2.5%, 3.8%, and 3.1%, respectively, for an average of 2.7% over the 6-year study period. A description of the other characteristics included in the analysis is available in Technical Notes.

Statistical analysis

To achieve reliable estimates and facilitate comparisons between visits by males and females, data for 2016-2021 were combined and averaged across the study period. Weighted counts, percentages, standard errors, and Korn–Graubard 95% confidence intervals are presented. Certain estimates that did not meet National Center for Health Statistics criteria for statistical reliability are not presented. Reliability of estimates for percentages was determined according to National Center for Health Statistics data presentation standards for proportions (38). Differences between percentage estimates for the subgroups by sex and homeless status were assessed for statistical significance using a two-sided t test at the p < 0.05 level. All analyses were conducted using SAS-callable SUDAAN 11.0.3 (RTI International, Research Triangle Park, N.C.) to account for the complex sampling design of NHAMCS.

Results

During 2016–2021, an estimated annual average of 1.4 million ED visits were made by people experiencing homelessness compared with 134.2 million visits made by people not experiencing homelessness (Table 1). Females experiencing homelessness made an average of about 460,000 visits annually compared with an average of 981,000 visits by males experiencing homelessness. Consequently, females accounted for about one-third of the ED visits made by those experiencing homelessness.

Patient age

Eight of 10 ED visits by people experiencing homelessness were made by those between ages 26 and 64 (82.1%), with 6.2% by those age 65 and older and 3.4% by those younger than age 18 years (Table 1). The age distributions were not significantly different for females and males experiencing homelessness.

In contrast, both female and male age distributions varied significantly when compared with the population not experiencing homelessness (Figure 1). Among those not experiencing homelessness, a higher percentage of ED visits were by children younger than 18 (22.1%) and adults 65 and older (18.0%) compared with those experiencing homelessness. Less than one-half of the ED visits among those not experiencing homelessness were by people ages 26-64 (48.3%). This pattern was also seen when comparing females experiencing homelessness with females not experiencing homelessness. Among males, the same pattern was found with one exception: The percentage of ED visits by males ages 18-25 experiencing homelessness (7.9%) was not significantly different from the percentage of ED visits by males ages 18-25 not experiencing homelessness (9.8%).

Patient race and ethnicity

In general, 53.1% of ED visits by people experiencing homelessness were made by White non-Hispanic people, compared with 27.1% of visits made by Black non-Hispanic people and 14.9% of visits made by Hispanic people (Table 2). About 5% of ED visits by people experiencing homelessness were made by non-Hispanic people of other races. The distribution of ED visits by patient race and ethnicity was not significantly different among females experiencing homelessness and males experiencing homelessness. Additionally, the distributions of visits by race and ethnicity did not vary significantly by sex when comparing populations experiencing and not experiencing homelessness (Figure 2).

Figure 1. Percent distribution of visits to hospital emergency departments, by age group and sex according to homeless status: United States, 2016–2021



Figure 2. Percent distribution of visits to hospital emergency departments, by race and ethnicity and sex according to homeless status: United States, 2016–2021



¹Significantly higher than Black non-Hispanic, Hispanic, and other races non-Hispanic among those experiencing homelessness and those not experiencing homelessness.
²Significantly higher than Hispanic and other races non-Hispanic among those experiencing homelessness and those not experiencing homelessness.
³Significantly higher than other races non-Hispanic among those experiencing homelessness and those not experiencing homelessness.
⁴People of Hispanic origin may be of any race.

NOTES: Percentages are based on a sample of 104,416 emergency department visits during 2016–2021, of which 1,800 were by people experiencing homelessness and 102,616 were by people not experiencing homelessness. Homelessness was characterized by a checkbox response of "Homeless/homeless shelter" to the survey item on patient residence. SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

Geographic region

The percent distribution of ED visits by geographic region for people experiencing homelessness was significantly higher in the West (46.6%) compared with the South (19.9%), Northeast (17.1%), and Midwest (16.4%) (Table 3). Distributions were similar for both males experiencing homelessness and females experiencing homelessness, with 46.9% and 46.0% of visits, respectively, occurring in the West (Figure 3). In contrast, among people not experiencing homelessness, the largest percentage of visits occurred in the South (40.9%), followed by the Midwest and West (21.8% and 21.6%, respectively) and the Northeast (15.6%) (Table 3). These distributions were similar for both males and females not experiencing homelessness.

Although visits were higher in the West and lower in the South for both males and females experiencing homelessness compared with those not experiencing homelessness, distributions of visits in the Northeast and Midwest were similar.

Primary expected source of payment

More than one-half of the ED visits by people experiencing homelessness reported Medicaid as the primary expected source of payment (53.1%), followed by Medicare (12.7%), uninsured (9.9%), and private insurance (4.9%) (Table 4). The percent distribution of visits by primary expected source of payment did not differ significantly between males experiencing homelessness, except that a higher percentage of visits by males listed other payment sources (3.0%) compared with visits by females (0.5%).

In contrast, among people not experiencing homelessness, about one-third of ED visits listed Medicaid as the primary expected source of payment (34.3%), followed by private insurance (24.8%), Medicare (19.7%), and uninsured (8.1%). The percent distribution of visits by primary expected source of payment was similar for males and females not experiencing homelessness, except that visits by females were significantly more likely to list Medicaid than visits by males (35.8% and 32.6%, respectively) and less likely to be uninsured (7.2% and 9.2%, respectively).

A higher percentage of visits by females experiencing homelessness listed Medicaid as the expected source of payment (54.1%) compared with visits by females not experiencing homelessness (35.8%), while a lower percentage listed private insurance, Medicare, and other forms of payment (note that count estimates for private and other did not meet reliability criteria) (Table 4). A higher percentage of visits by males experiencing homelessness listed Medicaid (52.6%), and a lower percentage listed private insurance (4.6%) and Medicare (11.6%) compared with males not experiencing homelessness. No significant difference was observed in the percentage of visits defined as uninsured when comparing males and females, regardless of homeless status.





¹Significant difference between males experiencing homelessness and males not experiencing homelessness.

²Significant difference between males experiencing homelessness and males not experiencing homelessness, and between females experiencing homelessness and females not experiencing homelessness.

NOTES: Percentages are based on a sample of 104,416 emergency department visits during 2016–2021, of which 1,800 were by people experiencing homelessness and 102,616 were by people not experiencing homelessness. Homelessness was characterized by a checkbox response of "Homeless/homeless shelter" to the survey item on patient residence. SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

Major diagnosis category based on primary (first-listed) diagnosis

The most frequent major diagnosis categories at visits by people experiencing homelessness were mental, behavioral, and neurodevelopmental disorders (28.8%); followed by symptoms, signs and abnormal clinical findings (21.4%); injury (9.8%); diseases of the musculoskeletal system (7.5%); and diseases of the skin and subcutaneous tissue (4.5%) (Table 5). In contrast, the most frequent major diagnosis categories for those not experiencing homelessness were symptoms, signs and abnormal clinical findings (24.8%), injury (18.3%), diseases of the respiratory system (9.8%), diseases of the musculoskeletal system (7.4%), and diseases of the digestive system (6.0%). Only 3.6% of visits by those not experiencing homelessness were for mental, behavioral, and neurodevelopmental disorders.

About one-third of visits by males experiencing homelessness listed a primary diagnosis of a mental, behavioral, or neurodevelopmental disorder (32.3%) compared with about one-fifth of visits by females experiencing homelessness (21.2%). A higher percentage of visits by females experiencing homelessness had a primary diagnosis of a genitourinary condition (3.9%) compared with visits by males (1.2%). Symptoms, signs and abnormal clinical findings accounted for about one-fifth of visits by females experiencing homelessness (22.2%) and males experiencing homelessness (21.1%). Skin conditions and musculoskeletal conditions accounted for 12.5% of visits by females experiencing homelessness and 11.8% of visits by males experiencing homelessness.

A lower percentage of visits by males experiencing homelessness had primary diagnoses of infectious diseases, respiratory system diseases, and digestive system diseases compared with visits by males not experiencing homelessness (Table 5). Higher percentages of visits by males and females experiencing homelessness had primary diagnoses of mental disorders (32.3% and 21.2%, respectively) compared with visits by males and

females not experiencing homelessness (4.2% and 3.1%, respectively). For some diagnosis categories, males and females experiencing homelessness had lower percentages of visits compared with males and females not experiencing homelessness. These categories included circulatory system diseases (1.8% and 1.3% for males and females experiencing homelessness, respectively, compared with 4.1% and 3.2% for males and females not experiencing homelessness), genitourinary diseases (1.2% and 3.9% compared with 3.8% and 6.7%), and injuries (10.6% and 8.0% compared with 21.1% and 16.0%). No differences were found by sex or homeless status among the other diagnoses examined.

Chronic conditions

Substance abuse (41.5%), alcohol abuse (28.1%), and depression (27.0%) were the most frequently documented chronic conditions at ED visits by people experiencing homelessness (Table 6). Substance abuse was documented at 37.2% of visits by females experiencing homelessness and 43.5% of visits by males experiencing homelessness. Alcohol abuse was documented more frequently at visits by males experiencing homelessness (34.9%) compared with visits by females experiencing homelessness (13.4%). Depression was reported at about one-quarter of ED visits by both males (27.5%) and females (26.1%) experiencing homelessness. Chronic obstructive pulmonary disease or COPD was documented more frequently at visits by females experiencing homelessness (12.6%) compared with visits by males experiencing homelessness (6.3%).

Comparing sex and homeless status for selected chronic conditions, visits by males experiencing homelessness had higher percentages of documented substance abuse, alcohol abuse, and depression in the medical record compared with males not experiencing homelessness (Figure 4). No statistical differences were noted between visits by males for hypertension or diabetes.

Females experiencing homelessness had higher percentages of documented substance abuse, alcohol abuse, and depression at ED visits compared with females not experiencing homelessness. However, ED visits by females experiencing homelessness had lower percentages of documented hypertension compared with visits by females not experiencing homelessness. No significant difference was noted for diabetes.

Other visit characteristics

A higher percentage of visits by people experiencing homelessness included an arrival by ambulance (41.8%) compared with visits by those not experiencing homelessness (16.1%) (Table 7). Additionally, a higher percentage of visits by males experiencing homelessness included an arrival by ambulance (44.8%) compared with visits by females experiencing homelessness (35.5%). Visits by both males and females experiencing homelessness had higher percentages of ambulance arrivals compared with visits by males and females not experiencing homelessness (17.0% and 15.3%, respectively).

Among all visits by people experiencing homelessness, most visits were for an initial problem, 76.9%, compared with 88.1% of visits by those not experiencing homelessness (Table 7). The percent distributions were similar among males experiencing homelessness and females experiencing homelessness (75.1% and 80.7%, respectively). The percent distribution was also similar among males and females not experiencing homelessness (87.6% and 88.5%, respectively). However, follow-up visits for the problem were higher among both males experiencing homelessness (15.3%) and females experiencing homelessness (11.4%) compared with males and females not experiencing homelessness (6.1% and 5.5%, respectively).

This report also examined the provision of medications during ED visits. Among visits by people experiencing homelessness, 69.9% included a medication given in the ED or prescribed at discharge (Table 7). This was lower than the corresponding percentage of visits by people not experiencing homelessness (79.5%). Among those experiencing homelessness, medications were prescribed at 70.7% of

Figure 4. Percentage of visits to hospital emergency departments, by selected chronic conditions and sex according to homeless status: United States, 2016–2021



¹Significant difference between males experiencing homelessness and males not experiencing homelessness, and between females experiencing homelessness and females not experiencing homelessness.

²Significant difference between females experiencing homelessness and females not experiencing homelessness

³Significant difference between males experiencing homelessness and females experiencing homelessness.

NOTES: Percentages are based on a sample of 104,416 emergency department visits during 2016–2021, of which 1,800 were by people experiencing homelessness and 102,616 were by people not experiencing homelessness. Homelessness was characterized by a checkbox response of "Homeless/homeless shelter" to the survey item on patient residence. Selected chronic conditions were documented in medical records.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

visits by females and 69.5% of visits by males, compared with 80.4% of visits by females and 78.4% of visits by males not experiencing homelessness.

The most commonly prescribed therapeutic drug categories at visits by people experiencing homelessness were central nervous system agents (primarily analgesics; antiemetic or antivertigo agents; anxiolytics, sedatives, and hypnotics; and anticonvulsants), respiratory agents, nutritional products, and psychotherapeutic agents (Table 7). Among visits by people not experiencing homelessness, the most commonly prescribed therapeutic drug categories were central nervous system agents, respiratory agents, nutritional products, and anti-infectives. Provision of these categories of drugs was similar by sex and homeless status, except that psychotherapeutic drugs were prescribed less frequently at visits by females experiencing homelessness compared with males experiencing homelessness, and less frequently at visits by males and females not experiencing homelessness compared with visits by males and females experiencing homelessness.

Opioids were given or prescribed at fewer visits by both females and males experiencing homelessness (12.6% and 8.9%, respectively) compared with females and males not experiencing homelessness (19.2% and 17.4%, respectively) (Table 7, Figure 5). The same was true for nonsteroidal anti-inflammatory drugs, which were given or prescribed at 13.5% of visits by females and 16.2% of visits by males experiencing homelessness compared with 23.2% and 22.6% of visits, respectively, by females and males not experiencing homelessness. A higher percentage of visits by people experiencing homelessness included benzodiazepines being given or prescribed (12.5% of visits by females and 14.0% of visits by males) compared with those not experiencing homelessness (4.8% of visits by females and 4.7% of visits by males).

Visit disposition

The most frequent disposition at visits by both males and females experiencing homelessness was "Return or refer to physician or clinic for follow-up," accounting for 58.0% of visits by females and 52.9% of visits by males (Table 8). Fifteen percent of visits by females experiencing homelessness resulted in admission to the current hospital, and this was not significantly different than the percentage of visits by males experiencing homelessness (12.4%). A slightly higher percentage of visits by males experiencing homelessness received instructions to return to the ED either by appointment or as needed, or had no follow-up planned, compared with visits by females experiencing homelessness. At 5.8% of visits by males experiencing homelessness and 6.5% of visits by females experiencing homelessness, patients were transferred to a psychiatric hospital.

Comparing visit disposition by sex and homeless status, higher percentages of people of either sex who were not experiencing homelessness were told to return to a physician or clinic for follow-up or were referred to a physician or clinic for follow-up. A higher percentage of visits by males experiencing homelessness compared

Figure 5. Percentage of visits to hospital emergency departments, by selected drug characteristics and sex according to homeless status: United States, 2016–2021



collected on up to 30 medications that were either given in the emergency department or prescribed at discharge. Drugs were classified using the UpToDate Lexidrug second-level therapeutic drug category (available from: https://www.wolterskluwer.com/en/solutions/uptodate/pro/lexidrug). SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

with visits by males not experiencing homelessness resulted in transfer to a psychiatric hospital (5.8% and 1.1%, respectively).

Discussion

This report examines ED visits by sex and homeless status, comparing visits by males and females experiencing homelessness with each other, and with visits by males and females not experiencing homelessness. During the 2016–2021 study period, people experiencing homelessness made an estimated 8.6 million ED visits, or an average of 1.4 million visits per year. Nearly one-third of those visits (31.9%) were by females.

The results show that the age distribution at ED visits by both males and females experiencing homelessness did not differ statistically from each other. For both sexes, most visits were by people ages 26–64. This is in contrast with the age distribution at ED visits by males and females not experiencing homelessness, where less than one-half of visits were by people ages 26–64. Accordingly, visits by people younger than 18 years or older than 64 accounted for a larger percentage of visits among those not experiencing homelessness. No significant differences were seen by race and ethnicity when comparing visits by sex and homeless status. The percentage of ED visits by Hispanic people was 14.9% for both males and females experiencing homelessness.

Geographic region did not differ by sex at ED visits by those experiencing homelessness. However, regional differences were observed between those experiencing and not experiencing homelessness in general. Nearly one-half of ED visits by both males and females experiencing homelessness occurred in the West; this is consistent with other literature on people experiencing homelessness, which found that in 2022 California alone accounted for 30% of the population experiencing homelessness, and Washington State accounted for another 4% (7).

Primary expected source of payment did not differ by sex at ED visits by those experiencing homelessness, except that visits by males more frequently listed "other" as the expected source of payment. As defined in NHAMCS, "other" sources of payment include military insurance, state and local governments, and private charitable organizations, among others. Veterans account for about 10% of the population experiencing homelessness and about 89% of veterans experiencing homelessness are male (7), so it is possible that the higher percentage of other forms of payment among visits by males experiencing homelessness reflects a greater reliance on military insurance. This difference was not noted when comparing expected source of payment between visits by males experiencing homelessness and males not experiencing homelessness.

Comparing primary expected source of payment by sex and homeless status, no statistically significant differences were found in the percentages of visits categorized as uninsured for males and females experiencing homelessness compared with males and females not experiencing homelessness.

About one-third of visits by males experiencing homelessness had a first-listed major diagnosis category of a mental disorder (International Classification of Diseases, 10th Revision, *Clinical Modification* codes F01–F99) (39). This is consistent with other research on ED use and homelessness (22). In contrast, about one-fifth of visits by females experiencing homelessness received such a diagnosis. Unexplained symptoms, skin conditions, and musculoskeletal conditions were observed most frequently at visits by both males and females experiencing homelessness, and a higher percentage of visits by females experiencing homelessness included a genitourinary system diagnosis compared with visits by males experiencing homelessness.

Visits by both males and females experiencing homelessness compared with those not experiencing homelessness had lower percentages of visits with first-listed diagnoses of infectious diseases, circulatory system diseases, genitourinary diseases, and injuries. The latter finding differs from one NHAMCS study (19), which reported that visits by those experiencing homelessness were more likely to include unintentional, self-inflicted, and assault-type injuries compared with visits by those who were not experiencing homelessness. However, this appears to be mainly a difference in definition. The current study focuses on injury as defined by the primary diagnosis (International Classification of Diseases, 10th Revision, Clinical Modification codes S00-T88), while the above-mentioned study by Hammig et al. (19) used a broader injury definition, which included reason-for-visit and cause-of-injury codes.

Differences in chronic conditions occurred between men and women experiencing homelessness. While substance abuse was frequently documented in the medical record at visits by both sexes, a higher percentage of visits by males experiencing homelessness included a documentation of alcohol abuse. In general, men have higher rates of alcohol use and higher rates of use or dependence on illicit drugs and alcohol than women (40,41). However, women are just as likely to develop a substance use disorder (42). Depression was noted at about one-quarter of visits by either sex, but a higher percentage of visits by females included a documentation of chronic obstructive pulmonary disease compared with visits by males.

Comparing chronic conditions by sex and homeless status, some chronic conditions were documented more often at visits by people experiencing homelessness compared with those not experiencing homelessness. Significantly lower percentages of visits by both sexes among those experiencing homelessness had documented hyperlipidemia, and a lower percentage of visits by females experiencing homelessness had documented hypertension compared with visits by both females and males not experiencing homelessness. These findings are consistent with Lombardi et al. (22), whose research suggested that patients experiencing homelessness were less likely to present with or be diagnosed with common conditions.

Another difference by sex and homeless status was the percentage of visits arriving by ambulance, which was higher for visits by males experiencing homelessness compared with visits by females experiencing homelessness. Both were significantly higher than visits by those not experiencing homelessness. This is consistent with previously published literature on ED visits by people experiencing homelessness (22).

No differences were noted in ED visits by males experiencing homelessness and females experiencing homelessness for episode of care, but both sexes had significantly higher percentages of follow-up visits to the ED compared with those not experiencing homelessness. Likewise, providers seen and medication prescription at ED visits did not appear to vary significantly by sex among those experiencing homelessness, but significant differences were found when comparing visits by people experiencing homelessness with people not experiencing homelessness. The percentage of visits at which medications were given in the ED or prescribed at discharge was lower among those experiencing homelessness in general, but a higher percentage of visits with benzodiazepines given or prescribed was found among visits by people

experiencing homelessness. However, a lower percentage of ED visits by either males or females who were experiencing homelessness included the provision of opioids or nonsteroidal anti-inflammatory drugs compared with visits by females and males not experiencing homelessness.

Regarding visit disposition, approximately 55% of visits by either sex experiencing homelessness were either told to return to a physician or clinic for follow-up or were referred to a physician or clinic for follow-up, but these percentages were lower than those for people not experiencing homelessness. A higher percentage of visits by males experiencing homelessness included being told to return to the ED or had no follow-up planned compared with females experiencing homelessness. Visits by males experiencing homelessness had a higher percentage of transfers to psychiatric hospitals compared with visits by males not experiencing homelessness.

This study has several limitations. Even with 6 years of data combined to increase sample sizes, some estimates were still unreliable when examining differences by sex among visits by those experiencing homelessness.

Because NHAMCS data rely on abstraction from medical records by U.S. Census Bureau field staff, which in turn are partly based on self-report by the patient, the potential for bias and reporting errors exists. As pointed out by Lombardi et al. (22), the true extent of homelessness may be masked by patients who prefer not to reveal their residential status for a variety of reasons. Also, the NHAMCS definition of homelessness, which is based on a survey item checkbox with categories of private residence, nursing home, homeless/homeless shelter, and other, may not correctly classify patients with other living arrangements that may be considered homeless, such as shared housing arrangements, or those who may be considered transiently housed or at risk of homelessness.

Finally, NHAMCS does not track individual patients but takes samples of visits over a 4-week reporting period. As a result, it is possible that the same person may appear in the data more than once. For this reason, NHAMCS data are not typically used to make estimates of population incidence or prevalence. In this report, however, the intent is to examine the characteristics of people making ED visits. NHAMCS was designed to provide information on the characteristics of ED use, and these data provide further insight on ED use by people experiencing homelessness.

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Table 1. Number and percent distribution of annual visits to hospital emergency departments, by age group and sex according to homeless status: United States, 2016-2021

	People e	xperiencing h	omelessnes	SS	People not	People not experiencing homelessness			
Patient characteristic	Number of visits (standard error) in thousands	Percent distribution	Lower 95% CI	Upper 95% CI	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% CI	
All visits.	1,441 (87)	100.0			134,154 (4,003)	100.0			
Age group (years)									
Younger than 18	49 (12)	3.4	1.9	5.4	29,588 (1,525)	22.1	20.4	23.8	
18–25	120 (17)	8.4	6.3	10.8	15,698 (505)	11.7	11.3	12.1	
26–44	584 (45)	40.5	37.0	44.1	34,300 (1,104)	25.6	24.9	26.3	
45–64	599 (45)	41.6	37.7	45.5	30,418 (987)	22.7	22.0	23.3	
65 and older	89 (14)	6.2	4.6	8.1	24,149 (836)	18.0	17.3	18.7	
Sex and age group (years)									
Female	460 (40)	100.0			73,794 (2,267)	100.0			
Younger than 18	*	*			14,219 (730)	19.3	17.8	20.8	
18–25	43 (10)	9.3	5.7	14.1	9,812 (349)	13.3	12.8	13.8	
26–44	174 (22)	37.8	31.2	44.9	20,048 (669)	27.2	26.4	27.9	
45–64	185 (23)	40.2	32.9	47.9	16,070 (557)	21.8	21.1	22.4	
65 and older	27 (9)	5.9	3.0	10.3	13,645 (488)	18.5	17.7	19.3	
Male	981 (62)	100.0			60,359 (1,799)	100.0			
Younger than 18	*	1.8	0.8	3.7	15,370 (819)	25.5	23.5	27.5	
18–25	78 (13)	7.9	5.5	10.9	5,886 (209)	9.8	9.3	10.2	
26–44	410 (35)	41.8	37.5	46.1	14,251 (477)	23.6	22.8	24.4	
45–64	414 (33)	42.2	38.0	46.5	14,349 (466)	23.8	22.9	24.6	
65 and older	62 (10)	6.3	4.5	8.5	10,504 (387)	17.4	16.6	18.3	

Category not applicable.

* Estimate does not meet National Center for Health Statistics standards of reliability.

NOTES: CI is confidence interval. Numbers may not add to totals because of rounding.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

Table 2. Number and percent distribution of annual visits to hospital emergency departments, by race and ethnicity and sex according to homeless status: United States, 2016-2021

	People ex	xperiencing h	omelessnes	s	People not experiencing homelessness			
Patient characteristic	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl
All visits	1,441 (87)	100.0			134,154 (4,003)	100.0		
Race and ethnicity								
White, non-Hispanic	766 (55)	53.1	48.5	57.7	75,936 (2,522)	56.6	54.8	58.4
Black, non-Hispanic	390 (35)	27.1	23.3	31.0	31,399 (1,430)	23.4	21.9	25.0
Hispanic ¹	215 (29)	14.9	11.6	18.8	21,846 (1,240)	16.3	14.8	17.8
Other races, non-Hispanic	71 (16)	4.9	3.1	7.3	4,973 (325)	3.7	3.3	4.2
Sex and race and ethnicity								
Female	460 (40)	100.0			73,794 (2,267)	100.0		
White, non-Hispanic	253 (28)	54.9	47.4	62.2	41,698 (1,422)	56.5	54.6	58.4
Black, non-Hispanic	120 (14)	26.1	20.6	32.2	17,488 (849)	23.7	22.1	25.4
Hispanic ¹	69 (17)	14.9	9.0	22.6	11,937 (692)	16.2	14.7	17.7
Other races, non-Hispanic	*	4.1	2.1	7.1	2,672 (176)	3.6	3.2	4.1
Male	981 (62)	100.0			60,359 (1,799)	100.0		
White, non-Hispanic	513 (39)	52.3	47.2	57.3	34,238 (1,148)	56.7	54.8	58.6
Black, non-Hispanic	270 (28)	27.5	23.3	32.1	13,911 (616)	23.0	21.5	24.6
Hispanic ¹	146 (18)	14.9	11.8	18.5	9,909 (574)	16.4	14.9	18.0
Other races, non-Hispanic	52 (12)	5.3	3.3	8.0	2,301 (169)	3.8	3.3	4.4

.. Category not applicable.

Estimate does not meet National Center for Health Statistics standards of reliability.

¹People of Hispanic origin may be of any race.

NOTES: CI is confidence interval. Numbers may not add to totals because of rounding.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016-2021.

Table 3. Number and percent distribution of annual visits to hospital emergency departments, by geographic region and sex according to homeless status: United States, 2016-2021

	People ex	xperiencing h	omelessnes	S	People not experiencing homelessness			
Patient characteristic	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl	Number of visits (standard error) in thousands	Percent distribution	Lower 95% CI	Upper 95% Cl
All visits	1,441 (87)	100.0			134,154 (4,003)	100.0		
Geographic region								
Northeast	246 (30)	17.1	13.3	21.4	20,989 (1,275)	15.6	13.9	17.5
Midwest	237 (40)	16.4	11.8	22.0	29,310 (1,654)	21.8	19.7	24.2
South	287 (38)	19.9	15.3	25.1	54,863 (2,757)	40.9	37.9	43.9
West	672 (60)	46.6	40.6	52.8	28,992 (2,010)	21.6	19.1	24.3
Sex and geographic region								
Female	460 (40)	100.0			73,794 (2,267)	100.0		
Northeast	68 (11)	14.9	10.5	20.2	11,175 (676)	15.1	13.4	17.0
Midwest	84 (18)	18.2	11.9	26.0	16,198 (956)	22.0	19.7	24.4
South	97 (18)	21.0	14.5	28.7	30,693 (1,594)	41.6	38.5	44.7
West	212 (29)	46.0	37.2	54.9	15,728 (1,107)	21.3	18.8	24.0
Male	981 (62)	100.0			60,359 (1,799)	100.0		
Northeast	177 (25)	18.1	13.7	23.2	9,814 (620)	16.3	14.4	18.3
Midwest	153 (29)	15.6	10.7	21.6	13,112 (724)	21.7	19.6	24.0
South	190 (28)	19.4	14.6	24.9	24,169 (1,213)	40.0	37.1	43.0
West	460 (40)	46.9	40.7	53.3	13,264 (924)	22.0	19.4	24.7

... Category not applicable.

NOTES: CI is confidence interval. Numbers may not add to totals because of rounding.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

Table 4. Number and percent distribution of annual visits to hospital emergency departments, by primary expected source of payment and sex according to homeless status: United States, 2016-2021

	People e	xperiencing he	omelessne	SS	People not experiencing homelessness				
Patient characteristic	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% CI	
All visits	1,441 (87)	100.0			134,154 (4,003)	100.0			
Primary expected source of payment									
Private insurance	71 (13)	4.9	3.3	7.0	33,266 (1,086)	24.8	23.8	25.8	
Medicare	183 (21)	12.7	10.3	15.4	26,493 (948)	19.7	18.9	20.6	
Medicaid	766 (57)	53.1	48.7	57.5	46,071 (1,872)	34.3	32.7	36.0	
Uninsured	143 (19)	9.9	7.7	12.6	10,874 (669)	8.1	7.3	9.0	
Other	32 (7)	2.2	1.4	3.3	3,837 (255)	2.9	2.5	3.2	
Blank or unknown	247 (35)	17.1	13.1	21.8	13,611 (1,430)	10.1	8.2	12.3	
Sex and primary expected source of payment									
Female	460 (40)	100.0			73,794 (2,267)	100.0			
Private insurance.	*	*			18,294 (636)	24.8	23.7	25.9	
Medicare	69 (13)	15.0	10.7	20.1	14,924 (550)	20.2	19.3	21.2	
Medicaid	249 (25)	54.1	47.1	61.0	26,415 (1,070)	35.8	34.1	37.5	
Uninsured	37 (8)	8.1	5.2	11.9	5,307 (372)	7.2	6.4	8.1	
Other	*	0.5	0.1	1.5	1,587 (136)	2.2	1.8	2.5	
Blank or unknown	78 (17)	16.9	11.0	24.5	7,268 (782)	9.8	8.0	12.0	
Male	981 (62)	100.0			60,359 (1,799)	100.0			
Private insurance.	46 (9)	4.6	3.0	6.8	14,972 (490)	24.8	23.7	25.9	
Medicare	114 (15)	11.6	9.0	14.8	11,570 (434)	19.2	18.2	20.1	
Medicaid	516 (40)	52.6	47.7	57.6	19,656 (847)	32.6	30.8	34.4	
Uninsured	106 (16)	10.8	8.1	14.1	5,568 (318)	9.2	8.4	10.1	
Other	30 (6)	3.0	1.9	4.6	2,250 (144)	3.7	3.3	4.2	
Blank or unknown	169 (27)	17.2	12.7	22.4	6,344 (671)	10.5	8.5	12.8	

. Category not applicable.

* Estimate does not meet National Center for Health Statistics standards of reliability.

NOTES: CI is confidence interval. Numbers may not add to totals because of rounding.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016-2021.

Table 5. Number and percent distribution of annual visits to hospital emergency departments, by most frequent major diagnosis category and sex according to homeless status: United States, 2016–2021

		People experiencing homelessness People not experiencing homelessness					S		
Major diagnosis category	ICD-10-CM ¹ code	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl
All visits.		1,441 (87)	100.0			134,154 (4,003)	100.0		
Mental, behavioral and neurodevelopmental disorders	F01–F99	415 (37)	28.8	25.2	32.5	4.824 (189)	3.6	3.4	3.8
Symptoms, signs and abnormal clinical findings, not elsewhere classified	R00–R99	309 (28)	21.4	18.5	24.6	33,316 (1,110)	24.8	24.2	25.5
Injury, poisoning and certain other consequences of						, , ,			
external causes Diseases of the musculoskeletal system and	S00–T88	141 (18)	9.8	7.8	12.1	24,523 (776)	18.3	17.8	18.7
connective tissue	M00–M99	107 (16)	7.5	5.6	9.7	9,918 (369)	7.4	7.1	7.7
Diseases of the skin and subcutaneous tissue	L00–L99	65 (11)	4.5	3.2	6.2	4,479 (177)	3.3	3.2	3.5
Diseases of the respiratory system.	J00–J99	57 (13)	4.0	2.4	6.1	13,140 (514)	9.8	9.3	10.3
Diseases of the genitourinary system.	N00–N99	30 (7)	2.1	1.3	3.2	7,204 (274)	5.4	5.1	5.6
Disease of the digestive system	K00–K95	27 (7)	1.9	1.1	3.0	8,044 (272)	6.0	5.8	6.2
Endocrine, nutritional and metabolic disorders	E00–E89	*	1.7	0.9	2.8	2,205 (108)	1.6	1.5	1.8
Diseases of the circulatory system	100–199	*	1.6	0.9	2.6	4,826 (200)	3.6	3.4	3.8
Certain infectious and parasitic diseases	A00–B99	22 (6)	1.6	0.9	2.5	3,651 (162)	2.7	2.5	2.9
All other ²	C00–D49, G00–H95, O00–Q99, V00–Z99, U00–U85	220 (25)	15.3	12.5	18.4	18,025 (675)	13.4	12.9	14.0
Female									
All visits		460 (40)	100.0			73,794 (2,267)	100.0		
Mental, behavioral and neurodevelopmental disorders	F01–F99	97 (16)	21.2	15.6	27.6	2,273 (108)	3.1	2.8	3.3
elsewhere classified	R00–R99	102 (15)	22.2	16.8	28.3	19,283 (661)	26.1	25.4	26.8
external causes	S00-T88	37 (9)	8.0	4.7	12.4	11,809 (397)	16.0	15.5	16.5
Diseases of the musculoskeletal system and	M00 M00	*	0.1	0.5	0.0	E 440 (00E)	7.0	7.0	
	IVIUU-IVI99	*	6.1	3.5	9.8	5,410 (225)	7.3	7.0	7.7
	L00-L99	*	6.4	3.4	10.9	2,234 (105)	3.0	2.8	3.2
	J00-J99	*	0.0			7,337 (307)	9.9	9.4	10.5
Diseases of the dimentium system.	N00-N99	*	3.9	2.0	6.7	4,923 (200)	6.7	6.4	7.0
	KUU-K95	*	0.0			4,159 (158)	5.6	5.4	5.9
		*	0.8	0.1	2.5	1,203 (74)	1.0	1.5	1.8
Diseases of the circulatory system	100-199	*	1.3	0.4	3.0	2,361 (112)	3.2	3.0	3.4
All other ²	AUU-B99 C00-D49, G00-H95, 000-099 V00-799	••••	1.9	0.8	3.7	1,923 (100)	2.6	2.4	2.8
	U00–U85	93 (16)	20.2	14.3	27.1	10,878 (395)	14.7	14.1	15.4

Table 5. Number and percent distribution of annual visits to hospital emergency departments, by most frequent major diagnosis category and sex according to homeless status: United States, 2016–2021—Con.

		People experiencing homelessne				People not experiencing homelessness			
Major diagnosis category	ICD-10-CM ¹ code	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl
Male									
All visits		981 (62)	100.0			60,359 (1,799)	100.0		
Mental, behavioral and neurodevelopmental disorders	F01-F99	317 (31)	32.3	27.9	37.1	2,550 (113)	4.2	3.9	4.6
elsewhere classified	R00–R99	207 (22)	21.1	17.5	25.0	14,033 (489)	23.2	22.5	24.0
external causes	S00-T88	104 (15)	10.6	8.1	13.6	12,714 (421)	21.1	20.4	21.7
connective tissue	M00–M99	79 (13)	8.1	5.8	10.8	4,508 (177)	7.5	7.1	7.9
Diseases of the skin and subcutaneous tissue	L00–L99	36 (7)	3.7	2.4	5.3	2,245 (99)	3.7	3.5	4.0
Diseases of the respiratory system.	J00–J99	33 (8)	3.4	2.0	5.4	5,803 (243)	9.6	9.1	10.1
Diseases of the genitourinary system.	N00-N99	*	1.2	0.5	2.4	2,281 (101)	3.8	3.5	4.0
Disease of the digestive system	K00–K95	*	1.3	0.7	2.1	3,885 (150)	6.4	6.1	6.8
Endocrine, nutritional and metabolic disorders	E00–E89	*	2.1	1.0	3.8	1,002 (57)	1.7	1.5	1.8
Diseases of the circulatory system	100–199	*	1.8	0.9	3.2	2,465 (118)	4.1	3.8	4.4
Certain infectious and parasitic diseases	A00–B99	*	1.4	0.7	2.6	1,727 (91)	2.9	2.6	3.1
All other ²	C00–D49,G00–95, O00–Q99,V00–Z99,								
	U00–U85	127 (17)	13.0	10.3	16.1	7,147 (324)	11.8	11.1	12.6

... Category not applicable.

* Estimate does not meet National Center for Health Statistics standards of reliability.

¹International Classification of Diseases, 10th Revision, Clinical Modification.

²Includes neoplasms; diseases of the blood and blood-forming organs; diseases of the nervous system; diseases of the eye; diseases of the ear; pregnancy, childbirth and the puerperium; certain conditions originating in the perinatal period; congenital malformations and chromosomal abnormalities; codes for special purposes (only appearing in these data as U0.70 Vaping Disorder and U0.71 COVID-19); external causes of morbidity; factors influencing health status and contact with health services; and blank entries.

NOTES: CI is confidence interval. Numbers may not add to totals because of rounding.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

Table 6. Number and percentage of annual visits to hospital emergency departments, by selected chronic conditions and sex according to homeless status: United States, 2016–2021

	People ex	kperiencing h	omelessnes	ŝs	People not experiencing homelessness			
Selected chronic condition	Number of visits (standard error) in thousands	Percent of visits	Lower 95% CI	Upper 95% CI	Number of visits (standard error) in thousands	Percent of visits	Lower 95% CI	Upper 95% Cl
All visits.	1,441 (87)	100.0			134,154 (4,003)	100.0		
Substance abuse	598 (46) 404 (38) 389 (35) 307 (29) 171 (19) 131 (18) 120 (18)	41.5 28.1 27.0 21.3 11.9 9.1 8.3	37.3 24.4 23.4 18.1 9.8 7.1 6.2	45.8 31.9 30.9 24.7 14.2 11.3 11.0	7,956 (462) 4,467 (203) 14,550 (572) 35,252 (1,225) 17,076 (601) 13,335 (464) 7 908 (303)	5.9 3.3 10.8 26.3 12.7 9.9 5.9	5.4 3.1 10.3 25.3 12.3 9.6 5.6	6.5 3.6 11.4 27.2 13.2 10.3 6.2
Hyperlipidemia	72 (11)	5.0	3.7	6.6	13,735 (550)	10.2	9.7	10.8
Sex and chronic condition								
Female	460 (40) 171 (22) 62 (11) 120 (16) 80 (13) 60 (12) 51 (10)	100.0 37.2 13.4 26.1 17.5 13.0 11.2	30.1 9.6 20.3 12.7 8.8 7.6	44.8 18.1 32.6 23.1 18.1 15.7	73,794 (2,267) 3,640 (240) 1,451 (77) 9,692 (391) 19,464 (706) 9,363 (343) 8,404 (302)	100.0 4.9 2.0 13.1 26.4 12.7 11.4	4.4 1.8 12.4 25.4 12.2 10.9	5.5 2.2 13.9 27.3 13.2 11.9
Chronic obstructive pulmonary disease	58 (14) 31 (7) 981 (62) 427 (36) 342 (33) 269 (28)	12.6 6.6 100.0 43.5 34.9 27.5	7.7 4.0 38.8 30.4 23.2	19.2 10.2 48.3 39.7 32.1	4,602 (187) 7,473 (315) 60,359 (1,799) 4,316 (245) 3,016 (149) 4,858 (218)	6.2 10.1 100.0 7.2 5.0 8.0	5.9 9.5 6.5 4.6 7.5	6.6 10.7 7.9 5.4 8.6
Hypertension. Diabetes Asthma Chronic obstructive pulmonary disease Hyperlipidemia	226 (24) 111 (15) 79 (13) 62 (12) 41 (8)	23.1 11.4 8.1 6.3 4.2	19.4 8.8 6.1 4.2 2.8	27.1 14.3 10.5 9.1 6.0	15,788 (554) 7,713 (294) 4,931 (197) 3,306 (145) 6,262 (265)	26.2 12.8 8.2 5.5 10.4	25.1 12.2 7.7 5.1 9.7	27.2 13.4 8.6 5.8 11.1

... Category not applicable.

NOTES: CI is confidence interval. Numbers may not add to totals because more than one condition could be reported per visit. Selected chronic conditions were documented in medical records.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

Table 7. Number and percent distribution of annual visits to hospital emergency departments, by selected visit characteristics and sex according to homeless status: United States, 2016–2021

	People e	xperiencing h	omelessne	SS	People not experiencing homelessness			
Visit characteristic	Number of visits (standard error) in thousands	Percent of visits	Lower 95% CI	Upper 95% CI	Number of visits (standard error) in thousands	Percent of visits	Lower 95% CI	Upper 95% CI
All visits.	1,441 (87)	100.0			134,154 (4,003)	100.0		
Arrival by ambulance								
Yes	603 (48)	41.8	37.7	46.1	21,582 (771)	16.1	15.4	16.8
No	778 (56)	54.0	49.8	58.2	109,073 (3,379)	81.3	80.5	82.1
Blank or unknown	60 (12)	4.2	2.7	6.1	3,498 (331)	2.6	2.1	3.1
Episode of care								
Initial visit for problem	1 108 (73)	76.9	72 9	80.6	118 209 (3 701)	88 1	86.9	89.3
Follow-up visit for problem	202 (23)	14.0	11.4	16.9	7.751 (377)	5.8	5.4	6.2
Blank or unknown	131 (20)	9.1	6.6	12.0	8,194 (817	6.1	5.0	7.4
Medications ¹								
No modications given or prescribed	424 (25)	20.1	26.7	22.7	27 406 (014)	20.5	10.6	21 /
Medications given or prescribed	1 007 (67)	69.9	20.7 66 3	73.3	106 657 (3 383)	20.5 79.5	78.6	21.4
Central nervous system agents	707 (52)	49.1	45.3	52.9	74 923 (2 462)	55.8	54.9	56.8
Nonsteroidal anti-inflammatory drugs	222 (24)	15.4	12.6	18.5	30 809 (1 142)	23.0	22.3	23.7
Benzodiazepines	195 (23)	13.5	11 1	16.3	6 394 (270)	4.8	4.5	51
Opioids	145 (20)	10.1	7.8	12.8	24.641 (961)	18.4	17.6	19.1
Respiratory agents	383 (35)	26.6	23.1	30.3	41,932 (1,560)	31.3	30.3	32.3
Nutritional products	291 (31)	20.2	16.8	23.9	32.536 (1.326)	24.3	23.2	25.3
Psychotherapeutic agents	211 (26)	14.6	11.9	17.7	5,064 (304)	3.8	3.4	4.2
Anti-infectives	202 (23)	14.0	11.3	17.0	30,470 (1,063)	22.7	22.1	23.3
Female								
All visits	460 (40)	100.0			73,794 (2,267)	100.0		
Arrival by ambulance								
Yes	164 (20)	35.5	29.1	42.4	11.311 (421)	15.3	14.6	16.0
No	278 (30)	60.5	53.5	67.1	60.623 (1.938)	82.2	81.3	83.0
Blank or unknown	18 (5)	4.0	2.1	7.0	1,860 (183)	2.5	2.1	3.1
Episode of care								
Initial visit for problem	372 (36)	80.7	74.8	85.8	65.308 (2.119)	88.5	87.3	89.7
Follow-up visit for problem	52 (9)	11.4	8.0	15.5	4.091 (221)	5.5	5.1	6.0
Blank or unknown	36 (10)	7.9	4.4	12.9	4,395 (440)	6.0	4.8	7.3
Medications ¹								
No medications given or prescribed	135 (19)	29.3	22.9	36.4	14.474 (493)	19.6	18.6	20.6
Medications given or prescribed	325 (32)	70.7	63.6	77.1	59.320 (1.959)	80.4	79.4	81.4
Central nervous system agents.	234 (27)	50.8	43.1	58.4	42,694 (1,451)	57.9	56.8	58.9
Nonsteroidal anti-inflammatory drugs	62 (12)	13.5	8.9	19.3	17,151 (648)	23.2	22.5	24.0
Benzodiazepines	58 (12)	12.5	8.4	17.8	3,565 (170)	4.8	4.5	5.2
Opioids	58 (14)	12.6	7.7	19.1	14,161 (587)	19.2	18.4	20.0
Respiratory agents	128 (20)	27.8	21.2	35.2	24,026 (948)	32.6	31.5	33.7
Nutritional products	101 (17)	21.9	15.9	29.0	18,817 (811)	25.5	24.3	26.7
Psychotherapeutic agents	54 (11)	11.7	7.9	16.6	3,101 (192)	4.2	3.8	4.7
Anti-infectives	94 (17)	20.4	14.6	27.3	17,307 (639)	23.5	22.7	24.2

Table 7. Number and percent distribution of annual visits to hospital emergency departments, by selected visit characteristics and sex according to homeless status: United States, 2016-2021-Con.

	People ex	kperiencing h	omelessnes	SS	People not experiencing homelessness			
Visit characteristic	Number of visits (standard error) in thousands	Percent of visits	Lower 95% CI	Upper 95% Cl	Number of visits (standard error) in thousands	Percent of visits	Lower 95% Cl	Upper 95% Cl
Male								
All visits	981 (62)	100.0			60,359 (1,799)	100.0		
Arrival by ambulance								
Yes	439 (36)	44.8	40.2	49.4	10,271 (392)	17.0	16.2	17.9
No	500 (38)	51.0	46.3	55.6	48,450 (1,497)	80.3	79.3	81.2
Blank or unknown	42 (10)	4.3	2.6	6.6	1,638 (162)	2.7	2.2	3.3
Episode of care								
Initial visit for problem	737 (51)	75.1	70.3	79.5	52,900 (1,641)	87.6	86.3	88.9
Follow-up visit for problem	150 (19)	15.3	12.1	18.9	3,660 (183)	6.1	5.6	6.5
Blank or unknown	95 (16)	9.6	6.8	13.2	3,799 (395)	6.3	5.1	7.7
Medications ¹								
No medications given or prescribed	299 (26)	30.5	26.7	34.5	13,022 (464)	21.6	20.6	22.6
Medications given or prescribed	682 (48)	69.5	65.5	73.3	47,337 (1,481)	78.4	77.4	79.4
Central nervous system agents	474 (38)	48.3	43.9	52.7	32,228 (1,060)	53.4	52.3	54.5
Nonsteroidal anti-inflammatory drugs	159 (20)	16.2	13.1	19.8	13,657 (527)	22.6	21.8	23.5
Benzodiazepines	138 (19)	14.0	11.0	17.5	2,829 (129)	4.7	4.4	5.0
Opioids	87 (13)	8.9	6.8	11.4	10,481 (410)	17.4	16.6	18.1
Respiratory agents	255 (24)	26.0	22.3	30.0	17,906 (651)	29.7	28.7	30.7
Nutritional products	190 (21)	19.3	15.9	23.2	13,719 (552)	22.7	21.7	23.8
Psychotherapeutic agents	157 (19)	16.0	12.8	19.5	1,963 (134)	3.3	2.9	3.7
Anti-infectives	108 (14)	11.0	8.5	13.9	13,164 (458)	21.8	21.1	22.5

... Category not applicable. ¹Includes up to 30 medications that were either given in the emergency department or prescribed at discharge. Drugs were classified using the UpToDate Lexidrug second-level therapeutic drug category (available from: https://www.wolterskluwer.com/en/solutions/uptodate/pro/lexidrug).

NOTES: Cl is confidence interval. Numbers may not add to totals because of rounding. Number of visits by therapeutic categories may not add to totals because multiple drugs could be given or prescribed per visit.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016-2021.

Table 8. Number and percent distribution of annual visits to hospital emergency departments, by visit disposition and sex according to homeless status: United States, 2016-2021

	People e	xperiencing h	omelessne	SS	People not experiencing homelessness			
Visit disposition	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% CI	Number of visits (standard error) in thousands	Percent distribution	Lower 95% Cl	Upper 95% Cl
All visits.	1,441 (87)	100.0			134,154 (4,003)	100.0		
Died or dead on arrival	*	*			262 (44)	0.2	0.1	0.3
Admit to hospital	191 (22)	13.2	10.7	16.1	15.401 (707)	11.5	10.7	12.3
Transfer to psychiatric hospital Return or refer to physician or	87 (15)	6.1	4.3	8.3	1,159 (81)	0.9	0.8	1.0
clinic for follow-up	786 (58)	54.6	50.7	58.3	91,879 (3,047)	68.5	67.0	70.0
Return to emergency department.	50 (10)	3.5	2.3	5.1	2,693 (205)	2.0	1.7	2.3
No follow-up planned	141 (17)	9.8	7.8	12.1	11,943 (788)	8.9	7.8	10.1
Other	173 (20)	12.0	9.8	14.5	9,807 (407)	7.3	6.9	7.8
Blank or unknown	*	0.7	0.3	1.7	1,010 (156)	0.8	0.5	1.0
Sex and visit disposition								
Female	460 (40)	100.0			73,794 (2,267)	100.0		
Died or dead on arrival		-			98 (18)	0.1	0.1	0.2
Admit to hospital	69 (15)	15.0	9.9	21.6	8,013 (381)	10.9	10.1	11.6
Transfer to psychiatric hospital	*30 (10)	6.5	3.2	11.7	521 (46)	0.7	0.6	0.8
Return or refer to physician or								
clinic for follow-up	267 (28)	58.0	50.2	65.6	51,947 (1,773)	70.4	68.9	71.9
Return to emergency department	*	1.9	0.7	4.1	1,354 (109)	1.8	1.6	2.1
No follow-up planned	33 (6)	7.3	4.9	10.3	6,245 (427)	8.5	7.4	9.6
Other	45 (10)	9.8	6.1	14.6	5,111 (238)	6.9	6.4	7.5
Blank or unknown	*	1.5	0.3	4.5	504 (83)	0.7	0.5	0.9
Male	981 (62)	100.0			60,359 (1,799)	100.0		
Died or dead on arrival	*	*			164 (32)	0.3	0.2	0.4
Admit to hospital	122 (17)	12.4	9.6	15.7	7.387 (351)	12.2	11.4	13.2
Transfer to psychiatric hospital	57 (11)	5.8	3.9	8.4	638 (51)	1.1	0.9	1.2
Return or refer to physician or	()							
clinic for follow-up	519 (40)	52.9	48.7	57.2	39,931 (1,328)	66.2	64.6	67.7
Return to emergency department	42 (9)	4.3	2.6	6.5	1,339 (106)	2.2	1.9	2.6
No follow-up planned	108 (14)	11.0	8.6	13.9	5,698 (383)	9.4	8.3	10.7
Other	128 (16)	13.1	10.5	16.0	4,696 (197)	7.8	7.3	8.3
Blank or unknown	*	0.4	0.1	1.0	505 (78)	0.8	0.6	1.1

... Category not applicable. Estimate does not meet National Center for Health Statistics standards of reliability.

- Quantity zero.

NOTES: CI is confidence interval. Numbers may not add to totals because of rounding.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2016–2021.

Technical Notes

Definition of terms

Chronic conditions—From 2016 through 2021, a checkbox item was included in the National Hospital Ambulatory Medical Care Survey that asked, "Does the patient have (mark all that apply)." The response list included the following categories: alcohol misuse, abuse, or dependence; Alzheimer disease or dementia: asthma: cancer: cerebrovascular disease or history of stroke or transient ischemic attack; chronic kidney disease; chronic obstructive pulmonary disease; congestive heart failure; coronary artery disease, ischemic heart disease, or history of myocardial infarction; depression; diabetes mellitus, type 1; diabetes mellitus, type 2; diabetes mellitus, type unspecified; end-stage renal disease; history of pulmonary embolism or deep vein thrombosis; HIV; hyperlipidemia; hypertension; obesity; obstructive sleep apnea; osteoporosis; and substance use disorders.

A separate item, provider's diagnosis, collected information on up to five diagnoses related to the current visit, using verbatim text entries from the patient's medical record. These entries were later coded by National Center for Health Statistics medical coders using the International Classification of Diseases, 10th Revision, Clinical Modification (39). To ensure that the chronic condition checkbox data were complete, a consistency check was performed during data editing to review responses to the provider's diagnosis item. If any of the chronic conditions from the checkbox item were also listed in the diagnosis item, the relevant checkbox item was also checked.

Major diagnosis category—The first-listed (primary) diagnosis reported in the Patient Record form (the National Hospital Ambulatory Medical Care Survey instrument) was grouped into broader categories, following International Classification of Diseases, 10th Revision, Clinical Modification (39) chapter headings; some chapters were further collapsed because of small sample sizes. Primary expected source of payment—During data collection, all sources of payment were collected. For patients with more than one source of payment, the following hierarchy was used (with Medicare counted first and self-pay and no charge counted last) to collapse sources into one mutually exclusive variable (primary expected source of payment):

- Medicare—Partial or full payment by a Medicare plan includes payments made directly to the hospital or reimbursed to the patient. Charges covered under a Medicaresponsored prepaid plan are included.
- *Medicaid*—Partial or full payment by a Medicaid plan includes payments made directly to the hospital or reimbursed to the patient. Charges covered under a Medicaid-sponsored prepaid plan (health maintenance organization) or "managed Medicaid" are included.
- *Private* Partial or full payment by a private insurer (for example, BlueCross BlueShield), either directly to the hospital or reimbursed to the patient. Charges covered under a private insurance-sponsored prepaid plan are included.
- Uninsured—Includes self-pay and no charge or charity. Self-pay are charges paid by the patient or patient's family, which will not be reimbursed by a third party.
 Self-pay includes visits for which the patient is expected to be ultimately responsible for most of the bill, even if the patient never actually pays it. This does not include copayments or deductibles. No charge or charity are visits for which no fee is charged (for example, charity, special research, or teaching).
- Other—Includes Workers' Compensation and responses of "Other" to the expected source of payment question, which could include any sources of payment not covered by the above categories, such as TRICARE and other insurance for veterans, state and local governments, private charitable organizations, and other liability insurance (for example, automobile collision policy coverage).

Sex—The National Hospital Ambulatory Medical Care Survey uses checkboxes for "male" and "female." Missing data were imputed, but these data were missing at less than 1% of emergency department visits over the study period. Before 2015, the U.S. Department of Housing and Urban Development's annually published point-in-time estimates of the population experiencing homelessness did not include data by sex. However, starting in 2015, a table by gender was included in the annual report using categories "Female," "Male," and "Transgender" (43). By 2022, the categories had expanded to "Female," "Male," "Transgender," "A gender that is not Singularly 'Female' or 'Male,'" and "Questioning" (7). Because these data are not collected in the National Hospital Ambulatory Medical Care Survey, they were omitted from the current report when discussing differences by sex. According to Housing and Urban Development data, categories other than female and male accounted for 1.4% of the population experiencing homelessness in 2022 (7).

Visit by a person experiencing homelessness—Determined by survey records where the "Patient residence" checkbox item for "Homeless/homeless shelter" was checked.

Visit by a person not experiencing homelessness—Determined by survey records where the "Patient residence" checkbox item for "Private residence," "Nursing home," or "Other" was checked.

Visit disposition—Collected as a "check all that apply" item in the National Hospital Ambulatory Medical Care Survey, so that multiple dispositions could be reported for the same visit. For the purpose of this report, a hierarchy was used to assign a single disposition to each visit:

- DOA (dead on arrival) or Died in the ED (emergency department)
- Admit to hospital or admit to observation unit and then hospitalized
- Transfer to psychiatric hospital
- Return or refer to physician or clinic for follow-up
- Return to the ED

- No follow-up planned
- No disposition reported
- All other (includes admitted to observation unit and then discharged, transferred to nursing home, transferred to other facility, left against medical advice, left before treatment complete, left before being seen, and checkbox entry of "other disposition")

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