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Trends in Emergency Department Visits Among People Younger Than Age 65 by Insurance Status: United States, 2010–2021

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Abstract

Purpose—This report describes trends in emergency department visits among people younger than age 65 from 2010 through 2021, by health insurance status and selected demographic and hospital characteristics.

Methods—Estimates in this report are based on data collected in the 2010–2021 National Hospital Ambulatory Medical Care Survey. Data were weighted to produce annual national estimates. Patient and hospital characteristics are presented by primary expected source of payment.

Results—Private insurance and Medicaid were the most common primary expected sources of payment at emergency department visits by people younger than age 65 from 2010 through 2013. Medicaid was the most common primary expected source of payment from 2014 through 2021. Among children younger than age 18 years, the most common primary expected source of payment was Medicaid across the entire period. The percentage of visits by children with no insurance decreased from 7.4% in 2010 to 3.0% in 2021. Among adults, the percentage of visits with Medicaid increased from 25.5% in 2010 to 38.9% in 2021, and the percentage of visits by those with no insurance decreased from 24.6% to 11.1% during this period. Among Black non-Hispanic and Hispanic people, Medicaid was the most frequent primary expected source of payment during the entire period. Among White non-Hispanic people, private insurance was the most frequent primary expected source of payment through 2015, while private insurance and Medicaid were the most frequent primary expected sources of payment from 2016 through 2021.

Keywords: hospital visits • public insurance • private insurance • uninsured • National Hospital Ambulatory Medical Care Survey (NHAMCS)

Introduction

Changes in health insurance coverage have impacted emergency department (ED) use in the past decade (1–8). The passage of the Affordable Care Act (commonly known as ACA) in 2010 was designed to increase access to health care, including access to primary care, and reduce potentially preventable ED visits and hospitalizations (2,3,6,7,9). The percentage of uninsured people in the United States decreased from late 2013 through 2020 (10). A study using data from the National Hospital Ambulatory Care Survey (NHAMCS) and the Healthcare Cost and Utilization Project showed that the proportions of ED visits by uninsured people decreased by 2.1 percentage points per year from 2014 through 2016, and the percentage of annual ED visits by people with Medicaid increased from 26% in 2013 to 34% in 2016 (5).

To further examine health insurance coverage for ED visits, this report describes trends in ED visits by primary expected source of payment from 2010 through 2021. Estimates of ED visits are presented as percentages by primary expected source of payment and by selected demographic and hospital characteristics.

Methods

Data sources

NHAMCS data on ED visits during 2010–2021 were used for this analysis. NHAMCS is a nationally representative survey of nonfederal general and short-stay hospitals conducted by the National Center for Health Statistics. NHAMCS

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National Center for Health Statistics

uses a multistage probability design with samples of geographic primary sampling units, hospitals within primary sampling units, and patient visits within EDs. The plan and operation of NHAMCS are described in detail elsewhere (11). Weighted response rates for NHAMCS ranged from 84.9% in 2010 to 35.1% in 2020. The low response rate in 2020 may be partially attributed to the COVID-19 pandemic. The second lowest response rate was observed in 2021 (46.0%).

ED visit data include patient demographic characteristics as well as visit information obtained from medical records, including primary expected source of payment. The study population for these analyses includes all ED visits by people younger than age 65. This study population was selected because it includes the highest proportion of people not eligible for Medicaid or Medicare, making them more likely to be uninsured (10). Also, people age 65 and older are eligible for Medicare, which accounts for most insurance coverage among this age group (12).

During data collection, all expected sources of payment were collected using checkbox categories of "Private Insurance," "Medicare," "Medicaid," "Self-Pay," "Workers' Compensation," "No Charge or Charity," and "Other." More specific definitions of these categories follow.

Medicare—Partial or full payment by Medicare plan includes payments made directly to the hospital as well as payments reimbursed to the patient. Charges covered under a Medicare-sponsored prepaid plan are included.

Medicaid, Children's Health Insurance Program, or other state-based program—Subsequently referred to as 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 (for example, a health maintenance organization) or "managed Medicaid" are included.

Private—Partial or full payment by a private insurer (for example, BlueCross BlueShield) includes payments directly to the hospital or reimbursed to the patient. Charges covered under a private insurance-sponsored prepaid plan are included.

No insurance—Includes self-pay and no charge or charity. Self-pay is charges paid by the patient or patient's family that 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. Copayments and deductibles are excluded. No charge or charity are visits for which no fee is charged, such as charity, special research, or teaching.

For patients with more than one expected source of payment, a hierarchy was used to assign a single primary expected source of payment, where Medicare was at the top of the hierarchy followed by Medicaid, private insurance, and no insurance (representing visits with only self-pay and no charge or charity). For example, if a visit listed both Medicare and Medicaid as expected sources of payment, Medicare was assigned as the primary expected source of payment.

Throughout 2010–2021, ED visits by people younger than age 65 with both Medicaid and Medicare listed as an expected source of payment (people with both types of insurance are called dual-eligible) ranged between 2.3% and 3.2%. Dual-eligible beneficiaries receive their primary health insurance coverage through Medicare and receive some assistance from their state Medicaid program (13). For this reason, they are counted under Medicare rather than Medicaid in the hierarchy to assign a primary expected source of payment. If a visit listed both Medicaid and any other expected source of payment except Medicare, Medicaid was assigned as the primary expected source of payment. The most frequently listed expected sources of payment along with Medicaid were private insurance and self-pay, but these were listed together infrequently. Among all ED visits where Medicaid was assigned as the primary expected source of payment, 91.4%–95.9% of those visits included Medicaid as the only expected source of payment. This report focuses on Medicaid as the primary expected source of payment because Medicaid enrollment and expenditures continue to be the focus of extensive research to examine the success and improvement of healthcare policy, including care management and potential health disparities in access to care (14).

Visits with missing data for expected source of payment were excluded from the analysis; this occurred at 4.7%–14.4% of visits depending on the year. Sensitivity analyses with inclusion of missing values were conducted and similar trends were found.

From 2010 through 2021, on average, about 102.5 million visits to the ED occurred annually by people younger than age 65 where a primary expected source of payment could be determined. Visits ranged from 109.6 million in 2014 to 90.8 million in 2020. Other primary expected source of payment, which includes workers' compensation and any other payment source, represented 6.0% of the visits in 2013 and 3.1% in 2018. They were included in the analysis, but they are not shown in the figures.

Race and Hispanic origin are shown for three specific groups: Black non-Hispanic (subsequently, Black), Hispanic, and White non-Hispanic (subsequently, White). People categorized as Hispanic may be of any race or combination of races. People categorized as Black non-Hispanic and White non-Hispanic indicated one race only. Visits by non-Hispanic people of other races are not shown in the figure (Figure 4) but are included in the overall percentages.

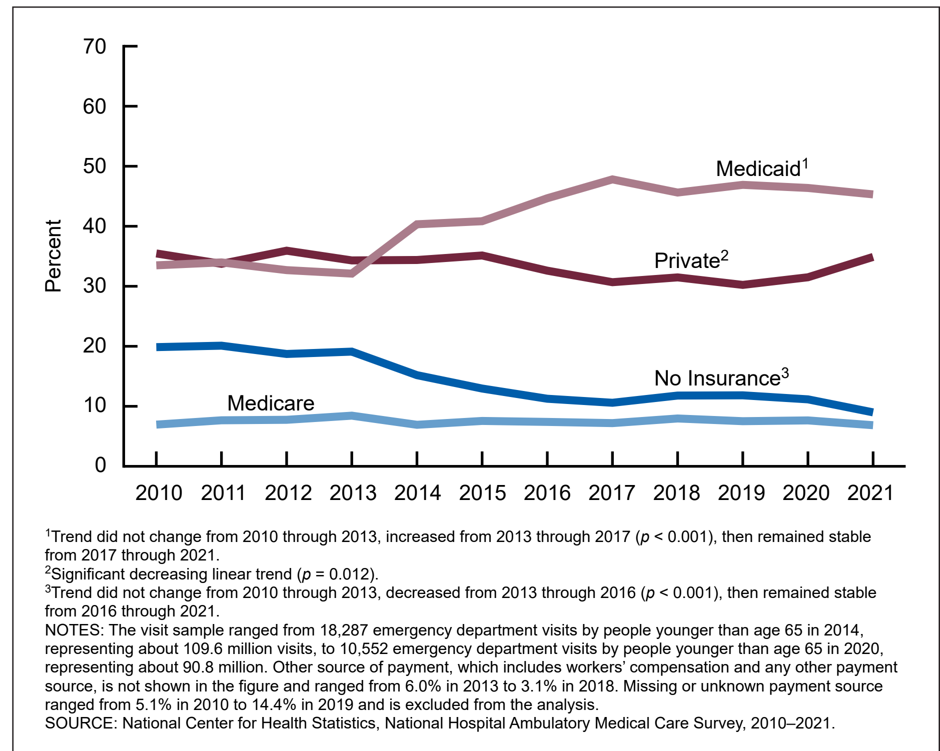
Analyses for this report were conducted using data from restricted-use data files. Public-use versions of these files are available: https://www.cdc.gov/nchs/ahcd/datasets_documentation_related.htm. Count estimates and measures of variance could differ between the restricted-use and public-use files. Information for accessing the restricted-use data files is available: https://www.cdc.gov/rdc/index.htm.

To provide national estimates of ED use, sample weights were applied to each sampled visit. Estimates of sampling error were made using a Taylor series approximation, which accounted for the survey's complex sampling design. All analyses were conducted using SAS version 9.4 (SAS Institute, Cary, N.C.) and SAS-callable SUDAAN version 11.0 (RTI International, Research Triangle Park, N.C.). Differences between groups were tested using a two-sided t test at the $p < 0.05$ significance level. Linear and quadratic trends were

modeled using orthogonal polynomials. If a quadratic trend was significant, Joinpoint software (15) was used to determine the change point in the trend line. Piecewise linear regression was used to test the significance of slopes. Terms like “increasing” or “decreasing” imply that these trends are statistically significant. All proportion estimates presented were evaluated using National Center for Health Statistics standards for presentation of proportions (16) and follow National Center for Health Statistics trend analysis guidelines (17). Estimates that did not meet the proportion standards are presented with an asterisk.

Throughout the remainder of the report, the primary expected source of payment is reported. For readability, the text omits the phrase “primary expected source of payment” and lists only the insurance type (Medicaid, Medicare, private insurance, or no insurance), implying that it is the primary expected source of payment.

Figure 1. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment: United States, 2010–2021



[1]Trend did not change from 2010 through 2013, increased from 2013 through 2017 ($p < 0.001$), then remained stable from 2017 through 2021.
[2]Significant decreasing linear trend ($p = 0.012$).
[3]Trend did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable from 2016 through 2021.
NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers’ compensation and any other payment source, is not shown in the figure and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis.
SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

Results

Trends in percentage of ED visits by people younger than age 65, by insurance status

From 2010 through 2013, the percentages of ED visits by people younger than age 65 with private insurance or Medicaid were higher than the percentages of visits with no insurance and Medicare (Table 1, Figure 1). No significant differences were observed between the percentages of visits by people with private insurance or Medicaid in the first 4 years of the period. Beginning in 2014 and continuing through 2021, the percentage of ED visits with Medicaid was higher than all other insurance sources. The percentage of ED visits with private insurance decreased over the period. The percentage of ED visits with Medicaid remained stable from 2010 (33.5%) through 2013 (32.1%), increased from 2013 through 2017 (47.8%), then remained stable from 2017 through 2021 (45.3%). The percentage of ED visits with no insurance remained stable from 2010 (19.9%) through 2013 (19.1%), decreased from 2013 through 2016 (11.3%), and remained stable from 2016 through 2021 (9.0%). Percentages of ED visits with Medicare were low compared with other insurance types and did not change from 2010 (7.0%) through 2021 (6.8%).

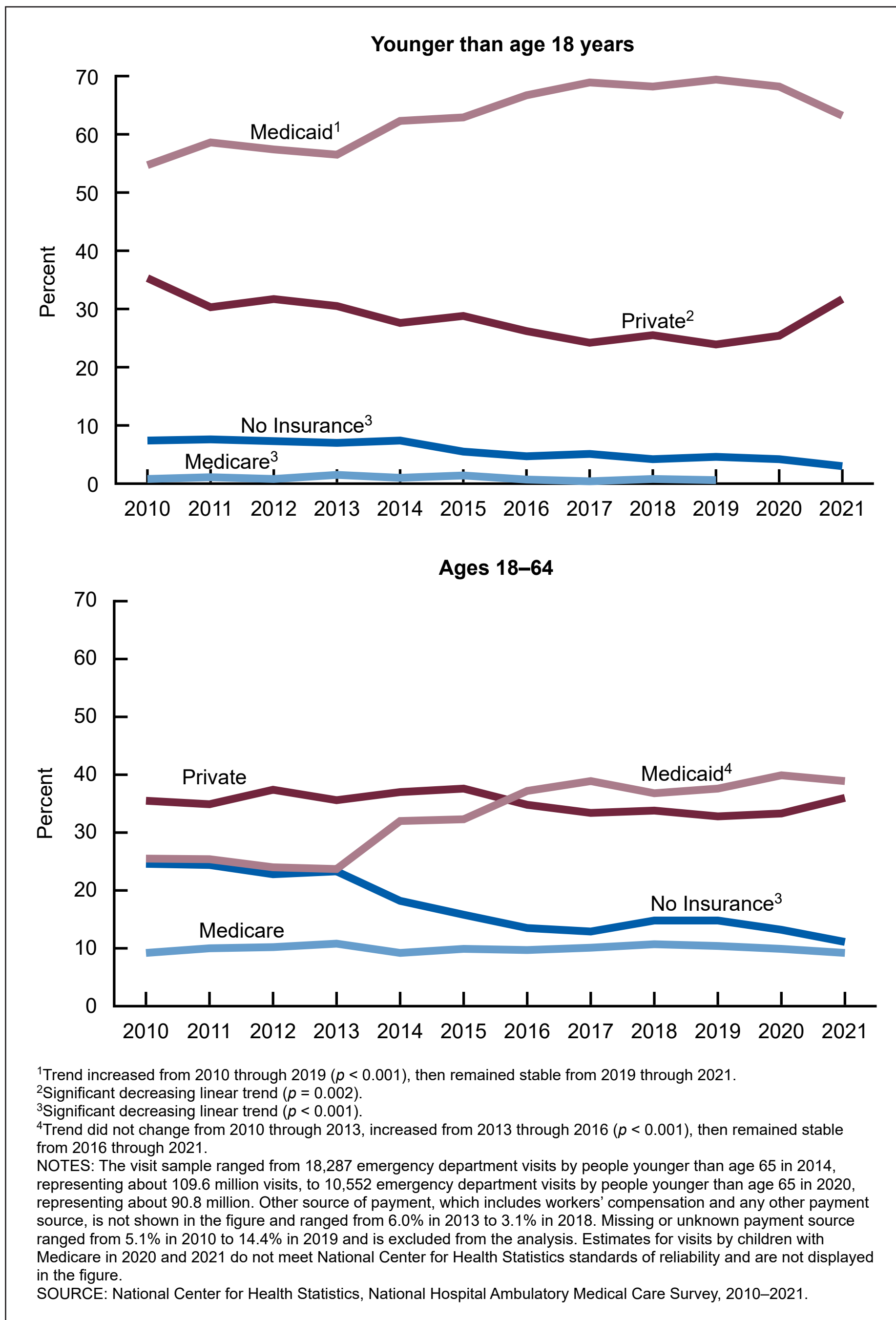
Trends in percentage of ED visits by people younger than age 65, by insurance status and patient characteristics

Insurance status and age group

Among children younger than age 18 years, the percentage of ED visits with Medicaid was higher than other sources across the entire period (Table 1, Figure 2). The percentages of ED visits by children with Medicaid increased from 2010 (54.7%) through 2019 (69.4%) and did not change significantly through 2021 (63.2%). The percentages of visits with private insurance decreased from 35.3% in 2010 to 31.7% in 2021. The percentages of ED visits by children with no insurance decreased from 7.4% in 2010 to 3.0% in 2021. The percentage of ED visits by children was lowest among those with Medicare.

Among adults ages 18–64, significant trends were observed in the percentage of ED visits with private insurance (Table 1, Figure 2). The percentages with private insurance were highest from 2010 (35.5%) through 2015 (37.6%). Percentages of visits by adults with Medicaid did not change from 2010 (25.5%) through 2013 (23.7%), increased from 2013 through 2016 (37.2%), then remained stable from 2016 through 2021 (38.9%). During 2016–2021, the percentage of ED visits with private insurance were not significantly different from the percentage of visits with Medicaid except in 2019 and 2020, when ED visits with Medicaid were significantly higher than visits with private insurance (2019: 37.6% compared with 32.8%; 2020: 39.9% compared with 33.3%). The percentages of ED visits by adults with no insurance decreased from 24.6% in 2010 to 11.1% in 2021. ED visits with Medicare represented the smallest percentages of ED visits by adults ages 18–64, and these percentages remained stable from 2010 (9.2%) through 2021 (9.2%).

Figure 2. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and age group: United States, 2010–2021



[1]Trend increased from 2010 through 2019 (p < 0.001), then remained stable from 2019 through 2021.
[2]Significant decreasing linear trend (p = 0.002).
[3]Significant decreasing linear trend (p < 0.001).
[4]Trend did not change from 2010 through 2013, increased from 2013 through 2016 (p < 0.001), then remained stable from 2016 through 2021.
NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the figure and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis. Estimates for visits by children with Medicare in 2020 and 2021 do not meet National Center for Health Statistics standards of reliability and are not displayed in the figure.
SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

Insurance status and sex

Among females younger than age 65, no significant difference between the percentages of ED visits with private insurance and Medicaid was observed during 2010–2013 (Table 1, Figure 3). However, starting in 2014 and continuing through 2021, the percentage of ED visits by females with Medicaid was higher than all other primary sources of payment. The percentages of ED visits by females with Medicaid did not change from 2010 (35.7%) through 2013 (35.3%); however, it increased from 2013 through 2016 (46.9%) and remained stable through 2021 (47.9%). ED visits with private insurance decreased from 35.7% in 2010 to 35.0% in 2021. ED visits with no insurance decreased from 18.5% in 2010 to 7.7% in 2021. ED visits with Medicare represented the smallest percentage of ED visits by females, and this percentage remained stable during the study period.

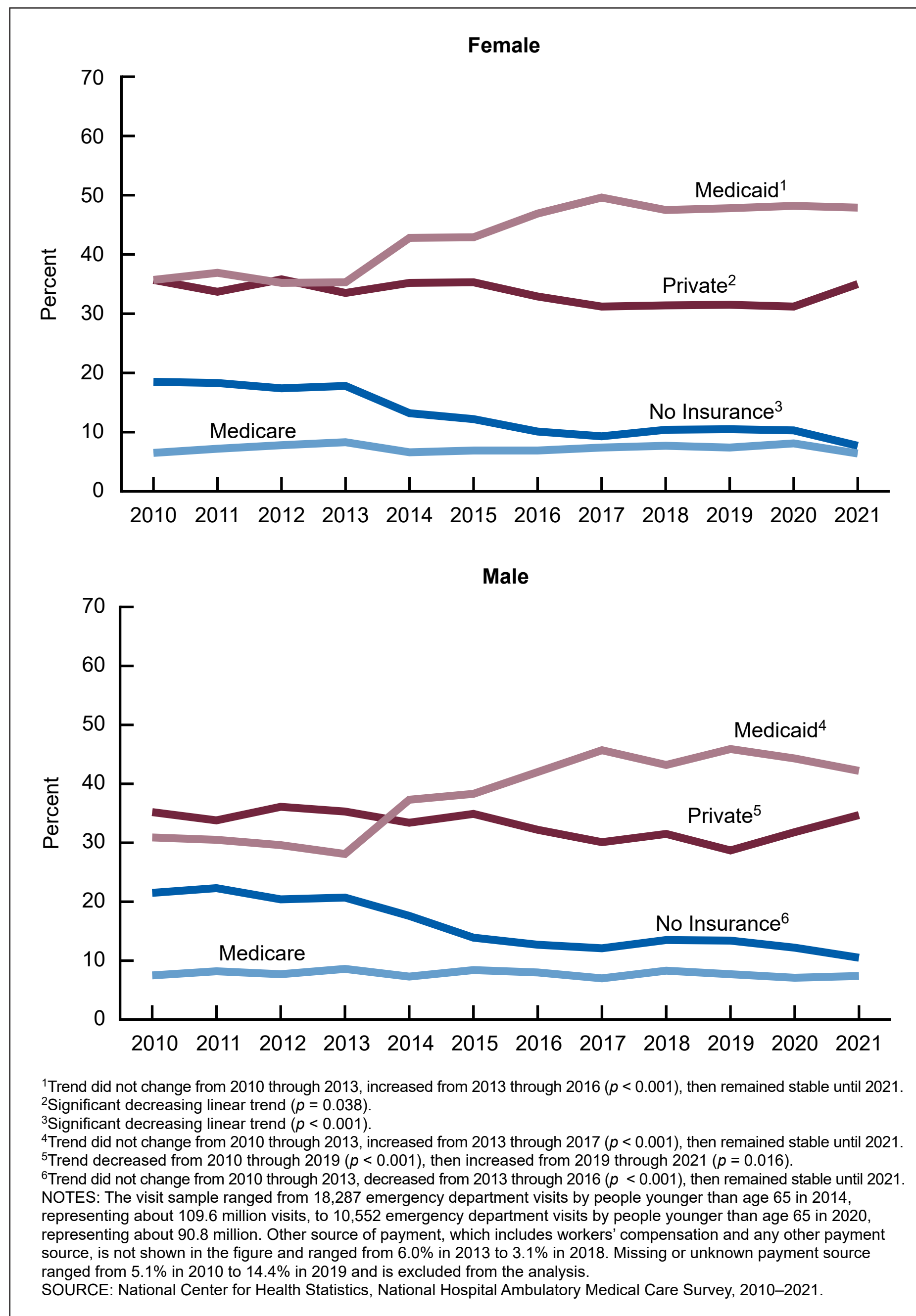
Among males younger than age 65, the percentage of ED visits with private insurance was highest in 2010, 2012, and 2013 (Table 1, Figure 3). From 2014 through 2021, the percentage of ED visits by males with Medicaid was higher than other sources. ED visits by males with private insurance decreased from 2010 (35.2%) through 2019 (28.7%), then increased from 2019 through 2021 (34.7%). ED visits by males with Medicaid did not change from 2010 (30.9%) through 2013 (28.1%); however, this percentage increased from 2013 through 2017 (45.7%), then remained stable through 2021 (42.2%). ED visits with no insurance did not change from 2010 (21.5%) through 2013 (20.7%), decreased from 2013 through 2016 (12.7%), and did not change significantly from 2016 through 2021 (10.5%). ED visits with Medicare represented the smallest percentage of ED visits by males, and this percentage remained stable during the study period.

Insurance status and race and ethnicity

Among Black people younger than age 65, the percentage of ED visits with Medicaid was highest during the entire study period (Table 2, Figure 4). The percentages of ED visits by Black people with Medicaid did not change from 2010 (42.2%) through 2013 (38.1%), but increased from 2013 through 2016 (51.7%) and remained stable through 2021 (53.4%). The percentages of ED visits by Black people with no insurance decreased from 21.4% in 2010 to 8.3% in 2021. The percentage of ED visits by Black people with Medicare remained stable during the study period and, from 2010 through 2020, represented the smallest percentage of ED visits. In 2021, the percentages of ED visits by Black people with no insurance and those with Medicare were the same (8.3%).

Among Hispanic people younger than age 65, the percentage of ED visits with Medicaid was highest during the entire study period (Table 2, Figure 4). The percentages of ED visits by Hispanic people with Medicaid increased from 2010 (43.5%) through 2017 (63.7%), then remained stable through 2021 (62.7%). The percentages of ED visits by

Figure 3. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and sex: United States, 2010–2021



[1]Trend did not change from 2010 through 2013, increased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
[2]Significant decreasing linear trend ($p = 0.038$).
[3]Significant decreasing linear trend ($p < 0.001$).
[4]Trend did not change from 2010 through 2013, increased from 2013 through 2017 ($p < 0.001$), then remained stable until 2021.
[5]Trend decreased from 2010 through 2019 ($p < 0.001$), then increased from 2019 through 2021 ($p = 0.016$).
[6]Trend did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the figure and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis.
SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

Hispanic people with private insurance decreased through the study period from 2010 (24.4%) through 2021 (20.6%). The percentages of ED visits by Hispanic people with no insurance decreased from 2010 (23.3%) through 2017 (10.2%) and remained stable through 2021 (11.7%). ED visits by Hispanic people with Medicare represented the smallest percentage of ED visits during the entire period and decreased from 4.2% in 2010 to 2.1% in 2021.

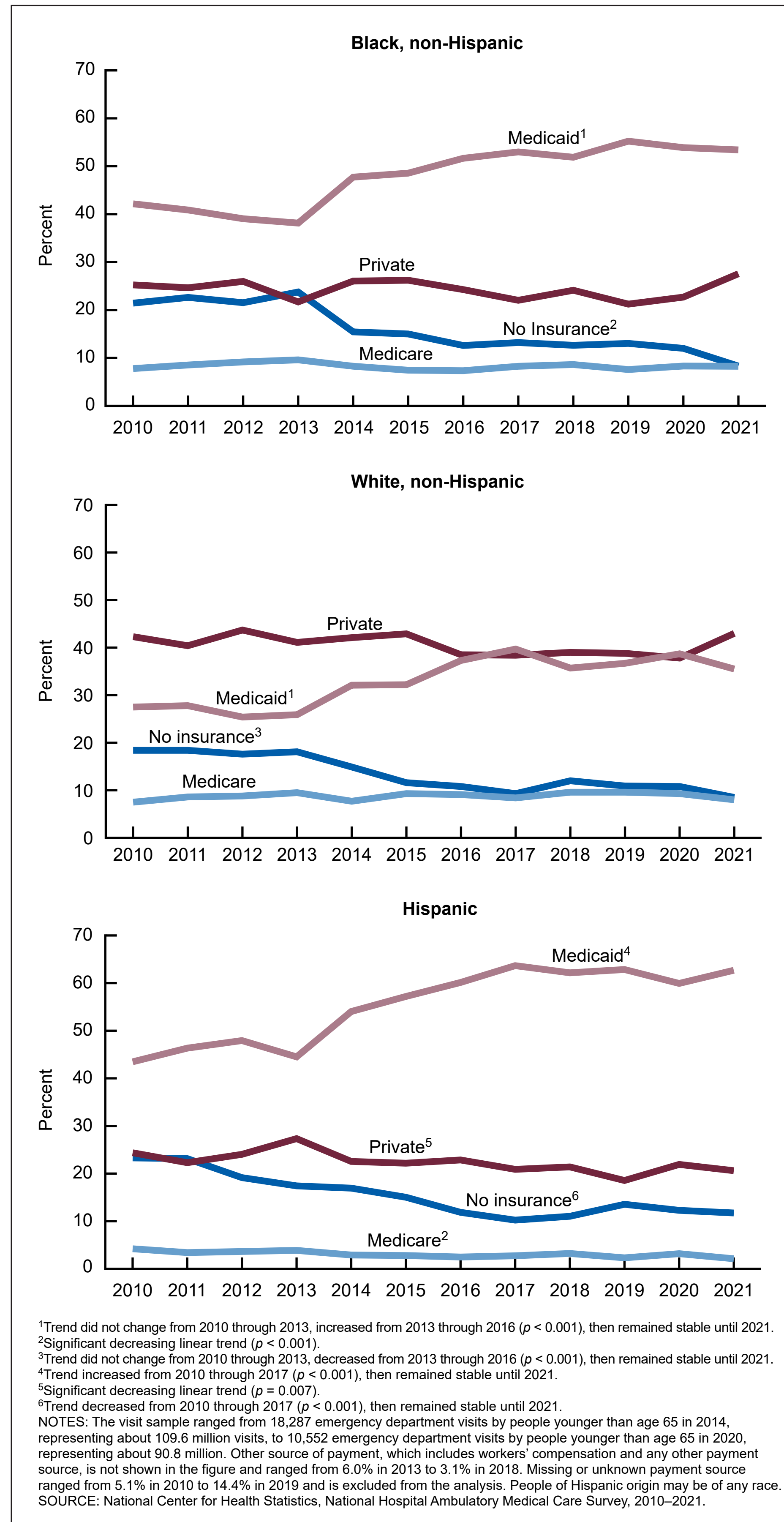
Among White people younger than age 65, the percentage of ED visits with private insurance was highest until 2015 (Table 2, Figure 4). Then from 2016 through 2020, no significant difference was observed between the percentages of ED visits with private insurance (38.5% in 2016, 37.8% in 2020) and Medicaid (37.3% in 2016, 38.7% in 2020). In 2021, the percentage of ED visits by White people was higher for visits with private insurance (43.1%) than visits with Medicaid (35.5%). The percentages of ED visits with private insurance did not significantly change from 2010 (42.3%) through 2021 (43.1%). The percentages of ED visits by White people with Medicaid did not change from 2010 (27.5%) through 2013 (25.9%), but increased from 2013 through 2016 (37.3%) and remained stable through 2021 (35.5%). The percentages of ED visits by White people with no insurance did not change from 2010 (18.4%) through 2013 (18.1%), decreased from 2013 through 2016 (10.8%), and remained stable through 2021 (8.5%). Medicare represented the smallest percentage of ED visits among White people from 2010 (7.5%) until 2014 (7.7%); from 2015 (9.3%) through 2021 (8.0%), the percentages were similar to ED visits by White people with no insurance. The percentage of ED visits by White people with Medicare remained stable during the study period.

Trends in percentage of ED visits by people younger than age 65, by insurance status and hospital characteristics

Insurance status and region

In each region (Midwest, Northeast, South, and West), the percentage of ED visits by people younger than age 65 with Medicaid increased from 2010 through 2021, similar to the national trend. The increases were greatest in the Northeast (from 31.7% in 2010 to 49.3% in 2021) and West (from 35.2% in 2010 to 54.8% in 2021) (Table 3, Figure 5). At the same time, the percentage of ED visits by people younger than age 65 with no insurance decreased in each region from 2010 through 2021, again similar to the national trend. This decrease was greatest in the Northeast (from 15.2% in 2010 to 3.7% in 2021). The percentage of ED visits with private insurance did not change significantly from 2010 through 2021 in the Northeast, Midwest, and South. In the West, the percentage did not change significantly from 2010 through 2013, decreased from 2013 through 2016, then did not change significantly through 2021. Consistent with overall trends, the percentage of ED visits with Medicare remained stable during the study period.

Figure 4. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and race and ethnicity: United States, 2010–2021



[1]Trend did not change from 2010 through 2013, increased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
[2]Significant decreasing linear trend ($p < 0.001$).
[3]Trend did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
[4]Trend increased from 2010 through 2017 ($p < 0.001$), then remained stable until 2021.
[5]Significant decreasing linear trend ($p = 0.007$).
[6]Trend decreased from 2010 through 2017 ($p < 0.001$), then remained stable until 2021.
NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the figure and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis. People of Hispanic origin may be of any race.
SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

Insurance status and metropolitan statistical area status

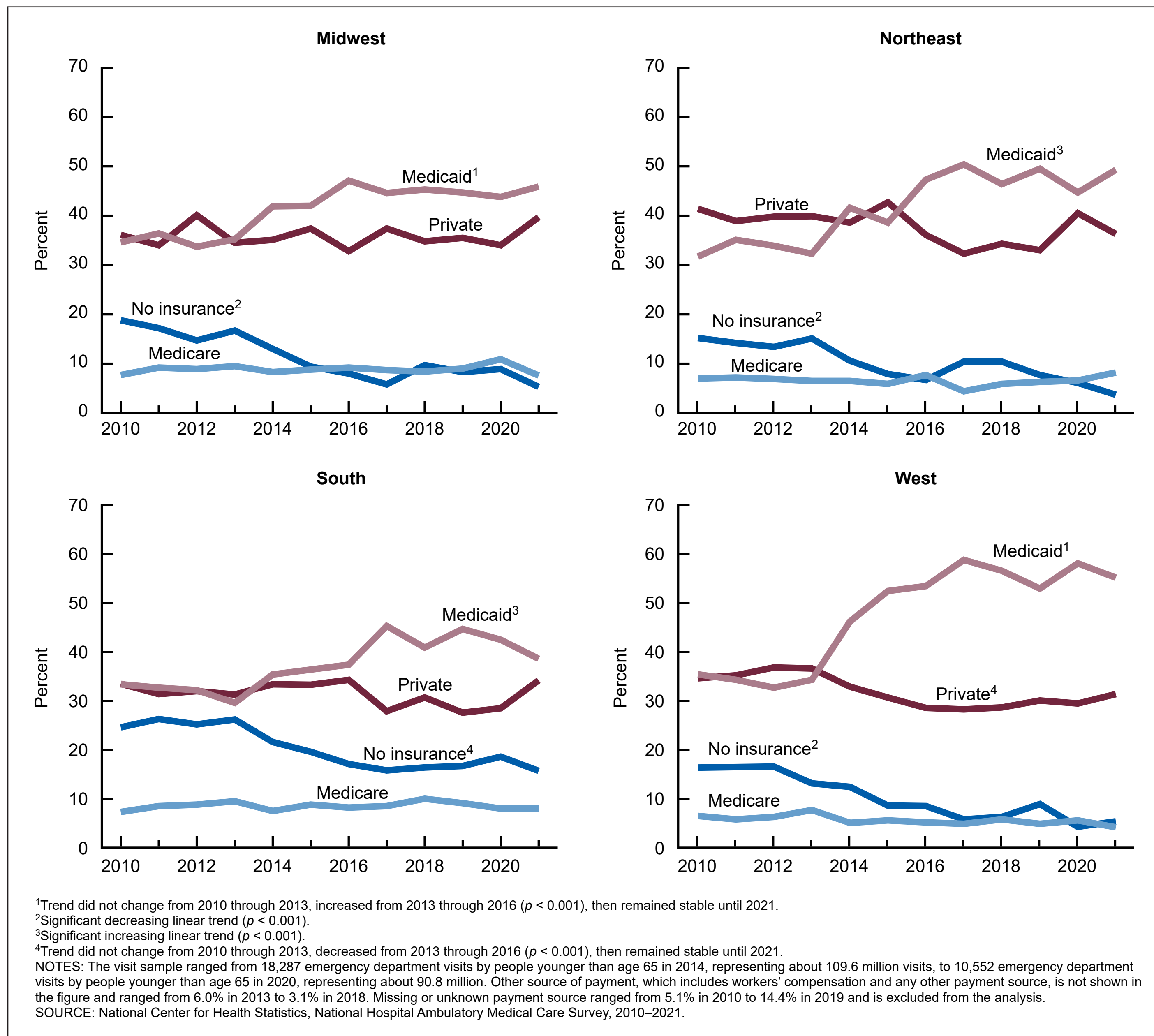
In hospitals located in metropolitan statistical areas (MSAs) and non-MSAs, the percentage of ED visits by people younger than age 65 with Medicaid increased from 2010 through 2021, similar to the overall trend (Table 4). At the same time, the percentage of ED visits by people younger than age 65 with no insurance decreased between 2010 and 2021 in both MSAs and non-MSAs. From 2014 through 2021, in MSAs, the percentage of ED visits by people younger than age 65 with Medicaid was highest compared with other expected sources of payment. The percentage of ED visits in MSAs by people with private insurance decreased during the study period. In non-MSAs, observed differences in the percentages of ED visits with private insurance or Medicaid were not significant compared with other sources of payment from 2010 through 2021, except in 2019, when the percentage of ED visits with Medicaid was significantly higher (42.0%) than the percentage of ED visits with private insurance (30.0%). The percentages of ED visits by people with private insurance did not change significantly from 2010 (35.5%) through 2021 (38.2%). Consistent with overall trends, the percentage of ED visits with Medicare remained stable during the study period.

Discussion

In 2014, Medicaid was the most frequent primary expected source of payment at visits to the ED by people younger than age 65 and remained the most frequent primary expected source of payment through 2021. This is consistent with the expansion of Medicaid eligibility. By the end of 2014, Medicaid enrollment rose to almost 70 million, a 22% increase from 2013 (18).

The analyses by age groups were consistent with the overall trends, showing a decrease in the percentages of children and adults with no insurance. Among children, the most frequent primary expected source of payment was Medicaid during the entire 2010–2021 period. These findings were consistent

Figure 5. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and hospital region: United States, 2010–2021



[1]Trend did not change from 2010 through 2013, increased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
[2]Significant decreasing linear trend ($p < 0.001$).
[3]Significant increasing linear trend ($p < 0.001$).
[4]Trend did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the figure and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis.
SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

with a previous report showing that in 2012 over a 12-month period, 25% of children with Medicaid visited the ED at least once compared with 13% of children with private insurance and 16% of children without insurance (19). From 2010 through 2014, children with public insurance also were more likely to have two visits or more to the ED than children with private insurance (20).

Analyses by sex showed consistency with national trends, where Medicaid became the most common primary expected payment source for ED visits by people younger than age 65 in 2014 and remained as such through 2021 among both males and females. Subgroup analyses by race and ethnicity showed that Medicaid was the most common primary expected source of payment among Black and Hispanic people during the entire study period. The largest increase in ED visits with Medicaid was observed among Hispanic people. Conversely, among ED visits by White people, private insurance represented the most frequent primary expected source of payment until 2015, but from 2016 through 2020, no significant differences were observed between the percentages of ED visits with private insurance and Medicaid. These findings are consistent with higher Medicaid coverage among Black and Hispanic people compared with White people. In 2019, approximately 56.4% of Medicaid beneficiaries were from racial and ethnic minority groups (14). Data from the 2020 National Health Interview Survey showed that for Medicaid and the Children's Health Insurance Program, coverage was highest among Black (33.9%) and Hispanic (30.4%) people compared with Asian (15.2%) and White (14.3%) people (10).

Across the 2010–2021 period, the largest increases among all four regions in ED visits by people with Medicaid was observed in the Northeast and West regions. Hospitals located in the Northeast experienced the largest decrease in ED visits with no insurance. As of May 2023, 41 states including the District of Columbia had adopted or implemented Medicaid expansion. The 10 states that have not adopted the expansion are mainly located in the South and in the Midwest (21). Although ED visits by people with Medicaid increased in hospitals located in MSAs as well as in hospitals in non-MSAs, larger increases in ED visits by people with Medicaid were observed in hospitals located in MSAs. Similar decreases in the percentage of ED visits with no insurance were observed in hospitals located in MSAs and non-MSAs.

This report has some limitations. First, the unit of analysis in NHAMCS is the visit, not the patient. Because only a sample of visits is taken without any tracking of patients, some visits sampled for the survey may be made by the same person. Second, this report presents descriptive data, and adjustment for any variable that could influence the relationship between ED use and insurance type was not performed. Third, because of the cross-sectional nature of the study, causation cannot be inferred. Finally, the NHAMCS survey design does not allow for state-level estimation of visit characteristics, and additional state-level analyses were not included in this study.

The findings from this report include trend estimates using the most current available data from a nationally representative survey of ED visits and show that private insurance and Medicaid represented the most frequent primary expected sources of payment at ED visits by people younger than age 65 from 2010 through 2013. Starting in 2014, Medicaid was the most common primary expected source of payment through the end of the study period in 2021. The percentages of visits by children and adults with no insurance decreased. This analysis provides insights into use of the ED during changes in health insurance coverage in the United States.

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Table 1. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and selected demographic characteristics: United States, 2010–2021

Primary source of payment	2010	2011	2012	2013	2014	2015	2016
	Percent (95% confidence interval)						
Total:							
Private	35.5 (33.4–37.6)	33.7 (31.7–35.9)	35.9 (33.4–38.6)	34.3 (31.6–37.1)	34.4 (30.9–38.1)	35.1 (32.1–38.3)	32.6 (30.3–35.0)
Medicare	7.0 (6.5–7.5)	7.7 (7.0–8.4)	7.8 (7.0–8.6)	8.4 (7.7–9.2)	6.9 (6.1–7.9)	7.6 (6.6–8.6)	7.4 (6.6–8.3)
Medicaid	33.5 (31.4–35.7)	34.0 (31.6–36.4)	32.7 (29.9–35.6)	32.1 (29.6–34.8)	40.3 (36.9–43.9)	40.8 (37.5–44.2)	44.7 (42.1–47.3)
No insurance	19.9 (18.3–21.5)	20.1 (18.5–21.8)	18.7 (17.0–20.6)	19.1 (17.1–21.3)	15.2 (13.0–17.6)	13.0 (10.8–15.5)	11.3 (9.3–13.6)
Younger than age 18 years:							
Private	35.3 (31.9–38.9)	30.3 (27.5–33.2)	31.7 (27.2–36.5)	30.5 (26.2–35.2)	27.6 (22.0–34.0)	28.8 (25.1–32.8)	26.2 (22.9–29.7)
Medicare	0.8 (0.6–1.2)	1.1 (0.7–1.7)	0.8 (0.5–1.3)	1.5 (1.0–2.4)	1.0 (0.4–2.4)	1.4 (0.4–5.1)	0.7 (0.4–1.2)
Medicaid	54.7 (50.9–58.5)	58.6 (55.2–61.9)	57.4 (52.7–62.0)	56.5 (51.0–61.9)	62.3 (55.9–68.3)	62.9 (58.6–67.1)	66.7 (62.9–70.3)
No insurance	7.4 (6.3–8.6)	7.6 (6.2–9.3)	7.3 (5.8–9.1)	7.0 (5.4–9.0)	7.4 (5.3–10.1)	5.5 (4.2–7.3)	4.7 (3.4–6.4)
Ages 18–64:							
Private	35.5 (33.5–37.6)	34.9 (32.9–37.1)	37.4 (35.0–40.0)	35.6 (33.1–38.2)	37.0 (33.8–40.3)	37.6 (34.6–40.7)	34.8 (32.3–37.3)
Medicare	9.2 (8.6–9.9)	10.0 (9.2–10.8)	10.2 (9.2–11.2)	10.8 (10.0–11.7)	9.2 (8.1–10.4)	9.9 (9.1–10.9)	9.7 (8.7–10.8)
Medicaid	25.5 (23.5–27.6)	25.4 (23.5–27.5)	24.0 (21.9–26.2)	23.7 (21.8–25.6)	32.0 (28.8–35.3)	32.3 (29.5–35.2)	37.2 (34.5–40.0)
No insurance	24.6 (22.7–26.5)	24.4 (22.6–26.3)	22.8 (20.9–24.8)	23.3 (20.9–25.9)	18.2 (15.5–21.2)	15.8 (13.1–19.0)	13.5 (11.1–16.3)
Female:							
Private	35.7 (33.5–38.0)	33.7 (31.4–36.1)	35.8 (33.0–38.7)	33.5 (30.7–36.4)	35.2 (31.7–38.9)	35.3 (32.1–38.7)	32.9 (30.4–35.5)
Medicare	6.5 (6.0–7.0)	7.2 (6.5–8.0)	7.8 (6.9–8.8)	8.3 (7.4–9.2)	6.6 (5.6–7.7)	6.9 (5.9–8.1)	6.9 (6.1–7.8)
Medicaid	35.7 (33.4–38.0)	36.9 (34.3–39.6)	35.2 (32.5–38.1)	35.3 (32.6–38.1)	42.8 (39.2–46.5)	42.9 (39.4–46.4)	46.9 (44.2–49.5)
No insurance	18.5 (16.8–20.4)	18.3 (16.6–20.0)	17.4 (15.6–19.3)	17.8 (15.8–20.0)	13.2 (11.2–15.4)	12.2 (9.9–14.9)	10.1 (8.1–12.5)
Male:							
Private	35.2 (33.0–37.4)	33.8 (31.7–36.1)	36.1 (33.3–38.9)	35.3 (32.4–38.4)	33.4 (29.5–37.6)	34.9 (31.8–38.2)	32.2 (29.8–34.8)
Medicare	7.5 (6.8–8.2)	8.2 (7.4–9.1)	7.7 (6.7–8.7)	8.6 (7.8–9.6)	7.3 (6.3–8.6)	8.4 (7.3–9.6)	8.0 (6.9–9.3)
Medicaid	30.9 (28.6–33.3)	30.5 (28.0–33.1)	29.6 (26.4–32.9)	28.1 (25.5–31.0)	37.3 (33.8–41.0)	38.3 (34.9–42.0)	42.0 (39.1–44.9)
No insurance	21.5 (19.9–23.1)	22.3 (20.5–24.2)	20.4 (18.4–22.5)	20.7 (18.4–23.2)	17.6 (14.9–20.7)	13.9 (11.7–16.5)	12.7 (10.5–15.3)

See footnotes at end of table

Table 1. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and selected demographic characteristics: United States, 2010–2021—Con.

Primary source of payment	2017	2018	2019	2020	2021	*p* value for linear trend[1]	Percent change, 2010–2021
	Percent (95% confidence interval)						
Total:							
Private	30.7 (27.7–33.8)	31.5 (28.9–34.2)	30.2 (27.7–32.9)	31.5 (28.7–34.5)	34.9 (31.6–38.4)	0.012	1.7
Medicare	7.2 (6.4–8.2)	8.0 (7.0–9.0)	7.5 (6.6–8.6)	7.6 (6.7–8.7)	6.8 (5.9–7.9)	0.644	2.9
Medicaid	47.8 (43.4–52.3)	45.6 (41.8–49.5)	46.9 (42.9–51.0)	46.4 (41.9–50.9)	45.3 (41.9–48.8)	†Less than 0.001	35.2
No insurance	10.6 (8.3–13.4)	11.8 (9.8–14.2)	11.8 (9.7–14.3)	11.2 (8.8–14.1)	9.0 (6.7–12.0)	‡Less than 0.001	54.8
Younger than age 18 years:							
Private	24.2 (19.8–29.2)	25.5 (22.6–28.5)	23.9 (20.9–27.4)	25.4 (22.0–29.1)	31.7 (25.7–38.3)	0.002	10.2
Medicare	0.4 (0.2–0.8)	0.8 (0.3–2.5)	0.6 (0.3– 1.1)	*	*	Less than 0.001	§25.0
Medicaid	68.9 (63.9–73.5)	68.2 (64.6–71.6)	69.4 (65.4–73.0)	68.2 (64.0–72.1)	63.2 (56.6–69.4)	¶Less than 0.001	15.5
No insurance	5.1 (3.5–7.3)	4.2 (3.1–5.6)	4.6 (3.4–6.3)	4.2 (3.1–5.8)	3.0 (1.9– 4.6)	Less than 0.001	59.5
Ages 18–64:							
Private	33.4 (30.3–36.7)	33.8 (31.1–36.7)	32.8 (30.3–35.4)	33.3 (30.4–36.3)	36.0 (32.8–39.5)	0.090	1.4
Medicare	10.1 (9.2–11.1)	10.7 (9.9–11.7)	10.4 (9.3–11.6)	9.9 (8.8–11.1)	9.2 (8.0–10.5)	0.908	0.0
Medicaid	38.9 (34.4–43.6)	36.8 (33.3–40.5)	37.6 (34–41.4)	39.9 (35.1–45.0)	38.9 (35.5–42.4)	††Less than 0.001	52.5
No insurance	12.9 (10.2–16.3)	14.8 (12.3–17.6)	14.8 (12.2–17.8)	13.2 (10.3–16.8)	11.1 (8.3–14.8)	Less than 0.001	54.9
Female:							
Private	31.2 (28.1–34.5)	31.4 (28.7–34.3)	31.5 (28.9–34.3)	31.2 (28.3–34.3)	35.0 (31.5–38.8)	0.038	2.0
Medicare	7.4 (6.3–8.5)	7.7 (6.6–8.9)	7.4 (6.3–8.6)	8.1 (6.7–9.7)	6.4 (5.4–7.5)	0.872	1.5
Medicaid	49.6 (45.2–53.9)	47.5 (43.6–51.5)	47.8 (43.8–51.8)	48.2 (43.5–52.9)	47.9 (44.2–51.7)	‡‡Less than 0.001	34.2
No insurance	9.3 (7.0–12.2)	10.4 (8.5–12.7)	10.5 (8.5–13.0)	10.3 (7.8–13.5)	7.7 (5.3–11.1)	Less than 0.001	58.4
Male:							
Private	30.1 (26.9–33.5)	31.5 (28.8–34.4)	28.7 (26–31.6)	31.8 (28.4–35.5)	34.7 (31.3–38.3)	§§0.006	1.4
Medicare	7.0 (6.0–8.2)	8.3 (7.2–9.7)	7.7 (6.6–8.9)	7.1 (6.2–8.3)	7.4 (6.2–8.9)	0.326	1.3
Medicaid	45.7 (40.8–50.6)	43.2 (39.2–47.4)	45.9 (41.5–50.3)	44.3 (39.7–49.0)	42.2 (38.7–45.8)	¶¶Less than 0.001	36.6
No insurance	12.1 (9.7–15.1)	13.5 (11.1–16.3)	13.4 (11.0–16.2)	12.2 (9.8–14.9)	10.5 (8.2–13.4)	†††Less than 0.001	51.2

* Estimate does not meet National Center for Health Statistics standards of reliability.
† Includes a significant quadratic term. Visits by people with Medicaid as the primary expected source of payment did not change from 2010 through 2013, increased from 2013 through 2017 ($p < 0.001$), then remained stable until 2021.
‡ Includes a significant quadratic term. Visits by people with no insurance did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
§ Calculated using 2019 and 2010 estimates because the estimate in 2021 does not meet National Center for Health Statistics standards of reliability.
¶ Includes a significant quadratic term. Visits by people younger than age 18 years with Medicaid as the primary source of payment increased from 2010 through 2019 ($p < 0.001$), then remained stable until 2021.
†† Includes a significant quadratic term. Visits by people ages 18–64 with Medicaid as the primary source of payment did not change from 2010 through 2013, increased from 2013 through 2016, ($p < 0.001$), then remained stable until 2021.
‡‡ Includes a significant quadratic term. Visits by females with Medicaid as the primary source of payment did not change from 2010 through 2013, increased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
§§ Includes a significant quadratic term. Visits by males with private insurance as the primary source of payment decreased from 2010 through 2019 ($p < 0.001$), then increased until 2021 ($p = 0.016$).
¶¶ Includes a significant quadratic term. Visits by males with Medicaid as the primary source of payment did not change from 2010 through 2013, increased from 2013 through 2017 ($p < 0.001$), then remained stable until 2021.
††† Includes a significant quadratic term. Visits by males with no insurance did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
[1]Calculated using regression models, with time points modeled as an orthogonal polynomial.

NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the table and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

Table 2. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and race and ethnicity: United States, 2010–2021

Primary source of payment	2010	2011	2012	2013	2014	2015	2016
	Percent (95% confidence interval)						
Black, non-Hispanic:							
Private	25.2 (22.3–28.4)	24.6 (21.2–28.5)	26.0 (23.1–29.1)	21.7 (17.6–26.5)	26.0 (21.2–31.5)	26.2 (22.5–30.3)	24.3 (20.7–28.2)
Medicare	7.8 (7.0–8.6)	8.5 (7.4–9.8)	9.2 (7.7–10.8)	9.6 (8.4–10.9)	8.3 (6.4–10.6)	7.4 (6.4–8.7)	7.3 (5.9–9.1)
Medicaid	42.2 (38.8–45.6)	40.9 (36.5–45.4)	39.1 (35.0–43.3)	38.1 (34.1–42.4)	47.7 (43.0–52.5)	48.6 (44.5–52.6)	51.7 (47.9–55.4)
No insurance	21.4 (19.0–24.1)	22.6 (20.3–25.2)	21.5 (18.4–25.0)	23.8 (21.1–26.7)	15.4 (12.6–18.8)	15.0 (11.8–18.9)	12.6 (9.5–16.5)
White, non-Hispanic:							
Private	42.3 (39.9–44.7)	40.4 (38.1–42.7)	43.7 (40.7–46.7)	41.1 (38.4–43.8)	42.1 (38.3–46.0)	42.9 (39.8–46.0)	38.5 (35.8–41.2)
Medicare	7.5 (6.9–8.2)	8.6 (7.8–9.4)	8.8 (7.9–9.7)	9.5 (8.6–10.6)	7.7 (6.7–8.8)	9.3 (7.9–10.9)	9.1 (8.1–10.2)
Medicaid	27.5 (25.4–29.7)	27.8 (25.6–30.1)	25.4 (23.4–27.5)	25.9 (23.6–28.4)	32.1 (28.5–35.8)	32.2 (29.1–35.5)	37.3 (34.6–40.1)
No insurance	18.4 (16.8–20.1)	18.4 (16.8–20.1)	17.6 (15.9–19.4)	18.1 (15.9–20.4)	14.9 (12.2–18.0)	11.6 (9.6–13.9)	10.8 (8.6–13.4)
Hispanic:							
Private	24.4 (21.6–27.3)	22.3 (19.4–25.4)	24.0 (20.7–27.7)	27.3 (23.1–32.1)	22.6 (18.1–27.7)	22.2 (17.4–27.9)	22.9 (19.8–26.3)
Medicare	4.2 (3.4–5.2)	3.4 (2.7–4.4)	3.6 (2.8–4.8)	3.9 (2.8–5.3)	2.9 (2.0–4.2)	2.8 (2.0–3.8)	2.5 (1.6–3.7)
Medicaid	43.5 (38.5–48.5)	46.3 (42.6–50.2)	47.9 (42.0–54.0)	44.5 (39.1–50.0)	54.0 (48.4–59.6)	57.2 (50.8–63.3)	60.1 (55.5–64.6)
No insurance	23.3 (19.8–27.2)	23.1 (20.1–26.5)	19.2 (16.5–22.2)	17.4 (14.3–21.1)	16.9 (14.3–19.9)	15.0 (11.0–20.1)	11.9 (8.9–15.6)

Primary source of payment	2017	2018	2019	2020	2021	*p* value for linear trend[1]	Percent change, 2010–2021
Black, non-Hispanic:							
Private	22.0 (17.9–26.8)	24.1 (20.3–28.4)	21.2 (18.3–24.5)	22.7 (18.9–27.0)	27.6 (23.5–32.1)	0.628	9.5
Medicare	8.3 (7.0–9.7)	8.6 (7.1–10.4)	7.6 (6.3–9.2)	8.3 (6.7–10.3)	8.3 (6.8–10.0)	0.465	6.4
Medicaid	53.0 (46.1–59.8)	51.9 (45.9–57.9)	55.2 (49.6–60.7)	53.9 (47.6–60.1)	53.4 (48.5–58.3)	†Less than 0.001	26.5
No insurance	13.2 (9.5–18.1)	12.6 (9.9–16.0)	13.0 (10.0–16.8)	12.0 (8.5–16.8)	8.3 (5.9–11.5)	Less than 0.001	61.2
White, non-Hispanic:							
Private	38.4 (34.8–42.0)	39.0 (36.1–42.1)	38.8 (36.0–41.6)	37.8 (34.7–41.0)	43.1 (39.1–47.0)	0.081	1.9
Medicare	8.4 (7.6–9.4)	9.6 (8.5–10.8)	9.6 (8.5–10.9)	9.3 (8.3–10.4)	8.0 (6.9–9.3)	0.117	6.7
Medicaid	39.7 (35.8–43.9)	35.7 (31.8–39.8)	36.7 (33.3–40.2)	38.7 (33.8–43.8)	35.5 (32.4–38.6)	†Less than 0.001	29.1
No insurance	9.3 (7.4–11.7)	12.0 (9.7–14.7)	10.9 (8.9–13.3)	10.9 (8.1–14.5)	8.5 (5.8–12.4)	‡Less than 0.001	53.8
Hispanic:							
Private	20.9 (16.2–26.5)	21.4 (17.8–25.6)	18.6 (15.7–21.9)	21.9 (16.8–28.1)	20.6 (17.8–23.8)	0.007	15.6
Medicare	2.7 (1.8–4.1)	3.2 (2.2–4.7)	2.3 (1.6–3.4)	3.2 (2.1–4.7)	2.1 (1.4–3.1)	Less than 0.001	50.0
Medicaid	63.7 (55.4–71.2)	62.2 (56.2–67.8)	62.9 (56.6–68.7)	59.9 (51.6–67.7)	62.7 (57.2–67.9)	§Less than 0.001	44.1
No insurance	10.2 (6.8–15.1)	11.0 (8.5–14.2)	13.6 (9.8–18.4)	12.3 (8.6–17.2)	11.7 (8.4–16.1)	¶Less than 0.001	49.8

† Includes a significant quadratic term. Visits by people with Medicaid as the primary expected source of payment did not change from 2010 through 2013, increased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
‡ Includes a significant quadratic term. Visits by people with no insurance did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
§ Includes a significant quadratic term. Visits by people with Medicaid as the primary expected source of payment increased from 2010 through 2017 ($p < 0.001$), then remained stable until 2021.
¶ Includes a significant quadratic term. Visits by people with no insurance decreased from 2010 through 2017 ($p < 0.001$), then remained stable until 2021.
[1]Calculated using regression models, with time points modeled as an orthogonal polynomial.

NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the table and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

Table 3. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and hospital region: United States, 2010–2021

Primary source of payment	2010	2011	2012	2013	2014	2015	2016
	Percent (95% confidence interval)						
Midwest:							
Private	36.1 (31.3–41.3)	34.0 (30.3–37.8)	40.1 (34.7–45.9)	34.5 (30.6–38.7)	35.1 (29.4–41.2)	37.4 (32.7–42.4)	32.8 (28.5–37.5)
Medicare	7.7 (6.8–8.7)	9.2 (7.6–11.0)	8.9 (7.0–11.4)	9.5 (8.3–10.8)	8.3 (6.1–11.0)	8.8 (7.2–10.7)	9.2 (7.8–10.8)
Medicaid	34.6 (31.2–38.2)	36.4 (32.1– 41.0)	33.7 (29.2–38.6)	35.2 (31.2–39.5)	41.9 (36.2–47.8)	42.0 (36.7–47.5)	47.1 (41.7–52.5)
No insurance	18.8 (15.9–22.2)	17.2 (14.4–20.5)	14.7 (11.9–17.9)	16.7 (14.4–19.3)	13.0 (8.8–18.7)	9.4 (6.9–12.8)	8.0 (4.6–13.5)
Northeast:							
Private	41.4 (37.9–45.0)	38.9 (35.5–42.5)	39.8 (34.9–44.9)	39.9 (34.1–46.0)	38.6 (29.8–48.1)	42.7 (36.3–49.3)	36.1 (30.9–41.7)
Medicare	7.0 (6.0–8.2)	7.2 (6.0–8.5)	6.9 (5.8–8.2)	6.5 (5.4–7.8)	6.5 (5.2–8.1)	5.9 (5.1–6.9)	7.7 (5.3–10.9)
Medicaid	31.7 (27.0–36.7)	35.1 (30.3–40.1)	33.9 (28.8–39.4)	32.3 (25.2–40.4)	41.6 (32.2–51.7)	38.6 (29.9–48.2)	47.3 (41.6–53.1)
No insurance	15.2 (12.8–18.0)	14.2 (11.7–17.2)	13.4 (10.4–16.9)	15.1 (11.4–19.8)	10.6 (6.6–16.6)	7.9 (6.1–10.1)	6.7 (4.8–9.3)
South:							
Private	33.0 (29.7–36.6)	30.9 (27.3–34.7)	31.5 (27.7–35.6)	30.8 (26.5–35.5)	32.9 (27.9–38.3)	32.8 (27.9–38.2)	33.8 (29.6–38.4)
Medicare	6.8 (6.1–7.6)	8.0 (7.0–9.0)	8.3 (6.8–10.1)	9.0 (7.9–10.3)	7.0 (5.8–8.5)	8.3 (6.4–10.8)	7.7 (6.6–9.0)
Medicaid	32.9 (29.5–36.4)	32.2 (27.9–36.8)	31.7 (26.4–37.4)	29.1 (24.1–34.6)	34.9 (30.1–40.0)	35.9 (30.7–41.4)	36.9 (33.7–40.2)
No insurance	24.1 (21.3–27.2)	25.8 (23.2–28.7)	24.7 (21.1–28.6)	25.7 (22.7–28.9)	21.1 (17.5–25.2)	19.1 (14.9–24.1)	16.6 (12.5–21.6)
West:							
Private	34.4 (29.8–39.3)	35.0 (30.2–40.2)	36.6 (31.0–42.6)	36.4 (30.8–42.3)	32.7 (23.0–44.2)	30.5 (24.4–37.4)	28.4 (24.6–32.7)
Medicare	6.5 (5.4–7.8)	5.8 (4.5–7.4)	6.3 (5.4–7.4)	7.7 (5.9–10.1)	5.1 (4.1–6.5)	5.6 (4.5–7.0)	5.2 (4.0–6.7)
Medicaid	35.2 (29.7–41.1)	34.1 (29.7–38.8)	32.5 (27.0–38.6)	34.1 (30.5–37.8)	45.9 (35.8–56.4)	52.1 (43.8–60.4)	53.1 (47.7–58.5)
No insurance	16.3 (13.7–19.3)	16.4 (13.7–19.6)	16.5 (13.7–19.8)	13.1 (10.1–16.9)	12.4 (9.8–15.5)	8.6 (6.2–12.0)	8.5 (6.5–11.1)

Primary source of payment	2017	2018	2019	2020	2021	*p* value for linear trend[1]	Percent change, 2010–2021
Midwest:							
Private	37.4 (32.8–42.3)	34.8 (30.9–38.9)	35.5 (31.1–40.2)	34.0 (28.5–40.0)	39.7 (32.2–47.6)	0.740	10.0
Medicare	8.7 (7.4–10.2)	8.4 (6.7–10.5)	9.0 (7.3–11.0)	10.9 (8.4–14.0)	7.6 (5.9–9.6)	0.728	1.3
Medicaid	44.6 (40.0–49.3)	45.3 (38.3–52.5)	44.7 (38.2–51.4)	43.8 (34.3–53.7)	45.9 (38.5–53.5)	†Less than 0.001	32.7
No insurance	5.8 (3.8–8.6)	9.7 (6.6–14.2)	8.3 (5.7–11.9)	8.9 (3.4–20.9)	5.3 (3.1–9.0)	Less than 0.001	71.8
Northeast:							
Private	32.3 (23.8–42.2)	34.3 (28.4–40.9)	33.0 (26.9–39.8)	40.5 (31.7–49.9)	36.3 (29.5–43.7)	0.062	12.3
Medicare	4.4 (3.0–6.5)	5.9 (4.6–7.6)	6.3 (4.4–8.9)	6.6 (4.9–8.8)	8.2 (5.6–11.8)	0.816	17.1
Medicaid	50.4 (38.8–61.9)	46.4 (39.7–53.2)	49.5 (42.1–57.0)	44.7 (36.6–53.0)	49.3 (40.4–58.2)	Less than 0.001	55.5
No insurance	10.4 (6.0–17.3)	10.4 (6.3–16.7)	7.7 (5.6–10.6)	6.1 (2.6–13.7)	3.7 (2.0–6.9)	Less than 0.001	75.7
South:							
Private	27.4 (23.1–32.2)	30.2 (25.9–35.0)	27.1 (24.0–30.6)	28.0 (23.8–32.5)	33.7 (27.7–40.3)	0.274	2.1
Medicare	8.0 (6.6–9.7)	9.5 (7.7–11.7)	8.6 (6.9–10.6)	7.5 (6.3–8.9)	7.5 (6.0–9.2)	0.511	10.3
Medicaid	44.8 (36.8–53.0)	40.4 (33.0–48.4)	44.2 (37.0–51.6)	42.0 (34.8–49.6)	38.1 (32.5–44.0)	Less than 0.001	15.8
No insurance	15.3 (11.0–20.8)	15.9 (12.1–20.7)	16.2 (11.9–21.7)	18.1 (14.3–22.8)	15.2 (10.4–21.6)	‡Less than 0.001	36.9
West:							
Private	28.1 (21.8–35.4)	28.5 (23.4–34.2)	29.9 (23.1–37.8)	29.3 (24.6–34.5)	31.2 (26.8–35.9)	§0.011	9.3
Medicare	4.9 (3.7–6.5)	5.8 (4.3–7.8)	4.9 (3.7–6.4)	5.6 (4.3–7.3)	4.2 (2.9–6.2)	0.012	35.4
Medicaid	58.4 (50.5–66.0)	56.2 (50.0–62.2)	52.6 (43.0–62.1)	57.7 (50.5–64.6)	54.8 (50.2–59.2)	†Less than 0.001	55.7
No insurance	5.8 (3.7–8.9)	6.3 (4.4–8.8)	8.9 (6.0–13.1)	4.3 (2.6–7.0)	5.4 (3.8–7.5)	Less than 0.001	66.9

† Includes a significant quadratic term. Visits by people with Medicaid as the primary expected source of payment did not change from 2010 through 2013, increased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
‡ Includes a significant quadratic term. Visits by people with no insurance did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
§ Includes a significant quadratic term. Visits by people with private insurance as the primary source of payment did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
[1]Calculated using regression models, with time points modeled as an orthogonal polynomial.

NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing about 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing approximately 90,8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the table and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

Table 4. Percentage of emergency department visits by people younger than age 65, by primary expected source of payment and metropolitan statistical area: United States, 2010–2021

Primary source of payment	2010	2011	2012	2013	2014	2015	2016
	Percent (95% confidence interval)						
Metropolitan statistical area[1]:							
Private	35.5 (33.2–37.8)	34.2 (31.9–36.6)	36.3 (33.5–39.3)	34.3 (31.3–37.5)	34.3 (30.3–38.6)	34.7 (31.4–38.3)	32.0 (29.4–34.7)
Medicare	6.7 (6.2–7.3)	7.4 (6.6–8.1)	7.2 (6.4–8.1)	8.1 (7.3–9.0)	6.8 (5.8–8.0)	7.3 (6.3–8.5)	6.9 (6.1–7.9)
Medicaid	33.2 (30.8–35.6)	33.5 (30.7–36.3)	32.3 (29.2–35.6)	32.1 (29.2–35.1)	40.5 (36.6–44.6)	41.4 (37.8–45.1)	45.7 (42.7–48.8)
No insurance	20.4 (18.7–22.3)	20.4 (18.6–22.3)	19.1 (17.2–21.2)	18.8 (16.4–21.4)	15.3 (12.9–17.9)	13.2 (10.8–16.0)	11.5 (9.3–14.2)
Nonmetropolitan statistical area[1]:							
Private	35.5 (31.3–40.0)	31.3 (27.2–35.6)	33.7 (28.5–39.4)	34.2 (29.1–39.7)	34.8 (30.2–39.8)	37.4 (32.5–42.5)	35.2 (29.6–41.3)
Medicare	8.3 (7.3–9.4)	9.4 (8.1–10.8)	10.9 (9.0–13.3)	9.8 (8.2–11.8)	7.6 (6.9–8.5)	9.2 (7.6–11.0)	9.5 (7.7–11.6)
Medicaid	35.2 (30.1–40.6)	36.8 (33.3–40.4)	35 (30.2–40.0)	32.3 (27.3–37.7)	39.5 (35.3–43.8)	37.4 (31.9–43.4)	39.9 (34.4–45.7)
No insurance	16.9 (14.6–19.5)	18.5 (15.7–21.6)	16.4 (12.8–20.9)	20.5 (17.7–23.6)	14.9 (10.3–21.0)	11.4 (7.5–17.1)	10.2 (6.3–16.0)

Primary source of payment	2017	2018	2019	2020	2021	*p* value for linear trend[2]	Percent change, 2010–2021
Metropolitan statistical area[1]:							
Private	29.7 (26.4–33.1)	31.4 (28.6–34.3)	30.3 (27.3–33.4)	31.2 (27.9–34.7)	34.4 (30.9–38.2)	0.008	3.1
Medicare	7.1 (6.2–8.2)	7.5 (6.6–8.6)	6.9 (5.9–8.0)	7.4 (6.4–8.5)	6.6 (5.6–7.8)	0.642	1.5
Medicaid	48.5 (43.6–53.5)	46.2 (42.0–50.6)	47.9 (43.3–52.6)	47.1 (42.3–52.1)	46.1 (42.0–50.2)	†Less than 0.001	38.9
No insurance	11.1 (8.6–14.3)	11.7 (9.6–14.3)	11.4 (9.2–14.0)	11.1 (8.5–14.3)	9.2 (6.7–12.4)	‡Less than 0.001	54.9
Nonmetropolitan statistical area[1]:							
Private	37.3 (32.1–42.8)	32.2 (26.3–38.7)	30.0 (27.1– 33.1)	34.0 (26.7–42.2)	38.2 (31.2–45.8)	0.835	7.6
Medicare	8.0 (6.0–10.4)	10.8 (8.4–13.9)	10.5 (8.4–13.0)	9.8 (7.9–12.2)	8.8 (6.7–11.5)	0.518	6.0
Medicaid	43.2 (36.2–50.4)	41.5 (34.1–49.3)	42.0 (36.7–47.5)	39.9 (34.8–45.2)	39.7 (34.8–44.7)	0.004	12.8
No insurance	7.3 (4.1–12.8)	12.3 (7.7–19.0)	14.0 (8.7–21.7)	11.9 (6.7–20.2)	*	Less than 0.001	§29.6

* Estimate does not meet National Center for Health Statistics standards of reliability.
† Includes a significant quadratic term. Visits by people with Medicaid as the primary expected source of payment did not change from 2010 through 2013, increased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
‡ Includes a significant quadratic term. Visits by people with no insurance did not change from 2010 through 2013, decreased from 2013 through 2016 ($p < 0.001$), then remained stable until 2021.
§ Calculated using 2020 and 2010 estimates because the estimate in 2021 does not meet National Center for Health Statistics standards of reliability.
[1]Status is based on the actual location of the hospital together with the definition of the U.S. Census Bureau and the Office of Management and Budget, and is updated each year based on the latest Office of Management and Budget guidance. Metropolitan statistical areas have at least one urbanized area of 50,000 or more population, plus adjacent territory with a high degree of social and economic integration with the core as measured by commuting ties. Nonmetropolitan statistical areas include noncore rural areas, as well as micropolitan statistical areas, which have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
[2]Calculated using regression models, with time points modeled as an orthogonal polynomial.

NOTES: The visit sample ranged from 18,287 emergency department visits by people younger than age 65 in 2014, representing approximately 109.6 million visits, to 10,552 emergency department visits by people younger than age 65 in 2020, representing about 90.8 million. Other source of payment, which includes workers' compensation and any other payment source, is not shown in the table and ranged from 6.0% in 2013 to 3.1% in 2018. Missing or unknown payment source ranged from 5.1% in 2010 to 14.4% in 2019 and is excluded from the analysis.

SOURCE: National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey, 2010–2021.

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