

Recent Trends in Hospital Emergency Department Visits for Non-Traumatic Dental Conditions



Individuals who visit hospital emergency departments (EDs) for non-traumatic dental conditions (NTDCs) can divert critical resources and create added stress for ED personnel. Moreover, most hospitals lack the ability to provide appropriate and definitive care for NTDCs, and the typical cost of such ED visits is much higher than that of care received from a dental provider. These realities make it important to monitor ED trends for these visits. In addition, these trends often reflect changes in Americans' access to dental care.

Key Findings

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In 2019, there were a **total of 1,804,619 ED visits** (weighted estimate) **for NTDCs**, which represents **1.5% of all ED visits that year.**

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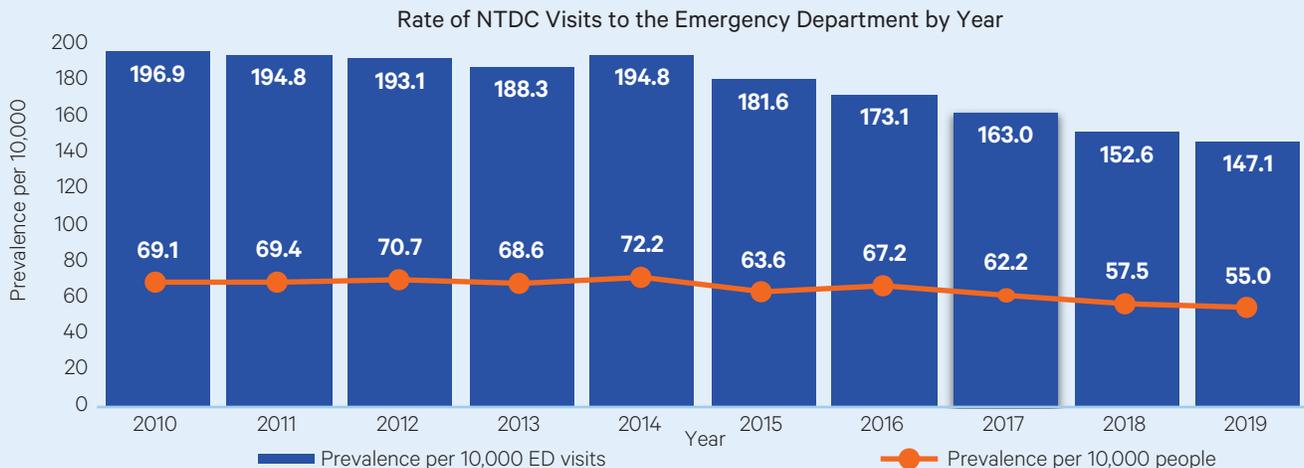
Estimated total charges for ED visits for NTDCs were nearly \$3.4 billion in 2019.



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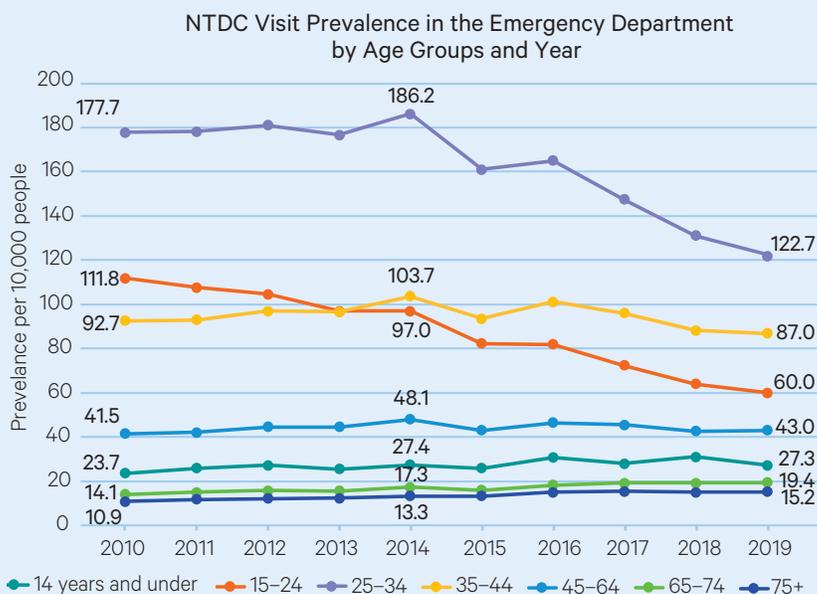
The rate of outpatient visits (per 10,000 people) for NTDCs in EDs in the US decreased by 24% from 2014 to 2019.

This decline followed a 4.5% increase in this type of ED visit from 2010 to 2014.



4 From 2010 to 2019, the ED visit rate for NTDCs was highest among patients in the 25–34 age group.

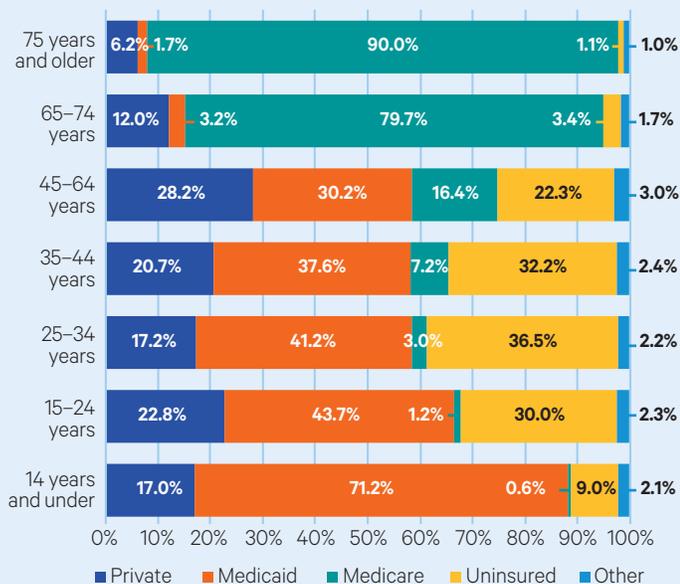
- From 2010 to 2014, the **annual rate** of ED visits for NTDCs per 10,000 people **varied between 177.7 and 186.2.**
- Starting in 2014, the **annual rate** began to decrease, **falling to 122.7 in 2019.**



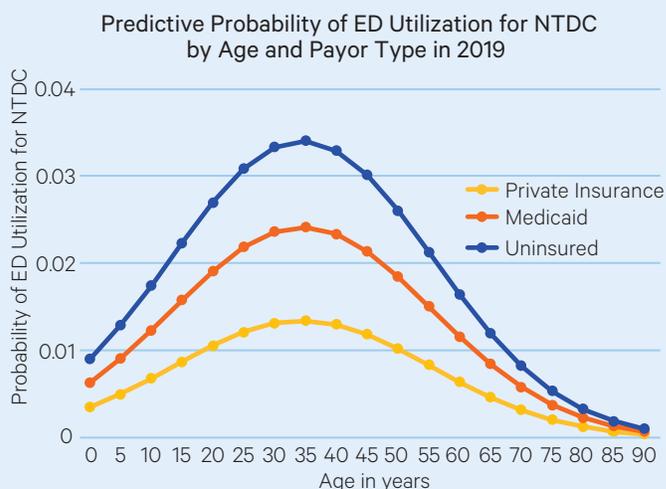
5 The type of dental coverage, or lack thereof, was closely linked with a patient’s likelihood of having an ED visit for an NTDC.

- In 2019, at least **7 out of 10 ED visits for NTDCs** among patients aged 0–44 years were for **Medicaid enrollees or for people who were uninsured.**
- **Individuals without insurance were most likely to have ED visits for NTDCs,** followed by those with Medicaid coverage and then by those with private insurance.

NTDC Visits to the Emergency Department in 2019 by Age Groups and Primary Payors



- The probability of ED utilization for NTDCs among Medicaid enrollees and uninsured patients followed **a curvilinear path by age,** with visits sharply increasing from infancy to 30 years of age, peaking between 30 and 40 years of age, and steadily decreasing after 40 years of age.



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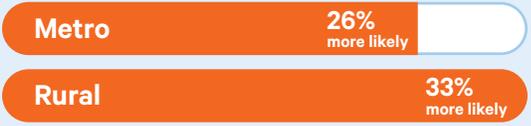


Compared with white individuals, **Black individuals were 44% more likely to visit an ED for NTDCs**, while **Native Americans were 9% more likely**. Individuals in all other racial categories were less likely to have this type of visit than white individuals.

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ED visits for NTDCs consistently varied by patients' income level and their location type.

- Compared with individuals living in a county with a population of more than a million people, **those in small or medium-sized metro areas (50,000–999,999 residents) were 26% more likely to have an NTDC ED visit in 2019**, and **people living in rural areas were 33% more likely**.



- Compared with individuals in the lowest-income quartile (\$47,999 or less per year), **those with an annual income of \$82,000* or more were 45% less likely to have an NTDC ED visit in 2019**.

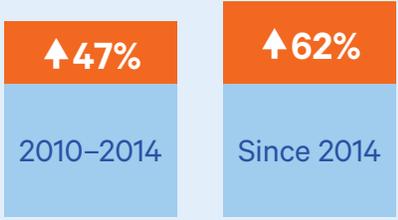
*In this calculation, the data were controlled for age, payor type, sex, and comorbidities.

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The average charge for an NTDC ED visit in 2019 was **\$1,887 for all payors** (Medicaid, Medicare, private insurance, uninsured, and others), which is **39% of the average charge for all other ED visits**.



- Since 2014, **the average annual charges associated with NTDCs**, adjusted for inflation, have **increased by 62%**. Between 2010 and 2014, this increase was 47%.



Methodology:

CareQuest Institute for Oral Health used the discharge data from the Nationwide Emergency Department Sample (NEDS), which is the largest all-payor US ED database, containing a 20% stratified sample of ED visits from across the US.¹² NEDS data is provided by the Healthcare Cost and Utilization Project (HCUP), a project of the Agency for Healthcare Research and Quality. It includes State Emergency Department Databases (SEDD) that capture the discharge information on ED visits that do not result in an admission to the same hospital. We used the HCUP SEDD database to examine trends of ED utilization for NTDCs. Consistent with past research, we defined NTDCs based on the principal diagnosis using ICD-9-CM or ICD-10-CM codes as recommended by the Association of State and Territorial Dental Directors. Furthermore, we examined factors associated with ED utilization for NTDCs for the year 2019.³

References

- HCUP Nationwide Emergency Department Sample (NEDS). Healthcare Cost and Utilization Project (HCUP), 2007, 2008, 2009. <https://www.hcup-us.ahrq.gov/nedsoverview.jsp>. Agency for Healthcare Research and Quality, Rockville, MD.
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- Manz MC. *Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Departments*. Reno, NV: Association of State and Territorial Dental Directors, 2017. Available at: <https://www.astdd.org/docs/recommended-guidelines-for-surveillance-of-ntdc-in-eds.pdf>.

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