The type or lack of dental coverage was closely linked with a patient’s likelihood of having an ED visit for NTDCs:

During the COVID-19 pandemic or other public health crises, patients 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 care for NTDCs, and the typical cost of such ED visits is much higher than a patient receiving care from a dental provider. These realities make it important to monitor the ED trends for these visits. In addition, these trends often reflect changes in Americans’ access to dental care.

**KEY FINDINGS**

1. **ED visits for NTDCs decreased 14% from 2014 to 2017.**

   The rate of treat-and-release visits (per 10,000 people) for NTDCs in hospital EDs in the United States decreased 14% from 2014 to 2017. This followed a 4.5% increase in this type of ED visit from 2010 to 2014.

2. **The type or lack of dental coverage was closely linked with a patient’s likelihood of having an ED visit for NTDCs:**

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

   In 2017, 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.

   The rate of treat-and-release visits (per 10,000 people) for NTDCs in hospital EDs in the United States decreased 14% from 2014 to 2017. This followed a 4.5% increase in this type of ED visit from 2010 to 2014.
From 2010 to 2017, the ED visit rate for NTDCs was highest among patients in the 25–34 age group.

The average charge for an ED visit for NTDC in 2017 was $1,428 for all payers (Medicaid, Medicare, private insurance, uninsured and others).

Estimated total charges for ED visits for NTDCs were nearly $2.65 billion in 2017.

ED visits for NTDCs consistently vary by patients’ income level and their location type across the years:

- In 2017, patients in rural locations were 30% more likely to utilize the ED compared to patients residing in counties with a population exceeding 1 million.
- Patients with an estimated median household income less than $43,999 were 38% more likely to utilize the ED compared to patients with an income of more than $74,000.*

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

For 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 ED rate decreased in subsequent years and reached 147.5 in 2017.

**METHODOLOGY**

The DentaQuest Partnership for Oral Health Advancement (DQP) used the discharge data from the Nationwide Emergency Department Sample (NEDS), which is the largest, all-payer US. ED database containing a 20% stratified sample of ED visits from across the U.S. NEDS data provided by the Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality, 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 principle diagnosis using ICD-9-CM or ICD-10-CM codes as recommended by the Association of State and Territorial Dental Directors. Further, we examined factors associated with ED utilization for NTDCs for the year 2017.

**References**


**SUGGESTED CITATION:**


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