

ISSUE BRIEF

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EDPQI Issues Briefs



Emergency Department Visits for Non-Traumatic Dental Conditions

Non-traumatic dental conditions include caries, periodontal disease, dental erosion, abscesses, cysts, and other non-traumatic conditions of the oral cavity. Optimally, prevention and treatment for NTDCs is provided outside of the hospital through routine oral health care. Despite the much higher cost of receiving care for NTDCs from the hospital, rates of Emergency Department visits for these conditions are high (Kelekar & Naavaal, 2019). Understanding the population rate and patterns of ED utilization associated with NTDCs could help to identify strategies for improving access to appropriate dental and medical services, reduce burden on hospital EDs, reduce the overall cost of care for these conditions and improve population health.

Visits for Non-Traumatic Dental Conditions (PQE 01) is one of five Emergency Department Prevention Quality Indicators recently released by the Agency for Healthcare Research and Quality (AHRQ ED PQI Technical Documentation, Version v2024). These indicators reflect both the burden of disease in a population and the availability of community resources, including appropriate health care services, to prevent hospitalization. In this issue brief, we present PQE 01 results for Kansas, based on hospital inpatient and outpatient ED administrative claims for fiscal year 2023 (FY2023). The measure specification, software and detailed instructions to compute population ED visit rates are available on the AHRQ [website](#). A description of the methods and data analysis is available [here](#).

ED visit rates are area-based annual rates. The denominator is the US Census population for the county (or state) matching the age criteria for the indicator and the numerator is the number of inpatient or outpatient ED claims for residents of the county captured by the indicator criteria. Area-based quality indicators do not measure quality at the hospital level. During FY 2023, there were 10,749 ED visits for NTDCs in Kansas for individuals five years and older, a rate of 3.89 per 1,000 population, higher than the national benchmark rate of 3.18 per 1,000 computed by AHRQ based on data from all states that participate in the Healthcare Cost and Utilization Project. The vast majority (10,676) were “treat and release” visits that did not result in hospitalization. The largest payer source for NTDC ED visits was Medicaid (30.1 percent of NTDC visits), followed by self-pay (27.1 percent) and private insurance (22.8 percent).

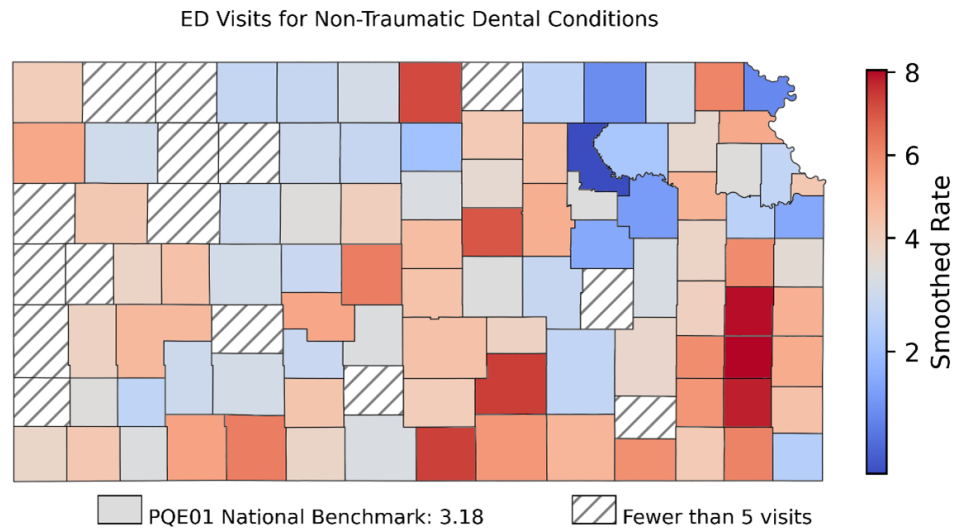
The map on the next page shows smoothed county-level rates for all counties with at least five ED visits. Counties with rates lower than the national benchmark are shaded blue, and rates above red. Counties with rates significantly higher (based on the 95 percent confidence interval) than the national benchmark include: Allen, Anderson, Atchison, Barton, Bourbon, Brown, Chautauqua, Clark, Clay, Cowley, Crawford, Dickinson, Ellsworth, Finney, Franklin, Harper, Harvey, Jewell, Labette,



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Linn, Meade, Montgomery, Neosho, Pawnee, Reno, Rice, Saline, Sedgwick, Shawnee, Sherman, Sumner, Wilson, Woodson, Wyandotte.

Consistent with previous research (Owens et al., 2021), there were significant disparities in ED visit rates by age and sex and among population subgroups of race and ethnicity (Table 1). The age group with the highest rate of NTDC ED visit rate was younger adults, ages 25 to 34 and was significantly higher among women than men. The NTDC ED visit rate was much higher among Black or African American Kansans as compared with other groups.



ED visits for NTDC stratified by demographic factors. See [Methods and Notes](#) document for more information.

Factor	Group	ED Visits	Population	Unadj. Rate	A.A. Rate (95% C.I.)
Age	5 to 24	1,847	819,009	2.24	
	25 to 34	3,413	376,652	9.06	
	35 to 44	2,723	379,479	7.18	
	45 to 54	1,335	329,515	4.05	
	55 and older	1,238	860,903	1.44	
Sex	Men	4,867	1,385,072	3.51	3.76 (3.66 to 3.87)
	Women	5,689	1,380,486	4.12	4.61 (4.49 to 4.74)
Race/Ethnicity	AIAN	79	22,007	3.59	3.74 (2.95 to 4.68)
	Asian and NHOPI	63	89,200	0.71	0.68 (0.52 to 0.87)
	Black	1,997	157,422	12.69	12.78 (12.22 to 13.36)
	Hispanic	931	367,334	2.53	2.56 (2.39 to 2.74)
	White	7,204	2,056,597	3.50	3.99 (3.89 to 4.08)

References

AHRQ ED PQI Technical Documentation, Version v2024, Agency for Healthcare Research and Quality, Rockville, MD. https://qualityindicators.ahrq.gov/measures/PQE_TechSpec. Accessed August 15th, 2024.

Kelekar, U., & Naavaal, S. (2019). Dental visits and associated emergency department—charges in the United States. *The Journal of the American Dental Association*, 150(4), 305-312.e1. <https://doi.org/10.1016/j.adaj.2018.11.021>

Owens PL (AHRQ), Manski RJ (AHRQ), Weiss AJ (IBM Watson Health). Emergency Department Visits Involving Dental Conditions, 2018. HCUP Statistical Brief #280. August 2021. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/reports/statbriefs/sb280-Dental-ED-Visits-2018.pdf. Accessed May 7, 2024.



The Kansas Hospital Association is a voluntary, non-profit organization existing to be the leading advocate and resource for members. KHA membership includes 235 member facilities, of which 121 are full-service, community hospitals. KHA and its affiliates provide a wide array of services to the hospitals of Kansas and the Midwest region. Founded in 1910, KHA's vision is: "Optimal Health for Kansans."
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