

Data Brief

Utilization of Ohio Emergency Departments to Treat Dental Problems, 2010-2011

Prevention and treatment of dental disease is most effectively provided in primary dental care settings.

However, many Ohioans either can't afford to go to a private dentist or cannot access one that will accept their method of payment. Due to the problems of accessing primary dental care, individuals may turn to hospital emergency departments (EDs) to alleviate their dental problems. However, most EDs are not staffed with a dentist who can provide definitive care.^{1,2,3} Thus, ED physicians are able to alleviate dental pain and infection, yet the underlying dental disease is left untreated. As a result, patients' dental disease worsens and they may return to an ED when their pain medication runs out or the dental pain is not resolved. This increases healthcare costs and is an unnecessary burden on hospital ED staff and resources.⁴ The purpose of this brief is to describe the extent that patients in Ohio are utilizing hospital EDs to alleviate dental problems.



Financial Impact of ED Visits for Dental Problems



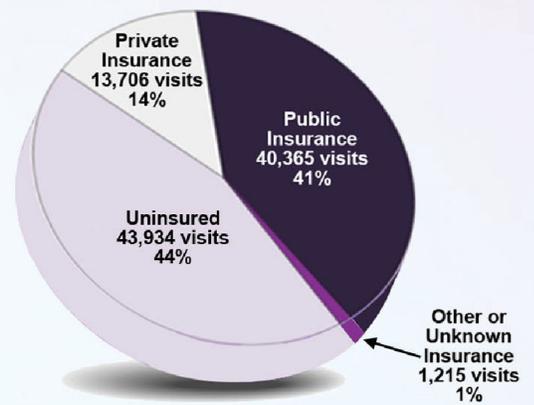
Key Findings

- In 2010-11⁵, there was a total of 291,013 hospital visits in Ohio for a non-trauma-related dental problem; of these, 81 percent (235,721 visits) had a primary dental diagnosis⁶ that was not associated with trauma, i.e., the primary reason for coming to the hospital was a dental problem.
- In 2010-11, there were just over 100,000 visits to the ED with a primary dental diagnosis that was not associated with trauma. Of those visits in the ED with a primary dental diagnosis, 69 percent occurred Monday through Friday and 5 percent stayed at least one night.
- During 2010-11, the charges for visits to EDs for a primary dental diagnosis were more than \$58 million. The total charges for visits to the ED for a primary dental diagnosis by people who were uninsured or who had public insurance was approximately \$48 million.

The Ohio Hospital Association (OHA) provided data for 2010 and the first six months of 2011. This data consisted of a sample of 205 hospitals that reported data to OHA of the 253 hospitals in Ohio. This data provided an overview of characteristics of patients who came to the hospital for non-trauma-related dental problems. Please visit <http://www.ohonet.org/> for more information on the Ohio Hospital Association.

Method of Payment for ED Visits for Dental Problems

- More than 84,000 ED visits for a primary dental diagnosis were made by people who were uninsured or who had public insurance. Uninsured or publically insured patients represented almost 85 percent of all ED visits for a primary dental diagnosis, or 6 in every 7 visits.
- Just over 14 percent of ED visits for dental problems were paid for by private insurance.



Counties with the Highest Percentage of Medicaid Enrollees Who Visted the ED	
Cuyahoga	10.2%
Franklin	9.4%
Hamilton	6.9%
Lucas	5.9%
Summit	4.6%

Source: ODH Analysis of Ohio Medicaid claims data provided by the Ohio Department of Job and Family Services for SFY 2011.

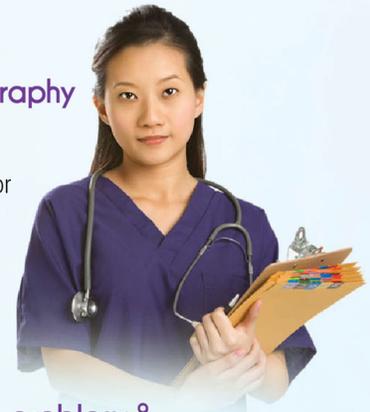
ED Usage for Dental Problems by Those Insured by Medicaid

Among all ED visits by Medicaid enrollees, almost 35,000 visits per year were for non-trauma related dental problems.

- Twenty-three percent (23%) of visits to the ED for dental problems covered by Medicaid were repeat patients.
- Women were more likely than men to have a repeat visit to the ED for a dental problem.

Disparities in ED Visits for Dental Problems by Demographic Characteristics and Geography

- Non-Hispanic blacks had a higher likelihood of visiting the ED for dental problems than other race and ethnic groups. Approximately 12 percent of Ohio's population are non-Hispanic blacks but they account for 19 percent of ED visits for dental problems.
- Persons 22-44 years of age accounted for 57 percent of all dental-related ED visits and children under the age of 18 accounted for approximately 5 percent of dental-related ED visits.
- There were no significant differences by gender among all individuals who visited the ED for dental problems.



Several areas in Ohio have more than 20 ED visits per 1,000 residents for dental problems.⁹

- Four rural, one metropolitan, and two Appalachian counties had a large or several zip codes with more than 20 ED visits for dental problems per 1,000 population living within that zip code.
- These geographical differences may be due to inadequate access to primary dental care resulting from an overall lack of nearby primary care dental providers, a lack of nearby primary care dental providers who serve low-income patients, the capacity of existing primary care dental providers to serve patients in need, or the inability of patients in need to navigate the existing dental care system to find appropriate care.

¹Fifteen (15) of the 205 member hospitals (approximately 7%) have dental residency programs and may provide more comprehensive treatment options for patients presenting at the ED with a primary dental diagnosis. Unfortunately, we were unable to identify those specific hospitals in the data provided.

²Davis EE, Deinard AS, Maiga EWH. 2010. Doctor, my tooth hurts: the cost of incomplete dental care in the emergency room. *Public Health Dentistry*. 205-210.

³Burgess J, Byers MR, Dworkin SF. Pain of dental and intraoral origin. In: Bonica JJ, editor. *The Management of Pain*, 1. Philadelphia, PA: Lea and Febiger; 1990.

⁴The PEW Center on the States. 2012. A costly dental destination. PEW Children's Dental Campaign Issue Brief. Retrieved March 14, 2013 from http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/State_policy/Pew_Report_A_Costly_Dental_Destination.pdf

⁵Data collected from the year 2011 only included up to June 30th.

⁶A visit with a primary dental diagnosis is one with non-trauma-related dental problems which includes dental codes most commonly used to identify dental pain and infection. These specific ICD9 codes include codes in the following groups: 521-523, 525, and 873. Any dental diagnosis refers to both patients with a primary dental diagnosis and any patients visiting the hospital due to another concern and in the process of examination, a dental diagnosis is made. This includes all other dental codes mentioned previously.

⁷Private insurance includes both employer-sponsored coverage and privately purchased options such as Blue Cross and private HMO's.

⁸Source: ODH Analysis of Ohio Medicaid claims data provided by the Ohio Department of Job and Family Services for SFY 2011.

⁹The ArcGIS mapping program uses algorithms to detect natural breaks in the given data and shows the distribution of values. Twenty ED visits per 1,000 people was chosen as the highest category given the data.



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