

The Oral Health Forum



Utilization of Emergency Departments for Non-Traumatic Dental Care in Illinois – 2010 to 2014

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INTRODUCTION

Public health attention to oral health care remains inadequate as evidenced by prevalence of dental caries and periodontal disease in general and especially in low-income communities. These common oral infections are almost completely preventable with education, effective self-care and timely access to professional oral health intervention. The Oral Health Forum works with the public health system, key oral health care providers and community leaders to coordinate, expand, and improve existing oral health resources in health promotion, prevention and treatment.

Nationally and in Illinois, support for adequate access to basic dental care through publically funded programs is unstable and based on changing political, social and financial interest. In addition, when states are fiscally challenged, they try to save expenditures by cutting non-mandated programs. This has been the case with the Medicaid adult oral benefit in Illinois.

When obtaining regular dental services in community clinics become challenging, people seek care through the emergency departments (EDs), a place where individuals can obtain access and relief 24 hours a day. However, oral health care services through EDs are more expensive, and in many cases less able to provide definitive care for the presenting oral health problem. The end result is that many individuals may return to the ED leading to overcrowding in the EDs, delay in patient care and adding cost to the health care system.

PROJECT OBJECTIVE

The use of EDs for preventable dental related health conditions is a growing problem in the US. To build an understanding of the scope of this burden for Illinois EDs, we examined existing state-wide outpatient hospital discharge summary data from the period July 1, 2009 to June 30, 2014. These analyses can be used to understand the public health impact of the current system of care and can be used in data driven strategies that provide timely access to definitive care in appropriate settings while yielding cost savings.

PROJECT METHODS

This project is an analysis of existing state-wide treat and release hospital discharge data for the period July 1, 2009 to June 30, 2014. The data were provided by the Illinois Department of Public Health, Division of Patient Safety and Quality with the general definition: a visit for oral care is any visit having a non-traumatic oral condition relevant ICD-9 diagnoses code. Trend analysis was conducted on the data by: year, visit rate, age group, primary payer, visit charges, race/ethnicity and change in use during a two-year implementation of the SMART Act. The Illinois SMART Act severely curtailed access to basic dental services for adult Medicaid enrollees. Statistical significance for all data presented below was set to $p < 0.05$ and at the 95% confidence interval.

For the financial impact analysis, the 2012 Medical Expenditure Panel Survey national median cost for general dental visit was used and adjusted to 2014 dollars (\$230.97) using 2012 BLS calculator. For the percent of divertible dental NTDC ED visits, we used the data reported by Wall et al. They analyzed a national ED data set by triage category, time of arrival for the patient facing an urgent dental visit and community dental provider workforce schedule and calculated that 78.6 percent of dental ED visits can be diverted to a local dental office. Using these two quantitative data points, the number of divertible ED NTDC visits and charges related to these divertible dental visits were calculated to illustrate potential financial savings of effective ED diversion programs. The complete report can be found at: <http://www.heartlandalliance.org/oralhealth/research--reports/critical-analysis-of-utilization-of-ed-for-ntdc-8-12015.pdf>

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ILLINOIS FINDINGS

FY2010 to FY2014

- The adult NTDC ED visit rate (per 100,000) increased from 724 in FY2010 to 807 in FY2014; total visits during the five – year study period was 362,245.
- The average NTDC ED visit charge increased from \$795 in FY2010 to \$1,215 in FY2014; the mean five year average charge for NTDC in an Illinois ED was \$1,000.
- Charges to primary payers increased from \$54.5M in FY2010 to \$93.2M in FY2014; the total charge for NTDC in Illinois EDs in the study period was \$362M.
- In examining the five-year trend by age-group, the highest overall visit rates are for adults between the ages of 25 and 34 years followed very closely by adults between the ages of 35 and 49.
- The utilization by race/ethnicity shows that Non-Hispanic Blacks are over twice as likely as you would expect, based on their share of the total population, to visit the ED for NTDC.
- The majority of the people who sought treatment for NTDC in Illinois EDs in the study period were uninsured, or Medicaid enrollees and 18-49 years of age. They accounted for 76.3% of the total \$362,064,501 ED dental charges, and 85.2% of total 362,245 ED dental visits. For the period FY2010 to FY2014 charges to Medicaid were \$120.8M and Un-insured \$103.9M.

IMPACT OF SMART Act

- Age-adjusted annual visits increased from 745 ± 14 per 100,000 in the Pre SMART Act period to 791± 16 per 100,000 in the SMART Act period.
- The mean annual ED charges during the Pre SMART Act period were \$62.8M ± 4.8M and mean annual charges for the SMART Act period were \$86.8M ± 6.4M.

FINANCIAL ANALYSIS

- In FY 2014, 32,859 Medicaid visits for NTDC were provided in Illinois ED settings, where the mean visit charge for Medicaid enrollee was \$1,011 and the total charge to Illinois Medicaid was \$33,256,845.
- Using the 2014 national median cost in a community setting of \$230.97 and 78.6 percent of ED visits are divertible in the FY2014 Medicaid program savings calculation: diverted patients would cost approximately \$6M if the dental care was provided in a community clinic setting. Through an effective statewide ED diversion program, dental care provided in a community setting has the potential to save the State of Illinois approximately \$20.1M per year, in the Medicaid program alone.

LEARNING & CONCLUSION

Although much work remains to fully understand the many operating variables that result in the use the ED for NTDC, this project provides important baseline and some detail understanding of this growing problem in Illinois. The year over year increase in numbers of patients seeking care for urgent dental issues in emergency rooms indicate that these patients have barriers to obtaining routine dental in their communities. In addition, the data presented show that state policies that severely curtailed access to basic dental services for adult Medicaid enrollees such as the SMART Act can contribute to significant increases in ED use for NTDCs.

Interventions with definitive care as an endpoint can alleviate the stresses on Illinois EDs and curtail high cost of providing dental care through EDs. Care- coordination to definitive and timely care in the community, improving oral health literacy, and prevention education all have the potential to transition the current system of non-care to one that is cost-effective, improved systems of care with reduced wasteful health care spending and improved health outcomes for all Illinoisans.

OHF is currently exploring two opportunities (hospital system and FQHC collaborators) that focus on target populations that use EDs. The objective in both cases is to plan interventions that can provide definitive, cost-effective care instead of using EDs.