Experience with Dental Emergency Department Visits

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Abstract

Background: Visits to the emergency department (ED) for dental problems are on the rise. Often these visits offer no definitive treatment and would be better treated in a dental office.

Objective: The purpose of the study was to evaluate dental ED visit data from a local hospital and experience with dental ED visits of patients at a new dental school. This descriptive data will be used to later evaluate the impact of the newly opened dental school on dental ED visits at the local hospital.

Methods: This two-part study consisted of 1) A retrospective analysis of hospital ED records and 2) A questionnaire dispensed at the dental school clinics.

Results: Visits to the new dental school are continuing to increase since opening in April 2013. There were 5,566 dental ED visits at the hospital, accounting for 1.92% of ED visits from April 2011 to March 2015. The percent of dental ED visits compared to all ED visits decreased from 1.94% in 2011/12 to 1.65% in 2014/15. Three diagnostic codes accounted for 90.9% of dental ED visits from January 2011 to December 2015. Unspecified codes accounted for 76.1% of dental ED visits, indicating no definitive diagnosis. According to the patient questionnaire, 13.5% of patients had a prior dental ED visit. Of these visits, 47.4% had no dentist. Most patients had a chief complaint of toothache and/or broken or chipped tooth and treatment with antibiotics and/or pain pills.

Conclusion: Since opening clinics at the new dental school in 2013, visits have continued to increase. At the same time, dental-related ED visits at the local hospital visually appear to be decreasing. Patients that reported having a dental-related ED visit on the questionnaire showed that the primary reason for dental ED use was related to not having a dentist. The questionnaire also reported that the major reason for ED use was a toothache and/or broken or chipped tooth and the most common treatment was antibiotics and/or pain pills.

Introduction

• In the United States, there were 2.18 million visits to the emergency department (ED) and 1.62% were dental related.
  • These visits accounted for $1.6 billion in total charges.
  • A North Carolina teaching hospital found that 90% of dental ED visits did not receive dental procedures.
  • Treatments consisted of prescriptions for pain control (81%) and antibiotics (69%).
  • Dental ED visits were most common among those uninsured (36.6%) and on Medicaid (35%).

Objective: The study was conducted to evaluate dental ED visit data at a local hospital and experience with dental ED visits of patients the receive treatment at the nearby new dental school.

Methods

1) Retrospective Analysis
  • Hospital emergency department records between January 2011 to January 2016
  • ICD-9/10 Codes – Primary diagnosis of a dental condition
  • ICD-10 codes were matched to ICD-9 codes

2) Questionnaire
  • Clinics at the new dental school
  • Experience with using the ED for a dental problem
  • Reason for ED use
  • Chief Complaint
  • Treatments given
  • De-identified information – race/ethnicity, gender, and age

Results

Figure 1. Number of Visits to the Dental School by Month

Figure 2. Dental ED Visits as a Percent of Total ED Visits by Year at the Hospital

Figure 3. Dental ED Visits as a Percent of Total ED Visits by Month at the Hospital

Figure 4. Numbers of Three Leading ICD-9/10 Codes in the ED at the Hospital

Figure 5. Reason for Dental ED Use (n = 27)

Figure 6. Chief Complaint at Dental ED Visit

Figure 7. Treatment at Dental ED Visit

Conclusions

Conclusion

• Since opening clinics at the dental school, number of visits has continued to increase.
• Dental Emergency Department visits appear to be the lowest in the year ranging from April 2014 to March 2015.
• Looking at the data by month and year, there is a visual trend for decreased ED visits by dental diagnostic codes.
• Patients in a dental school clinic that reported a dental-related ED visit show:
  • A primary reason for ED use for a dental concern is related to not having a dentist
  • The chief complaint for the ED visit was for toothache and/or broken or chipped tooth
  • The most common treatment offered in the ED was antibiotics and/or pain pills

Limitations

• Small-questionnaire sample size
• Not all dental clinics included
• Potential for information bias in recording of ICD-9/10 codes

References


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