

## **Legislative Committee on Health Care**

### **Oral Health Talking Points**

The Oral Health Program (OHP) has been working with the sealant partners to standardize the process of data collection/reporting such that we can better assess the oral health needs of children in Nevada. A standardized, comprehensive sealant report will enable the OHP to compare its findings with national benchmarks such as the Healthy People 2020 Objectives and oral health indicators reported in the National Oral Health Surveillance System (NOHSS). One of the limitations to assessing the oral health needs of children is not having current data. The Association of State and Territorial Dental Directors (ASTDD) recommends that a Basic Screening Survey (BSS) for 3<sup>rd</sup> graders be conducted approximately every 3-5 years to assess the needs of children across the state. While Nevada had the funding to conduct a Head Start BSS in 2012, it has not been able to conduct a 3<sup>rd</sup> grade BSS since 2009. Without the most current data to assess the oral health needs of 3<sup>rd</sup> graders in our state, we are limited to the data offered by the sealant partners.

Before providing a brief summary of our findings for FY2012-2013, I want to provide an overview of the prevalence of dental decay in children and evidence-based preventive efforts to help reduce the rates of decay. Tooth decay remains a common chronic condition that becomes more prevalent with age. According to the CDC, tooth decay affects more than one-fourth of children aged 2-5 and half of those aged 12-15. Untreated tooth decay can cause pain and infection that may lead to difficulty eating, speaking, socializing and sleeping which can result in poor overall health. Dental problems can also negatively affect school attendance and performance. The Community Preventive Services Task Force recommends school-based sealant delivery programs and community water fluoridation based on strong evidence of effectiveness in preventing tooth decay. Sealants can protect the teeth by preventing decay and the pain/discomfort that can be associated with it, thus, enabling the student to properly focus within the classroom.

Oral health is an integral part of general health. Although preventable, tooth decay is a chronic disease affecting all age groups. In fact, it is the most common chronic disease of children aged 6 to 11 years. The burden of disease is far worse for those who have limited access to prevention and treatment services. This is why it is important to be strategic when implementing prevention programs and use the Best Practices to offer services to at-risk populations in innovative ways to increase access to care.

**For FY 2012-2013 (July 1, 2012-June 30, 2013), the sealant partners reported the following:**

Number of schools participating: 40

Number of children receiving an oral health assessment: 2445

Percent of children with untreated decay: approximately 52% (2008-2009 BSS: 28%, HP2020: 25.9%)

Percent of children with urgent care needs (pain/infection): approximately 13%

Number of children with a fluoride varnish application: 2560

Number of children with at least one dental sealant placed: 1518 (2008-2009 BSS: 37.5%; HP2020: 28.1%)

Number of children reporting Medicaid/CHIP coverage: approximately 40%

Number of children reporting no insurance coverage: approximately 66%

The majority of the children that received preventive services from our sealant partners were from underserved populations.

Black/African American: 14.2%

American Indian/Alaska Native: 1.3%

Hawaiian/Pacific Islander: 3.7%

Asian: 7.6%

Hispanic: 59%

**Total: 85.8%**

While the sealant programs provide a snapshot of the need of children in Clark County and Washoe County, it does provide more current information on the oral health needs of these children. The documented untreated decay for the children participating in the sealant programs during FY2013 was much higher than what was reported during the 2008-2009 BSS (52% vs 28%).

With continued support from community partners and a standardized format to report sealant data, additional programs can report data to the OHP, thus, increasing the number of high-risk

schools that receive preventive dental services (sealants, screenings, fluoride varnish). Leveraging resources from community partners can help increase the standardization of sealant program data, bringing Nevada closer to the Healthy People 2020 targets.

The Healthy People 2020 Objective (OH 12.2) is to increase the proportion of children aged 6 to 9 years who have received dental sealants on one or more of their permanent molar teeth (28.1% target). The Healthy People 2020 Objective (OH 2.2) is to reduce the proportion of children aged 6 to 9 years with untreated decay in their primary and permanent teeth (25.9% target). Findings from the generated reports can be disseminated to oral health partners to further leverage funding to expand the capacity of the programs and to support the OHP infrastructure

In conclusion, it is extremely important to fund public health surveillance programs such that we can better address the needs of the children in our state. Working with the other departments within the Division of Public and Behavioral Health, we can leverage the available funding to collect data from various programs and creating a more integrated approach to addressing the health disparities of Nevadans which in turn can help reduce the prevalence of chronic disease in children and young adults.

Recommendations to help address the oral health needs of children:

1. Consider oral health when planning public health programs to address the needs of children (local and state integration)
2. Support the use of Community Health Workers (CHW) in Women, Infant and Children (WIC) centers to help assess the oral health risk of children and to deliver preventive services (oral health education and fluoride varnish if the scope of work is revised in the future)
3. Support the integration of oral health screenings and preventive services with pediatricians at Well Check visits
4. Support the integration of oral health with Home Visiting Programs in addition to providing them the tools to assess the oral health risk of children and a referral protocol to get the children to a dental home for treatment. Also, encourage the community health nurses to provide fluoride varnish at the recommended interval. Some of the community health nurses don't apply fluoride varnish during the Home Visits as they have done in the past.
5. Increased funding for public health surveillance to better address the oral health needs of children not only in the more metropolitan areas, but also the rural areas of Nevada.
6. Conduct community assessments with the use of emergency room data to describe the population that is using the emergency room for dental services and the reason for the service (UNLV School of Dental Medicine, Pediatric Dental Resident evaluated UMC discharge data to provide a description of the population making use of the emergency room. Preliminary data is attached for your review. I will forward the manuscript when it is published). We can use the UMC model to evaluate the pediatric records of other hospitals.

7. In many ways, if we can increase the oral health literacy of the community, they can modify behaviors such that they can have less of a risk for developing oral health problems. Using non-traditional oral health providers increases the available workforce that is available to provide assessments and case management for community members.
8. Establishing partnerships with other State organizations to leverage funding for data collection/data analysis to identify the needs of certain populations ie seniors, people with special needs.

In terms of what the Legislative Committee on Health Care can do to help address the oral health disparities that exist for children, it is important to acknowledge the importance of oral health in funding health care in general. With the integration of the Division of Public and Behavioral Health, more programs understand the importance of oral health with general health, but the OHP doesn't currently have any funding beyond July 1, 2014. We have made great strides in developing partnerships at the local and state level as well as putting in place Best Practices that can move the OHP forward to help address the oral health disparities of all Nevadans, but with limited funding, it is difficult to implement some of the programs that have been successful in other States.

In terms of addressing the oral health needs of all Nevadans through WICHE, National Health Service Corps (NHSC), ACA provisions and graduating dental student that stay in Nevada, many factors come into play. As I mentioned at the meeting, students need an incentive to return to the rural counties or to stay in Nevada. I have worked closely with students on this topic since 2010 when I started teaching Healthcare Financing and Public Health to the first year dental students. Many of them are passionate about offering services to underserved communities, but with such a large amount of debt upon graduation, they need some incentive to help them relocate while paying back their debt and supporting their families. I recently graded the Midterm for the current first year students and many students had some great ideas even beyond what I discussed in class. The current first year students are very passionate about public health and working in rural counties. WICHE and NHSC funding is a great incentive for dental students upon graduation, but if coupled with assistance in finding a job or recruitment strategies of students from rural counties, it would have an even bigger impact on addressing the needs of all citizens. Several students have applied for the NHSC scholarship program, but due to the competitive nature, they did not receive the scholarship. Jeanine and Barbara have been great at not only presenting to our students, but to our pediatric residents and Faculty. Several faculty were also interested this year in WICHE funding to help them stay at the school. Academic dentistry does not compensate as well as a private practice so the school is always faced with the challenge that faculty may opt to leave for private practice. Any incentives to keep them at the school and offer services to the underserved through one of our many community programs, is greatly appreciated by faculty.

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I can be reached by email or phone to address any specific questions you have or if you would like to discuss what innovative strategies that we can implement to ensure that our dental students and future alumni meet the needs of Nevadans.

On behalf of Dean Karen West, I would like to invite the members of the Legislative Committee on Health Care to the UNLV School of Dental Medicine for a tour and further discussion. If you let me know what days are convenient, I can coordinate things from this end.

## **Trends of Pediatric Oral and Dental Emergencies in a Hospital, Rusinoski A, Hughes C, Nelson D (UNLV School of Dental Medicine and University Medical Center, Las Vegas, NV)**

**Purpose:** The purpose of this study was to evaluate sociodemographic trends associated with patients who present to the pediatric ED with oral and dental related emergencies.

**Methods:** De-identified medical records of patients aged 0-18 years old who presented to the emergency room for oral and dental reasons between the years 2007-2012 were collected from an urban hospital in Las Vegas, NV. Variables analyzed included 1) race, 2) ICD-9 diagnosis code, and 3) insurance status using frequency and chi-square tests.

**Results:** There were 4,122 dental/oral related emergencies with 47.7% having Medicaid or government assistance insurance and 46.4% were Hispanic. Most emergencies (54.7%) were considered nontraumatic with mucositis as the most common diagnosis. Those with no insurance presented 64.7% of the time for nontraumatic reasons similar to those with Medicaid who presented 57.6% of the time for nontraumatic reasons. There has been a 47.7% increase in dental and oral related emergencies in the ED among Medicaid patients from 2007 to 2012.

### **Conclusions:**

1. Nontraumatic dental diagnoses were more common than traumatic diagnoses.
2. Mucositis was the most common emergency.
3. Hispanic patients comprised the majority of ED visits.
4. Most had Medicaid or government assistance insurance.
5. Those with no insurance and Medicaid or government assistance insurance presented most of the time for nontraumatic reasons.
6. There has been an increase in dental and oral related emergencies among Medicaid patients.



# Sociodemographic Trends of Pediatric Oral Emergencies in a Southern Nevada Hospital



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## PURPOSE

The purpose of this study was to evaluate sociodemographic trends associated with patients who present to the pediatric emergency department with oral related emergencies.

## METHODS

De-identified medical records of patients from birth-18 years old who presented to the emergency room for oral reasons between the years 2007-2012 were collected from an urban hospital in Las Vegas, NV. Variables analyzed included 1) race, 2) ICD-9 diagnosis code, and 3) insurance status using frequency and chi-square tests.

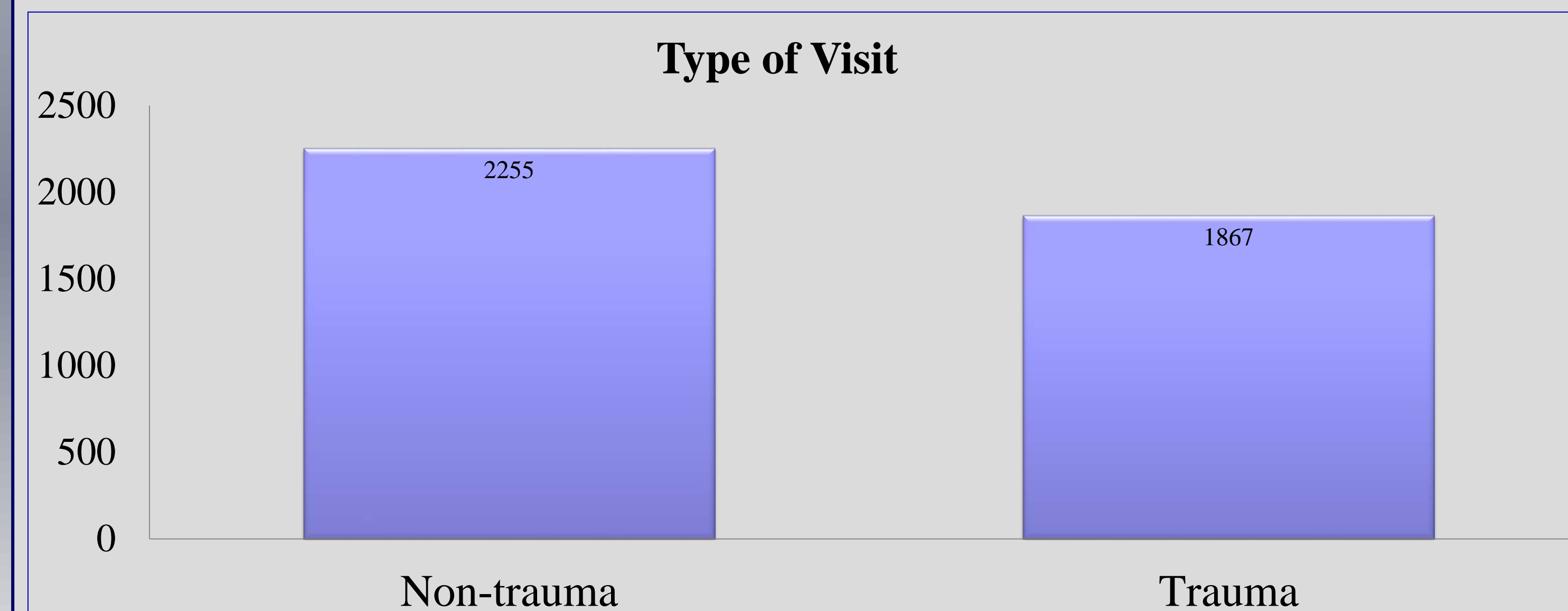
## RESULTS

There were 4,122 primary oral related emergency diagnoses which accounted for 30.0% of all ED emergencies. A total of 1969 (47.7%) had Medicaid or government assistance insurance and 1911 (46.4%) were Hispanic. The majority (54.7%) of the emergencies were considered nontraumatic with the most common diagnosis of mucositis and stomatitis, unspecified accounting for 1013 of the visits. Those with no insurance presented most 64.7% for nontraumatic reasons similar to those with Medicaid who presented 57.6% of the time for nontraumatic reasons. Those with private insurance presented to ED 37.8% for nontraumatic reasons. Of those who presented with mucositis, 61.4% had Medicaid, 24.6 had no insurance, and only 14.0% had private insurance. There has been an increase of 47.7% in oral related emergencies in the ED among Medicaid patients from 2007 to 2012.

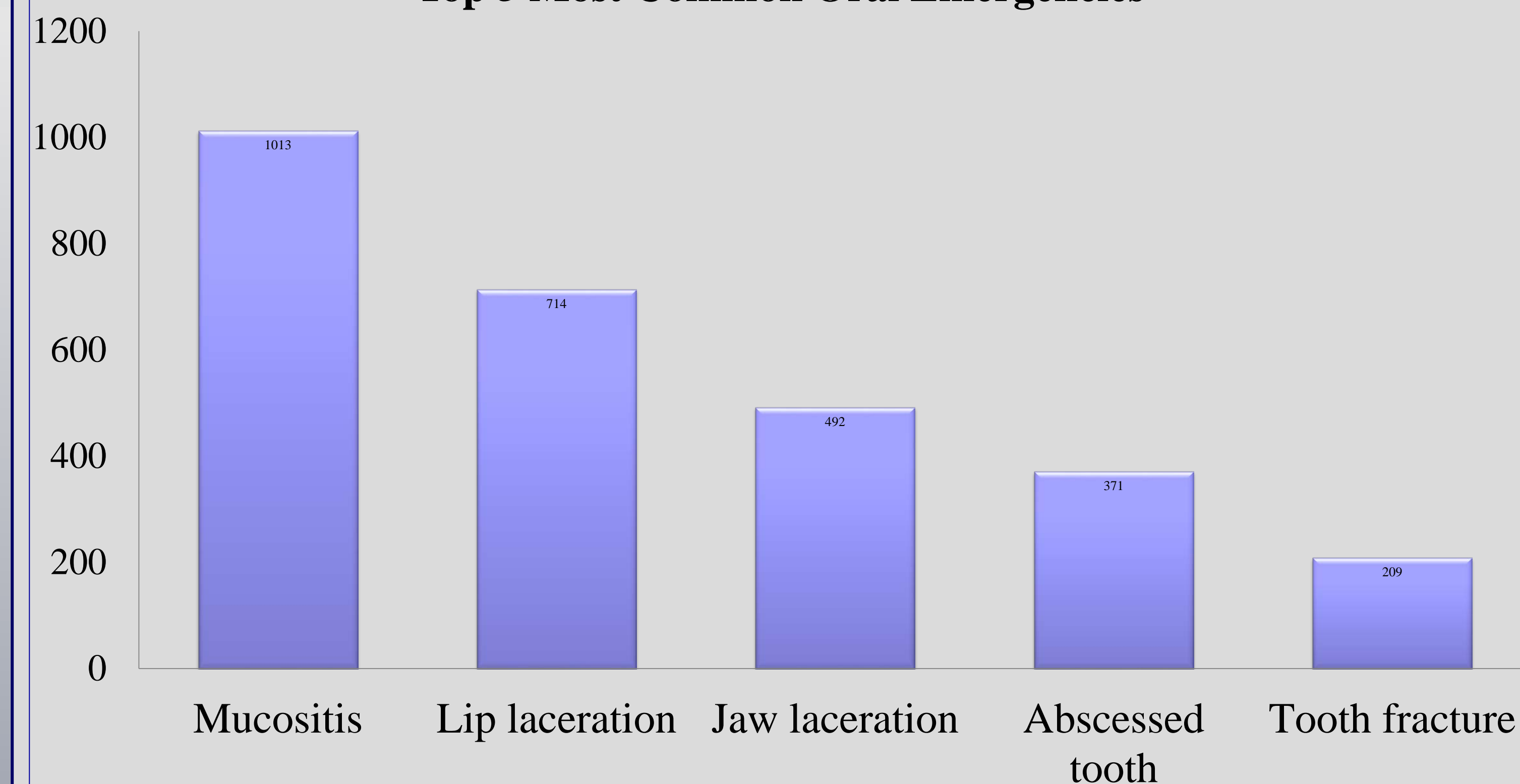
## CONCLUSIONS

- Oral emergencies comprised 30% of all ED visits between the years 2007-2012.
- Visits to the ED for an oral condition are more likely to have a non-trauma origin than visits arising from trauma.
- Mucositis and stomatitis, unspecified is the most common diagnosis.
- Hispanic patients comprise the majority of patients presenting to the ED.
- The majority of ED patients have Medicaid or government assistance insurance.
- Those with no insurance and Medicaid or government assistance insurance present most of the time for non-trauma reasons.
- There has been an increase in almost 50% in oral related emergencies in the ED among Medicaid patients from 2007 to 2012.

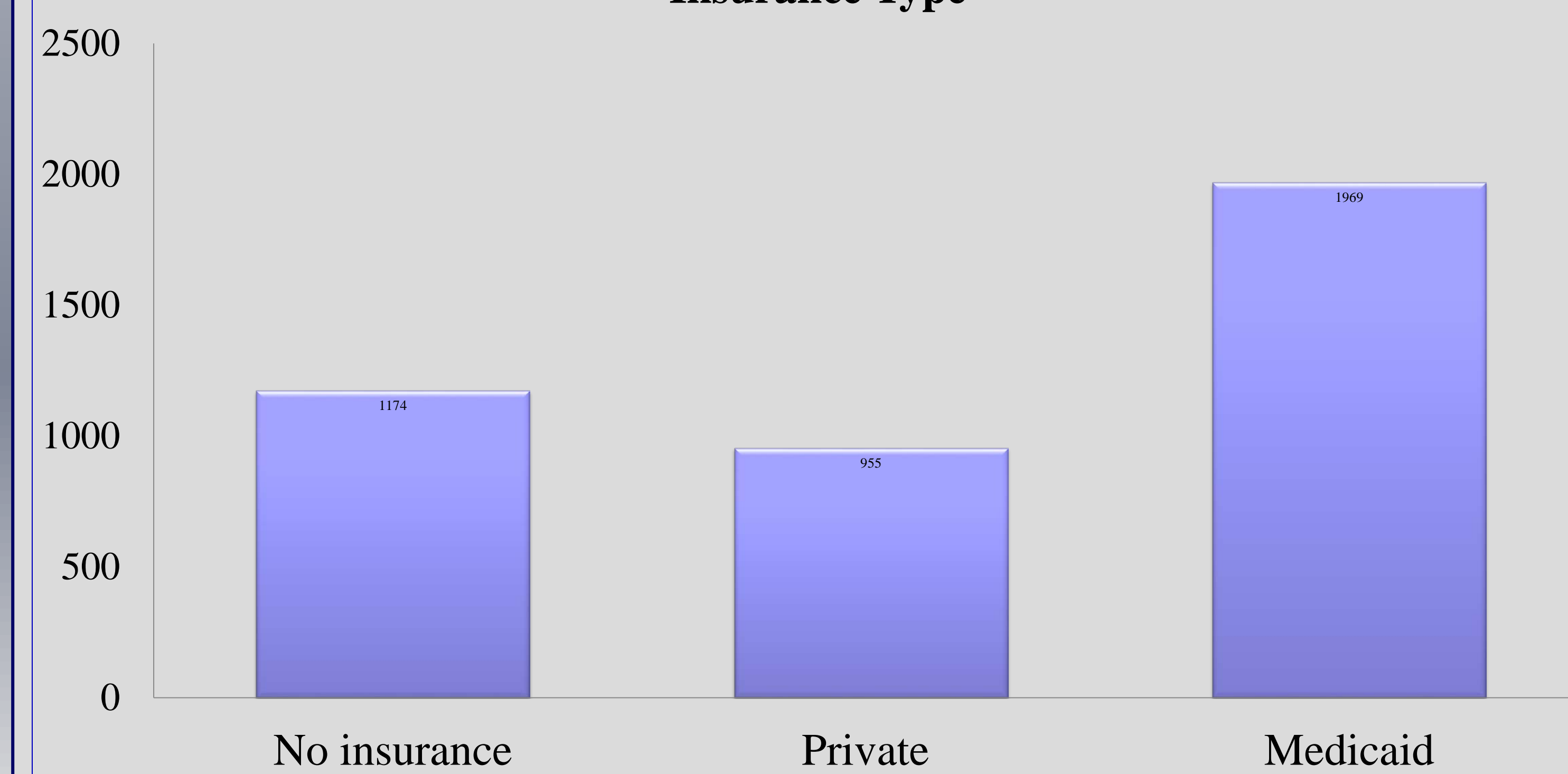
### ED Visit Trends



### Top 5 Most Common Oral Emergencies



### Insurance Type



### Insurance Trends

Table 1. Insurance vs. Type of Emergency

Insurance	Non-trauma	Trauma
	N(%)	N(%)
No insurance	758(64.6)	416(35.4)
Private	361(37.8)	594(62.2)
Medicaid	1134(57.6)	835(42.4)
CBD*	2(8.3)	22(91.7)

Table 1.  $\chi^2 = 183.652^a$ ;  $p < 0.001$

Notes: \*Cannot be determined due to motor vehicle accidents

Table 2. Insurance vs. Top 5 Emergencies

	Oral Emergency				
	Mucositis	Lip laceration	Jaw laceration	Abscessed tooth	Fractured tooth
Insurance	N(%)	N(%)	N(%)	N(%)	N(%)
No Insurance	249 (24.6)	156 (21.8)	109 (22.2)	168 (45.3)	51 (24.4)
Private	142 (14.0)	246 (34.5)	168 (34.1)	56 (15.1)	56 (26.8)
Medicaid	622 (61.4)	306 (42.9)	208 (42.3)	147 (39.6)	98 (46.9)
CBD*	0 (0)	6 (0.8)	7 (1.4)	0 (0)	4 (1.9)

Table 2.  $\chi^2 = 498.401^a$ ;  $p < 0.001$

Notes: \*Cannot be determined due to motor vehicle accidents

### Medicaid ED Visits for Oral Emergencies

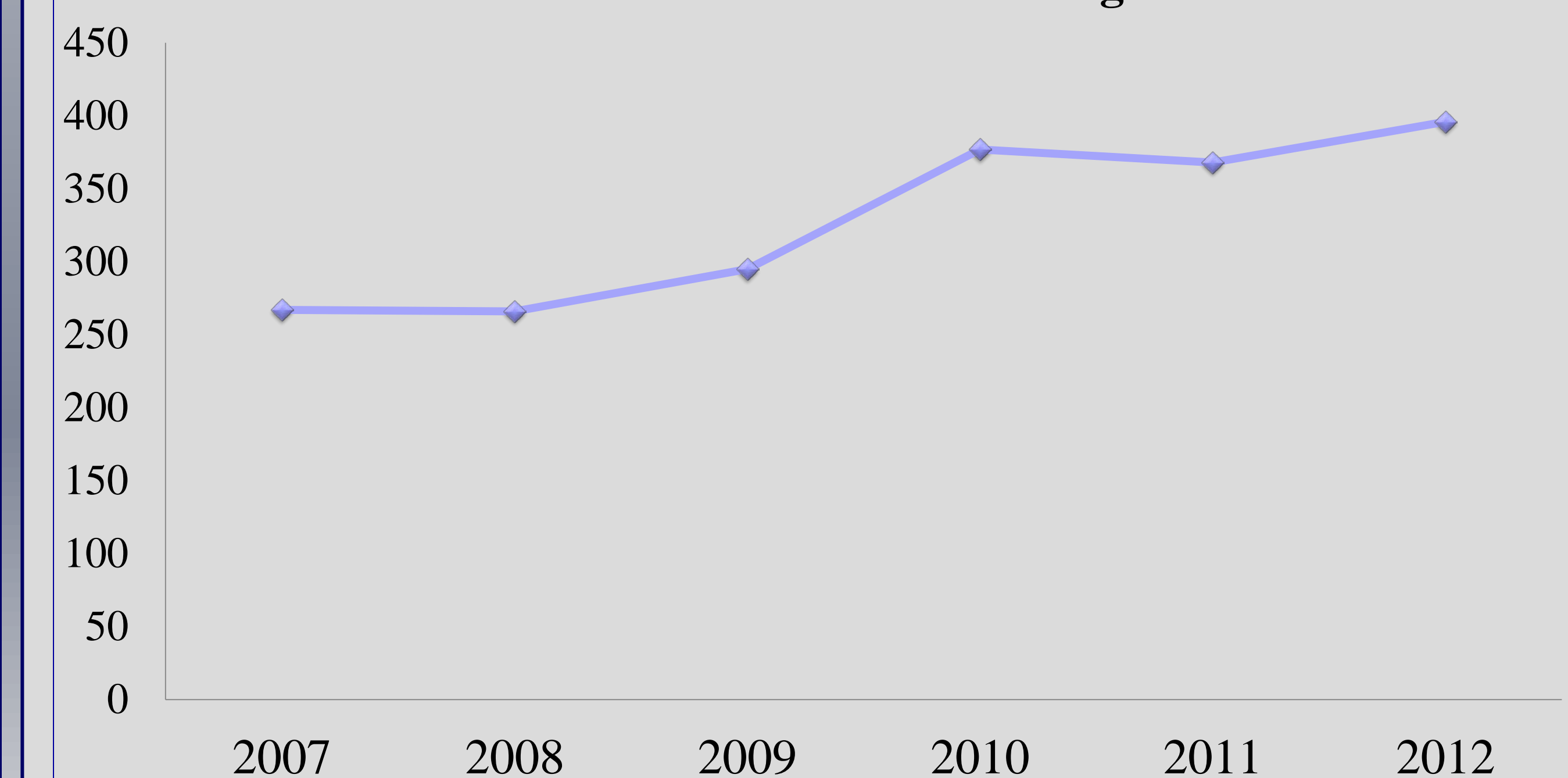


Figure 1. An increase of 47.7% in ER visits among Medicaid patients from 2007-2012 for oral emergencies.