



Emergency Department Visits and Hospitalizations for Preventable Dental Conditions

California HealthCare Foundation
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California HealthCare Foundation

- Mission to improve the delivery & financing of health care in California through innovation and ideas
- Objective to improve oral health & access to dental services through:
 1. Research & communication
 2. Supporting innovation
 3. Informing policy development

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Projects in Oral Health

- Research on access for underserved
- Safety net dental clinic capacity
- “Virtual” dental home demonstration
- IOM Workshop on Oral Health
- Retail dental clinic concept focused on *prevention*
- Medicaid policy and operations
- Clinical guidelines for pregnant women

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Introduction

- One quarter of all adults and 28% of children in CA have untreated dental caries (tooth decay).
- Access to preventive & restorative dental services are problematic for uninsured & publicly insured
- Reductions in Medi-Cal dental benefits & increasing uninsured will exacerbate dental access problems.
- **Issue:** *Without access to routine oral health services, dental diseases and conditions may go untreated and may result in emergency department (ED) visits and, in extreme situations, hospital inpatient admissions.*

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Goal & Methods

1. Assess the extent to which Californians, uninsured and insured, use the ED for ambulatory care sensitive (ACS) dental conditions.
2. Predict the probability of ED use for dental ACS conditions.
 - **Methods:** Analyze California OSHPD inpatient discharge data (2002-2007) and ED data (2005-2007) to ascertain use of EDs and inpatient services for specific dental conditions identified by ICD-9 codes.
 - **Audiences** –Legislature & staff, advocates, providers, dentists, media

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Prevalence

- Millions of Americans have untreated tooth decay:
 - 27 percent of those 35 to 44 years old
 - 30 percent of those 65 years and older
- 55% of children ages 6 to 8 have untreated tooth decay, more than twice the national average.
- Tooth decay remains the most common, though largely preventable, chronic disease of children ages 5 to 17 years — five times more common than asthma (59 versus 11 percent).
- Gallup-Healthways Poll reports that over 1/3 of the population did not visit dentist last year at all.

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Oral Health & Health

- Oral and general health are intertwined. Poor oral health makes it difficult to eat, speak, get a job, and for kids especially — to learn.
- Surgeon General's 2000 report on oral health documented the interconnection between oral health and other diseases. Research suggests poor oral health may:
 - Contribute to the development of heart disease, the nation's leading cause of death.
 - Increase the risk of stroke.
 - Increase a woman's risk of poor birth outcomes
 - Pose a serious threat to people with diabetes, respiratory diseases, or osteoporosis.
- Although oral disease can be episodic and is generally not life threatening, it can often become chronic and the effects run deep.

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Providers

- **Private system** - Small teams of professionals (dentists, dental hygienists, and dental assistants) in private practices and clinics serve largely insured and self-pay patients.
- **California's "dental safety net"** consists of community health centers and public health clinics, (the largest providers), as well as dental hygiene and dental schools, hospital clinics, and other settings such as mobile vans.
- **Emergency departments and hospitals** sometimes become the *providers of last resort*.

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Financing

- Dental care is financed primarily through private and public insurance and out-of-pocket payments.
- Most dental insurance plans require large co-payments, as much as 50%. Services are usually charged by procedure on a fee-for-service basis.
- The result is *two-tiered system* for financing:
 - Individuals with private insurance or who can afford to self-pay usually choose private practice.
 - Individuals without insurance and who cannot afford to self-pay receive dental care via safety net providers

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Factors Affecting Oral Health

- Dental insurance alone does not guarantee good oral health.
- Many factors, in addition to genetics, influence oral health and access to dental care. Other factors include:
 - Access to public or private dental care providers
 - Access to fluoridated water
 - Nutrition
 - Personal oral hygiene practices
 - Tobacco use
 - Resources for co-payments

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Cost & Knowledge Barriers

Cost is a burden for most

- Nearly two-thirds who could not afford needed dental care were uninsured. Publicly (14 percent) and privately (22 percent) insured respondents reported the same difficulty.
- Nearly 60 percent of those who failed to get the dental care they needed last year said that they couldn't afford it. An additional 17 percent cited lack of dental insurance as the reason.

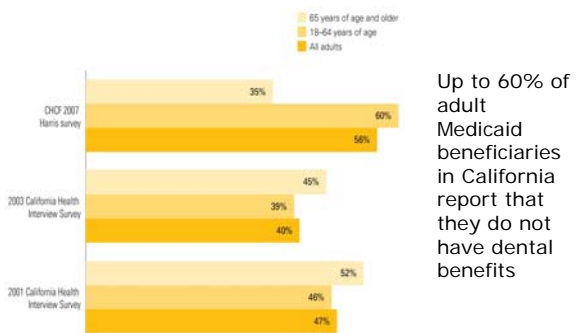
Multiple California surveys find:

- Over half of individuals covered by Medicaid in California may not know they have full dental benefits.

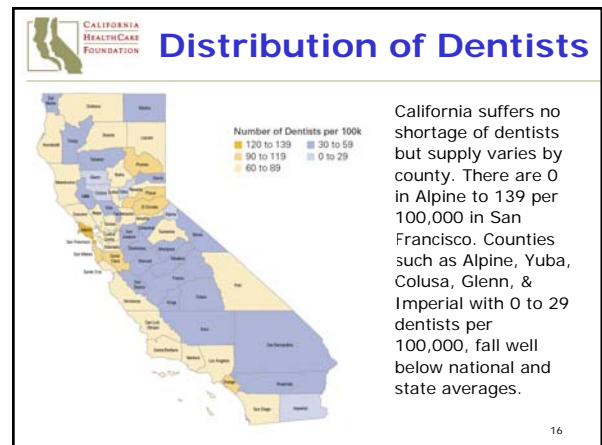
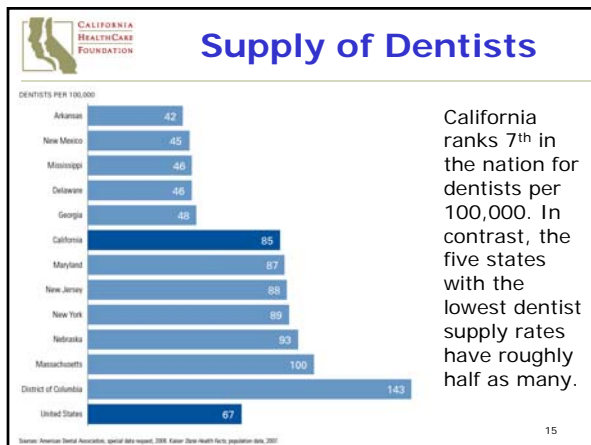
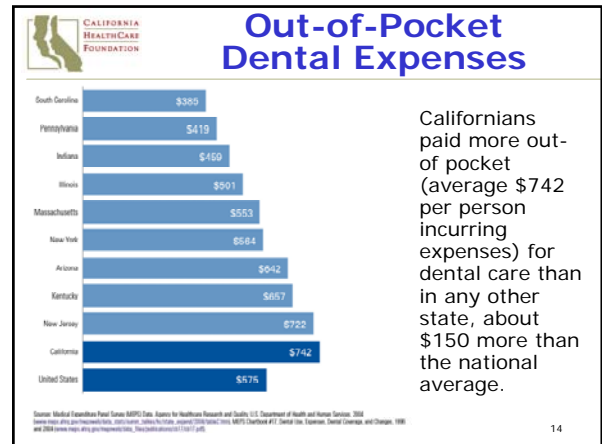
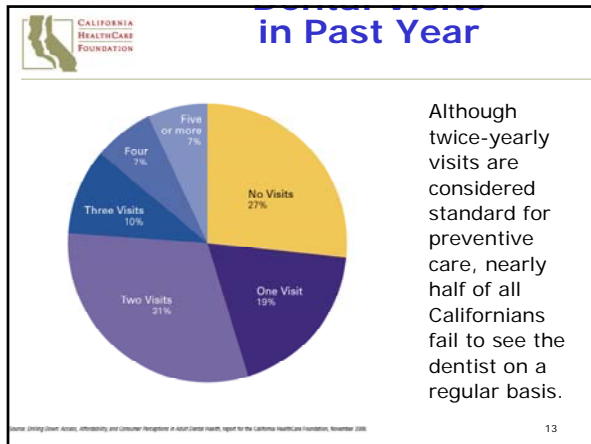
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Medicaid Beneficiaries Reporting Dental Benefits



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- ### Dental Safety-Net Clinics
- California's dental safety net is not an organized system but a loose association of clinics
 - Community dental clinics usually provide very basic dental services, e.g., x-rays, cleanings.
 - Dental clinics reported an average 28-day waiting time for new patient exams.
 - No shows or cancellations accounted for almost 20 percent of unused chair time.
 - In 2005, 60 percent of dental clinics planned to expand dental services in the next 1 to 3 years.
 - Many clinics reported personnel shortages (from hygienists to specialists).
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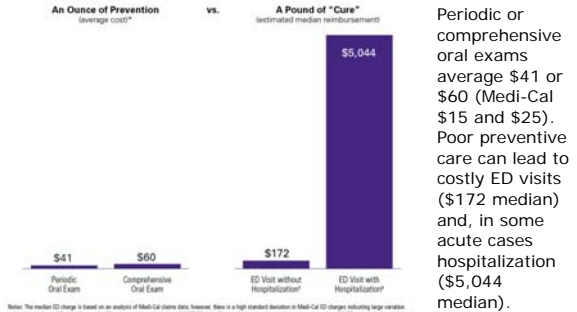
Ambulatory Care-Sensitive (ACS) Dental Conditions

- The five ACS dental conditions studied include cases where:
 - Tooth decay or periodontal disease has become so severe that patients must seek immediate care.
 - “Good outpatient care can potentially prevent the need for hospitalization, or for which early intervention can prevent complications or more severe disease.”
- Visiting an emergency department (ED) or hospital for dental care suggests poor prevention & inadequate access to outpatient services.
- EDs rarely offer definitive dental treatments as they are inappropriately staffed and inadequately equipped.
- Costs rise precipitously when patients receive dental care in ED or hospital settings.

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The Cost of Dental Neglect



*Notes: The median ED charge is based on an analysis of Medi-Cal claims data. However, there is a high standard deviation in Medi-Cal ED charges including large variation in the charges for an ED visit. Charges for ED visits are not available from OSHHS ED data. Charges for outpatient hospital visits were based on OSHHS patient discharge data. Reimbursement was estimated by adjusting ED charges by the 2007 cost-to-charge ratio for all general acute care hospitals. Median Medi-Cal payments for about 10 percent of charges. Cost-to-charge ratio for the Pacific Region 95th percentile.

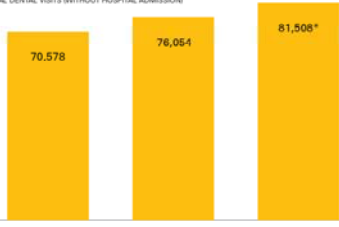
*Source: Dental Association, Survey of General Practice Form, 2005. Division of Health Care Financing, Department of Health Care Services, Department of Health Care Services, 2007.

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ED Visit Rates per 100K for ACS Conditions

TOTAL DENTAL VISITS (WITHOUT HOSPITAL ADMISSION)



ED visits for preventable dental conditions (without hospitalization) were higher than those for diabetes ACS conditions. The number of ED visits for preventable dental conditions increased 12% over three years.

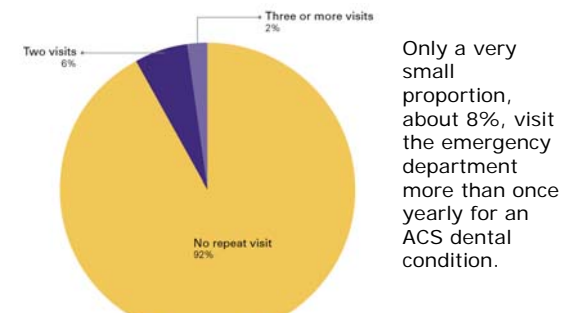
Rate per 100,000 (without hospital admission)	2005	2006	2007	Change (05-07)
Dental	191	203	215	▲ 12%
Diabetes	139	143	148	▲ 6%
Asthma	262	272	269	▲ 7%

*ED visits for preventable dental conditions, including those resulting in hospital admissions, totaled 83,816 in 2007. Source: Gilman, L.A., Mendenhall, J., Magley, L.S., et al. "Dental Visits to Hospital Emergency Departments by Adults Receiving Medicaid: Awaiting Street Care." JGIM 2007;22(10):716-720. State of California, Department of Health Care Financing, California Department of Health Care Services, 2007. Department of Health Care Services, California, California OSHHS emergency department data, 2005-2007.

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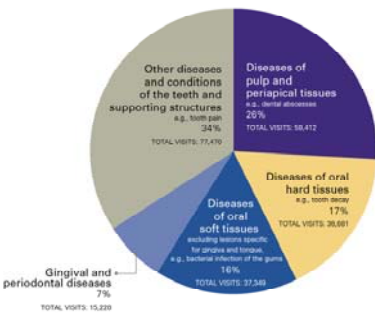
Repeat Dental ED Visits Within One Year



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ED Visits by ACS Dental Condition



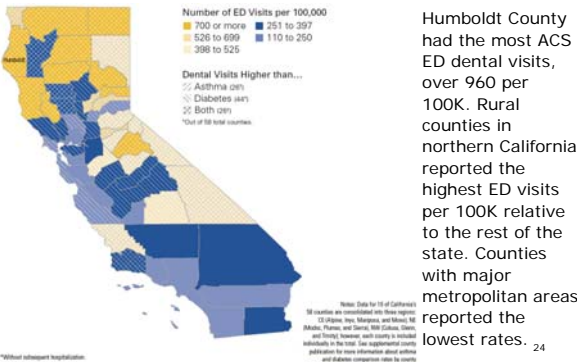
Diseases of the pulp and periapical tissues (inflammatory in nature or due to infections) made up about a quarter of the visits to EDs. Tooth decay & other conditions such as tooth pain accounted for another 17 & 34 percent, respectively.

Note: Data contained for three-year period. Please see Appendix A for a more complete description of the five preventable dental conditions studied for this report. Source: www.hcf.org. California OSHHS emergency department data, 2005-2007.

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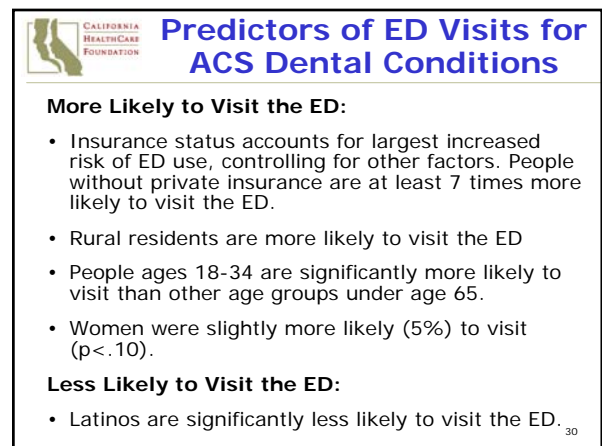
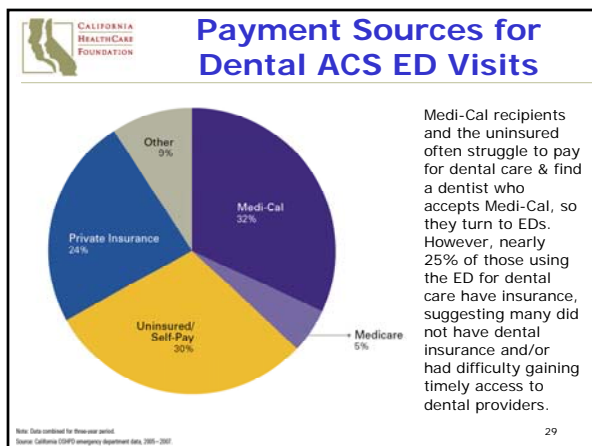
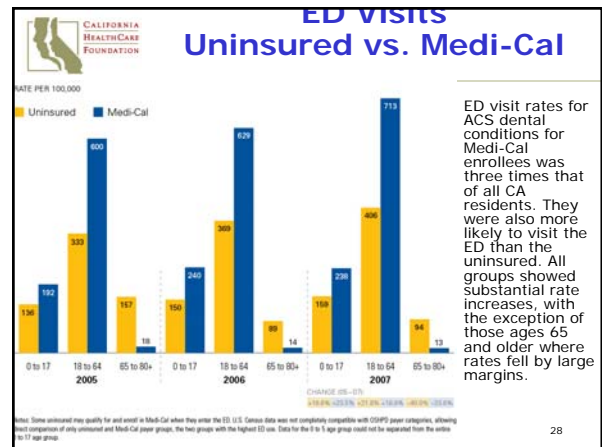
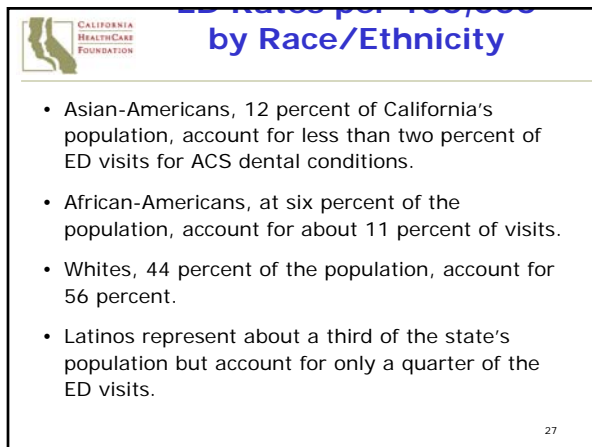
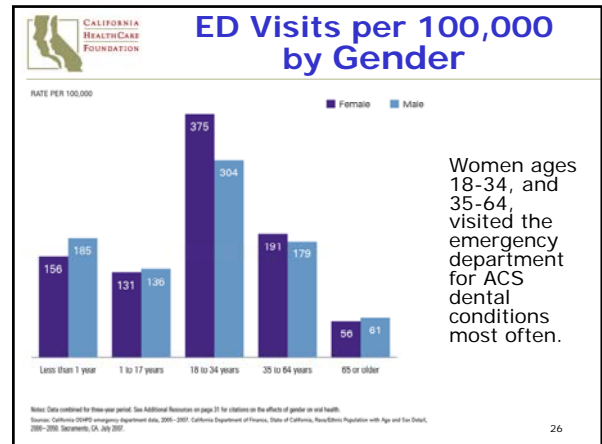
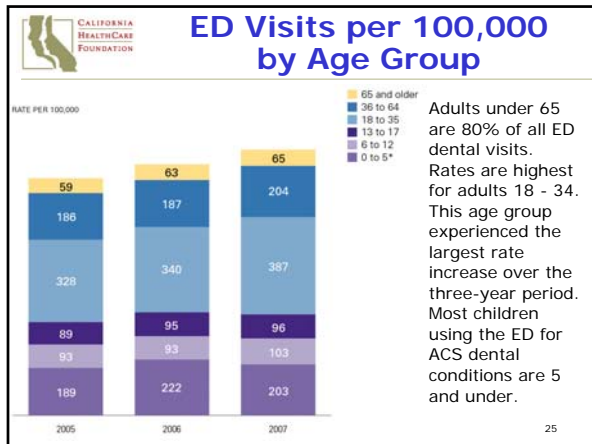


ED Visits per 100,000 by County



Note: Data for 16 of California's 58 counties are consolidated into three regions: 13 (El Dorado, Inyo, Mono, and Nevada); 13 (Alameda, Contra Costa, Colusa, Glenn, and Tehama); however, each county is included individually in the text. See supplemental county publication for more information about asthma and diabetes comparison data by county.

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Summary

- Over 83,000 Californians (222 per 100K) visited the ED for ACS dental conditions, a 12% rise since 2005. Hospital inpatient admissions for these conditions were infrequent.
- From 2005 to 2007, Medi-Cal beneficiaries & the uninsured represented nearly two-thirds of such ED visits, with rates increasing by about 20% over the three-year time period.
- Lacking private insurance is the biggest predictor of ED use after controlling for other demographic factors, but people in rural areas, ages 18-34, and women are also at greater risk.
- In 2007, the median charge for an ED visit for an ACS dental condition was \$660, although charges & payments varied widely. Hospitals charged an estimated \$55 million to commercial insurers, government programs and uninsured individuals for preventable ED visits for dental conditions.

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Recommendations

Dental Insurance Coverage and Preventive Services

- **Federal & state policymakers:** include dental benefits, including payment for preventive dental services, in national and state coverage expansion legislation.
- **Public health departments:** undertake campaigns to promote oral health knowledge and good practices, particularly for children and pregnant women.

Health Care Workforce Training and Practice

- **Federal and state policymakers:** expand scholarships and loan repayment programs to oral health professionals practicing in underserved areas.
- **Dental & hygiene schools:** provide training experience treating underserved populations in non-dental school settings, such as community clinics, schools, nursing homes, and rural areas.
- **Medical, nursing and other health professions schools:** include oral health in curricula and train students to identify and treat basic dental conditions.
- **State policymakers:** support demonstrations of new oral health workforce models (e.g. dental therapists) and expanded scope of practice for existing professionals (e.g. Registered Dental Hygienists, dental assistants) to address unmet need in underserved areas.

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Recommendations

Dental Care Delivery System

- **Local health and public health systems:** expand dental service capacity at federally qualified health centers, WIC clinics, school-based clinics, nursing homes and mobile dental clinics.
- **Private and community dental practices:** establish "virtual dental homes" using teledentistry and community-based oral health teams to increase preventive services in underserved settings.
- **Dental, medical & nursing professionals:** collaborate more across sectors & refer patients appropriately for needed oral & health care.

Payers and Insurers

- **State policymakers:** increase dental reimbursement rates in Medi-Cal and Healthy Families to increase access to dentists for enrolled populations.
- **State policymakers:** offer tax incentives for dentists who treat Medi-Cal and other public program beneficiaries.
- **Medi-Cal program:** amend contracts with fiscal intermediaries and managed care plans to increase and measure the provision of preventive dental services in health and dental plans.

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More Resources

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