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Adult Emergency Oral Health Care 2008
Report to the Legislature

Tennessee Department of Health
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Acknowledgements:
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BACKGROUND

Oral health is essential to the overall health of an individual and a population. In 2000, the Surgeon General released the first report on oral health,[1] noting the importance of oral health to the health of the public. Recent reports have documented links between poor oral health and increased risk of heart disease, stroke and poor birth outcomes.[2,3,4,5]

Despite the recognized influence of oral health on overall health and well-being, Tennesseans fare poorly with regard to oral health indicators. Data from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS) revealed that in 2006 Tennessee ranked:

- 42nd in the nation with only 64.8% of adults visiting the dentist in the previous year for any reason (national average, 69.5%)
- 45th in the country with 52.2% of persons having one or more permanent teeth extracted (national average 45.3%)
- 48th for 34.9% of adults 65 years and older having had all permanent teeth extracted

See related figures in Appendix I

There are limited data resources available to document the unmet dental needs of adults in Tennessee. Like many other states, Tennessee has data from statewide dental surveys of school aged children, but does not have statewide survey data on the adult population. In an effort to better understand the extent of the problem of unmet needs in adult oral health, Tennessee Department of Health (TDOH) staff conducted a retrospective study of dental-related visits to Tennessee emergency departments (EDs) by adults for the years 1998-2005. During this eight-year period, dental-related ED visits by all ages increased 161%; however, the greatest increase in ED utilization was seen in adults 21 years and older (see figure below).

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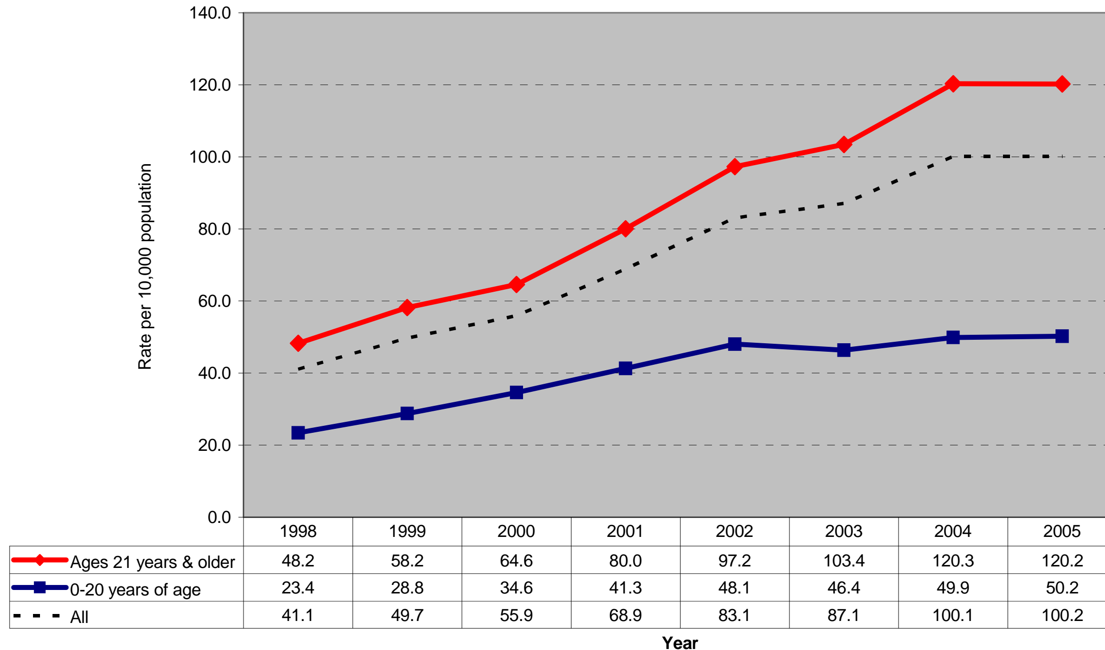
[1] US Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.

[2] Humphrey LL, Fu R, Buckley DI, Freeman M, Helfand M. Periodontal disease and coronary heart disease incidence: a systematic review and meta-analysis. *J Gen Intern Med*. 2008 Dec;23(12):2079-86. Epub 2008 Sep 20.

[3] Sim SJ, Kim HD, Moon JY, Zavras AI, Zdanowicz J, Jang SJ, Jin BH, Bae KH, Paik DI, Douglass CW. Periodontitis and the risk for non-fatal stroke in Korean adults. *J Periodontol*. 2008 Sep;79(9):1652-8.

[4] Siqueira FM, Cota LO, Costa JE, Haddad JP, Lana AM, Costa FO. Maternal periodontitis as a potential risk variable for preeclampsia: a case-control study. *J Periodontol*. 2008 Feb;79(2):207-15.

[5] Khader Y, Al-shishani L, Obeidat B, Khassawneh M, Burgan S, Amarin ZO, *et al*. Maternal periodontal status and preterm low birth weight delivery: a case-control study. *Arch Gynecol Obstet*. 2009 Feb;279(2):165-9. Epub 2008 Jun 4.



During this 8-year period, the 21-34 year old age group had the highest dental-related ED utilization rate/10,000 population each year, accounting for half of all dental-related ED visits. Nearly 75% of ED visits during the period were made by young adults 21-44 years of age. More than two-thirds of adults visiting EDs for dental problems had TennCare (45.8%) or self-pay (22.4%) as the payer code. In 2005, total charges for dental-related ED visits for adults exceeded $16 million (see table).

Charges for dental-related ED visits made by adults, by payer code, Tennessee residents, 2005

Payer Code	Number of Visits	Charge per Visit			Total Charges
		Mean	Median	Mode	
TennCare	23,193	$290.29	$225.00	$128.00	$6,732,607.00
Medicare	3,899	$407.89	$243.00	$320.00	$1,590,363.00
Self-pay	13,320	$308.00	$218.00	$128.00	$4,102,615.00
Other Insurance	6,638	$382.74	$238.00	$94.00	$2,540,607.00
Free Care	147	$322.07	$226.00	$98.00	$47,344.00
Unknown	3,977	$289.43	$203.00	$320.00	$1,151,081.00
All Patients	51,174	$315.89	$226.00	$128.00	$16,164,617.00

Source: Division of Health Statistics, Tennessee Department of Health

Tennessee's Medicaid and Medicare programs do not provide dental services, and many persons with private health insurance do not have dental coverage. National estimates suggest that for every person without health insurance, 2.3 persons do not have dental insurance coverage. BRFSS data (2006) estimated that 606,686 Tennessee adults lacked health insurance, translating into an estimated 1,395,378 Tennesseans without dental insurance coverage.

There are some dental resources available to Tennesseans. TDOH has 54 dental clinics located in 53 rural counties, and 3 mobile dental clinics providing care to children in school settings. Rural dental clinics are staffed by 30.9 FTE dentists who provide comprehensive care to children and emergency care to adults. Five metro health departments have 8 dental clinics; 13 Federally Qualified Health Centers (FQHCs) sites, and 7 Safety Net sites also offer adult dental services. In FY 2007-2008, TDOH allocated additional Health Access and Safety Net dollars to address adult emergency oral health needs; however, dental services are not a required function of public health, and there is no consistent source of state funding specifically for adult emergency oral health.

CHARGE

Public Chapter 998, passed May 7, 2008 states that:

> "…the Commissioner will, in conjunction with professional organizations comprised of dental and related health care providers, organizations representing dental health recipients and other key stakeholders, develop a statewide strategy for the provisions of adult emergency oral health care, utilizing public and private sector resources."

Commissioner Cooper designated Dr. Veronica Gunn, Chief Medical Officer of the Department, to convene and chair a strategic planning group for this purpose. Staff of the Tennessee Department of Health identified key stakeholder groups and solicited participation from representative entities to ensure broad participation. Members of the strategic planning group are listed in Appendix II. The strategic planning group convened approximately monthly from July through December, 2008; subcommittees met as needed in between the larger group meetings.

After reviewing available Tennessee patient and resource data and exploring practices of other states, the strategic planning group acknowledged that the work product would likely entail a compilation of recommendations for programmatic and policy change, rather than a formalized plan *per se*. The recommendations included in this report represent consensus of the strategic planning group on activities that the group believes will result in improved adult emergency oral health care. Action has been initiated on many of the recommendations to date, and the group—eager to maintain this positive momentum—has committed to continuing to meet beyond the submission of this report.

RECOMMENDATIONS

The strategic planning group felt that many activities could be acted upon in a relatively short period of time. These recommendations are listed under the heading "Short Term." Longer-term recommendations acknowledge the continued need for additional data to guide effective action, and the ultimate need for both a comprehensive, preventive oral health plan as well as dedicated dollars to fund such an effort. The recommendations are listed here in brief, and on subsequent pages with additional explanations, if necessary.

Short-Term

- Offer provider liability protection for volunteer services
- Pilot TennCare MCO monitoring of frequent ED utilizers for emergency oral health care, and explore means of providing care per their "cost effective alternative" guidance
- Continue to support water fluoridation for preventative benefits
- Reallocate state funds to support adult emergency oral health services at public health clinics
- Recruit retired and part-time providers to provide volunteer services
- Promote existing and explore new options for recruiting and retaining dental providers in underserved areas
- Explore Area Health Educational Center (AHEC) opportunities
- Explore alternate uses of existing TDOH operatories and mobile dental units

Long-Term

- Commit dedicated dollars for adult dental services
- Continue involvement of strategic planning group beyond the report filing time to ensure continued collaboration
- Review salaries of TDOH dental providers to make more competitive
- Develop and implement evaluation strategy to determine what is working
- Consider location of existing resources (e.g. FQHC, Community and Safety Net clinics) when determining location of additional resources

RECOMMENDATIONS

Short-Term

Offer provider liability protection for volunteer services

Strategic planning committee members expressed concern that they were not able to entice interested dental providers to volunteer their services because current State law did not extend liability protection to them when practicing at clinics that charge patients fees based on their ability to pay. The strategic planning committee unanimously supported the introduction of legislation that allows for extension of the State's liability protection to dental providers who are donating their services in free or not-for-profit health clinics. Such expansion would reasonably result in increased available dental workforce to provide emergency dental services in high-need areas within existing free or not-for-profit health clinics.

Pilot TennCare MCO monitoring of frequent ED utilizers for emergency oral health care, and explore means of providing care per their "cost effective alternative" guidance

A brief analysis of CY 2007 TennCare expenditures for adult patients with dental-related ED visits revealed that approximately 8,800 patients had at least one ED dental encounter, with an average of 2.6 claims per patient. Anecdotal and general data reviews such as this suggest that there may be adults who are frequent utilizers of ED services for emergency oral health complaints. To the extent that such patients could be treated more effectively and at a reduced cost by a dental provider—preferably within a dental home—MCOs should consider monitoring for frequent ED utilizers, and consider contracting with local dental providers to serve these adults. MCOs could consider replicating an existing medical home pilot study in Middle TN to reduce inappropriate ED utilization by referral to an appropriate dental provider within a reasonable time.

Continue to support water fluoridation for preventative benefits

Widespread use of fluoride has been a major factor in the decline in the prevalence and severity of dental caries (i.e., tooth decay) in the United States, and is regarded as one of the most significant public health "successes" of the 20th century. Much scientific evidence demonstrates that when used appropriately, fluoride is both safe and effective in preventing and controlling dental caries. Given Tennessee's poor rankings in overall oral health, the strategic planning group unanimously supported continuing water fluoridation as a vital means of protecting tooth health.

Reallocate state funds to support adult emergency oral health services at public health clinics

In FY 2007-2008, TDOH expanded the Primary Care Safety Net Grant application to address increasing adult emergency oral health needs; approximately $203,000 of primary care safety net funds were redirected to assist in expanding the capacity of existing adult emergency dental services (i.e. extractions). A separate adult emergency dental grant opportunity totaling approximately $500,000 was developed for FY 2008-2009 as well. In FY 2007-2008, TDOH also allocated $1,000,000 of one-time Health Access funding which was distributed to local and metro HDs and FQHCs for the provision of adult emergency dental services. In addition, TDOH has required rural county HDs and encouraged metro HDs with dental resources to begin providing adult emergency oral health services.

Recruit retired and part-time providers to provide volunteer services
The Tennessee Dental Association (TDA) conducted a brief survey of retired members to ascertain providers' interest in providing dental services gratis. Respondents indicated an interest in providing free dental services at clinics where patients are charged based on their ability to pay, provided the state offered liability protection. TDA will continue to encourage volunteer opportunities for their retired and part-time members.

Promote existing and explore new options for recruiting and retaining dental providers in underserved areas
There are a number of existing programs meant to facilitate recruitment of providers to under-served areas. Health Professional Shortage Area (HPSA) is a federal designation based on provider-to-patient ratios as well as other mitigating factors. Clinics in HPSA-designated areas are eligible to recruit dental providers who have participated in the National Health Service Corp (NHSC) dental scholarship program. In addition, NHSC has a loan repayment program for which dental providers may be eligible for $25,000 for up to 3 years if they are practicing in a HPSA. Clinics in HPSA-designated areas that meet other eligibility criteria (e.g. utilize sliding fee scale, accept Medicaid/Medicare, treat a patient population below 200% federal poverty level) should be encouraged to apply for HPSA designation through the NHSC. The Tennessee Primary Care Association can be one resource for distributing such information to its members. Finally, Tennessee offers a Rural Scholarship Program designed to increase providers in medically under-served areas of the state. Eligible dental providers can apply as students and receive up to $12,500 per year to any state educational facility. Scholarship recipients provide one year of service in an underserved area for each year of scholarship receipt. This program has not been utilized by dental trainees due to the relatively small scholarship amount, and the fact that the award is subject to federal income tax.

Explore Area Health Educational Center (AHEC) opportunities
AHEC is the Area Health Educational Center program that develops community-based training programs at health service delivery sites in rural and underserved areas in the state. The AHEC Centers partner with a medical or other health professional school to provide community-based training programs for health professional students, residents and other providers who have a primary care concentration. The goal of these programs is to ultimately improve health care delivery in underserved and rural areas. Although there are currently 4 AHEC training programs in Tennessee, this resource seems to have been underutilized in the recruitment of dental providers to rural and underserved communities.

Explore alternate uses for existing TDOH operatories and mobile dental units
TDOH has 54 dental clinics within or adjacent to local county health departments. Many of these clinics are utilized on a part-time basis, and are available for usage after 4:30 p.m., on weekends and on some Fridays. TDOH has begun exploring opportunities for collaboration with dental schools in the State in which existing space would be utilized by dental trainees with appropriate supervision. This would allow for expansion of dental services to high-need populations using existing, underutilized resources, and would have the added benefit of exposing dental trainees to the field of public health dentistry.

Long-Term

Commit dedicated dollars for adult dental services

Dental services are not a required function of public health, and as such, there is no consistent source of state funding specifically for adult emergency oral health. The strategic planning group consistently identified a lack of consistent funding source as a key barrier to access to adult preventive and emergency oral health services. If Tennessee is to make strides in improving adult oral health, having a consistent, committed funding stream—state or otherwise—will be essential.

Support concept of "dental homes" similar to model for "medical homes"

The dental home is a philosophy of dental providers as well as a locus for preventive oral health supervision and emergency care. Much like the "medical home" model, characteristics of a dental home include care that is: accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally competent. The goal of the dental home would be to provide affordable services that focus on non-emergent oral health care maintenance and prevention. Creating a cohesive provider-patient relationship would facilitate patient retention. Although the concept of a dental home is too new to have been studied as a predictor of health, it is reasonable to anticipate that having an established "dental home" for adults could help to reduce the high rate of ED utilization for dental-related services.

Continue involvement of strategic planning group beyond the report filing time to ensure continued collaboration

The strategic planning group recognized the need for continued collaboration to explore future opportunities and to assess the effectiveness of existing efforts. In addition, continued collaboration of key stakeholders will be helpful to inform the development of the oral health component of the State Health Plan.

Review salaries of TDOH dental providers to make more competitive

The average salary of TDOH dentists is not competitive with industry averages, making it difficult to recruit and retain excellent dental providers. Currently, TDOH has only 30.9 FTE dental providers for its 54 dental clinics. As a result, some TDOH clinics operate as little as one day a week. Having more dental providers would enable TDOH to greatly expand its ability to meet the dental needs of all at-risk Tennesseans.

Develop and implement evaluation strategy to determine what is working

The strategic planning group acknowledges that additional data and analysis is necessary to determine if current efforts are achieving the desired outcome.

Consider location of existing resources (e.g. FQHC, community and Safety Net clinics) when determining location of additional resources

Several TDOH dental clinic sites are located in communities with other not-for-profit or free dental providers, while some areas of the state have a paucity of dental providers. The strategic planning group recommended that consideration be given to locating any future TDOH dental clinics in areas where there exists the fewest resources.

OTHER TOPICS OF DISCUSSION

These items reflect topics of discussion within subcommittees and among the larger planning group that did not rise to the level of a recommendation. They are included here for completeness and to possibly inform future conversations on adult oral health strategies.

- The State should develop a comprehensive state oral health plan which includes emergency services as well as adult and child dental disease education and prevention. (Note: the group recognized that the Office of Health Planning has been charged with developing a state Health Plan, one component of which will be a comprehensive oral health plan. The strategic planning group appreciated the participation of State Health Planning staff in this process, and wanted to underscore the importance of having a comprehensive oral health plan that addresses preventive and emergency care for all Tennesseans.)

- A full review of salaries and benefits for public health dentists should be conducted and the department of Health needs to make salaries competitive.

- Creative funding could be used to reimburse schools for student or resident time outside the metro areas. The goal is to facilitate stronger relationships between dental trainees and public health by increasing trainee exposure to public health educational opportunities.

- A thorough review of best practices in other states surrounding the expansion of the public health work force is warranted.

- Exploration of employer-sponsored benefit programs such as the one developed by the Sevier County Economic Development Council for employers and their employees who have no health insurance. In this model, employers contribute a set amount of money per employee into a “pool.” Employees utilize employer-issued “smart” cards with demographic data and available benefits, at participating not-for-profit clinics in the area.

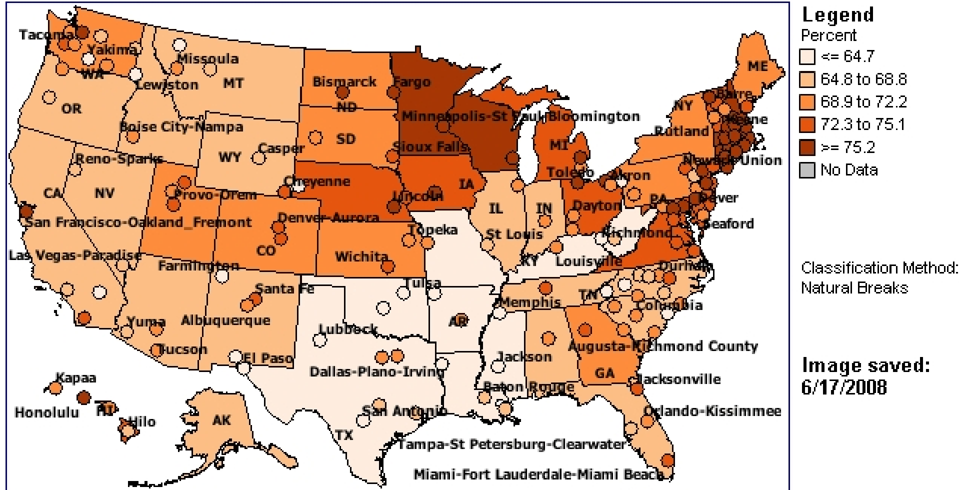
APPENDIX I

BRFSS Maps

Year - 2006

Visited the dentist or dental clinic within the past year for any reason

Percentage of respondents reporting Yes

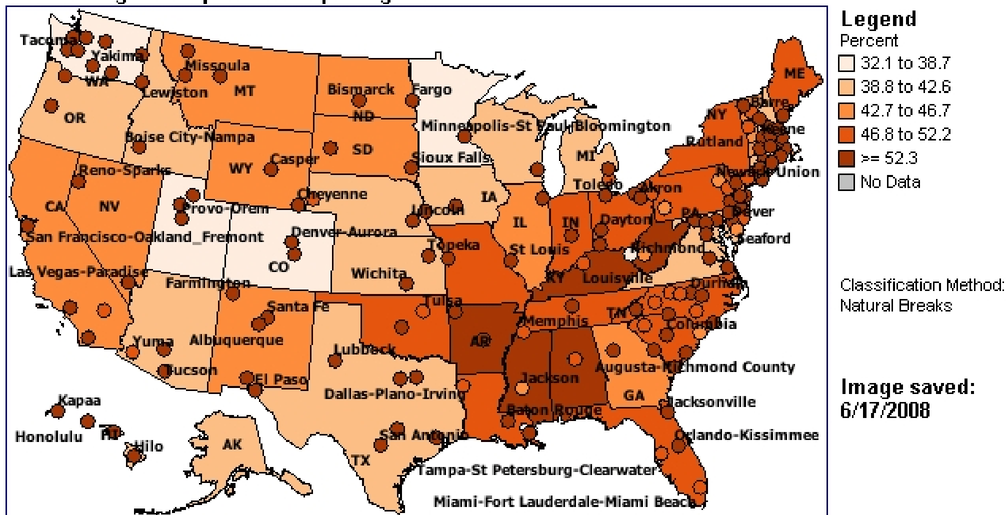


BRFSS Maps

Year - 2006

Adults that have had any permanent teeth extracted

Percentage of respondents reporting Yes

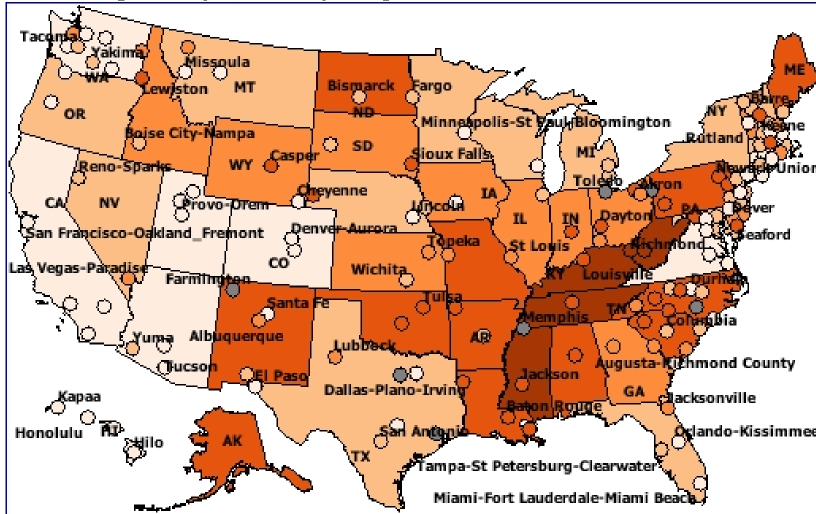


BRFSS Maps

Year - 2006

Adults aged 65+ who have had all their natural teeth extracted

Percentage of respondents reporting Yes



Legend

Percent

- <= 15.8
- 15.9 to 18.6
- 18.7 to 21.6
- 21.7 to 28.9
- >= 29
- No Data

Classification Method:
Natural Breaks

Image saved:
6/17/2008

APPENDIX II
Emergency Adult Oral Health Strategic Planning Group Members

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