

# Texas Oral Health Coalition's

## ORAL HEALTH PLAN

### FOR THE STATE OF TEXAS

# 2012 - 2015

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## **Notes for the Texas Oral Health Coalition's State Oral Health Plan**

A brief explanation of this document's content is needed for the reader to be fully informed in the reading of the narrative. This document was approved by the Texas Oral Health Coalition, Inc. at its October 2012 Board of Directors meeting.

The Texas Oral Health Coalition was commissioned by the Oral Health Program (OHP) of the Department of State Health Services (DSHS) to produce a State Oral Health Plan. Details of the steps of that process are found in the body of this document.

In August 2012 a State Oral Health Plan approved by the then Board of Directors was sent to the DSHS through the OHP director, Dr. Linda Altenhoff. Since that date, the Coalition has not had any communication from the OHP as to the status of the plan submitted in August 2012. In fact the coalition's third year of a three year contract was cancelled at the end of the second fiscal year with very short notice upon submission of that August 2012 version of the plan.

Concurrently, the Coalition Board member representatives from the Texas Dental Association (TDA) and the Texas Academy of General Dentistry (TAGD) resigned, and their sponsoring organizations withdrew from the coalition, and demanded that their names be removed from any references to the Coalition or the plan that they had indeed voted for in July 2012.

Since some key portions of the plan originally written by the writing committee were deleted at the insistence of the TDA and TAGD representatives, the Coalition Board reconsidered the plan and reinstated key portions of the plan that were felt to be solidly based in Dental Public Health principles, and/or appropriate responses to the Surgeon General's Call to Action referenced in this document, and which were more true to the original document produced by the writing committee.

The version that was submitted ultimately to the Centers for Disease Control and Prevention will therefore be a different document than the document published here.

## EXECUTIVE SUMMARY

This State Oral Health Plan for Texas is a roadmap to improve the oral health of the people living in the State of Texas. The development of the plan was funded by a cooperative agreement with the Department of State Health Services, Texas Oral Health Program (OHP) from the Centers for Disease Control and Prevention (CDC) and was written under a sub-contract by the Texas Oral Health Coalition (TxOHC). The Plan reviews the state's oral health efforts and recommends programs and priorities based upon sound public health principles and practices. It is written for public policy professionals and individuals providing oral health services who are collaborating on oral health issues in the State. This plan will serve as the basis for program development, prioritization, and funding for the state's oral health program.

The Plan is organized around the Core Functions of Public Health described in the CDC Oral Health Strategic Plan. The Core Functions are the standard by which a state oral health program is measured. They comprise: 1) Monitoring/Surveillance, 2) Research, 3) Communications, 4) Preventive Strategies, 5) State Infrastructure, 6) Evaluation, 7) Partnerships, and 8) Policy Development.

In this narrative, each Core Function has four sections: Background, Existing Activity at the State Level, Gaps, and Action Items. The Background comprises material from the 2005 Oral Health Plan, information from the scientific literature and the Texas Oral Health Program. Existing activities are drawn from reports and publications of the Oral Health Program as well as its web site. Existing activities are compared to the CDC Core Functions and the Oral Health Program Core Functions and identified Gaps, that is, areas for program improvement. The Action Items are recommendations to close the gaps identified in this process.

Surveillance is the preeminent Core Function since it is a critical precursor for program development and evaluation. While there are limited ongoing surveillance efforts, current surveillance effort should be expanded substantially. A continuous oral health surveillance system should be implemented by individuals who have expertise in data collection and analysis (*i.e.*, dental public health epidemiology, and statistics)

employed by the State and guided by the Texas Oral Health Coalition and its designated consultants. The creation and implementation of the state oral health surveillance program should include key stakeholders and experts in the field of oral epidemiology to include the dental schools and schools of public health. Moreover, the State should budget sufficient funds to contract with Texas Dental Schools that possess dental public health expertise to provide support for an oral health surveillance program.

This Plan can be used to advocate for additional resources from the State to support the Oral Health Program in the Department of State Health Services. It sets the bar for what the Oral Health Program can do for the state with adequate resources. The State should allocate resources to those modalities that have a scientific evidence base; specifically, 1) the design, implementation, and monitoring of community water fluoridation, 2) school-based dental sealant programs, and 3) fluoride varnish programs. The First Dental Home Program is supported but not endorsed by the Coalition until a longitudinal study can assess the cost effectiveness of the program, and an outcomes assessment can determine if this preventive initiative decreases the rate of dental caries as well as the severity of dental caries among children needing operating room care for pediatric dental rehabilitation.

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## **1.0 BACKGROUND**

The State Oral Health Plan for Texas is a roadmap to improve the oral health of the people living in the State of Texas. It reviews the state's oral health efforts and recommends programs and priorities based upon sound public health principles and practices. It is written for public policy professionals and individuals providing oral health services who are collaborating on oral health issues in the state. According to the CDC, "A state oral health plan is a roadmap for accomplishing the goals and objectives that have been developed by the state oral health program in collaboration with partners and stakeholders, including the state oral health coalition and members of the public health and dental communities." The previous Oral Health Plan was written in 2005 (1). The current plan identifies broad areas of policy identified by stakeholders in a collaboratively sponsored policy workshop as well as oral health programs and policies based on published scientific evidence, sound existing policies, and guidelines or recommendations from recognized public health authorities and professional organizations. In future development of the state oral health plan, workgroups or groups convened by the Texas Health and Human Services Commission (HHSC) or the Department of State Health Services (DSHS) may further assign priority and develop action items and annual work plans which will specifically address the policies needing revision or promulgation after being identified in this document. The Texas Oral Health Plan will also explore potential partnerships to enhance the oral health of people living in Texas.

### **1.1 The Purpose of the Oral Health Plan**

Oral health plans can shape programs and policy. State oral health programs should conduct a periodic assessment of laws, regulations, administrative policies, and systems-level strategies that offer the potential to reduce oral diseases. The latest evidence-based research, including systematic reviews and recommendations from national organizations should also be taken into consideration.

The assessment can reveal opportunities for overcoming barriers, capitalizing on assets available in the state, increasing capacity, and coordinating prevention interventions. In addition, the assessment can help a state develop a policy action plan

and implement a set of activities through annual work plans that include the priorities established from the assessment process.

With this knowledge, the state oral health program management will then have the information necessary to educate policymakers about how to increase the capacity and effectiveness of the state oral health program to improve oral health plan in Texas. In addition, the state oral health program can identify and engage a broad spectrum of stakeholders to address oral health issues of concern. Examples of such changes in health systems and policies include mandates for community water fluoridation in communities with water systems that serve a specified number of households and increased Medicaid reimbursement for specific oral health services - the latter of which Texas has done since publication in 2005 of the first Oral Health Plan in Texas.

Other activities which derived from information obtained in self-assessments include the following:

- Implementing policies that support evidence and population-based strategies consistent with the state oral health plan. Examples are oral health policies, legislation, regulations, ordinances, guidelines and standards that promote optimal oral health such as community water fluoridation and school-based dental sealant programs, and statutory authority for the state oral health program and/or state dental director position;
- Increasing the extent to which population-based interventions address established objectives that are informed by surveillance data and prioritized from the state oral health plan, the policy action plan, or the program strategic plan;
- Evaluating the impact of and lessons learned from implementation of policies;
- Making recommendations on maximizing the delegation of permitted duties in the provision of oral health care prevention modalities;
- Discontinuing obsolete or cost-ineffective programs which do not benefit large numbers and the most vulnerable of the population.

## **1.2 The History of the Oral Health Plan**

In May 2000, the U.S. Surgeon General's report, Oral Health in America, described both the "marked improvement in the nation's oral health in the past 50 years" and the simultaneous "silent epidemic of oral disease affecting our most vulnerable citizens"

restricting activities in school, work and home and often diminishing the quality of life (2). The Report noted that oral disease burden is disproportionately borne by poor children, adults, and the elderly with low incomes and other vulnerable population groups. It further detailed how oral health is promoted, how oral diseases and conditions are prevented and managed, and what needs and opportunities exist to enhance oral health. Water fluoridation and dental sealants were noted as two interventions that have reduced dental caries and the Report noted the ongoing need to reduce oral health disparities and inequities (2). While the overall prevalence of dental caries among children has decreased during the past 50 years, the reduction in caries burden has not been shared equally (3), the remaining caries is concentrated with low-income and non-white individuals (4). The Centers for Disease Control and Prevention (CDC) has been assisting states through collaborative agreements to improve the dental public health of those states over the past few years.

Texas was chosen to receive this collaborative agreement assistance to develop a State Oral Health Plan, form a state-wide coalition, develop surveillance and program monitoring plans, and improve oral health infrastructure (5). The Texas Oral Health Coalition, which was formed with the assistance of an initial CDC collaborative agreement (6), was subcontracted by the Texas Department of State Health Services to continue the process and update the collaborative State Oral Health Plan from its original form drafted in 2005.

The Texas Oral Health Coalition conducted listening sessions throughout the state, presented perceptions from the listening sessions on the existing state of dental/oral health in the state of Texas to the Coalition, and asked for input on the core components of dental public health activities and other dental programs which exist in the state during the first half of 2011. Appendix 1 presents an outline with results of the listening sessions.

In addition, the Coalition sponsored a policy workshop. The five policy/systems change suggestions that received the most votes during the policy workshops were (7):

- Support the development of the dental home through professional education
- Create a statewide oral health surveillance system to collect oral health data across the lifespan

- Improve oral health literacy across Texas
- Integrate oral health into all elder-care services and facilities
- Fluoridate all community water systems

This Oral Health Plan for the State of Texas is designed to be a living document and should be modified as the oral health status environment of the state of Texas evolves. Since the organizational structure of the Texas Health and Human Services Commission and Department of State Health Services is not static, the plan may not specify which agency or department may be called upon to implement provisions identified in the plan. In light of this fact, the plan may refer to “the State” or “the HHSC” rather to specific individuals, departments, or agencies in the Health and Human Services Commission in its recommendations. The plan includes priority policies that were identified by a group of stakeholders from a variety of disciplines and geographical areas of the state that convened to outline recommendations.

## 2.0 INTRODUCTION

The Oral Health Plan for the State of Texas is organized around the Core Functions of Public Health described in the Centers for Disease Control and Prevention Oral Health Strategic Plan (8). These Core Functions, developed by the preeminent public health entity in the United States, are the standard by which a state oral health program should be measured for evaluation. They include:

- **Monitor/Surveillance:** *Monitor the burden of disease, risk factors, preventive services, and other associated factors.*
- **Research:** *Support public health research that directly applies to policies and programs.*
- **Communications:** *Communicate timely and relevant information to impact policy, practices, and programs.*
- **Preventive strategies:** *Support the implementation and maintenance of effective strategies and interventions to reduce the burden of oral diseases and conditions*
- **State infrastructure:** *Build capacity and infrastructure for sustainable, effective, and efficient oral health programs.*
- **Evaluation:** *Evaluate programs to ensure successful implementation.*
- **Partnerships:** *Identify and facilitate oral health partnerships to support CDC strategic priorities and enhance community efforts.*
- **Policy development:** *Develop and advocate sound public health policies.*

## **2.1 Structure of the Plan**

In this narrative of the Plan, each core function has four sections: background, existing activity at the state level, gaps, and action items. The Background comprises material from the 2005 Oral Health Plan, information from the scientific literature and the Texas Oral Health Program. Existing Activities are drawn from reports and publications of the Oral Health Program as well as its web site. The existing activities were compared to the CDC Core Functions and the Oral Health Program Core Functions and then Gaps were identified, that is, areas for program improvement were specified in this step. The Action Items are recommendations to close the gaps identified in the process.

The Texas Oral Health Program (OHP) has developed its own Core Functions<sup>1</sup> (9, Appendix 3). These Core Functions are the OHP's program goals and, like CDC's Core Functions, are standards by which to assess the Program. They are:

- 1. Promot[ing] effective evidence-based strategies and preventive oral health practices through population-based services.*
- 2. Serv[ing] as an oral health subject matter expert and provide support for internal and external partners.*
- 3. Gather[ing], provid[ing], and maintain[ing] oral health data required by local, state, and federal policy makers for decision making, support, and documentation of oral health trends.*
- 4. Develop[ing] a collaborative network of community and professional partners to increase delivery systems for the implementation of preventive dental services programs.*
- 5. Serv[ing] as support for disaster related response teams.*

## **2.2 Demographics of the State of Texas**

The population of the state of Texas has grown substantially in the ten years between the 2000 and 2010 censuses (Appendices 4 and 5, respectively). Over the past decade, the percentage of persons living in Texas has grown by 20%, which is the second highest percentage growth in the nation. Much of the growth of the population in Texas has been attributed to the proportionate increase in the Hispanic/Latino population while the non-Hispanic white population proportion is declining. The non-Hispanic black proportion is approximately the same in both census surveys. Minorities

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<sup>1</sup> Each Core Function has several elements.

in general and Hispanics in particular are less likely to be insured, either with medical insurance (10) or dental insurance (11,12,13). The implications are clear: there will be an increased need for dental care in Texas and the populations with the least resources will bear the burden of the most disease, with striking oral health policy implications. As the diversity of the state increases, the need for culturally competent oral health care providers will also increase. The general population is also aging along with national trends in the United States. These challenges will have an impact on the existing oral health infrastructure in the state.

### **2.3 Methodology**

The recommendations in this Oral Health Plan were developed using an evidence-based approach consistent with CDC recommendations. Priority was given to those modalities where internationally recognized systematic approaches were used to assess the strength of scientific evidence by national organizations and agencies (e.g., CDC, Agency for Healthcare Research and Quality (AHRQ), U.S. Preventive Services Task Force (USPSTF), and American Dental Association Evidence-Based Clinical Recommendations. In addition, we are guided by Healthy People 2020 Oral Health Objectives (14).

In developing this oral health plan, the outcomes of the Texas OHP were compared with the Core Functions specified by the CDC and Texas Oral Health Plan Program to assess the extent to which the Texas data most currently published support them. In addition, publications about oral health in Texas such as Oral Health in Texas 2008 (15), and Building Better Oral Health: A Dental Home for All Texans (16) were used in comparisons and preparation of the plan. Moreover, we were informed by the five calls to action articulated in the National Call to Action to Promote Oral Health (17):

- Change perceptions of oral health
- Overcome barriers by replicating effective programs and proven efforts
- Build the science base and accelerate science transfer
- Increase oral health workforce diversity, capacity, and flexibility
- Increase collaborations

## 2.4 The Texas Oral Health Program (OHP)

The mission of the OHP is: “Promoting oral health through leadership in public health practices, policy development, education, and population-based preventive services” (9). The program is located in the Department of State Health Services, Division for Family and Community Health Services. Appendix 6 shows the organizational chart of the Department of Health Services.

The Oral Health Program is guided by the *Texas Oral Health Improvement Act* (18)<sup>2</sup>. It was the intent of the legislature that the Act should be “construed liberally so that eligible individuals may receive appropriate and adequate oral health services in a timely manner” (18, §43.002).

It may conduct field research, collect data, and prepare statistical and other reports relating to the need for and availability of oral health services (18, §43.005). Moreover, it may administer or oversee 1) clinical care, 2) oral disease prevention (e.g., community water fluoridation, school-based fluoride mouth rinse and pit and fissure dental sealant programs, 3) public health education for patients and providers, 4) the facilitation to access care to oral health services, 5) the improvement of the oral health services delivery system for low-income residents, 6) outreach activities to inform the public of the type and availability of oral health services to increase the accessibility of oral health care to low income residents, and 7) assistance and cooperation in promoting better distribution of dentists and oral health professionals throughout the state (18, §43.004). Moreover, the Oral Health Program “is not required to provide oral health services unless funds are appropriated ... for that express purpose” (18, §43.013).

In addition to providing services with its staff, the Oral Health Program may enter into contracts and agreements “to facilitate the efficient and economical provision of oral health services” (18, §43.014). The proposals outlined in this plan are within the scope of the *Texas Oral Health Improvement Act*.

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<sup>2</sup> *The Texas Oral Health Improvement Act* uses the term “Department” which we take to be the Health Department, of which the Oral Health Program is a component. In this section, we substitute the Oral Health Program for the Health Department.

## 3.0 ORAL HEALTH PLAN

### 3.1 Monitoring /Surveillance

#### 3.1.1 Background

**Monitor/Surveillance:** *Monitor the burden of disease, risk factors, preventive services, and other associated factors (8).*

Monitoring (surveillance) measures the prevalence and burden of oral diseases; describes the potential risk factors that impact the disease burden and other associated factors, and identifies available preventive services, workforce capacity, and other factors that impact the burden of oral diseases in the State of Texas. This process provides oral health information for stakeholders and policymakers to evaluate current systems and identify potential resources needed to improve the oral health of all Texans in the future and enables comparisons with other data such as the National Oral Health Surveillance System (NOHSS), jointly developed by the CDC and the Association of State and Territorial Dental Directors (ASTDD), and Healthy People 2020 (HP2020), which is maintained by the US Department of Health and Human Services (19). Moreover, the data help policy makers and public health personnel target available resources to best meet the state's oral health needs (20).

#### 3.1.2 Existing Activity at the State Level

Monitoring (Surveillance) is OHP Core Function 3 (9) which comprises:

*Gather[ing], provid[ing], and maintain[ing] oral health data required by local, state, and federal policy makers for decision making, support, and documentation of oral health trends.*

- a. Collect[ing] oral health data that is statistically valid by calibrated dentists.
- b. Evaluat[ing] the effectiveness of implemented oral health strategies through annual strategic planning and programmatic evaluation activities.
- c. Implement[ing] statistically valid Basic Screening Surveys (BSS) for targeted populations.
- d. Submit[ting] data reports to management per program reporting requirements.
- e. Collect[ing] convenience data for preventive dental services clinics.
- f. Establish[ing] oral health surveillance system that utilizes various data sources (BRFSS, YRBS, Birth Defects, Cancer Registry, etc.) that describe oral health status.
- g. Coordinat[ing] and conduct[ing] routine utilization reviews on randomly selected Medicaid dental providers.

### 3.1.2.1 The Texas Oral Health Surveillance System (TOHSS)

Oral health surveillance, the systematic collection, analysis, and interpretation of health data, is performed by the Texas Oral Health Surveillance System (21). Its purpose is to:

*monitor trends in oral disease, such as early childhood caries, loss of teeth, and oral and pharyngeal cancer; effectiveness of preventive services, such as dental sealants, community water fluoridation, and fluoride varnish; and dental service utilization, through such programs such as the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) Program and the Children's Health Insurance Plan (CHIP) (21).*

The National Oral Health Surveillance System provides a snap-shot of the nation's overall oral health as well as that of migrant families, and children with disabilities. It tracks eight basic oral health surveillance indicators: 1) dental visits, 2) oral prophylaxis, 3) complete tooth loss at age 65 or older, 4) percent of the population with fluoridated water, 5) percent of third graders with dental caries experience, 6) percent of third graders with untreated dental caries, 7) percent of third graders with dental sealants on at least one permanent molar, and 8) number of people with oropharyngeal cancer (20).

### 3.1.3 Gaps

Surveillance is accomplished by analyzing primary data<sup>3</sup> (collected or sponsored by the DSHS-Oral Health Program) and secondary data<sup>4</sup> collected by other agencies – primarily the Centers for Disease Control and Prevention and The National Cancer Institute (Surveillance, Epidemiology, and End Result (SEER)), and data from other statewide and national registries.

While the TOHSS provides many useful data, its coverage is limited. For example, oral health surveillance data are not available for nursing home residents, state prisoners, the uninsured, home-bound elders, and the perinatal population. DSHS does have oral health surveillance data available on children with special health care needs through secondary data from the National Survey of Children's Health and the National

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<sup>3</sup> For example, Basic Screening Survey (BSS) and Texas data for Water Fluoridation Reporting System (WFRS).

<sup>4</sup> Youth Risk Behavior Survey (YRBS), Behavioral Risk Factor Surveillance System (BRFSS), Texas Cancer Registry, Pregnancy Risk Assessment Monitoring System (PRAMS), utilization data from Medicaid EPSDT / CHIP, School Based Health Center (SBHC) Contract Reporting, Uniform Data System (UDS), and the Texas Birth Defects Registry.

Survey of Children with Special Health Care Needs. However, the oral health program does not have adequate funding to build the necessary infrastructure to support dental public health trained epidemiologists and biostatisticians to collect and analyze primary data or to analyze secondary data, nor perform program evaluation. (Core Function 3, *supra*).

Though there are no formally trained dental public health specialists within OHP, the program does have access to and utilizes trained epidemiologists, researchers, and statisticians through the DSHS Office of Program Decision Support (OPDS) and Center for Health Statistics (CHS) and the HHSC Strategic Decision Support (SDS) staff. Due to the functional organizational structure of both HHSC and DSHS, programs within these agencies (to include OHP) are supported by epidemiological and research staff maintained by OPDS, CHS, and SDS.

As a result, the state lacks surveillance data in several critical domains, i.e., elderly institutionalized, adult working poor, adolescents and the quality of the analysis and reporting has been inadequate for program evaluation and development.

It is critical that surveillance study design and analysis be of a high quality to be considered credible by public health experts at the state and federal levels. The Texas Health and Human Services System Strategic Plan for 2011-2015 (22) recognizes several factors contributing to this issue, including the lack of available epidemiologists (23,24,25,26).

#### 3.1.4 Action Items

- The HHSC should develop and implement a continuous oral health surveillance system in the State of Texas that is managed by the Department of State Health Services in consultation with the Texas Oral Health Coalition and its designated consultants. The creation and implementation of the state oral health surveillance program should include key stakeholders and experts in the field of oral epidemiology.
- The State should provide the various oral health program staffs with a sufficient number of individuals who have expertise in data collection and analysis (*i.e.*, dental

public health epidemiology, and statistics) that can maintain a comprehensive oral health surveillance program in the State.<sup>5,6</sup>

- The Legislature and the HHSC should budget sufficient funds to contract with Texas Dental Schools and Dental Hygiene Programs that possess dental public health expertise to provide support for an oral health surveillance program. The Dental Schools and Dental Hygiene Programs would be contracted by collaborative interagency agreements to fill 'gaps' within the existing state program and should not be used to circumvent the state surveillance system. This should not be *ad hoc*, but a part of a multi-year plan developed in a partnership with the dental schools.
- The HHSC and Oral Health Program should build collaborations with existing local health departments and not-for-profit agencies that collect valid and reliable data to enhance the state data collection infrastructure.
- The HHSC and the Oral Health Program should explore opportunities to use secondary data to supplement the surveillance plan for the state.

## 3.2 Research

### 3.2.1 Background

**Research:** *Support public health research that directly applies to policies and programs. (8)*

Research is a broad activity that ranges from basic science research (e.g., cellular-level) research to epidemiologic research (e.g., oral health status) and health services research. Research can encompass the collection and analysis of clinical data (e.g., periodic Basic Screening Survey [BSS]) or survey data (e.g., Behavioral Risk Factor Surveillance System (BRFSS)) data. Epidemiologic and health services research are inextricably entwined with surveillance. Also, research can also include the gathering of data and information to guide policy development and for systematic planning of education initiatives for key stakeholders. One key component to research is the

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<sup>5</sup> There are no dental public health specialists, epidemiologists, or statisticians in the Oral Health Program. This will be addressed in the Infrastructure section.

<sup>6</sup> These specialists should have graduate level training and the proven ability to publish in peer-reviewed journals.

dissemination of data to partners and stakeholders that can lead to an improvement in the oral health of all Texans.

### 3.2.2 Existing Activity at the State Level

The State Oral Health Program published a burden document, Oral Health in Texas, 2008 (27) that described the oral health of Texans. This document provided a well-crafted surveillance summary that could be used in program planning and to identify oral health issues to key stakeholders. No additional information has been made available since that time.

Currently, Texas participates in the Water Fluoridation Reporting System (WFRS) and reports fluoride levels to the Centers for Disease Control and Prevention. The data gathered from this activity allow the state to identify municipal water districts (MUD) that are in compliance with community water fluoridation standards and those systems that have challenges with community water fluoridation.

The Texas Cancer Registry (TCR) is a collaboration between the Texas Department of State Health Services, the National Program of Cancer Registries, the Centers for Disease Control and Prevention, and the Cancer Prevention and Research Institute of Texas. The TCR is a statewide population-based registry that serves as the foundation for measuring the Texas cancer burden, comprehensive cancer control efforts, health disparities and inequities, progress in prevention, diagnosis, treatment, and survivorship. In addition, it supports a wide variety of cancer-related research. These priorities cannot be adequately addressed in public health, academic institutions, or the private sector without timely, complete, and accurate cancer data (28).

An oral health workforce project is ongoing at the University of Texas Health Science Center at San Antonio. This project is a collaboration between the University, the San Antonio Metropolitan Health District and the State Oral Health Program. This program seeks to expand capacity by developing a model for population-based prevention at the community level and to assess the dental health workforce in the state.

A survey of oral health status of elders living in assisted living centers in the Dallas-Fort Worth region has been initiated by the Texas A & M Health Science Center, Baylor

College of Dentistry through a grant provided by Delta Dental to assess quality of life issues and oral health needs of this population group.

Additional workforce data are available through the Texas State Board of Dental Examiners (TSBDE). While this is not meant to be an exhaustive list of available data resources, the Oral Health Program should serve as a clearinghouse or resource providing investigators with sources of data for analysis.

### 3.2.3 Gaps

Current statewide data were published in 2008 and no continuous process is in place to evaluate the data. The Texas Department of State Health Services, Oral Health Program, developed a Surveillance Matrix that spans 2010-2018. According to the schedule (Appendix 6, *infra*), there will be no primary data collection until 2013 and the surveillance plan relies on secondary data sources. At this time, the state has not established ongoing collaborations with possible partner state organizations involved in research, including dental schools and dental hygiene schools, to analyze data from systematic surveillance. The Texas Oral Health Coalition, Surveillance Workgroup is no longer active. Surveillance is a core function of public health. Ongoing and continuous monitoring of the health of the population along with periodic reporting of the findings should be a primary function of the Department of State Health Services.

### 3.2.4 Action Items

- The HHSC should implement an organized, systematic and continuous data plan that utilizes the talents of all stakeholders (e.g., Texas Oral Health Coalition, dental schools, dental hygiene schools, state epidemiologists, the State Dental Director for Medicaid and CHIP) to analyze and disseminate primary and secondary oral health data.
- The HHSC should develop an infrastructure within the state oral health program to promote oral health research utilizing data sharing agreements with key research stakeholders.
- The HHSC should establish collaborative, ongoing partnerships with the three Texas dental schools, dental hygiene schools, and the Texas Oral Health Coalition to develop research protocols, identify research questions, and to produce results that

are sufficiently robust to be publishable and disseminated to interested parties. These collaborations will fill gaps that cannot be easily met through the State Oral Health Program alone.

- The HHSC and Oral Health Program should provide the Texas Oral Health Coalition with research findings to disseminate to partners across the state.

### **3.3 Communications**

#### 3.3.1 Background

**Communications:** *Communicate timely and relevant information to impact policy, practices, and programs (8).*

#### 3.3.2 Existing Activity at the State Level

Currently the HHSC State Dental Director for Medicaid and CHIP holds quarterly stakeholder meetings in Austin. Incurred Medical Expense (IME) workgroup meetings are held annually. Notification of the meeting is sent by email. In 2012, for the first time, the meeting could be accessed via conference call. However, other than these meetings we are unaware of any other systematic communications from the State to any other stakeholders. There is a newsletter In Touch (29) published online by the HHSC which contains medical and programmatic information, and limited information related to oral health issues. However, the newsletter must be accessed actively or subscribed to by users via the internet.

#### 3.3.3 Gaps

Currently there is no formalized system for either the Texas HHSC Office of Health Policy and Clinical Services or the Texas Oral Health Program to communicate to all stakeholders interested in oral health issues<sup>7</sup>. While some oral health related information is disseminated by other Texas agencies, it is not conveyed to all stakeholders through a systematic approach.

#### 3.3.4 Action Items

- The HHSC should produce a quarterly electronic communication that would provide updates on Medicaid / Chip and Maternal Child Health (MCH) breaking news,

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<sup>7</sup>For example, dentists, dental hygienists, dental assistants, legislators, and organizations with an interest in oral health.

community water fluoridation status, policy changes, and other issues that have an impact on the oral health of all Texans. This newsletter should be widely communicated to all stakeholders and broad array of potential stakeholders, including the state legislators, public health committee members, members of the dental and dental hygiene community, and not-for-profit agencies (e.g., United Way), partners (Texas Association of Community Health Centers [TACHC], Texas Association of School Nurses [TASN]) or other agencies which have a vested interest in overall health in general, and/or oral health in particular.

- The HHSC and Oral Health Program should empower the Texas Oral Health Coalition to assist in the maintenance of electronic mailing lists or establishment of a social media application for such a communication tool at a low cost. To assume this role, the Coalition must have access to all pertinent communication and this access should be facilitated by Texas Oral Health Coalition partners.
- The HHSC should make the Medicaid Stakeholders meeting widely available and interactive via electronic means, using web-based technology.

### **3.4 Preventive Strategies**

#### 3.4.1 Background

***Preventive Strategies:*** Support the implementation and maintenance of effective strategies and interventions to reduce the burden of oral diseases and conditions (8).

Prevention is Texas Oral Health Program Core Function 1 (9). It comprises

- Screen[ing] and identify[ing] populations needing dental services.*
- Provid[ing] preventive dental services and treatment referrals.*
- Develop[ing] and promot[ing] evidence-based strategies and interventions to prevent and control oral diseases.*
- Provid[ing] dental sealant and fluoride varnish programs through a school-based delivery model.*
- Provid[ing] oversight and coordination of public health dental functions.*
- Educat[ing] Texans regarding good oral health and how it relates to overall health.*
- Address[ing] disparities in oral health.*
- Facilitat[ing], monitor[ing], and evaluat[ing] sealant program effectiveness.*

Not all preventive services are supported by a strong evidence base. For example, only community water fluoridation and school sealant programs are endorsed by the CDC. Other preventive services have been recommended by ADA/CDC Evidence Based Guidelines and Cochrane Reviews, *i.e.*, fluoride varnish and pit and fissure dental sealants. In developing the oral health plan our recommended preventive services were limited to those with a strong evidence base.

#### 3.4.1.1 Community Water Fluoridation

Community water fluoridation involves adding fluoride (which prevents dental cavities) to community water sources, then adjusting and monitoring the amount of fluoride to ensure that it stays at the desired level. The Guide to Community Preventive Services developed by the Community Preventive Services Task Force endorses community water fluoridation (30). Results from the 21 studies qualified for Systematic Reviews showed the following findings:

- Dental caries rates measured before and after community water fluoridation: median decrease of 29.1% among children ages 4 to 17 years when compared with control groups (21 study arms).
- Dental caries rates measured after water fluoridation only: median decrease of 50.7% among children ages 4 to 17 years when compared with control groups (20 study arms).
- Community water fluoridation was found to help decrease tooth decay both in communities with varying decay rates and among children of varying socioeconomic status.

Nine studies qualified for review of the economic efficiency of community water fluoridation programs (30).

- Median cost per person per year for 75 water systems receiving fluoridated water: \$2.70 among 19 systems serving  $\leq 5000$  people to \$0.40 among 35 systems serving  $\geq 20,000$  people (7 studies).
- Community water fluoridation was cost saving (5 studies).
- In smaller communities (5000 to 20,000 residents), community water fluoridation was estimated to be a cost-saving where decay incidence in the community exceeds 0.06 tooth surfaces per person annually.

#### 3.4.1.2 School-Based Dental Sealant Programs

School-based sealant programs are identified by the Centers for Disease Control and Prevention and recommended by the Community Preventive Services Task Force, Guide to Community Preventive Services (31), as one of two community-based preventive measures that has strong evidence demonstrating its effectiveness in the prevention of dental caries. Statewide or community-wide sealant promotion as an intervention has insufficient evidence for endorsement. School-based or school-linked pit and fissure dental sealant delivery programs directly provide pit and fissure dental sealants to children unlikely to receive them otherwise.

School-based programs are conducted entirely in the school setting, and school-linked programs are conducted in both schools and clinic settings outside schools. Such programs define a target population within a school district; verify unmet need for sealants (by conducting surveys); get financial, material, and policy support; apply rules for selecting schools and students; screen and enroll students at school; and apply sealant at school or offsite in clinics.

School-based dental sealant programs target what are referred to as high-risk children with high-risk teeth. High-risk children include vulnerable populations that are less likely to receive dental care in the private sector, such as children eligible for free or reduced-cost lunch programs. High-risk teeth (*i.e.*, those with deep pits and fissures) are the first and second permanent molars that erupt into the mouth around the ages of 6 and 12 years, respectively. School-based and school-linked sealant programs are strongly recommended on the basis of strong evidence of effectiveness in reducing caries on occlusal surfaces of posterior teeth among children.

#### 3.4.1.3 Fluoride Varnish Programs

Fluoride varnishes applied professionally two to four times a year would substantially reduce dental caries in children (31). Fluoride is a mineral that prevents tooth decay (dental caries). Since widespread use of fluoride toothpastes and community water fluoridation, the value of additional fluoride has been questioned in the literature. Fluoride varnishes can be professionally applied at a frequency from two to four times a year. The review of clinical trials found that fluoride varnish can substantially reduce dental caries in both primary and permanent teeth. However, more

high quality research is needed to assess the difference this preventive modality provides as well as to evaluate the effects and acceptability (31).

A meta-analysis of nine studies comprising 2,709 children found a substantial caries-inhibiting effect of fluoride varnish in both the permanent and the primary dentitions based largely on clinical trials without treatment controls (31).

#### 3.4.1.4 First Dental Home Program

A dental home is “[t]he ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family-centered way. Establishment of a dental home begins no later than 12 months of age and includes referral to dental specialists when appropriate” (32).<sup>8</sup> The First Dental Home (FDH) program is uniquely aimed at children enrolled in Medicaid and is an initiative of the *Frew vs. Suehs*<sup>9</sup> corrective action plan. Based on available paid claims and encounter data during the period March 1, 2008, through February 28, 2011, “FDH services were provided to more than 456,600 children (unduplicated count)—this represents an increase of FDH services to more than 44,600 children over the previous quarter.”(33)

### 3.4.2 Existing Activity at the State Level

#### 3.4.2.1 Community Water Fluoridation

Texas currently<sup>10</sup> reports 79.3% of the population drinking fluoridated water. The Healthy People 2020 goal is 79.6% for the United States (34). The scientific evidence is irrefutable that community water fluoridation is effective in reducing tooth decay in adults and children.

#### 3.4.2.2 School-Based Sealant Programs

The Oral Health Program in Texas, for the latest year for which statistics are available (FY 2011), provided direct patient care preventive services to 10,489 unduplicated children. Approximately 3,683 children received a total of 15,354 dental

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<sup>8</sup> The American Dental Association definition is not materially different.

<sup>9</sup> Formerly known as *Frew v. Hawkins*.

<sup>10</sup> December 2011.

sealants in 168 sites across the state. A national report card found that Texas in 2010 had school-based dental sealant programs in place in less than 25 percent of the high-risk schools (35).

#### 3.4.2.3 Fluoride Varnish Programs

In FY 2011 the State Oral Health Program provided fluoride varnish to 10,684 children in 168 sites across Texas.

#### 3.4.2.4 First Dental Home Program

From a 2010 DSHS report evaluating the First Dental Home (FDH) and the Oral Evaluation and Fluoride Varnish in the Medical Home, 815 pediatric and general dentists participated in FDH training with 674 of those dentists billing for FDH services (82.6%). This represented a participation rate of 78.3% of pediatric dental Medicaid providers and 20.1% of general dental Medicaid providers (36). However, these numbers of FDH providers represent just 5.7% of the state dental workforce and 15.7% of dental Medicaid providers who billed at least one paid claim in FY2010 (37).

##### 3.4.2.4.1 Initiative Purpose

The First Dental Home (FDH) strategic initiative provides routine preventive dental services to infants and very young children enrolled in Medicaid to reduce the incidence of dental caries in early childhood and to avoid additional dental health issues or dental procedures, such as restorative and oral surgery (e.g., extractions) in an operating room. Parents or caretakers accompany their young children during FDH examinations and this provides dental professionals the opportunity to provide parental education and anticipatory guidance based on national standards. This project is expected to meet all four strategic initiative objectives of the *Frew v. Suehs* corrective action plan including improving participation and utilization of Medicaid services among clients and providers, improving appropriate utilization of medically necessary services, and improving coordination of care.

#### 3.4.2.4.2 Status

The target population is children who are six through 35 months of age and are enrolled in Medicaid. The Health and Human Services Commission (HHSC) received approval for this project in December, 2007. The Department of State Health Services (DSHS) began the FDH provider education for pediatric dentists in March, 2008, and for general dentists in May, 2008.

DSHS continues to offer FDH in-person education to senior dental students and pediatric dental residents at the three Texas dental schools and to dentists working in private practices. These professional education efforts are held in conjunction with collaborations offered at the three dental schools and through continuing education programs coordinated at annual meetings of Texas dental professional organizations. In June 2010, the FDH on-line module became available, which offers dental providers and their staff members an additional continuing education option.

#### 3.4.2.4.3 Class Members Served

Based on available paid claims and encounter data, during the period March 1, 2008, through February 28, 2011, FDH services were provided to more than 456,600 children<sup>11</sup> - this represents an increase of FDH services to more than 44,600 children over the previous quarter.

### 3.4.3 Gaps

There are no prevention programs identified for other age groups other than children. Prevention models for the vulnerable institutionalized elderly are nonexistent and must embrace integrated approaches which include medical and social services rather than isolated strategies.

#### 3.4.3.1 Community Water Fluoridation

There are still many communities in Texas which have never fluoridated the public water supply, have allowed community water fluoridation to cease, or who have actively opposed fluoridation.

#### 3.4.3.2 School-Based Dental Sealant Programs

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<sup>11</sup> Unduplicated count.

Limited funds are targeted for school-based sealant programs in the State of Texas. The Oral Health Program's sealant initiative is underfunded for the number of children who are in need of this preventive service. The State of Texas has stipulated that the new managed dental care organizations embrace a "main dentist" concept. This requirement may deter some agencies and organizations from reaching high-risk children and providing evidence-based services through school-based dental sealants programs if these programs are dependent upon Medicaid or CHIP to sustain these community-based preventive services recommended by national agencies.

The Oral Health Program continues to support and provide dental sealants and other preventive dental services in a school setting. However, due to federal Medicaid regulations, if health care services are offered to a non-Medicaid/CHIP individual at a discount or free, then the same discount (including free services) must be afforded the state Medicaid/CHIP programs. As many of the school-based dental sealant programs offer services free to children who do not have Medicaid/CHIP services, then they must also refrain from billing Medicaid and CHIP for the dental sealants and other services or be in violation of federal statutes.

#### 3.4.3.3 Fluoride Varnish Programs

There is no funding specifically targeted to fluoride varnish programs in the state of Texas. The Oral Health Program's fluoride varnish program is underfunded for the number of children who could benefit from this preventive service. Also, some fluoride varnish programs may be diminished in the very near future under the "main dentist" model specified by the State of Texas and used by the managed dental care organizations if these community-based programs were reimbursed through Medicaid or CHIP funding in the past.

#### 3.4.3.4 First Dental Home Program

While the First Dental Home Program has been implemented in Texas, and reports show an increase in the number of services provided since its inception, its effectiveness in preventing disease and its cost-effectiveness are being subjected to a longitudinal scientific evaluation. A report of the longitudinal findings for the first three years of FDH should be forthcoming within the next several months.

In several states, physicians, nurse practitioners, and physician assistants are taught to perform a risk assessment, provide a fluoride varnish application and anticipatory guidance to the parents, and refer, if necessary, to a dentist for care (38). These programs have been shown to be effective since children will often visit the pediatrician before visiting the dentist. Opportunities to utilize an inter-professional model of oral health care should be considered for Texas, building upon the Oral Evaluation and Fluoride Varnish in the Medical Home (OEFV) initiative.

#### 3.4.4 Action Items

##### 3.4.4.1 Community Water Fluoridation

- The Texas Oral Health Coalition recommends continued support through current DSHS administration to assist communities in the design and implementation of water fluoridation systems by qualified water fluoridation engineers so that the Healthy People 2020 goal can be reached and maintained in Texas.
- The Texas Oral Health Coalition supports optimal community water fluoridation as a primary preventive practice against dental caries with sufficient evidence and efficacy to justify the continuation and expansion of state fluoridation projects.

##### 3.4.4.2 School-Based Dental Sealant Programs

- The State should support Medicaid reimbursement for children enrolled in Medicaid Managed Care Organizations who receive preventive services through school-based/school-linked dental sealant programs operated by local and state governmental entities, not-for-profit agencies, dental schools and dental hygiene programs. Also, this reimbursement for preventive services would include school-based sealant programs that are linked to school-based health centers. This reimbursement by Medicaid would be allowed for services provided outside of the

dental home for preventive services only for the specified non-profit entities. In addition, the OHP should also continue to support fluoride varnish applications in the First Dental Home program for both dentists and physicians who administer such preventive services through the first 35 months of life. However, an evaluation plan should be designed and executed to determine if these preventive attempts are efficacious in the current modalities in which they are performed in Texas.

- The Texas Oral Health Coalition should support DSHS and HHSC regulations prohibiting a provider from billing Medicaid for services that are also being offered to non-Medicaid clients for free or at a reduced cost.
- There are a variety of non-profit organizations, faith based organizations, school districts, and dental schools providing school-based dental sealants in the state. The Texas Oral Health Coalition recommends that HHSC support these efforts by providing information and technical assistance to organizations and communities who wish to plan, implement, and evaluate such programs in the future.
- The Texas Oral Health Coalition supports school-based dental sealant programs as a proven strategic prevention measure to reduce the dental caries burden in Texas.

#### 3.4.4.3 Fluoride Varnish Programs

- Based on the Marinho *et al.* review (31), the Texas Oral Health Coalition supports fluoride varnish programs for children enrolled in Head Start Programs, as well as children in school based dental sealant programs. These community based programs should provide linkage to comprehensive dental services in a dental home.

### 3.5 Infrastructure Development

#### 3.5.1 Background

**State infrastructure:** *Build capacity and infrastructure for sustainable, effective, and efficient oral health programs (8).*

Oral Health in America: A Report of the Surgeon General states that “*The public health infrastructure for oral health is insufficient to address the needs of disadvantaged groups, and the integration of oral and general health programs is lacking.(2)*”

### 3.5.2 Existing Activity at the State Level

The State of Texas employs dentists in several departments across the Health and Human Services Commission. More than 100 dentists work within the HHSC and have positions in the Department of Aging and Disability Services, the Department of State Health Services, the Texas Department of Criminal Justice (including correctional dentists in the University of Texas Medical Branch and Texas Tech correctional facilities programs) (39). Based on organizational charts for these departments, it is unclear who is in charge administratively of the dentists employed in state hospitals, and in state supported living centers. The State Dental Director for Medicaid and CHIP is located in the HHSC, Office of Health Policy and Clinical Services. The Oral Health Program has a Dental Director at headquarters in Austin and dentists and dental hygienists employed in regional locations (40).<sup>12</sup> The Health Program Preventive Dental Service Regional Teams functions are as follows (41):

1. *Provid[ing] and coordinat[ing] preventive dental services in border, rural, frontier, and other underserved areas of the state for school-aged children, Head Start centers, daycares, and other venues.*
2. *Coordinat[ing] with DSHS epidemiologists to maintain a statewide oral health surveillance system.*
3. *Support[ing] the dental home concept for children to enhance access to dental care and assist[ing] in identifying local dental home resources for children with limited or no access to dental care.*
4. *Develop[ing] and coordinat[ing] collaborative partnerships to increase state capacity through linkages with academic institutions, local health departments, professional organizations, community health centers, tribal health centers, and community-based organizations.*
5. *Provid[ing] leadership and support for community-based solutions to address oral health needs.*
6. *Serv[ing] as technical advisors to Medicaid, CHIP, Title V, Children with Special Health Care Needs Services Program and other HHSC adult programs by participation on committees and special projects.*

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<sup>12</sup> Dentist and dental hygienist positions in Regions 1/2 (Lubbock), 3/4/5N (Tyler), 5S/6/7 (Houston), 8/11 (San Antonio), and 9/10 (Midland). Regions 3/4 and 9/10 have a hygienist vacancy and Regions 5S/6/7 and 9/10 have a dentist vacancy at the time of this writing.

7. Conduct[ing] dental utilization reviews of Medicaid Providers in the regions and provide staff and resources when directed by HHSC, Office of Inspection and Enforcement (OIE), for targeted utilization reviews.

### 3.5.3 Gaps

- There is a lack of legislative appropriations for the authorized *Oral Health Improvement Act* programs.
- There is a lack of appropriately educated support staff to develop and monitor oral health programs, *i.e.*, dental public health statisticians and epidemiologists.
- There is a lack of dentists with advanced education in dental public health (MPH degreed, dental public health [DPH] certificate). The CDC recommends that “[t]o develop effective leadership within state oral health programs, a state will benefit by employing a full-time dental director who is an oral health professional with training in public health” (42).<sup>13</sup> Moreover, Healthy People 2020 goals include “Increas[ing] the proportion of States (including the District of Columbia) and local health agencies that serve jurisdictions of 250,000 or more persons with a dental public health program directed by a dental professional with public health training” (43).
- The Oral Health Program is submerged too deeply within the organizational structure of the Texas Department of State Health Services (DSHS)
- Dentists working in the Department of State Health Services (DSHS) have low salaries compared to dentists in positions within other state agencies (*e.g.*, Department of Aging and Disability Services, correctional care dentists) (30).
- There is no overarching dental administrative supervision and no surveillance systems or program evaluations existing currently for oral health related programs

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<sup>13</sup> “Activity 1 further states that Strong program infrastructure is an essential component to a successful program. Infrastructure enables a program to increase capacity, enhance support, and build sustainability. In addition, the following staff is also important for developing effective oral health program infrastructure (minimum availability shown for each type of expertise): [1] Program coordinator (.5 full-time equivalent [FTE]), [2] Epidemiologist (.5 FTE), [3] Water fluoridation engineer/specialist or coordinator (.5 FTE), [4] Dental sealant program coordinator (.5 FTE), [5] Other appropriate staff, including: Program evaluator (.25 FTE), Health education/health communication specialist (.25 FTE), [and] [a]dequate support staff. States that have met the minimal staffing levels (shown above) may wish to employ FTEs at greater amounts or acquire additional capacity by sharing positions, such as those for a fiscal coordinator or a grant writer. If states have insufficient funding for dedicated staff, they may seek ways to build infrastructure by leveraging existing state resources and sharing staff time with other programs” (42).

funded by the Texas Department of Aging and Disability Services (DADS)<sup>14</sup>, the Texas Department of State Health Services (DSHS), and the Texas Department of Criminal Justice (TDCJ).

#### 3.5.4 Action Items

- The Texas Oral Health Coalition and other non-governmental stakeholders should educate key legislators about the importance of the oral health program and other initiatives identified in the oral health plan, so that funding may be restored or even increased for authorized oral health initiatives.
- In the event of decreased or continually inadequate funding, the HHSC should evaluate the potential of moving regional positions to headquarters and filling them with public health dentistry specialists, epidemiologists, statisticians, and experts in program evaluation. Regional Dentists should possess MPH degrees as do their counterpart physician Regional Medical Directors (44).
- The DSHS should amend the job description of the DSHS Oral Health Program Dental Director to require that in addition to being a Texas licensed dentist, the Program Director possess a graduate degree in public health and has completed a Dental Public Health Residency. Additional training in public health for the Oral Health Program Dental Director is advocated in Healthy People 2020 Oral Health Objectives (45)<sup>15</sup>.
- The DSHS should amend the job descriptions for dentists working for DSHS to recommend a graduate degree in public health.
- The Legislature should appropriate funds to the OHP that are needed to collect, analyze and disseminate data on oral health, including but not limited to statewide surveys, needs assessments, and outcomes measurements (16).
- The DSHS should establish a Dental Public Health Residency Program within the DSHS Office of Academic Linkages to provide equal opportunity to dentists that physicians in the DSHS Preventive Medicine residencies have at the state level (46).

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<sup>14</sup> The DADS dental emergency policy for nursing facilities does not have oversight.

<sup>15</sup> OH- 17.1. "Increase the proportion of States (including the District of Columbia) and local health agencies that serve jurisdictions of 250,000 or more persons with a dental public health program directed by a dental professional with public health training."

Alternatively, partnerships with the state's dental schools should be explored to accomplish this goal.

- The Oral Health Program should partner with the DSHS Center for Health Statistics for conducting dental/oral health surveys and data analysis if statistical expertise is not otherwise available (47).<sup>16</sup> The Oral Health Program does partner with designated DSHS program areas and staff as deemed appropriate by the executive management of DSHS.

### 3.6 Evaluation

#### 3.6.1 Background

***Evaluation:*** Evaluate programs to ensure successful implementation (8).

Evaluation is an element of two of the Oral Health Program's Core functions (9):

*Core Function 1: Facilitate, monitor, and evaluate sealant program effectiveness.*

*Core Function 3: Evaluate the effectiveness of implemented oral health strategies through annual strategic planning and programmatic evaluation activities;*

#### 3.6.2 Existing Activity at the State Level

Programmatic evaluation of the Oral Health Program dental sealant and fluoride varnish program is limited to encounter data. A plan for future surveillance activities includes a Basic Screening Survey for third graders in FY 2012, and a Behavioral Risk Factor Surveillance System survey for adults in FY 2012. Medicaid, CHIP, Fluoridation Status (WFRS), and Cancer Registry data are planned to be supplied in all future fiscal years (Appendix 5).

#### 3.6.3 Gaps

Currently there are limited data with which to evaluate the effectiveness of the state's oral health program (see surveillance/research sections). In addition to the paucity of data, there is no formal evaluation of the effectiveness of the state's oral health programs. Routine evaluation is critical to ensure the proper stewardship of the

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<sup>16</sup> The Center for Health Statistics states that it is the "Portal for Comprehensive Health Data in Texas"; however, no oral health data are provided on its home page.

state's resources. Improving data quality and use is also recognized as an important action item for the Department of State Health Services in the Texas HHS System Strategic Plan (22; Section 8.4.3).

The *Frew v. Suehs* lawsuit (48) resulted in several dental-related initiatives, including the First Dental Home program and the Oral Evaluation and Application of Fluoride Varnish in the Medical Home. A recent evaluation of these initiatives has been performed (49); however, there is no methodologically sound evaluation of the effectiveness of either program's stated impact: "Changes in the number and proportion of class members 6-35 months of age requiring dental treatment in an Operating Room/Ambulatory Surgery Center setting."

A retrospective data analysis plan should be in place to measure any discernible change in the number of operating room cases occurring across the state over time. This will require the state to hire or contract with epidemiologists and dental public health educated specialists to design and conduct studies to evaluate the programs, in addition to having quality data available from Medicaid utilization reviews and hospital discharge data.

#### 3.6.4 Action Items

- The State Dental Director for Texas Medicaid and CHIP programs should develop evaluation plans for all the oral health programs funded by Texas Medicaid and CHIP resources and establish a schedule for the evaluations. For each evaluation, the data required and the evaluation methodology shall be specified based on recognized research standards. Where data to support program are not available, the surveillance system should be modified to obtain the necessary data for ongoing systematic evaluation.
- An external review committee should be established to review all program evaluations, including Oral Health Program activities, and make formal recommendations as to whether the program should be retained unchanged, or modified to meet changing needs in Texas. This external committee should be composed of dental public health specialists and epidemiologists with education and credentials in dental bioinformatics and research study design.

- The Texas Department of State Health Services and Texas HHSC State Office of Health Policy and Clinical Services should support the review and evaluation of the First Dental Home program and the Oral Evaluation and Application of Fluoride Varnish in the Medical Home program. The information from the evaluation should be used to measure the effectiveness of the programs and modify the programs as needed to assure improvements in oral health status and outcomes in Texas.

### **3.7 Partnerships**

#### 3.7.1 Background

*Partnerships: Identify and facilitate oral health partnerships to support CDC strategic priorities and enhance community efforts (8).*

The Texas Oral Health Program Core Function that deals with partnerships states:

*Develop[ing] a collaborative network of community and professional partners to increase delivery systems for the implementation of preventive dental services programs (9).*

- The HHSC and Oral Health Program should develop and maintain liaison relationships with dental and medical professional organizations, professional schools, and individuals in organizations that are seeking to provide dental public health services.
- The Oral Health Program should work to involve the public, private, and non-profit local groups, agencies, and individuals interested in improving dental public health services in underserved areas and addressing the needs of vulnerable populations.
- The Oral Health Program should serve as an active collaborative partner with other public health, community, and statewide entities to promote improved oral health for all Texans.
- The Oral Health Program should serve as a referral liaison between Texans and regional public health programs and community partners.
- The HHSC and the Oral Health Program should promote oral health for the most vulnerable elderly by facilitating initiatives and communication with state and local aging agencies and organization which are involved with long term care facilities and other key aging services.

- The HHSC and the Oral Health Program should support mentoring opportunities in oral health across medical and social service disciplines and programs involved in long term care and other key aging services.

### 3.7.2 Existing Activity at the State Level

According to the Texas Department of State Health Services Oral Health Program, the OHP staff has worked to establish and maintain working relationships with all three Texas dental schools, several Texas dental hygiene programs, the Texas State Head Start Collaboration Office, Texas Dental Association, Texas Dental Hygienists' Association, Texas Academy of Pediatric Dentistry, Texas Academy of General Dentistry, Texas Maternal and Child Health Program, Texas Children with Special Health Care Needs Services Program, Texas Medicaid and CHIP Division, Texas Department of Aging and Disability Services, Texas Department of Family and Protective Services, Texas Diabetes Program, Texas Fluoridation Project, Texas Oral Health Coalition, Baylor College of Medicine, Texas A&M School of Medicine, Texas Tech School of Medicine, Texas Medical Association, Texas Pediatric Society, Association of State and Territorial Dental Directors, Medicaid-CHIP State Dental Association, American Dental Association, and the American Dental Hygienists' Association, as well as various local health departments operating in the cities of Houston, Laredo, San Antonio, and El Paso, community and faith based organizations such as Methodist Healthcare Ministries, and local hospital systems including Dell Children's Hospital (Austin), Cook Children's Hospital (Fort Worth), and Driscoll Children's Hospital (Corpus Christi).

### 3.7.3 Gaps

Collaborations between Head Start and the American Academy of Pediatric Dentistry (AAPD) have been successful in the initial efforts of matching dentists with children enrolled in Head Start Programs. This has been facilitated also by the Texas Dental Association. The national Office of Head Start discontinued its partnership with AAPD in November, 2010 (50). Moreover, there is no state level facilitation that promotes oral health at the end of the life span in coordination with state organizations involved with long term care.

#### 3.7.4 Action Items

- Providing oral care to medically complicated elderly must overcome unique and complex logistical barriers that require multidisciplinary strategies. The Texas Oral Health Coalition should establish a Long Term Care Work Group that consists of representatives and key stakeholders from private, public, and nonprofit state and local organizations and agencies working on aging issues including long term care industry representatives.

### 3.8 Policy Development

#### 3.8.1 Background

***Policy development:*** *Develop and advocate sound public health policies (8).*

#### 3.8.2 Existing Activity at the State Level

The CDC Division of Oral Health in cooperation with the Children’s Dental Health Project (CDHP), the Department of State Health Services, and the Texas Oral Health Coalition conducted a Policy Workshop in spring, 2012. The workshop was designed to bring together oral health advocates to facilitate critical thinking about the state’s oral health policies and systems. Fifty-two individuals participated in the Policy Workshop, representing dental and dental hygiene organizations, public health professionals, community health advocates, and other interested parties.

The Director of the Texas Oral Health Program welcomed participants to the half-day workshop. Two CDHP Facilitators introduced the Policy Tool and the agenda for the session. Participants were asked to introduce themselves and the organization or constituency they represented.

Participants were requested to suggest a policy or systems change priority for discussion, and to clarify how each might impact the oral health status of Texas communities. In addition to policy and systems change priorities, a number of programmatic suggestions were generated from which five priority issues were selected. Two of the issues identified as priorities at the Policy Workshop included community water fluoridation and oral health surveillance across the lifespan. These key issues have been described in detail in the Texas Oral Health Plan. Three other

issues are identified as gaps in the current oral health activities of the state and will be discussed in the next Gaps section (3.8.3).

### 3.8.3 Gaps

#### 3.8.3.1 ElderCare

In Texas, Medicaid eligible residents in long term care with an incurred medical expense account (IME) may use the Medicaid IME process to access medically non contraindicated dental care. The reimbursement process is inconsistent among the 11 regions (51).

Federal requirements include the provision of dental care for nursing homes receiving Medicare and Medicaid funding (52). Subsequent amendments included dentistry (53). Each nursing home resident must undergo a Nursing Home Resident Assessment with an instrument called the Minimum Data Set (MDS), which includes sections on Oral/Nutritional Status and Oral/Dental Status (54). Nursing homes must assist residents in obtaining routine and emergency dental care (55). Routine care requires an annual exam (56). An emergency involves an episode of pain or other dental problem that requires immediate attention (56). Nursing homes can arrange services by hiring a local dentist or by having an agreement with a local dentist to treat residents (56). If a resident's dentures are lost or damaged, the nursing home is required to make a prompt referral to a dentist and to aggressively work at replacing the dentures (56).

Nursing facility residents continue to have significant oral health care needs. Katz *et al.* described an operational definition of oral neglect in institutionalized elderly in the United States (57).<sup>17</sup> Another gap is that despite the mandate that nursing facilities must make emergency dental care available for their residents, there is no well-defined process for obtaining reimbursement for residents who do not have an applied income.

#### 3.8.3.2 Oral Health Literacy

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<sup>17</sup> The clinical implication is stated as follows: "Since federal legislation that funds payments to nursing homes for the care and housing of their residents requires that there shall be no oral neglect, this validated consensus ONiIE [Oral Neglect in Institutionalized Elderly] definition provides a utilitarian means to enforce that legislative expectation."

Health literacy in dentistry is “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate oral health decisions” (58). Nearly nine out of ten U.S. adults have difficulty understanding and using everyday health information that is generally available in health care facilities, retail outlets, media and communities. The average American reads at the 8th to 9th grade level; however, health information is usually written at a higher reading level (59). Texas Health and Human Services Commission should make health literacy, including oral health literacy, a part of the HHSC System Strategic Plan. Strategies should include: Simplifying and making written materials easier to understand<sup>18</sup>; improving providers’ communication skills<sup>19</sup>; and improving patients’ self-management skills<sup>20</sup> (60).

### 3.8.3.3 The Dental Home

The dental home in contrast to the First Dental Home initiative was a policy priority identified by the Texas Oral Health Coalition policy development workshop (§ 2.2, *supra*). The dental home should be promoted through professional education according to the recommendations outlined by the attendees of the Policy Workshop. There is little funding through any government agency revenues or non-profit organizations for this initiative. Promotion of this concept by individual health care professionals and professional dental organizations is encouraged to promote dental homes for working adults and the elderly as well as children not included in the First Dental Home initiative.

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<sup>18</sup> Medication counseling using a plain language, pictogram-based intervention resulted in fewer medication-dosage errors (5.4 percent versus 47.8 percent) and greater adherence, compared to standard medication counseling (38 percent versus 9.3 percent).

<sup>19</sup> A study of rates of participation in colon cancer screening compared two groups of providers. One group received feedback on their patients’ health literacy status and underwent subsequent training in communicating with patients who had limited literacy skills; the second group did not. The patients of the first group of providers had higher colon cancer screening rates than the patients of the second group of providers (41.3 percent versus 32.4 percent). Among patients with limited literacy, screening rates for patients of providers in the first group were almost twice as high as those for patients of providers in the second group (55.7 percent versus 30 percent).

<sup>20</sup> A congestive heart failure self-management program—featuring education on self-care, picture-based educational materials, and scheduled telephone follow-up to reinforce adherence to necessary medication regimens and daily weight measurement—reduced hospitalization rates and mortality by 35 percent, compared with patients in the control group. Similarly, patients with limited literacy who received a diabetes self-management program that used health literacy strategies were more likely to achieve program goals than people with diabetes who received usual care (42 percent versus 15 percent).

The Texas Oral Health Coalition should facilitate this concept through its communications and website presence in collaboration with the TDA, TDHA, Texas Academy of General Dentistry (TAGD) and other professional organizations.

#### 3.8.4 Action Items

- The HHSC and DSHS should continue to support policies that allow for resources to support the provision of dental care to nursing home residents through coordination with the Texas Department of Aging and Disability Services (DADS), and residents of group homes through the Intermediate Care Facilities-Mental Retardation program, as well as the Children with Special Health Care Needs program (CSHCN) in DSHS.
- The HHSC should support reinstatement of the dentist loan repayment program which was discontinued by the Texas legislature. Loan repayment programs are vital in recruiting and retaining dentists in rural and other underserved areas of the state, in helping establish dental homes in those areas, and originally were funded as one of the initiatives of the *Frew v. Suehs* settlement (22; p 79).
- The TDCJ should support basic dental care<sup>21</sup> for all state prisoners, jailed adults, and juvenile detainees across the state, to be provided by qualified dental personnel. Collaboration with state oral epidemiologists and qualified public health dentists within the DSHS should be made possible with the TDCJ through interagency memoranda of understanding to design surveillance systems and quality assurance programs within these institutions.
- The State should support efforts to expand fluoride varnish programs in Head Start Centers, along with school based sealant programs as the evidence base continues to grow regarding the effectiveness of such programs. These programs should be supported by the reimbursement policies for enrolled recipients funded through the Medicaid and CHIP programs.
- The HHSC should support conducting needs assessments for elders in the state, particularly those residing in nursing homes, and support the appropriation of funds

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<sup>21</sup> This includes dentures, basic restorative dentistry and extractions.

to provide preventive care to nursing home residents enrolled in Medicaid by qualified dental health personnel, as permitted by the *Texas Occupations Code*.

- The HHSC should support the concept of “dental home” for the elderly in long term care. A dental home must be available to provide diagnostic, preventive and comprehensive care and referrals when appropriate.
- The HHSC should ensure that oral health assessments are being monitored with improved auditing efforts of the Minimum Data Set.
- Since state and federal law<sup>22</sup> require nursing facilities (NFs) that receive Medicare and/or Medicaid funding be directly responsible for the dental care of their residents, the HHSC should promote the inclusion of a licensed dental professional on the multidisciplinary team (Nursing Facility Dental Program Director) which helps coordinate the individualized oral care plan for residents in long term care. The Nursing Facility Dental Program Director would help ensure that the NF is not in violation of any State and Federal Law regarding dental care; provide dental in-service training and assist in acquiring funding for dental care.
- The HHSC should embrace the “Health Literacy in Dentistry Action Plan 2010-2015” promoted by the American Dental Association.

### **3.9 Internal Advocacy**

Policy for public programs should come from the Dental Public Health specialty area and a variety of knowledgeable and interested stakeholders. Though it is not possible for the Oral Health Program (OHP) or its employees to lobby the legislature, internal advocacy within the DSHS and HHSC is the responsibility and prerogative of the OHP Dental Director, and the HHSC Dental Director for Medicaid and CHIP, with the support of identified partners in this document. The HHSC and DSHS in partnership with the Texas dental schools should be the repository of dental public health expertise in the state. It should monitor and promote the oral health efforts of all state and local governmental entities and provide advice as to the scientific and programmatic validity of the programs, and be prepared to provide technical assistance to such programs.

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<sup>22</sup> *The Omnibus Budget Reconciliation Act, 1987.*

### 3.9.1 Dental Medicaid

The changes to the Medicaid program that resulted from *Frew v. Suehs* (48) are a good example of how the Texas OHP and State Dental Director internally advocated for an increased profile of preventive services, including the coverage of fluoride varnish services which could be rendered by either dental providers or medical providers in the First Dental Home Program, and for increased fees for selected oral health services to increase provider participation in the Medicaid program.

Another example of interactions between the OHP State Dental Director and the HHSC occurred when the review of “non-routine” dental services for elders in nursing facilities by non-dental personnel was changed and reasonable increases in fees were enacted to increase access to care for these vulnerable populations.

### 3.9.2 Corrections

The Texas Department of Criminal Justice (TDCJ) incarcerates 171,249 (61) adults and 1,689 incarcerated juveniles (62), with 36,485 juveniles under some form of supervision (63). These individuals have a constitutional entitlement to health care which subsumes dental care (64). Since *Estelle v. Gamble* (64) was decided, the courts have held that health that demonstrates ‘deliberate indifference’<sup>23</sup> (65) to ‘serious medical needs’<sup>24</sup> falls below the constitutional threshold in violation of the *Eighth Amendment* (66).<sup>25</sup> Moreover, courts have held that dental conditions meeting the above criteria can be serious medical needs.

In Texas, health care to adult prison inmates is provided under contract to the TDCJ by the University of Texas Medical Branch at Galveston<sup>26</sup> and Texas Tech University Health Science Center. Dental care is provided pursuant to TDCJ policies and

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<sup>23</sup> Deliberate indifference is subjective recklessness; that is “when a person has disregarded a risk of harm of which he was aware”. (See *Farmer v. Brennan, supra*).

<sup>24</sup> Whether a reasonable doctor or patient would perceive the medical need in question as important and worthy of comment or treatment, “whether the medical condition significantly affects daily activities, or the existence of chronic and substantial pain.” *Brock v. Wright*, 315 F. 3d 158, 162. Additionally, courts will be likely to find a “serious medical need” if a condition “has been diagnosed by a physician as mandating treatment or ... is so obvious that even a lay person would easily recognize the necessity of a doctor’s attention. *Hill v. DeKalb Reg’l Youth Detention Ctr.*, 40 F.3d 1176, 1187 (11thCir. 1994).

<sup>25</sup> “Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishment inflicted.”

<sup>26</sup> The University of Texas has indicated that it will not continue to provide health care to the Texas prison system.

procedures. Since Oral Health Program responsibilities do not include review of clinical aspects of the TDCJ dental program, there is no opportunity to identify policies that are invalid from a public health and clinical perspective. For example, dentures are provided only for “medical necessity” – that is, only when the health of the patient would otherwise be affected adversely.<sup>27</sup> This policy is below the standard of dental care in the community. Policies such as this should be reviewed by the Director of the Oral Health Program and the Dental Director of HHSC, Office of Policy and Clinical Services as well as dental public health experts in dental schools and schools of public health and other oral health and public policy stakeholders.

### 3.9.3 Access to Care

Registered Dental Hygienists (RDH) are key members of the oral health team who, when educated appropriately, are capable of increasing access to oral health care substantially.

#### 3.9.3.1 Children

- RDHs in the Head Start Program should be allowed to assess oral health status, collect data, and refer children to licensed dentists and apply fluoride varnish (see 3.4.1.3).
- RDHs in school-based clinics and public health facilities should be allowed to 1) assess oral health status and collect data and refer children to licensed dentists; 2) apply fluoride varnish; 3) apply pit and fissure dental sealants; and 4) perform oral prophylaxes. Another approach to increasing access to care is to allow RDHs to practice under a Collaborative Practice Agreement. Nine states have such provisions in their Dental Practice Acts.<sup>1</sup>

#### 3.9.3.2 Individuals in Long-Term Care

- In public and private long-term care, group homes, hospice and public health facilities, RDHs should be allowed to: 1) assess patients, collect data and refer to licensed dentists, 2) provide minor emergency and palliative treatment, 3) perform oral prophylaxis, and 4) order and administer fluoride and antimicrobials.

### 3.9.3.3 Regulatory Changes

- The *Texas Administrative Code*, Chapter 363 should be changed to allow Medicaid provider status for RDHs.<sup>1</sup>
- The supervision requirements in the *Texas Dental Practice Act* (Section 262.1515) should be changed to allow for RDHs in public and private long-term care, group homes, hospice and public health facilities, to: 1) assess patients, collect data and refer to licensed dentists, 2) provide minor emergency and palliative treatment, 3) perform oral prophylaxis, and 4) order and administer fluoride and antimicrobials.
- The *Dental Practice Act* should be changed to permit Collaborative Practice Agreements between a licensed dentist and a dental hygienist.

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<sup>27</sup> The policy instructs dentists to monitor the nutritional status of patients by tracking weight trends for those who may have compromised masticatory functions. As part of this monitoring, the Body Mass Index (BMI) is used as a tracking methodology. According to the policy, a BMI from 18.5 to 25 is considered normal and patients with a BMI of 25 or lower which is trending downward, or a patient who is 10 percent or more underweight relative to their ideal body weight, should be referred to the patient's treating physician for consultation. If the physician determines that the patient's nutritional status is compromised, special diets such as a mechanically blended diet may be considered. Dental prostheses for patients with compromised masticatory function should be considered following initiation and follow-up evaluation of the effectiveness of the special diet. CMC Policy E-36.5 provides for a dental utilization/quality review committee to address concerns about the dental care provided to inmates.

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<sup>1</sup> Many Texas hygienists already have a National Provider Identifier (NPI).

## 4.0 SUMMARY AND CONCLUSION

Like the report of the Surgeon General, Oral Health in America, the Oral Health Plan for the State of Texas serves as a call to action. Oral health is essential for overall health, but not all Texans are achieving the same level of oral health. While some people living in the state have seen an improvement in their oral health, there remain many individuals who suffer from dental pain and infection needlessly which negatively impacts their overall health and quality of life. It is to this end that the Oral Health Plan for the State of Texas seeks to identify gaps and develop action items to address these gaps based upon sound evidence-based public health science. Ultimately, the overarching goal is to improve the oral health of all Texans.

The Oral Health Plan for the State of Texas identifies the following five major findings.

1. Surveillance is a core public health function that can only be directed and funded by the State. While the Oral Health Program should have a critical mass of dental public health specialists, it should seek expertise, when needed from key stakeholders, especially the dental schools and schools of public health to accomplish a rigorous and continuous plan of oral disease surveillance.
2. The State should engage stakeholders and partners through an active communication strategy. The Texas Oral Health Coalition could serve as a clearinghouse for information that can be disseminated to a broader oral health audience. Other stakeholders can be identified to participate in this activity. The Oral Health Plan for the State of Texas encourages the use of webinars to improve meeting attendance and reach a broader audience and periodic newsletters to engage key stakeholders. This initiative should also include providing information at a literacy level appropriate for specific audiences using best practices that promote health literacy and cultural competence.
3. The State should actively support evidence-based, community-based prevention strategies. The Oral Health Plan for the State of Texas encourages the continued support of community water fluoridation initiatives across the state to achieve and maintain Healthy People 2020 objectives and the continued support of the state

fluoridation engineer. In addition, school-based dental sealant programs conducted by public health entities and dental schools should be supported through reimbursement from the Medicaid program. Other community-based prevention practices should be explored and evaluated, and when evidence supports their adoption, implemented widely.

4. The State should support the policy recommendation of the Texas Oral Health Coalition for a funded and sustained Oral Health Program Director who is a dentist and a specialist in dental public health. Continuous funding from the State for the Oral Health Program Director is essential to maintain a program that can develop both short-term and long-term goals and objectives and function effectively and efficiently. In addition, the Oral Health Program needs greater visibility within the organization of the DSHS.
5. The State should identify and facilitate oral health partnerships to support strategic priorities. The collaboration of public-private partners can enhance interprofessional and culturally competent community-based prevention strategies. Understanding that the oral health and overall health are linked, the promotion of tobacco control and cessation initiatives, eating health and better dietary choices, and improving sports gear and safety measures to reduce head and neck injuries are the purview of public health dental practitioners and dental professionals.

The Oral Health Plan for the State of Texas recognizes that improving the oral health of all Texans requires input and support from the public sector, private sector, nonprofit sector, and other key stakeholders. The plan provides a framework that allows that collaboration to occur in the future. It is paramount that all parties work together collaboratively to achieve our common goal, which is the optimal oral health for all Texans.

## **5.0 APPENDICES**

- Appendix 1. Outline of Listening Sessions**
- Appendix 2. Texas Oral Health Program Policy Tool Workshop**
- Appendix 3. Oral Health Program Summary**
- Appendix 4. Population Change between 2000 and 2010 Census: United States, Texas, California, Florida, North Carolina, and Arizona**
- Appendix 5. Texas' Ethnic Composition 2000 and 2010**
- Appendix 6. Texas Department of State Health Services Organizational Chart**
- Appendix 7. Division for Family and Community Health Services, Department of State Health Services**
- Appendix 8. Texas Oral Health Program, Department of State Health Services Surveillance Matrix, 2010-2018**

## **Appendix 1. Outline of Listening Sessions**

### **Written Comments/Suggestions from the**

### **2011 Oral Health Listening Sessions**

The following is a collection of written comments/suggestions to update the Collaborative Oral Health Plan in Texas (aka State Oral Health Plan), generated from the Six Oral Health Listening Sessions in the spring of 2011. Listening session sites and names are included when given on the submitted forms.

## **Assessment**

### **Goal 1: Support a Texas Oral Health Surveillance System to Assess Oral Health Burden and Trends**

**Objective:** Support, enhance, and expand statewide, ongoing Oral Health Surveillance System with a common set of data, uniform collection and reporting methods. The Oral Health Surveillance System will have the capacity to define the scope of oral health needs and access to oral health services, to monitor community water fluoridation status, and to measure the utilization of oral health services by children and adults in Texas.

**Strategy:**

- A. Collaborate with the Texas Department of State Health Services, Oral Health Program, to support, enhance, and expand a common statewide Oral Health Surveillance System.
- B. Identify potential primary and secondary sources of data that can be used to measure the oral health status of people living in Texas.
  - 1) Basic Screening Survey (BSS) conducted in elementary schools in Texas
  - 2) Basic Screening Survey (BSS) conducted in Head Start Centers in Texas
  - 3) Behavioral Risk Factor Surveillance System (BRFSS) survey on the oral health of adults living in Texas
- C. Develop a burden document that will describe the oral health status of people living in Texas.

What ways could we enhance and expand the State Oral Health Surveillance System?

What other primary and/or secondary sources of data should be used to measure the oral health status of people in Texas?

What other data should be reported to the NOHSS?

How can we develop a burden document that will describe the oral health status of people living in Texas?

How could the Basic Screening Survey on selected pre-K and 3<sup>rd</sup> graders be performed and reported on to the NOHSS if the Department of State Health Services, Oral Health Program is abolished?

Additional Comments:

## **Policy Development**

### **Goal 2: Support the expansion of the State Oral Health Infrastructure**

**Objective:** Develop a strong oral health unit with a full-time state dental director and effective infrastructure within the Texas Department of State Health Services to provide state level oral health leadership and perform the essential public health functions to meet the oral health needs of all Texans.

**Strategy:**

- A. Support the maintenance of a full-time State Dental Director with regional personnel to meet the dental public health need across the State.
- B. Request that the State Oral Health Program retain a full-time fluoridation engineer and sufficient infrastructure to oversee reporting of fluoridation levels.
- C. Work in partnership with the Texas Department of State Health Services to enhance the oral health infrastructure

**Questions:**

What can we do to support funding the maintenance of a state dental director and appropriate staffing?

In what ways can we support the retention of a full-time fluoridation engineer with sufficient infrastructure to oversee reporting of fluoridation levels?

In what ways can we enhance the oral health infrastructure?

### **Goal 3: Mobilize Support for Oral Health**

**Objective:** Change perceptions regarding oral health and oral disease so that oral health becomes an integral component of health policies and programs in Texas by informing, educating, and empowering community partners, public officials, policymakers, and the public.

**Strategy:**

- A. Establish linkages and foster communication between the Texas Oral Health Coalition and the local and regional coalitions
- B. Create a mechanism to sustain and grow the Texas Oral Health Coalition as an independent 501(c) (3)
- C. Advocate increasing support for oral health in Texas
- D. Plan, organize, support, and host an annual Oral Health Summit
- E. Increase and diversify the membership of the Texas Oral Health Coalition

F. Support initiatives that foster community and oral health capacity

**Questions:**

In what ways can we establish linkages and foster communication between the Texas Oral Health Coalition and the local and regional coalitions?

What kind of mechanism can be created to sustain and grow the Texas Oral Health Coalition?

How can we increase support for oral health in Texas?

How can we increase multidisciplinary collaboration and coordination between systems including medical, dental, mental health, social services, academia and education, non-profit, professional organizations, and government at the state and local levels?

Since the Texas Oral Health Coalition offers CE's at the Oral Health Summit and this year's theme is "Total Health through Oral Health" what topics are you most interested in attending?

**Assurance**

**Goal 4: Support Collaborative Partnerships that Implement Population-Based Oral Health Programs**

**Objective:** Plan, implement, and evaluate population-based programs through collaborative partnerships to increase the utilization of evidence-based primary and secondary prevention and reduce the oral health burden in Texas.

**Strategy:** Support initiatives that foster community-based initiatives to reduce the burden of oral disease in Texas.

1) These initiatives include, but are not limited to, school-based sealant programs, Texas water fluoridation project, oral cancer prevention programs, and WIC/Early Head Start/Head Start Oral Disease Prevention Programs.

**Strategy:** Serve as a clearinghouse to support ongoing population-based prevention programs throughout the State.

**Questions:**

In what ways can we increase communication at the state and local level among partners in the public, private, and non-profit sectors?

How can we increase the number of counties and cities that do not have dental directors or public health clinics with dental personnel?

How can we increase dental public health training and information sharing related to contemporary dental public health principles and practices?

Should we maintain community water fluoridation and technical support and how can we expand it?

Should we maintain school-based sealant/fluoride varnish programs and how can we expand them?

Should we examine other preventive programs, and if so, what?

In what ways can we promote healthy behaviors and dietary choices in schools?

How can we expand Early Head Start/Head Start/WIC preventive oral health programs?

In what ways can we promote early detection and prevention of oral cancer?

How can we expand the First Dental Home training for Dental and Medical Providers?

How can we maintain and enhance the Dental Oncology Education Program?

How can oral health education be implemented or increased into elementary school educational programs?

Are there any other programs that exist that need to be maintained like oral health education, oral health surveys for surveillance, oral health programs for pregnant women, a Youth Risk Behavior Survey program, Mouthguard/Injury Prevention Programs, Access to Care, Abuse/Neglect or PANDA program, and/or a program designed to maintain Hospital Discharge Data?

How can oral health assessments incorporate into the elementary school health assessments school nurses administer to identify, refer, and report for surveillance oral health disease?

Additional Comments:

**Goal 5: Build collaborative partnerships to increase access to and quality of the oral health care system.**

**Objective:** Remove barriers between people and the oral health care system by enhancing oral health system capacity, including directly supporting or providing oral health services when necessary.

**Strategy:**

- A. Advocate to maintain and enhance current levels of CHIP and Medicaid funding
- B. Identify potential partners and foster relationships with public and private agencies that can help to advance the awareness of oral health

**Questions:**

How can we maintain and enhance current levels of CHIP and Medicaid funding?

How can we maintain and expand community based training programs in higher education institutions?

Should we continue to support the Texas loan repayment program for dentists in underserved areas, and if so, how can we enhance it?

Should we continue the First Dental Home program with dentists and physicians and how can we expand it?

In what ways can we promote and expand School-based dental programs?

In what areas should we allow provisions for oral health assessments and preventive services by Registered Dental Hygienists under appropriate supervision?

How can we promote and expand Nursing home-based dental programs?

Should we incorporate oral health as part of a student's total health assessment provided in elementary schools to help identify, refer, and report data into a state-wide surveillance system, and if so, how?

Should we require mandatory dental examinations for all students entering school by a Texas licensed dentist?

If so, how are dental examinations funded for the non-insured?

Should dentists be required to participate in data submission to retain information for a state-wide surveillance system if mandatory dental examinations are required for school entry?

How will required dental examinations be enforced? What are the consequences for non-compliance?

What do you see as the largest barrier to oral health services in Texas?

Additional Comments:

Overall Session Comments:



## **Appendix 2. Texas Oral Health Program Policy Tool Workshop**

### **Texas Oral Health Program Policy Tool Workshop**

**March 23, 2012, Austin, Texas**

#### **A Report of Activities and Outcomes Utilizing a Policy Development Tool Developed by the Children's Dental Health Project in Cooperation with the CDC Division of Oral Health - Excerpts**

The workshop held in Austin, Texas on March 23, 2012 was designed to bring together oral health advocates to facilitate critical thinking about the state's oral health policies and systems. Sixty individuals, representing organized dentistry and dental hygiene, public health professionals, community health advocates, and others pre-registered for the workshop, although actual attendance included only fifty-two registrants.

Dr. Linda Altenhoff, Director of the Texas Oral Health Program welcomed participants to the half-day workshop. Lori Cofano and Wendy Frosh, CDHP Facilitators, introduced the Policy Tool and the agenda for the session. Each participant was asked to introduce him/herself and the organization or constituency he/she represented.

Each of the participants was asked to suggest a policy or systems change priority for discussion, and to clarify how each might impact the oral health status of Texas communities. In addition to policy and systems change priorities, the list generated included a number of programmatic suggestions. Those identified issues included:

- Improve oral health literacy across Texas
- Integrate oral health into all elder-care services and facilities
- Support the development of the Dental Home through professional education
- Integrate oral health into electronic communications/health records
- Increase collaboration between dentists and physicians
- Provide prevention and early intervention services for all children ages 0 to 3
- Improve access to care for all underserved populations
- Develop oral health education for all early childhood providers
- Implement the BSS for the senior population
- Build and train an oral health team to address the needs of seniors
- Build collaboration with Texas school systems to implement oral health screenings and oral health curricula
- Establish tooth brushing programs in all Texas elementary schools
- Train dentists to address the needs of young children and their mothers

- Develop and finance care coordination systems, particularly for young children
- Develop and provide integrated oral health education for pregnant women
- Create policy to ensure the delivery of oral health care for the incarcerated
- Develop and disseminate quality of care standards to all dental providers
- Provide legislators with information regarding the importance of oral health to overall health
- Ensure that Texas residents have access to an integrated Health Home
- Provide oral health services children with major medical and special needs
- Create incentives for dentists to practice in underserved areas
- Implement mandatory dental screenings for all children entering kindergarten
- Require oral health training for all nursing home aides
- Structure public assistance programs to encourage dental provider participation
- Create and implement an integrated care model to address oral cancers
- Implement a common comprehensive health assessment tool for all publicly- funded programs
- Increase access to evidence-based prevention services
- Incorporate oral health in hospital discharge instructions for maternity patients
- Increase the enrollment window for Medicaid from 6 months to 12 months
- Implement integrated/”one-stop” care models to improve access for the underserved
- Ensure that both medical and dental providers can be reimbursed for providing basic oral health services
- Ensure that all long term care and assisted living facilities provide routine oral health care to residents
- Include oral health in all school-based “healthy lifestyle” programs
- Increase the number of school-based health centers and ensure that they provide preventive services focused on oral health
- Ensure that oral health benefits are included in the ‘essential health benefit’ under the [Affordable Care Act] ACA
- Fluoridate all community water systems
- Create and implement a comprehensive oral health surveillance system for use across the lifespan
- Ensure that dentists are trained to address the needs of children with special needs and developmental disabilities
- Create best practices and quality improvement systems to generate outcomes data to support policy development

The list was reviewed and edited, prior to the next exercise, in which participants were asked to select and vote on their top five priorities. The five policy/systems change suggestions that received the most number of votes were as follows:

- Support the development of the Dental Home through professional education (28 votes)

- Create a statewide Oral Health Surveillance System to collect oral health data across the lifespan (27 votes)
- Improve oral health literacy across Texas (25 votes)
- Integrate oral health into all elder-care services and facilities (22 votes)
- Fluoridate all community water systems (19 votes)

## Appendix 3. Oral Health Program Summary



# ORAL HEALTH PROGRAM



### Vision Statement:

Our vision is a healthy Texas, where all individuals enjoy the benefits of good oral health as an integral part of overall health.

### Mission Statement:

Promoting oral health through leadership in public health practices, policy development, education, and population-based preventive services.

### Oral Health Program (OHP) Five Core Functions:

- 1. Promote effective evidence-based strategies and preventive oral health practices through population-based services.**
  - Screen and identify populations needing dental services.
  - Provide preventive dental services and treatment referrals.
  - Develop and promote evidence-based strategies and interventions to prevent and control oral diseases.
  - Provide dental sealant and fluoride varnish programs through a school-based delivery model.
  - Provide oversight and coordination of public health dental functions.
  - Educate Texans regarding good oral health and how it relates to overall health.
  - Address disparities in oral health.
  - Facilitate, monitor, and evaluate sealant program effectiveness.
- 2. Serve as an oral health subject matter expert and provide support for internal and external partners.**
  - Develop sound oral health policy.
  - Increase capacity by increasing infrastructure partners to leverage resources at the local, regional, and state levels.
  - Assist regional programs in providing community-based solutions to oral health problems.
  - Collaborate with school nurses to increase awareness of dental resources for students and the establishment of a dental home.
  - Work with dental and medical schools and other academic institutions to promote oral health.
  - Conduct educational activities geared at promoting optimal oral health with emphasis on the concept that oral health is a vital part total body health and well-being.
- 3. Gather, provide, and maintain oral health data required by local, state, and federal policy makers for decision making, support, and documentation of oral health trends.**
  - Collect oral health data that is statistically valid by calibrated dentists.
  - Evaluate the effectiveness of implemented oral health strategies through annual strategic planning and programmatic evaluation activities.
  - Implement statistically valid Basic Screening Surveys (BSS) for targeted populations.
  - Submit data reports to management per program reporting requirements.
  - Collect convenience data for preventive dental services clinics.
  - Establish an oral health surveillance system that utilizes various data sources (BRFSS, YRBS, Birth Defects, Cancer Registry, etc.) that describe oral health status.
  - Coordinate and conduct routine utilization reviews on randomly selected Medicaid dental providers.
- 4. Develop a collaborative network of community and professional partners to increase delivery systems for the implementation of preventive dental services programs.**
  - Develop and maintain liaison relationships with dental and medical professional organizations, schools, and individuals that are seeking to provide dental public health services.
  - Work to involve private local groups, agencies, and individuals interested in improving dental public health services in underserved areas.
  - Serve as an active collaborative partner with other public health, community, and statewide entities to promote improved oral health for Texas citizens.
  - Serve as a referral liaison between Texas citizens and regional public health programs and community partners.
- 5. Serve as support for disaster related response teams.**
  - Actively participate and/or serve in a supporting role to meet the agency's obligations for disaster response and/or recovery or Continuity of Operations (COOP) activation.

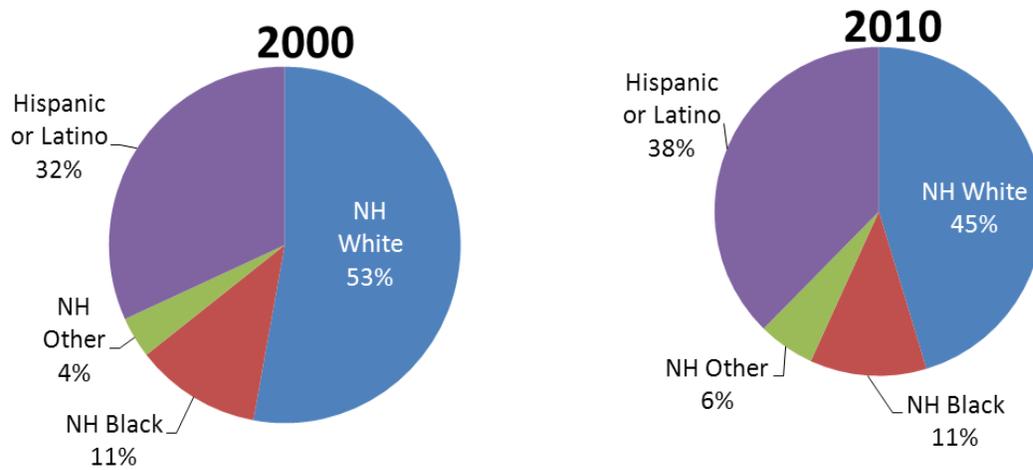
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**Appendix 4. Population Change between 2000 and 2010 Census: United States, Texas, California, Florida, Georgia, North Carolina, and Arizona**

<b>AREA</b>	<b>2000 Population</b>	<b>2010 Population</b>	<b>Numerical Change 2000-2010</b>	<b>Percent Change 2000-2010</b>
United States	281,421,906	308,745,538	27,323,632	9.7%
<b>Texas</b>	<b>20,851,820</b>	<b>25,145,561</b>	<b>4,293,741</b>	<b>20.6%</b>
California	33,871,648	37,253,956	3,382,308	10.0%
Florida	15,982,378	18,801,310	2,818,932	17.6%
Georgia	8,186,453	9,687,653	1,501,200	18.3%
North Carolina	8,049,313	9,535,483	1,486,170	18.5%
Arizona	5,130,632	6,392,017	1,261,385	24.6%

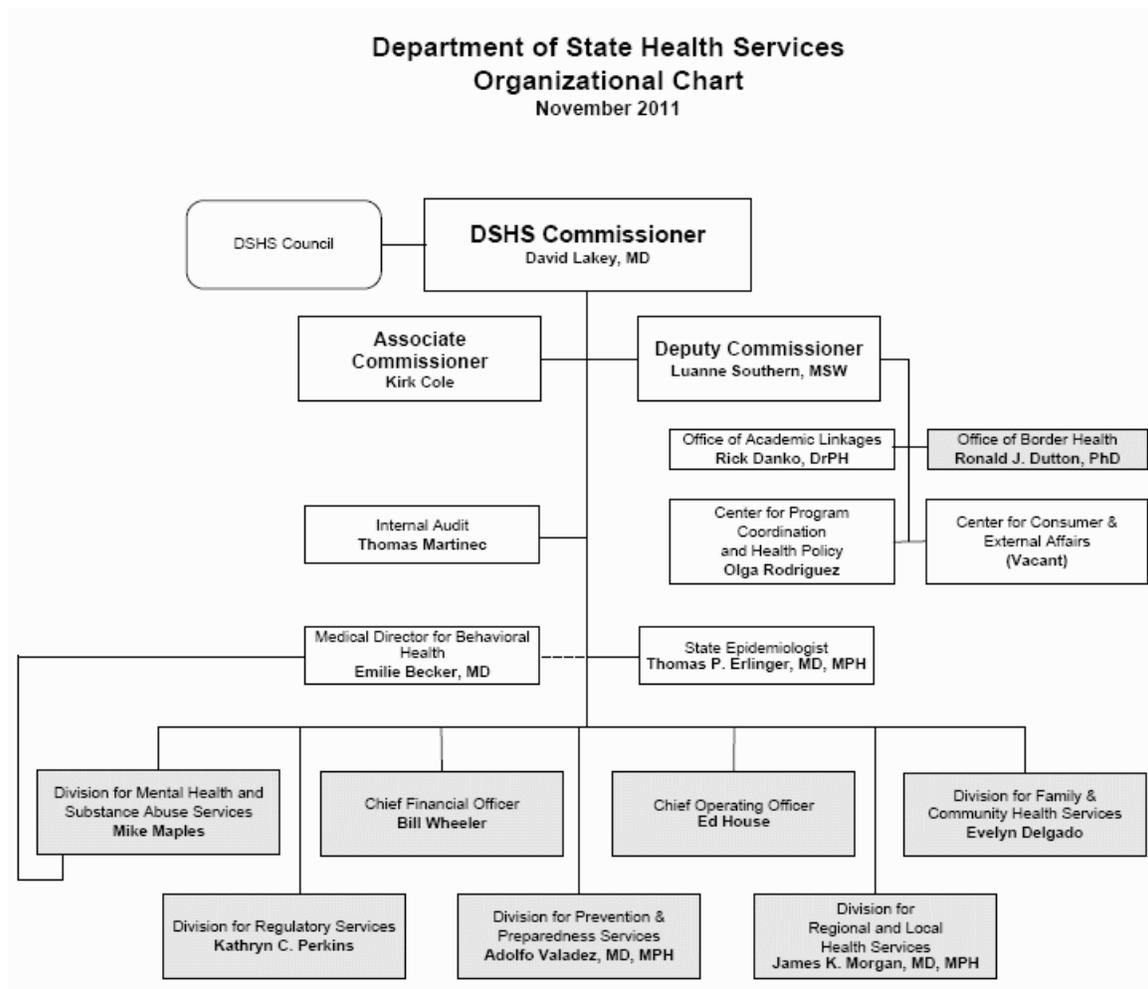
Source: Office of the State Demographer, Update of Texas Demographic Characteristics and Trends (1).

## Appendix 5. Texas' Ethnic Composition 2000 and 2010

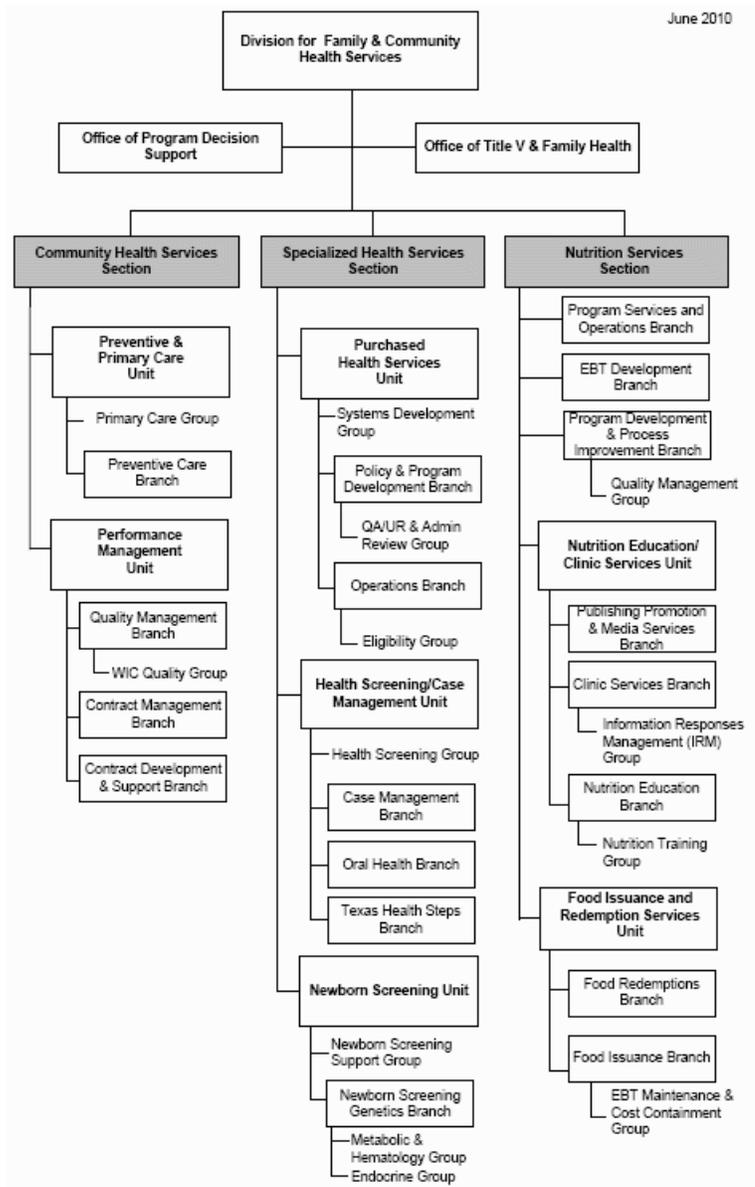


Source: Office of the State Demographer, Update of Texas Demographic Characteristics and Trends (1).

## Appendix 6. Department of Health Services Organizational Chart (2)



# Appendix 7. Division for Family & Community Health Services (3)



## Appendix 8. Oral Health Program / Department of State Health Services Surveillance Matrix, 2010-2018

*Texas Oral Health Data Source Grid*

Topic	Source	SFY 2010	SFY 2011	SFY 2012	SFY 2013	SFY 2014	SFY 2015	SFY 2016	SFY 2017	SFY 2018
<b>Pre-Schoolers</b>										
Decay Experience	Basic Screening Survey (BSS)					X				X
Untreated Decay						X				X
Sealant Prevalence						X				X
Urgent Need						X				X
<b>Third Graders</b>										
Decay Experience	Basic Screening Survey (BSS)			X					X	
Untreated Decay				X					X	
Sealant Prevalence				X					X	
Urgent Need				X					X	
<b>Adolescents</b>										
Decay Experience	Youth Risk Behavior Survey (YRBS)			X			X		X	
Untreated Decay				X			X		X	
Sealant Prevalence				X			X		X	
Urgency Need				X			X		X	
<b>Adults</b>										
Length of time since last dental visit	Behavioral Risk Factor Surveillance Survey (BRFSS)	X		X		X		X		X
Length of time since last teeth cleaning		X		X		X		X		X
Number of teeth removed due to tooth decay or gum disease		X		X		X		X		X
<b>Seniors</b>										
Length of time since last dental visit	Behavioral Risk Factor Surveillance Survey (BRFSS)							X		X
Length of time since last teeth cleaning								X		X
Number of teeth removed due to tooth decay or gum disease								X		X

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