

Florida Department of Health

Health Practitioner Oral Healthcare Workforce Ad Hoc Committee Report



February 2009

Florida Department of Health • 4052 Bald Cypress Way, Bin C15 • Tallahassee, FL 32399-1735



Table of Contents

Preface	3
Committee Members	4
Executive Summary	5
Background.	7
Authority	8
Mission.	8
Charge	8
Duties	9
Timeline and Schedule	9
Recommendation Development and Process	10
General Observations.	11
Recommendations.	12
References	15
Acknowledgements	16
Dental Workforce Glossary.	17
Appendices	
Appendix A: Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged).	20
Appendix B: Oral Healthcare Workforce Background Paper: <i>Dental Workforce Demographics, Trends, and Deficiencies</i>	35
Appendix C: Oral Health Florida Coalition	42
Appendix D: Oral Health Workforce Strategies Considered.	43
Appendix E: Survey of Strategies by Impact and Feasibility	44
Appendix F: Ranking of Oral Health Workforce Strategies by Impact	58
Appendix G: Ranking of Oral Health Workforce Strategies by Feasibility	59
Appendix H: Additional Views of Committee Members.	60

Preface

At my direction as the State Surgeon General of the great state of Florida, with leadership from Deputy Secretary Kimberly Berfield, the Florida Health Practitioner Oral Healthcare Workforce Ad Hoc Committee was convened and developed recommendations to evaluate and strategically address the complex range of oral health workforce concerns. Oral health workforce issues impact Florida's ability to recruit or retain practicing dental providers (dentists, dental hygienists, and dental assistants), especially for Florida's disadvantaged and underserved populations. On behalf of the Committee, we are pleased to present these recommendations.

The recommendations included in this report represent a foundation for further action and are a start toward addressing this complex challenge. The development of a strategic plan with detailed steps to implement these strategies is essential. Many of the recommended strategies will require funding and/or policy changes. We hope the work of the Committee provides meaningful awareness and guidance for future policy and funding decisions. Many challenges lie ahead. Notable in the process of developing these recommendations, the membership of the Committee worked within an environment of significant collaboration—working together to achieve a common goal and a desire to enrich the lives of all people in Florida by improving access to oral health care providers and services.

Deputy Berfield and I commend the committee members for their dedication and thank them for the thoughtful deliberation and time spent on this important project.

Ana M. Viamonte Ros, M.D., M.P.H.
Chair

Kimberly A. Berfield
Vice Chair

Committee Members

Ana M. Viamonte Ros, M.D., M.P.H., Chair
State Surgeon General, Florida Department
of Health

Kimberly A. Berfield, Vice Chair
Deputy Secretary, Florida Department of
Health

Michael Bolin
Agency for Health Care Administrator, Agency
for Health Care Administration (AHCA)
Nominated by the Secretary for the AHCA

Peter B. Claussen, D.D.S.
Private Practice
Nominated by the Florida Academy of
Pediatric Dentistry

Teresa (Terri) A. Dolan, D.D.S, M.P.H.
Professor & Dean University of Florida, College
of Dentistry
Nominated by the University of Florida,
College of Dentistry

Howard Fisher, D.D.S.
Private Practice
Nominated by the Florida Society of Oral &
Maxillary Facial Surgeons

Representative Alan Hays
Dentist, Retired
Florida House of Representatives
Nominated by the Speaker of the House

Charles W. Hoffman, Ph.D., D.M.D.
Private Practice
Nominated by Florida Dental Association

Holly E. Kahler, C.D.A., R.D.H., Ed.D.
Brevard Community College
Nominated by the Commissioner of Education

Betty D. Klement, D.M.D.
Private Practice
Nominated by the Florida Board of Dentistry

R. E. LeMon, Ph.D.
Florida Board of Governors
Nominated by the Chancellor, State University
System

Sarah E. Lightell
Chief Operating Officer, Senior Resource
Alliance & Area Agency on Aging of
Central Florida
Nominated by the Secretary of Elder Affairs

Mary Y. "Cookie" Martin, R.D.H.
Private Practice
Nominated by the Florida Dental Hygiene
Association

Judy Meyer
Agency for Workforce Innovation
Nominated by the Director, Agency for
Workforce Innovation

Maria C. Pardo, D.D.S.
Dental Director, Manatee County Rural Health
Services, Inc.
Nominated by the President, Area Health
Education Center Network

Cheryl Starnes
Heartland Dental Care
Nominated by the Florida Dental Assistants
Association

Patricia M. Tapley, D.M.D.
Private Practice
Nominated by the Florida Association of
Orthodontists

Myron Schrock, D.D.S.
Private Practice
At Large Private Practice Member

Robert Uchin, D.D.S.
Dean, Nova Southeastern University, College of
Dental Medicine
Nominated by the Nova Southeastern
University, College of Dental Medicine
*The State Surgeon General appointed Dean
Uchin to the Committee on September 9, 2008.*

Executive Summary

Florida, with the fourth largest population in the United States, has a diverse population residing in 67 disparate counties. This diversity of population and counties creates challenges in access to health care. While there have been considerable improvements in oral health in the state over the last 30 years, the State Surgeon General realizes that many persons in Florida, especially the disadvantaged, are not receiving basic dental care. While there are many factors that contribute to this lack of care, the inadequate availability or access to dental providers throughout the State is a major concern. Oral health is essential to general health and well-being. The lack of basic oral health care for all people in Florida contributes to the number of people experiencing poor general health.

In response to this issue, the State Surgeon General established the Florida Health Practitioner Oral Healthcare Workforce Ad Hoc Committee (Committee) to act as the advisory body for the State oral healthcare workforce initiative. The Committee was comprised of multiple governmental and nongovernmental stakeholders. The mission of the Committee was to evaluate and address the complex range of oral health workforce concerns that impact Florida's ability to recruit or retain available practicing dental providers (dentists, dental hygienists, and dental assistants), especially for Florida's disadvantaged and underserved populations.

Through a series of meetings spanning 10 months, the Committee actively reviewed, assessed, and recommended strategies. Staff and invited guests provided the Committee members with information about workforce and workforce trends in Florida and around the country through reviews of the literature, presentations on select topics, and descriptions of best practices from other states. From this information, the Committee proposed and reviewed an extensive list of strategies. Over the course of meetings, the Committee engaged in vigorous discussion and acted in a spirit of cooperation in an effort to find solutions that will best meet the state's current and future dental workforce needs.

The Committee agreed on the following observations:

- **Education and prevention** are crucial to improving the oral health of all people in Florida.
- **New models for the delivery of dental health care services** may be necessary to provide access to dental care for certain disadvantaged population groups in Florida.
- **Safety net providers** such as County Health Department (CHD) and Community Health Center (CHC) dental services are essential to providing dental care to underserved and disadvantaged populations.
- **There is a need for adequate and appropriate training** as a requirement for any provider, program, or new model of dental care delivery in the state of Florida.
- **Most underserved populations** (e.g. low-income children, individuals with special health care needs, seniors) require dental services provided by general dentists who receive additional training and experience in working with special populations as opposed to specialty dentists with postgraduate specialty degrees.
- **Reliable qualitative and quantitative data** can provide clear insight about workforce options that may address access issues. Data on Florida workforce, dental needs, and disadvantaged populations is incomplete and should be improved.

The Committee recognizes that no one strategy will solve all of the workforce issues. Consequently, the following strategies are all of equal importance and should be considered as such. After review and deliberation of multiple strategies, the Committee proposes the following recommendations grouped in five broad categories in no particular order of importance. These strategies are the beginning steps toward improving access to quality dental health care services for all persons in Florida.

PUBLIC ORAL HEALTH EDUCATION AND PREVENTION SERVICES

- **Expand community-based oral health prevention services.**
- **Expand oral health education and preventive programs in schools.**

THIRD PARTY PAYER ISSUES

- **Reduce Medicaid administrative burdens for providers.**
- **Increase Medicaid reimbursement rates.**
- **Reduce Medicaid administrative burdens for patients.**

RECRUITMENT/INCENTIVES TO ATTRACT PROVIDERS TO PUBLIC HEALTH DENTAL POSITIONS

- **Examine the compensation and improve the work environment for state-employed dental providers** in public health delivery systems such as county health departments (CHDs), Community Health Centers (CHCs), and Federally Qualified Health Centers (FQHCs).
- **Fund the loan forgiveness program**, reestablishing the Florida State Health Service Corps and increase utilization of the National Health Service Corps.
- **Strengthen the local, regional, or statewide coordinated volunteer workforce.**
- **Provide technical assistance to communities** wishing to recruit dental providers through the construction or equipping of dental office space in exchange for provision of dental services in their community.

LEGAL/POLICY APPROACHES TO EXPAND WORKFORCE OR SERVICES

- **Expand duties and reduce supervision levels** for allied dental providers who practice in health access settings.

TRAINING OF PROVIDERS

- **Provide dental school extern or residency opportunities in safety net programs.**
- **Establish short-term training programs in pediatric dentistry.**

The Committee recognizes that implementing these strategies is not without challenges; many will require policy changes and/or new funding sources. Despite known and as yet unknown barriers to their implementation, the Committee believes these strategies have the greatest potential to affect the dental workforce in Florida and ultimately expand the availability of dental care to Florida's most vulnerable populations. The Committee offers these observations and recommendations to provide guidance to policymakers, professional organizations, advocates, and the public as they consider how to address implementation of strategies that can positively affect Florida's dental workforce challenges.

Background

The United States Surgeon General’s 2000 Report, *Oral Health in America: A Report of the Surgeon General* (Report), concluded that “oral health is essential to the general health and well-being of all Americans and can be achieved by all Americans.”¹ The Report stated that there is a “silent epidemic” of dental and oral disease that “restricts activities in school, work and home, and often significantly diminishes the quality of life.”¹ The burden of oral disease and limitations on the ability to obtain dental care are disproportionately distributed among the population depending on racial, ethnic, geographic, and socioeconomic factors.² As the challenges of providing dental healthcare continue to grow throughout our country, Florida faces even larger challenges due to the diversity that exists in its 33 rural and 34 urban communities.

A large number of people in Florida, especially disadvantaged persons, are not receiving basic dental care due to inadequate utilization and/or the lack of conveniently available dental services throughout the State. Appendix A, Florida Disadvantaged Populations: Dental Disease Burdens, Needs and Barriers to Care; defines Florida’s disadvantaged populations. This document describes the dental disease burdens, needs, and barriers to care related to the composition, distribution and functioning of the dental workforce for each of these disadvantaged populations. A highly trained, diverse, and sufficiently geographically located dental workforce is a key component in the effective delivery of dental services to all persons of the State. There are serious concerns that there may be deficiencies in the numbers, distribution, and function of the dental workforce that are contributing to the lack of availability and/or underutilization of dental services. Workforce concerns involve a complex range of public policy and professional practice issues, including supply and demand influences, educational and training matters, and regulatory questions. Appendix B, Oral Healthcare Workforce Background Paper: Dental Workforce Demographics, Trends, and Deficiencies, highlights national and state dental workforce demographics, trends, and deficiencies.

Dental workforce planning is an essential component of ensuring that there is an adequate and appropriate supply of well-trained dental providers to meet the State of Florida’s current and future dental health care service needs. Our State’s dental workforce needs will continue to increase as both Florida’s general and elderly populations continue to increase. Consequently, the State Surgeon General established a Florida Health Practitioner Oral Healthcare Workforce Ad Hoc Committee (Committee) to serve as a coordinating and strategic planning body.

Authority

Pursuant to Florida Statutes 20.43(6) F.S.3 and 381.4018 F.S.4, the State Surgeon General of the Florida Department of Health established the Florida Health Practitioner Oral Healthcare Workforce Ad Hoc Committee (Committee) whose purpose was to act as the advisory body for the State oral healthcare workforce initiative.

Mission

The mission of the Committee was to evaluate and strategically address the complex range of oral health workforce concerns that impact Florida's ability to recruit or retain practicing dental providers (dentists, dental hygienists, and dental assistants), especially for Florida's disadvantaged and underserved populations. These concerns range from public policy, professional practice issues, supply and demand influences (current and projected), educational and training matters, and regulatory questions.

Charge

The State Surgeon General tasked the Committee with assessing the state's current and future health practitioner workforce needs and to investigate ways to attract and retain healthcare professionals in the Florida Department of Health (DOH). The Surgeon General charged the Committee with reviewing, assessing, and recommending strategies that will best meet the state's current and future dental workforce needs; and to develop recommendations to address the complex range of dental workforce concerns in the State of Florida.

The State Surgeon General suggested that the Committee consider any items relative to assessing the state's current and future dental workforce needs. These items may include, but are not limited to the evaluation of dental practice status; the general provider to specialty mix; the geographic distribution; the demographic information of dental providers, including, age, gender, race, cultural considerations, and other information the Committee may find relevant; and the oral health needs of current or projected underserved areas in the state.

The State Surgeon General established that the recommendations of the Committee should:

- 1. Provide for a well-trained supply of dental providers** that must include ensuring the availability while maximizing overall capacity of quality graduate dental schools, dental hygiene programs and dental assisting programs in this state;
- 2. Emphasize collaborating with new or existing state and federal programs** that provide incentives for dental providers to practice in needed specialties and in underserved areas in a manner that addresses the State's current and projected dental manpower needs;
- 3. Address workforce concerns** regarding the challenge of limited availability of healthcare practitioners, educators, and data.

Duties

The duties of the committee included, but were not limited to:

- 1. Identifying and making recommendations to the State Surgeon General that will be evaluated for incorporation into a statewide strategic plan.**
 - a. Discussing appropriateness of changes to statutes and administrative rules relating to priorities that will promote dental workforce development
 - b. Policy development discussions regarding key educational pipeline issues, including, but not limited to:
 - i. Education development and recruitment
 - ii. Education capacity and funding
 - iii. Recruiting and retaining Florida licensed dentists
 - c. Policy development regarding additional dental healthcare professions in a tiered approach, including a focus on primary care and on health access professions like hygienists, assistants and other allied health professions
- 2. Providing needed technical support to the DOH in areas related to dental workforce and health practitioner development, outreach, education, strategic planning and expansion**
- 3. Acting as a clearinghouse for information specific to changes in the provision of oral healthcare services in Florida.**

Timeline and Schedule

December 12, 2007 Identify core groups and stakeholders who should participate on the Committee. Parameters of the committee were discussed and decided upon.

December 21, 2007 The State Surgeon General and Chief of Staff presented the Oral Healthcare Workforce Ad Hoc Advisory Committee white paper to the Executive Office of the Governor for input.

January 3, 2008 The State Surgeon General designated vice chair, Deputy Secretary Kim Berfield, selected committee members to include a diversity of provider types and key partners.

January 17, 2008 The Department of Health (DOH) distributed letters to potential Committee members asking if they would serve. Letters of agreement were signed and returned to DOH.

April 7, 2008 First conference call of the Committee—the Committee reviewed background material and identifying objectives and obligations.

May 23, 2008 Second conference call of the Committee—the Committee reviewed Oral Health Florida/SOHIP recommendations, recent Florida legislation (SB 2760 and HB1367), information about the National and Florida Health Service Corps and Dental HPSAs, and suggesting potential strategies and surveying participants regarding suggested strategies.

June 20, 2008 Third conference call of the Committee—the Committee reviewed vouchers, tax incentives, and enterprise zones. The Committee continued discussion of strategies and the survey instrument.

July 18, 2008 Face to face Committee meeting in Tampa. The Committee discussed in depth the top 20 strategies prioritized in the survey instrument by impact to determine which strategies to recommend. The Committee reviewed the presentation of the DOH survey that assessed the attitudes of senior dental students and County Health Department (CHD) dentists towards employment in a CHD dental program. The Committee created a Subcommittee on Dental Hygienist and Dental Assistant Duties and Supervision Levels.

August 13, 2008 Conference call of the Subcommittee on Dental Hygienist and Dental Assistant Duties and Supervision Levels—the Subcommittee discussed duties, supervision levels, and different models to better utilize dental auxiliaries in public health practice.

December 2, 2008 Fourth conference call of Committee—the Committee reviewed strategies and draft of recommendation report.

February 3, 2009 Final conference call of the Committee—the Committee reviewed and approved the report.

Spring 2009 Florida Department of Health will pursue legislative changes based upon Committee recommendations if needed.

All conference calls and meetings were open to the public and subject to Florida's Government in the Sunshine law.^{5,6}

Agendas, surveys, minutes, presentations, background materials, transcripts, and recordings of conference calls and face to face meetings can be found on the Oral Health Florida website (www.oralhealthflorida.com) at: <http://www.doh.state.fl.us/Family/dental/OralHealthcareWorkforce/index.html>.⁷

Recommendation Development and Process

The Committee proposed, discussed, and evaluated a wide variety of strategies, building upon the prior work of the Oral Health Florida Coalition and the State Oral Health Improvement Plan (Plan). Oral Health Florida is a broad-based statewide coalition comprised of representatives from numerous organizations interested in better serving the oral health needs of disadvantaged populations in Florida. A more complete description of Oral Health Florida is available in Appendix C, Oral Health Florida Coalition and a copy of the Plan can be accessed on the Oral Health Florida website (www.oralhealthflorida.com). Appendix D, Oral Health Workforce Strategies Considered, lists each of the strategies the Committee considered. The Committee recognized that many of these strategies might be difficult to adopt or adapt in Florida under current economic and political conditions. However, the Committee conducted their work with the belief that consideration of all strategies is important for future workforce conversations.

After discussion of each strategy, Committee members had the opportunity to rank the strategies by impact and feasibility utilizing the survey tool in Appendix E, Survey of Strategies by Impact and Feasibility. The survey tool gives an explanation of each strategy including examples where another state or program has implemented such a strategy and the benefits and barriers of the strategy, where possible. Staff averaged the scores of each participating Committee member's survey and ranked the results by impact and feasibility. Appendix F, Ranking of Oral Health Workforce Strategies by Impact, lists the ranking of the strategies by impact and Appendix G, Ranking of Oral Health Workforce Strategies by Feasibility lists the ranking of the strategies by feasibility.

The Committee convened a face-to-face workshop meeting of Committee members to discuss the top 20

strategies ranked by impact only (including ties). At the face-to-face meeting, the Committee created a Subcommittee on Dental Hygienist and Dental Assistant Duties and Supervision Levels (Subcommittee) that met by conference call to discuss in greater depth the strategies dealing with dental auxiliary duties and levels of supervision. The strategies that remained after the face-to-face Committee meeting and the Subcommittee conference call received broad support and little opposition.

The Committee grouped the remaining strategies into five broad categories in no particular order of importance for this report:

- 1. Public Oral Health Education and Prevention Services**
- 2. Third Party Payer Issues**
- 3. Recruitment/Incentives to attract providers to public health dental positions**
- 4. Legal/Policy approaches to expand workforce or services**
- 5. Training of Providers**

The Committee met for conference calls on December 2, 2008 and February 3, 2009 to allow the Committee to discuss and provide final comment on the recommended strategies, including recommendations of the Subcommittee. The result of these conference calls was Committee approval of the final report.

The Committee recognizes implementation of many of these strategies may not be simple or feasible, especially statewide. Funding, training, and changing perceptions may be necessary to support many of these proposals. Some of these strategies have the potential to be studied, evaluated, piloted, or implemented in the short term, while other strategies may require a longer-term outlook. Some strategies may be of interest to private or public entities, while others may require legislative or policy changes in order to be piloted or adopted. Whatever the barrier or barriers to implementation, the Committee feels these strategies could have the most significant impact on improving the dental workforce in the state of Florida. The Committee offers these recommendations to provide guidance to a broad range of stakeholders who may, in the future, consider how to strategically address implementation of strategies that can positively affect Florida's dental workforce challenges.

General Observations

The Committee emphasizes that education and prevention are crucial to improving the dental health of all the people in Florida. Education and prevention can lessen dental disease and the need for clinical dental treatment services; thus, reducing demands on the dental workforce.

The Committee realizes that strategies should be based upon reliable data. Reliable qualitative and quantitative data can provide clear insight about workforce options that may address access issues. Since data on Florida dental workforce, dental needs, and disadvantaged populations is incomplete, the Committee stresses that the State needs to improve this data. The Committee suggests monitoring dental workforce trends through surveys that accompany licensure renewal and assessing dental needs of all persons in Florida through a statewide oral health needs assessment or a statewide oral health surveillance system.

The Committee recognizes in an ideal world all persons in Florida would be able to obtain appropriate dental services as Florida's dental providers currently function and are regulated.

The Committee recognizes that certain disadvantaged population groups nationally and in Florida have difficulties obtaining appropriate dental care in the current delivery model.¹ These disadvantaged population groups may have mental and/or physical disabilities, transportation issues, and/or may lack the ability to pay for dental services. These difficulties may prevent persons in Florida from obtaining appropriate dental care in the traditional manner where a patient travels to a private practice dental provider for care.

The Committee acknowledges that safety net providers such as County Health Department (CHD) and Community Health Center (CHC) dental services are invaluable and essential to providing dental care to underserved and disadvantaged populations. The Committee recognizes safety net providers may need new models in order to deliver dental services to the wide range and numbers of underserved and disadvantaged persons.

The Committee stresses the need for adequate and appropriate training as a requirement for any provider, program, or new model of dental care delivery in the state of Florida. See Appendix H, Additional Views of Committee Members, for an additional view of some of the Committee members.

The Committee observes that most underserved populations (e.g. children, individuals with special health care needs, seniors) require dental services provided by general dentists who receive additional appropriate training and experience following formal general dentistry training, as opposed to specialty dentists with postgraduate specialty degrees. Typically, only patients with severe dental disease or behavioral issues need the expertise of providers with postgraduate specialty education.

The Committee recognizes that data on workforce and dental needs and burdens of specific disadvantaged populations in Florida is incomplete in some areas. The Committee is making its recommendations on the best information available, but recommends the administration of surveys of dental providers upon dental licensure renewal and the completion of a statewide needs assessment to better monitor workforce trends and the delivery of dental services.

Recommendations

The Committee proposes the following recommendations in an effort to allow all persons in Florida access to quality dental health care services in the state of Florida. The Committee believes there is a need for innovative approaches in order to deliver appropriate and high quality dental care services to populations that have historically had difficulty receiving dental services in the traditional dental health care delivery model in Florida.

PUBLIC ORAL HEALTH EDUCATION AND PREVENTION SERVICES

Expand community-based oral health prevention services. The Committee recommends increasing support for and the provision of community-based oral health education and preventive services. Such services include, but are not limited to expanding community water fluoridation, expanding school-based fluoride and dental sealant programs, tobacco education, while incorporating dental health education into general health programs as well as school education programs wherever possible. Education, prevention, and early intervention reduce the costs and burdens of dental (and systemic) disease.

Expand oral health education and preventive programs in schools. The Committee recommends the Department of Education partner with the Department of Health and other oral health organizations throughout the state to expand oral health education in school curriculums, provide oral health training

to school nurses, and expand school-based oral health preventive programs such as fluoride mouth rinse and dental sealant programs. Additionally, the DOE, DOH and other health organizations should collaborate to eliminate candy, soda and other sugar containing drinks from school vending machines and work together to provide nutritious and dentally appropriate school lunch programs.

THIRD PARTY PAYER ISSUES

Reduce Medicaid administrative burdens for providers. The Committee recommends the State attempt to reduce administrative burdens that may prevent providers from enrolling in and providing Medicaid services to Medicaid eligible persons in Florida. The State should investigate administrative improvements to Medicaid. These include but are not limited to: simplifying and shortening the enrollment process; providing easier verification of patient eligibility; simplifying the reimbursement procedures; standardizing billing procedures; providing quicker reimbursement; improving communication between providers and the Medicaid administrators; providing outreach to providers on new procedures; providing case management to educate patients; utilizing new technology to streamline and speed up approvals, eligibility and billing; and reducing the paperwork. Improving the administrative burdens may motivate more practitioners to enroll as Medicaid providers.

Increase Medicaid reimbursement rates. The Committee recommends the Legislature address Medicaid reimbursement rates in a manner that is similar to how other states have shown success in regard to increasing the number of dentists participating in their programs.⁸ The Committee recognizes that increasing reimbursement rates alone will not create a significant increase in provider participation and Medicaid eligible utilization. Experience in other states has shown increasing reimbursement rates, frequently in conjunction with other Medicaid reforms, has the potential to increase provider participation in Medicaid.⁸

Reduce Medicaid administrative burdens for patients. The Committee recommends the State attempt to reduce the administrative burdens on patients that may be preventing eligible persons in Florida from enrolling in Medicaid and utilizing dental services. The Committee recommends the State investigate administrative improvements that include but are not limited to: simplifying enrollment procedures; providing case management; providing outreach to find and encourage eligible persons in Florida to enroll in Medicaid; providing more enrollment opportunities, locations and systems; addressing cultural, linguistic and literacy issues; extending hours of services; and providing transportation when necessary.

RECRUITMENT/INCENTIVES TO ATTRACT PROVIDERS TO PUBLIC HEALTH DENTAL POSITIONS

Examine the compensation and improve the work environment for state-employed dental providers in public health delivery systems such as county health departments (CHDs), Community Health Centers (CHCs), and Federally Qualified Health Centers (FQHCs). The Committee recommends examining the level and method of compensation and improving the work conditions for state-employed dental providers. CHDs have traditionally found it difficult to recruit and retain dental providers. There are opportunities for CHDs to improve recruitment. Salaries for state-employed dental providers may not be attractive to some dentists despite the inclusion of the state employment benefit package, liability coverage, and no overhead. Improving the work conditions through the reduction of paperwork, upgrading the physical work environment, providing high quality support staff while utilizing newer technology and equipment could make public sector work more appealing, improving recruitment and retention of dental providers in CHDs.

Fund the loan forgiveness program, the Florida State Health Service Corps and increase utilization of the National Health Service Corps. The Committee recommends funding the legislatively established Florida Health Service Corps that would provide loan forgiveness for service. Many dental students are in debt

upon graduation; the level of debt often exceeds \$100,000. In order to pay off debt, new graduates are often motivated to seek employment in lucrative private practices (which are generally located in suburban affluent areas). Loan forgiveness may remove the economic burden on new graduates and provide an additional incentive to practice in underserved areas or on underserved populations. Additionally, the Committee recommends better marketing and utilization of the National Health Service Corps to bring dental providers to Florida's dental health professional shortage areas.

Strengthen the local, regional, or statewide coordinated volunteer workforce. The Committee recommends strengthening the local, regional, or statewide coordinated volunteer workforce by removing legal barriers to and providing incentives such as sovereign immunity, tax credits, and discounts on dental licensure fees for volunteerism. The program could better utilize active and retired dental providers to increase the workforce and provide needed dental services to underserved populations or areas.

Provide technical assistance to communities wishing to recruit dental providers through the construction and equipping of dental office space in exchange for provision of dental services in their community. The Committee recommends the State market the concept of and provide technical assistance to local communities to recruit dental providers by providing incentives such as gifting office buildings and dental equipment to recent dental graduates. Starting a dental practice is expensive, especially for new graduates with a large amount of debt. Local communities with dental workforce needs could address their needs by providing incentives to recruit and retain dental providers.

LEGAL/POLICY APPROACHES TO EXPAND WORKFORCE OR SERVICES

Expand duties and reduce supervision levels for allied dental providers who practice in health access settings.

DENTAL ASSISTANTS: The Committee recommends that the State consider statutory and regulatory reform to the State Dental Practice Act to expand the scope of practice and reduce supervisory requirements for dental assistants practicing in health access settings. Florida Statute 466.003(14) defines "health access settings" as "programs and institutions of the Department of Children and Family Services, the Department of Health, the Department of Juvenile Justice, nonprofit community health centers, Head Start centers, federally qualified health centers (FQHCs), FQHC look-alikes as defined by federal law, and clinics operated by accredited colleges of dentistry in this state." (466.003(14) F.S.). The Committee recommends that dental assistants in health access settings should be able to provide fluoride varnish under general supervision; topical fluoride treatments under general supervision; rubber cup prophylaxis (no supra-gingival scaling) under general supervision; dental sealants under general supervision; and with appropriate training place and carve of amalgam restorations under direct supervision.

DENTAL HYGIENISTS: The Committee recommends that the State investigate policy reform that would expand the scope of practice and eliminate or reduce supervisory requirements for dental hygienists practicing in health access settings in order to improve access to dental care. The Committee recommends that such dental hygienists could practice expanded scope of practice without the presence or prior authorization of a dentist. The Committee recommends such dental hygienists have a required level of experience, receive appropriate training, and acquire certification. Such dental hygienists may need to be affiliated with a dentist in a health access setting so they can perform the following designated preventive dental services with reduced or no supervision of a dentist and without the necessity of a prior examination and authorization of a dentist. The Committee recommends such dental hygienists should be able to provide dental charting, prophylaxis, scaling (no root planning or curettage), fluoride varnishes, topical fluorides, and dental sealants without the presence or prior authorization of a dentist. See Appendix H, Additional Views of Committee Members, for an additional view of some of the Committee members.

TRAINING OF PROVIDERS

Provide dental school extern or residency opportunities in safety net programs. The Committee recommends the establishment of additional learning experiences through dental school externship or residency programs in safety net facilities (e.g. CHDs and CHCs) where students can rotate into safety net programs for 3–6 months and receive mentored training. Such programs could increase dental education training opportunities related to specific populations (e.g. children and individuals with special health care needs) and potentially increase dental professional capacity in safety net clinics and communities with workforce needs.

Establish short-term training programs in pediatric dentistry. The Committee recommends the State or the dental schools and dental programs within the State establish short term certificate training programs (e.g. like the executive applied learning models used in other professions) in pediatric, special needs or geriatric dentistry. These training programs would educate general dentists in aspects of clinical and didactic care so that general dentists would feel more comfortable and competent to examine, diagnose, and treat pediatric, special needs, and geriatric patients. This training would include some level of behavioral, cultural competency, and anesthesia/sedation techniques. The programs may utilize financial incentives, such as “free” training to Medicaid providers, to encourage participation. Properly designed programs can provide a mechanism where experienced providers can take time away from their practices and complete training without suffering undue economic burdens.

References

1. U.S. Department of Health and Human Services. Oral Health in America: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research; 2000.
2. McKinnon M, Luke G, Bresch J, Moss M, Valachovic RW. Emerging Allied Dental Workforce Models: Considerations for Academic Dental Institutions. *Journal of Dental Education*. 2007;71(11):1476–1491.
3. Florida Statutes: Title IV Executive Branch; Chapter 20 Organizational Structure; 20.43 Department of Health; 2008.
4. Florida Statutes: Title XXIX Public Health; Chapter 381 Public Health: General Provisions; 381.4018 Physician workforce assessment and development; 2008.
5. McCrackin V. Government in the Sunshine. Office of General Counsel, Florida Department of Health. Available at: http://www.doh.state.fl.us/Family/dental/OralHealthcareWorkforce/Call20080407/23_Government_Sunshine.pdf. Accessed April 7, 2008.
6. Article I §24, Florida Constitution, Section 286.011, Florida Statutes; 2008.
7. Florida Department of Health. Department of Health Oral Healthcare Workforce Ad Hoc Advisory Committee. Available at: <http://www.doh.state.fl.us/Family/dental/OralHealthcareWorkforce/index.html>. Accessed September 12, 2008.
8. Borchgrevink A, Snyder A, Gehshan S. The Effects of Medicaid Reimbursement Rates on Access to Dental Care. Washington, DC: National Academy for State Health Policy; March 2008.

Acknowledgements

STAFF

The Florida Department of Health provided staff to support the Committee and Committee meetings. Staff included:

Amy Cober, R.D., L.D., M.P.H.

Assistant Division Director
Family Health Services

Glen Davis

Program Administrator
Division of Health Access and Tobacco, Office
of Health Professional Recruitment

Harry Davis, D.D.S.

Dental Director
Public Health Dental Program

Sandy Halperin, D.D.S.

Consultant
Prosecution Services Unit, Bureau of Health Care
Practitioner Regulation

Kate Hammond

Assistant to Kimberly “Kim” Berfield
Office of the Deputy Secretary

Douglas Manning, D.M.D., J.D., M.P.H.

Senior Health Systems Analyst
Public Health Dental Program

Veronica McCrackin, J.D.

Senior Attorney
Division of Family Health Services

Annette Phelps, A.R.N.P., M.S.N.

Division Director
Family Health Services

Rory Reese, R.D.H., B.H.S.

Project Coordinator
Workforce Development Grant
Public Health Dental Program

FACILITATION

The Florida Department of Health engaged an independent facilitator to encourage full participation, promote mutual understanding, and cultivate shared responsibility of all Committee members during each Committee meeting. The facilitator for the Committee was:

Dee Jeffers R.N., M.P.H.

Associate Director
University of South Florida Lawton and Rhea
Chiles Center for Healthy Mothers and Babies

Dental Workforce Glossary*

* Terms are not listed in alphabetical order, but are grouped in areas of common applicability.

POPULATIONS

Disadvantaged Populations—are those population groups that lack the knowledge or resources to access optimal oral health care and may not feel empowered to obtain needed services or make changes to the systems of care to better accommodate their needs.

Individuals with Special Health Care Needs—an individual with a physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires more than routine oral health care to keep their mouth healthy due to their condition or treatment for their condition.

DENTAL SERVICES

Community Water Fluoridation—community water fluoridation is the adjustment of the level of fluoride in a community drinking water system to 0.7–1.2 ppm. Community water fluoridation is safe and effective in preventing tooth decay, and has been identified by the Centers for Disease Control as one of 10 great public health achievements of the 20th century. Approximately 67% of the U.S. population and 78% of Florida’s population on public water supplies has access to fluoridated water.

Dental Charting—means a recording by a dental hygienist of visual observations of clinical conditions of the oral cavity without the use of X rays, laboratory tests, or other diagnostic methods or equipment, except the instruments necessary to record visual restorations, missing teeth, suspicious areas, and periodontal pockets. (466.0235(1) F.S.).

Dental Examination—means examination by a dentist for the purpose of diagnosing, treatment planning, prescribing, or treating disease, pain, deformity, deficiency, injury, or physical condition of the human teeth or jaws or oral-maxillofacial region.

Dental Screening—means triage of a patient to establish oral health needs and priorities for allocation of resources and referral for appropriate examination and treatment by appropriate providers.

Dental Sealants—are preventive dental treatments that act as a barrier, protecting the teeth against decay-causing bacteria. The sealants are usually applied to the chewing surfaces of the back teeth (premolars and molars) where decay occurs most often.

Fluoride Varnish—fluoride varnish is a thin coating of resin that is applied to the tooth surface to protect it from decay. The purpose of applying fluoride varnish is to retard, arrest, and reverse the process of cavity formation.

Teledentistry—is the use of electronic information and telecommunications technologies to support long-distance clinical oral health care, patient, and professional health-related education, public health, and health administration.

DENTAL PROVIDERS

Allied Dental Providers or Dental Auxiliary—is any of the dentist’s supporting team who helps with dental treatment and works under the direction and supervision of a dentist. They include dental assistants, dental hygienists, and dental technicians.

Pediatric Dentistry—is an age-defined dental specialty that provides primary and comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.

Safety Net Provider—are providers who are usually employed in a publicly supported or volunteer capacity to care for populations who have limited means to obtain dental care. Generally, these providers offer preventive and acute, primary care dental services to low-income and special needs populations and may include Department of Health County Health Departments (CHDs), Community Health Centers (CHCs), academic dental or dental hygiene school clinics, and other programs that serve the disadvantaged.

Public Health Dental Program—is a program in the Department of Health, Division of Family Health Services that leads the Department of Health’s efforts to improve and maintain the oral health of Florida’s citizens by promoting and developing quality, cost-effective community and school-based preventive, educational and treatment programs that emphasize elimination of oral health disparities.

DOH PROGRAMS AND RELATED POLICY

Oral Health Florida—is Florida’s statewide oral health coalition whose mission is to “Promote, protect and improve the oral health of all people in Florida through collaboration among Florida’s oral health stakeholders.” Oral Health Florida includes representatives from dental and non-dental, Florida-based, professional organizations, private individuals and organizations, government, academia, and public interest and advocacy groups.

State Oral Health Improvement Plan—is a set of strategies, objectives, and action steps developed by Oral Health Florida that address access, awareness and data collection issues with an emphasis on improving the oral health status of disadvantaged persons. A copy of the plan is available at www.oralhealthflorida.org.

Board of Dentistry—is staffed by the Department of Health, Division of Medical Quality Assurance. It consists of 11 members appointed by the Governor and subject to confirmation by the Senate. Seven members of the board must be licensed dentists actively engaged in the clinical practice of dentistry in this state; two members must be licensed dental hygienists actively engaged in the practice of dental hygiene in this state; and the remaining two members must be laypersons who are not, and have never been, dentists, dental hygienists, or members of any closely related profession or occupation.

Dental Practice Act—is Chapter 466 of the Florida Statutes.

Florida Administrative Code—Rule 64B5 governs the practice of dentistry and the Board of Dentistry.

Health Access Setting—are programs and institutions of the Department of Children and Family Services, the Department of Health, the Department of Juvenile Justice, nonprofit community health centers, Head Start centers, federally qualified health centers (FQHCs), FQHC look-alikes as defined by federal law, and clinics operated by accredited colleges of dentistry in this state. (466.003(14) F.S.)

Public Health Delivery Systems—are dental care delivery systems where dental providers provide educational, preventive and primary care dental services in Health Access Settings.

OTHER PROGRAMS WITH DENTAL COMPONENTS

Community Health Centers (CHC)—are local organizations with facilities that are committed to improving community health through the provision of education, prevention, early intervention, and rehabilitation services.

Federally Qualified Health Centers (FQHC)—are a form of Community Health Center funded under Section 330 of the Public Health Service (PHS) Act that allows for cost-based reimbursement under Medicare and Medicaid for legislatively specified services including dental.

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

Workforce concerns involve a complex range of public policy, professional practice issues, supply and demand influences, educational and training matters, and regulatory issues.

There is no one solution that will solve all workforce and access problems for all population groups. Different population groups have different oral health needs and burdens, and thus, may require different solutions. Following is a description of Florida's disadvantaged populations, an indication of their oral health needs where data is available, and a discussion of the workforce issues related to access to oral healthcare services for these populations

POPULATION DEMOGRAPHICS¹ Based on the 2000 census, the U.S. population is projected to increase to 400 million or around 42 percent by the year 2050. During this same period, Florida's population is projected to grow even faster, from approximately 16 million in 2000 to around 24 million or 50 percent by the year 2050. It is estimated that 20 percent of the population, will be over the age of 65 with 25 percent of these seniors being over the age of 85. With continued improvements in oral health, more people are retaining more teeth longer. These increases in population and numbers of teeth that need care will create an increased need for oral health care and oral health care providers.

The projected race and ethnic composition of the population will also show significant changes. By 2050, the Black/African American population is projected to increase slightly from 12.¹ to 13.6 percent. Native Americans will increase slightly, from 0.7 to 0.9 percent. Asian/Pacific Islanders will increase from 3.5 to 8.2 percent. The largest increase will be in the Hispanic/Latino population, from 10.8 to almost 25 percent of the population. The White/Caucasian population will decline from about 73 to 52.8 percent.

DISADVANTAGED POPULATIONS, DENTAL DISEASE BURDENS AND NEEDS

The “disadvantaged” are those population groups that lack power and are without the knowledge or resources to achieve optimal oral care. The primary reason for this lack of access is economic. In any population group, those who suffer the worst oral health are the poor. This is especially true with children and the elderly. However, disparate access can also result from inequities in: political power (minorities have little political clout because of lack of numbers—as such members of racial and ethnic groups experience a disproportionate level of oral health problems); legal status (children, adults with mental incapacitation, and the incarcerated lack the power to vote and to contract for services); social status (society has stigmatized HIV/AIDS individuals and dental care providers may not be adequately trained and thus, fearful to treat special needs patients); physical abilities (limited mobility to visit a dental office, or limited coordination to provide home care can create dependence on others); or mental capacity (mental problems can be severe—incapacity to understand oral health and oral hygiene or inability to make health care decisions, or mild—contributing to compliance, home care, and oral health literacy issues). People with disabilities and complex health conditions are at greater risk for oral diseases that in turn further complicate their health. Moreover, gender-specific issues cut across all populations.² Regardless of the cause, disadvantaged populations face many barriers to optimal dental care and are at the highest risk for oral diseases and, subsequently, are subject to poorer systemic health and well-being as well.

Children

The oral health issues and barriers affecting children vary widely depending on their developmental age. In general, all children face numerous barriers to dental care. Barriers arise, not only from the individual's condition, but also from the status of their family (income, education, and involvement in the child's life); place of residence, **provider training and availability**; health care payer; government; and healthcare systems.³ The primary barrier to dental care for children is economic. Family income/poverty status affects the provision of basic needs such as nutritional foods, oral hygiene home care products, and **access and utilization**

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

of dental services. There are striking disparities in dental disease by income.² Poor children suffer twice as much tooth decay as children from economically stable families.² Furthermore, the decay seen in poor children is more likely to be more severe and untreated than decay in those children living above the poverty level.² More than one third (36.8 percent) of poor children aged 2 to 9 have one or more untreated decayed primary tooth, compared to 17.3 percent of non-poor children.²

Additionally, children have no political power as they cannot vote.^{4,5} Legally, children are dependent on parents or guardians and the State for most all of their needs, including health care. Children cannot enter into contracts to generate income or to obtain needed services. Children face oral health barriers such as transportation issues, **provider availability (e.g. geographic distribution, numbers of specialty pediatric dentists, and availability of providers who participate in certain insurance plans—e.g. Medicaid)**, who will pay for their dental care, and informed consent for treatment.^{2,6}

The needs and barriers a child faces become greater if the child has a developmental, physical, or mental disability; or is a member of a minority.^{2,6} Gross disparities exist in the extent and consequences of oral disease among young children of low-income, minority, immigrant, homeless, or other socially disadvantaged populations.³ These children access dental care at considerably lower rates, have twice the prevalence of decayed teeth, twice the severity of decay when they have decayed teeth, and twice the dental pain experience than their more economically and socially advantaged peers.³ Interestingly, while low-income and socially disadvantaged children have twice the dental insurance (due to public insurance programs), they have fewer dental visits than economically and socially advantaged children.³ One suggestion for this difference is a lack of Medicaid dental providers.

NATIONAL DEMOGRAPHICS The U.S. Census Bureau determined that there were 72,293,812 persons (or 25.7 percent of the U.S. population) under the age of 18 in the U.S. in the year 2000.⁷ The male to female ratio for persons under the age of 18 was approximately 1.05:1.00.⁷ Whites comprise approximately 68 percent of the under 18 population, Blacks 15 percent, Hispanics 17 percent, and Native Americans 1 percent.⁷ Moreover, in the U.S., 1 out of 4 children are born into poverty with minorities encountering a disproportionate share of poverty compared to Whites.⁷ Nationally, the percentage of children at or below 200 percent of poverty (the poor and near poor) for the years 2000–2002 was 37.7 percent.⁷

In 2001, seven percent of all children (aged 2–17) had unmet dental needs and 27 percent of all children had not seen a dentist in the past year.⁸ Over 50 percent of all children have no dental insurance.⁸ Uninsured children were more likely than children with Medicaid/public insurance (this percentage only includes those children who are enrolled in Medicaid/public insurance, not merely those who are eligible), and children with private insurance to have unmet dental needs (20% compared to 5% and 8%, respectively).⁸ Moreover, these children tend to have more tooth decay per child and more untreated decay.⁸

FLORIDA DEMOGRAPHICS Florida had 3,646,340 persons (or 22.8 percent of Florida's population) under the age of 18 in 2000.⁷ The male to female ratio was 1.05:1.00.⁷ The percentage of Florida children at or below 200 percent of poverty (the poor and near poor) for 2000–2002 was 41.2 percent.⁷ Florida Census data does not detail Florida's under 18 population by race or by disability.

Infants and Toddlers (up to age 5)

Children under the age of 5 are at a seminal stage in their physical and cognitive development. Early childhood is marked by tremendous growth and development, especially of the face, mouth, and dentition.^{2,3,9} Early childhood diseases and injuries combined with decisions regarding health, nutrition, education, socialization, and other basics of human existence can disturb the development of bone, tooth, and soft tissue formation and impact dental and systemic health for a lifetime.^{2,3,9} Infants and toddlers generally have only primary teeth. Tooth decay, especially baby bottle decay or early childhood caries (ECC) are of particular concern in this age group. In order to promote good oral health and prevent more serious dental disease it is important for children (and their parents), beginning by at least age 1, to have access to preventive dental services (e.g. risk assessment, fluoride varnish and other topical fluorides treatments, community water fluoridation, oral hygiene instruction, and

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

dental sealants. However, **there is a lack of general dentists willing to treat very young children, a lack of pediatric dentists, and an underutilization of physicians who understand oral health and dental disease which affects this access to preventive dental services.**^{6, 10–19}

Healthy People 2010 has set the reduction of the proportion of young children (baseline data is on children ages 2–4) who have experienced tooth decay and the reduction of the proportion of young children who have untreated tooth decay as two of its goals (21-1a and 21-2a).²⁰ Healthy People 2010 found that, nationally, 18 percent of children aged 2 to 4 had experienced tooth decay.² Males were affected as frequently as females.²⁰ Moreover, the report found that 15 percent of Whites, 24 percent of Blacks, 27 percent of Mexican Americans, and 76 percent of Native Americans had experienced dental decay.²⁰ Healthy People 2010 also found that, nationally, 16 percent of children aged 2 to 4 had untreated tooth decay.²⁰ Only 11 percent of Whites experienced untreated tooth decay compared to 22 percent of Blacks, 24 percent of Mexican Americans, and 67 percent of Native Americans.²⁰ The Healthy People 2010 report also noted that young children whose parents or caregivers had less than a high school education or whose parents or caregivers were Hispanic, or Native American had a markedly higher risk of ECC.²⁰ There was no Healthy People 2010 data on the tooth decay experience of children with disabilities.²⁰

Nationally, the U.S. population under 5 years of age for 2000 was 19,175,798 persons or 6.8 percent.⁷ This compares to Florida's under 5 year of age population which was 945,823 persons or 5.9 percent.⁷ Nationally, by race, Whites comprise 67.1 percent, Blacks 14.6 percent, Hispanics 19.4 percent, and Native Americans 1.1 percent of the under 5 population.⁷ There is no national data that categorizes persons under 5 years of age by disability. Moreover, there is no Florida-specific data that categorizes persons under 5 years of age by race or by disability.

Children with Special Needs

While all children potentially face barriers to accessing oral health care, not all children are at equal risk for poor oral health and lack of access to needed care. Children with special needs (due to physical, mental, and emotional disabilities) are particularly vulnerable to poor oral health.³ For these special needs children, every endeavor is more complex and demanding.³

Restricted physical dexterity may limit or prevent self home care, present problems with diet and nutrition, and limit mobility causing transportation problems.³ Diminished mental capacity may cause a lack of understanding about the importance of oral health, compliance, and proper home care.³ Moreover, physical and mental disabilities contribute to limited numbers of available oral health care providers willing or able to treat such persons.³ Most general dentists have limited training regarding special needs children.³ Thus, they may be unwilling or fearful of treating special needs children.³ The number of dentists with specialty training is limited.³ Moreover, many special needs children require general anesthesia in a hospital, further limiting the facilities a special needs child can access and something dental insurance usually does not cover.³ Additionally, due to the complexity of special needs children's health, integration between the systems that deliver medical and dental care is necessary to provide optimal oral health.³ However, these two systems remain essentially separate.

Foster Children

Children in foster care are a particularly vulnerable population. They are more likely than other children to have a significant physical or behavioral health problem.^{2, 1} Foster children experience high rates of physical, dental, and mental health problems that are the result of poverty, harmful exposures, socio-emotional deprivation, and neglect prior to being removed from their families; of the emotional consequences of that separation and of their subsequent inconstant, unpredictable life circumstances.²¹ This means that the foster care population often has special health care needs (30% to 65% have at least 1 behavioral problem or developmental disability).^{21, 22} Foster children are at great risk for having these health care needs remain unidentified and untreated because health care typically has been obtained sporadically prior to foster home placement and is discontinuous, fragmented, and of varying quality after placement.²¹

Foster children are under the control of the State. According to the Supreme Court, “when the State takes a person into its custody and holds him there against his will, the Constitution imposes upon [the State] a corresponding duty to assume some

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

responsibility for his safety and general well-being.”²³ Therefore, the State is responsible for their general well-being and health, including oral health.

Even though the State has responsibility for their oral health, foster children still face a number of barriers to oral health care. Most foster children are eligible for Medicaid and, in fact, utilize the Medicaid system almost twice as often as other populations of Medicaid eligible children. However, for all children eligible for Medicaid, obtaining comprehensive, coordinated, continuous health care of good quality is hampered by a system that itself is struggling to provide good child welfare services.²¹ Geographic maldistribution of oral health providers, especially Medicaid providers, and low reimbursement rates and administrative difficulties that limit dentist participation in Medicaid, have made access to dental care an issue for all children.

Foster children are dependent on their foster parents for scheduling dental appointments, arranging transportation to appointments, providing a proper, nutritious diet, supplying oral hygiene products, and supervising home care. Thus, the dental literacy of the foster parent will affect the dental health of the foster child. Many caregivers do not have the appropriate knowledge or values to understand the importance of appropriate oral hygiene and proper diet and nutrition that are essential for oral health (and many caregivers do not practice appropriate oral hygiene or choose proper diets for themselves, let alone their wards).³

Additionally, foster children tend to move from foster home to foster home.^{21, 22, 24} The result is the lack of establishment of a dental home. Thus, continuity of care and follow-up of treatment are problematic for foster children.^{21, 22, 24}

While the numbers of children in foster care vary from month to month, Florida has approximately 20,000 children at any given time in foster care.²² Approximately, 26 percent of these children are age 3 or younger, 45 percent are between the ages of 4 and 12, and 30 percent of these children are over 12.²² Slightly half of the children in foster care are White (45.8%), about a third are Black (37.7%), 7 percent are Hispanic, and 1.7 percent are Haitian.²²

Poverty

The U.S. Census Bureau categorizes poverty on the ratio of a family’s income in the previous calendar year to the appropriate poverty threshold (given the family’s size and number of children) for that year.²⁵ Persons who are categorized as “poor” had a ratio less than 1.0 (that is, their family income was strictly below the poverty threshold).²⁵ The “near poor” category includes persons with incomes of 100 percent to less than 200 percent of the poverty threshold.²⁵ Finally, “not poor” persons have incomes that are 200 percent of the poverty threshold or greater.²⁵

NATIONAL DEMOGRAPHICS The National Access to Care survey revealed that 71.5 percent of respondents indicated that finances were the major reason for not obtaining dental services.^{26, 27} Persons who are categorized as poor or near poor tend to have attained a lower educational level that contributes to a lack of knowledge about the importance of dental health. Thus, the poor and near poor tend to see dental disease as an eventuality and subsequently, may not perceive a need for dental care, even when there is a need. Of those persons below the 150 percent of poverty level, 16.4 percent had unmet dental wants and needs, compared to only 6.3 percent of families above the 150 percent poverty level.²⁸ The uninsured and underinsured tend to delay treatment for long periods of time (which can increase the severity of the condition and cost of treatment) and visit a dentist only when they have a problem.^{27, 28} Thus, they are less likely to have a regular dentist, use preventative services, or have all their dental needs met.

Nationally for the year 2002, the U.S. Census Bureau found that 34.6 million Americans or 12.1 percent lived in poverty (with 14.1 million or 4.9% of the U.S. population in the “severe poverty category—incomes below half of the poverty threshold); 12.5 million or 4.4 percent were near poor.²⁵ Child poverty stood at 16.7 percent.²⁵ The poverty rate for those 65 and older was 10.4 percent (while the percentage of elderly in poverty remains stable, the number of elderly in the U.S. and thus, in poverty is increasing as life spans become longer and the baby boomer generation ages).²⁵ Racially, 8.0 percent of Whites, 24.0 percent of Blacks, 25.7 for Native Americans, and 21.8 percent of Hispanics lived in poverty.²⁵ For many underserved populations, financial

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

barriers account for their failure to obtain primary, secondary, or even tertiary oral health care. Nationally, only five states had both a decrease in income and an increase in poverty—Hawaii, Illinois, Michigan, Mississippi, and Florida.²⁵

FLORIDA DEMOGRAPHICS Data for Florida revealed that for the years 2001–2002 there were approximately 2 million citizens or 12.6 percent of Florida’s population living in poverty.²⁵ Child poverty was 17.7 percent in 2000.²⁵ The poverty rate for persons 65 and older was 8.4 percent in 2000.²⁵ Florida was one of only 9 states in the U.S. where poverty was on the rise.²⁵ In Florida, income is predictive of visiting a dentist—the higher the income the greater chance of having seen a dentist in the last year (83.1% for persons with incomes greater than \$50,000, 71.2% for persons with incomes between \$25,000 and \$50,000, and 53.7% for persons with incomes below \$25,000).²⁹ Moreover, income is related to whether a person has all of their natural teeth (not including 3rd molar extractions, teeth removed for orthodontic treatment and teeth removed due to injury). In Florida, 55.7 percent of persons with incomes greater than \$50,000 had all their natural teeth compared to 42.3 percent for persons with incomes between \$25,000 and \$50,000, and 20.7 percent for persons with incomes below \$25,000.²⁹

Individuals with Special Health Care Needs

Defining special needs is difficult due to the variety of possible conditions, the subjectivity involved in the determination process and the fact that there are no clearly-defined parameters. Many definitions attempt to define this population group. The Americans with Disabilities Act defines a disability as a mental or physical impairment that substantially limits one or more major life activities such as walking, hearing, seeing, learning, or caring for one’s self.³⁰ However, in relation to health and the delivery of health care services the term individuals with special health care needs is more commonly used. Many health or mental health organizations define an individual with special healthcare needs as an individual with a physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires more than routine oral health care to keep their mouth healthy due to their condition or treatment for their condition.

A variety of diseases, disorders, defects, and conditions can cause any number of impairments and cause these persons to require special health care needs, including oral health care needs. The exact needs of the individual will vary by the severity of the disability. Irrespective of the cause, individuals with disabilities often lack legal, political, social, physical, and mental power. Socially society stigmatizes the disabled, physically they may not be able to take care of their personal needs, and mentally and legally they may not have the capacity to make decisions on their own. Performing oral hygiene home care, **accessing professional dental care**, and informed consent concerning health care treatment are significant issues among this population. Moreover, individuals with severe developmental disabilities who cannot communicate their oral discomfort are at great risk that their dental disease may go undetected for long periods of time. Thus, they may suffer needlessly from severe dental pain.

Dental care is one of the most difficult services for citizens with developmental disabilities to access. Access to dental care for individuals with special health care needs is not about promoting dental health or treating dental disease, but rather about accommodating behavioral or physical conditions. Severely disabled individuals, especially children, may be uncooperative or difficult to treat. **Many dental health care professionals are poorly educated in treating individuals with disabilities (and uncooperative patients of any kind) and are uncomfortable or unwilling to treat individuals with disabilities (or any difficult patients, including children and the elderly) due to the extra time and effort involved.**

Nationally, 54 million Americans have a disability.³¹ Of these, approximately, 26 million have a severe disability.³¹ Of the civilian non-institutionalized population, 5.8 percent of 5–15 year olds, 18.6 percent of 16–64 year olds, and 41.9 percent of the 65 and older population is disabled. Within the 5–15 year old population, 7.2 percent of males are disabled and 4.3 percent of females are disabled.^{31, 32} Within the 16–64 year old population, 19.6 percent of males are disabled and 17.6 percent of females are disabled.^{31, 32} Within the 65 and older population, 40.4 percent of males are disabled and 43.0 percent of females are disabled.^{31, 32} Comparatively, in Florida, of the civilian non-institutionalized population, 8.7 percent of 5–15 year olds, 21.9 percent of 21–64 year olds, and 39.5 percent of the 65 and older population are disabled.^{31, 32}

Disability rates increase with age. In the 65 and older population, 28.6 percent of the disabilities are physical disabilities, 20.4 percent are difficulties going outside, 14.2 percent are sensory disabilities, 10.8 are mental disabilities, and 9.5 percent are self-

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

care disabilities.³¹ Comparatively, in the 16–64 age group, 6.2 percent had physical disabilities, 6.4 percent had difficulties going outside, 2.3 had sensory disabilities, 3.8 had mental disabilities, and 1.8 had self-care disabilities.³¹

Racially, 18.5 percent of Whites, 24.3 percent of Blacks, 20.9 of Hispanics, and 24.3 percent of Native Americans were disabled.³¹

In 2000, 17.6 percent of the disabled aged 5 and older lived in poverty, compared to 10.6 percent of the 5 and older population without disabilities.³¹ Higher poverty rates were similar for both those with disabilities and those without disabilities—with the highest poverty rates found in the young (25.0% for those with disabilities and 15.7% for those without) and least found in the 65 and older (13.2% for those with disabilities and 7.4% for those without).³¹

There is no national or Florida-specific data on the oral health burdens and needs of the disabled.

Birth Defects

A birth defect is a problem that happens while a baby is developing in the mother’s body.³³ One of every 33 babies is born with a birth defect.³³ Most birth defects originate during the first 3 months of pregnancy.³³ A birth defect may affect how the body looks or functions or both. A birth defect can affect almost any part of the body and can cause physical and/or mental impairments.³³ Birth defects can be found before birth, at birth, or anytime after birth.³³ Birth defects can vary from mild to severe. Babies with birth defects may need surgery or other medical treatments.³³ If they receive the help and treatment they need, these babies often lead full lives.

Some common birth defects that have oral or craniofacial complications are “neural tube defects,” which are defects of the spine (e.g. spina bifida) and brain (e.g. anencephaly). Neural tube defects affect about 1 of 1,000 pregnancies.³³ Birth defects of the lip and of the palate are also common. These birth defects, known as “orofacial clefts,” include cleft lip, cleft palate, and combined cleft lip and cleft palate. Cleft lip is more common than cleft palate. In the U.S., orofacial clefts affect about 1 in 1,000 babies.³³ Additionally, many genetic conditions, such as Down’s syndrome, occur with mental or physical complications that can compromise a person’s home care abilities. Downs syndrome affects about 1 in 800 babies.³³

Developmentally Disabled

There are many definitions and thus, much confusion in attempting to define who is developmentally disabled. The Federal definition of a “developmental disability” is noted in the Developmental Disabilities Assistance and Bill of Rights Act of 2000.³⁴ In general terms, the definition states that the term developmental disabilities is “a severe, chronic disability of an individual.”³⁴

However, according to the Florida Statutes, a developmental disability is “a disorder or syndrome that is attributable to retardation, cerebral palsy, autism, spina bifida, or Prader-Willi syndrome and that constitutes a substantial handicap that can reasonably be expected to continue indefinitely.”³⁵

Nationally, approximately 17 percent of all U.S. children less than 18 years of age have a developmental disability.³⁶

In 2002, Florida estimated that there were 533,500 Florida residents with developmental disabilities: 30,000 with autism (1/500 incidence); 45,000 with cerebral palsy (3/1000 incidence); 450,000 with mental retardation (3/100 incidence); 1,000 with Prader-Willi syndrome (1/15,000 incidence); and 7,500 with spina bifida (1/2000 incidence).³⁵

In December 1996, the Florida Medicaid program began to provide dental services to adult beneficiaries enrolled in the Medicaid Developmental Disabilities/Home and Community-Based Services (DD) waiver.³⁷ The DD adult dental services cover dental treatments and procedures that the Medicaid State Plan does not otherwise cover for non-DD Waiver Medicaid adults.³⁷ The DD waiver is a Medicaid program that provides home and community-based support and services to eligible persons with developmental disabilities living at home or in a home-like setting, as an alternative to living in an Intermediate Care Facility for the Developmentally Disabled.³⁷ The DD waiver program operates under the authorization of the Agency for Health Care

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

Administration's Division of Medicaid.³⁷ However, the Florida Department of Children and Families' Developmental Disabilities Program directs the DD waiver program.³⁷ The federal Centers for Medicare and Medicaid Services, along with matching State dollars, fund the DS waiver program.³⁷

Statewide in calendar year 2005, 65 dental providers located in 30 counties treated 7,369 DD waiver beneficiaries in 66 counties.³⁸ In calendar year 2006, 65 dental providers located in 29 counties treated 8,505 DD waiver beneficiaries in 66 counties.³⁸ During fiscal year 2002–03, 23 percent of the Medicaid enrolled disabled children received dental services, while only 3 percent of the Medicaid enrolled disabled adults received dental services reimbursable through the Medicaid State Plan.³⁸

Acquired Disabilities and Illnesses

Children or adults can also become disabled from accidents or illnesses and may have temporary or permanent disabilities. Persons with acquired disabilities may be physically and/or mentally impaired such that they cannot perform home care, cannot access professional care, or may not understand the need for dental care. Acquired disabilities may include those persons who have experienced traumatic brain injuries, stroke victims, para- or quadriplegics, or individuals who have suffered from any number of diseases that affect physical or mental capabilities.

Minorities

The 2000 U.S. Census determined that minorities make up close to 25 percent of the U.S. population.⁷ Blacks comprised 12.3 percent, Hispanics 12.5 percent, and Native Americans 0.9 percent of the total U.S. population.⁷ Moreover, certain immigrant and refugee populations are unique to certain parts of the country. In Florida, especially in Dade County, a large Haitian population exists. Haitian leaders and activists estimate that close to 1.2 million Haitians live in the United States.³⁹ By the year 2050 the U.S. Census Bureau estimates that 50 percent of the U.S. population will be Asian, Black, Hispanic, and Native American.²

Although minority populations are growing, politically and socially they still lack power. Historically, minorities have been subject to blatant discrimination. Socially, politically, and legally minorities have been denied equal rights and benefits in the U.S. Consequently, Blacks, Hispanics, and Native Americans have the poorest oral health and general health of any racial populations in the U.S.² Additionally, minorities are underrepresented in the dental profession.^{1, 40, 41}

NATIONAL DEMOGRAPHICS Nationally, minority populations are composed of a larger proportion of younger persons than the White population. Thirty-five percent of the U.S. Hispanic population is under 18 years old and 4.9 percent is 65 and over.⁷ Additionally, 31.4 percent of the U.S. Black population is under 18 years old and 8.1 percent is 65 and over, while 33.9 percent of the U.S. Native American population is under 18 and 5.6 percent is 65 and older.⁷ This compares to 23.5 percent of the U.S. White population being 18 and under and 14.4 percent being 65 and older.⁷

Gender differences by racial group are also interesting. The national U.S. male to female ratio is 96.3 (males per 100 females).⁷ This ratio is 96.4 for Whites, 90.5 for Blacks, 99.4 for Native Americans, and 105.9 for Hispanics.⁷

Poverty in minority populations is most striking.⁷ Nationally in 2002, 24.1 percent of Blacks and 21.8 percent of Hispanics lived in poverty compared to 10.2 percent of Whites.⁷

Health care data on many minorities is limited. Historically, the majority of health care studies centered on Whites. Only in the last few decades have researchers begun to study minority groups and the subsequent, disparities in health care access and outcomes that these populations face. However, some minority oral health statistics are significant.

FLORIDA DEMOGRAPHICS In Florida the population has become increasingly non-White over the past few decades. The non-White population has increased from 14.7 percent in 1980 to 17.8 percent in 2000 and is expected to reach 19.2 percent of

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

the population by 2010.⁴² The Hispanic population is the fastest growing and currently the largest minority population in Florida. In 1980, Hispanics numbered approximately 860,000 (8.8% of Florida's total population).⁴² This population increased in numbers to approximately 1,575,000 (12.2%) in 1990 and to over 2,680,000 (16.8%) in 2000.⁴² Blacks represent 14.6 percent of Florida's population and Native Americans total 0.3 percent.^{7,42} Additionally, there are an estimated 200,000 Haitians living in Florida, mainly in Dade County.³⁹ The Florida Community Health Assessment Resource Tool Set (CHARTS) system that provides data on Florida's population only describes minorities by age and gender using the race characterizations "white," "black" and "other nonwhite."⁴³ Thus, information is limited as to the numbers of minority children and elderly that live in Florida.

By age, approximately 34.0 percent of Florida's Black population is under 18 and 7.0 percent is 65 and over.⁴³ Florida's "other nonwhite" population is 34.4 percent under 18 and 7.2 percent 65 and older.⁴³ This compares to 21.9 percent for Florida's White under 18 age group and 19.8 percent for Florida's White 65 and older age group.⁴³ The composition of Florida's minority populations by gender reveals that the male to female ratio is 92.8 (males per 100 females) for Blacks and 92.6 for other nonwhites compared to 95.9 for Whites.⁴³ There are no poverty statistics for Floridians by race.

Blacks

The percentage of Black children with dental sealants is 3–4 times less than the percentage for same aged White children (12.6% and 16.7% compared to 30.6%, respectively for 8–10 year olds and 8.1% and 9.4% compared to 29.1%, respectively for 14–16 year olds).⁴⁴

For people of all ages, Blacks had higher rates of untreated dental decay and incidence of gum disease than Whites.² A greater percentage of Black adults have missing teeth compare to White or Hispanic adults of the same age (15.1% compared to 22.1% and 27.7%, respectively).^{2,44} However, Black adults are only slight more likely to have lost all their teeth than White or Hispanic adults (27.7% compared to 24.9% and 20.8%).⁴⁴ Black males have the highest oral cancer incidence (20.8% compared to 14.9% for White males and 6.0 for all females) and mortality rates and lowest 5-year survival rates than any other minority and gender group.² However, Blacks have about a third lower incidence rate for cleft lip and cleft palate than Whites.²

Florida's BRFSS reported that 62.0 percent of Black adults visited a dentist in the last year compared to 72.3 percent of White adults.²⁹ Moreover, 60.6 percent of Black adults compared to 73.0 percent of White adults reported that they had their teeth cleaned in the last year.²⁹ The data also showed that 34.4 percent of Black adults compared to 48.1 percent of White adults had no teeth removed (not including 3rd molar extractions, teeth extracted for orthodontic reasons, or teeth extracted due to injury).²⁹

Hispanics

Health care data on Hispanics is even more incomplete than that on Blacks.² However, in general, employed Hispanic adults had twice the untreated dental decay as Whites.² Moreover, preliminary data suggests that Hispanic children aged 2–4 are more likely to have experienced dental caries in their primary teeth, have on average more decayed and filled tooth surfaces, and have more untreated dental decay than Whites or even Blacks of the same ages.² However, adult Hispanics 35–44 have significantly less decayed, missing, or filled surfaces in permanent teeth than Whites or Blacks (27.3% to 43.6% and 44.5%, respectively).⁴⁴

Language and cultural differences are a major barrier to access for many Hispanics.

Florida's BRFSS reported that 67.2 percent of Hispanic adults visited a dentist in the last year compared to 72.3 percent of White adults.²⁹ Moreover, 67.3 percent of Hispanic adults compared to 73.0 percent of White adults reported that they had their teeth cleaned in the last year.²⁹ The data also showed that 47.8 percent of Hispanic adults compared to 48.1 percent of White adults had no teeth removed (not including 3rd molar extractions, teeth extracted for orthodontic reasons, or teeth extracted due to injury).²⁹

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

Native Americans

Native Americans represented 1.6 percent of the total U.S. in the year 2000.⁷ In the same year there were 66,138 Native Americans living in Florida (or 4.0 percent of Florida's population).⁷ The Federal Indian Health Service (INS) program is responsible for the health, including dental needs, of the Native American population.

The INS maintains data on the oral health status of Native Americans, but only records data on those Native Americans living on reservations.² Little is known about the health status of the 1 million Native Americans the INS does not serve.² In general, Native Americans aged 2–4 years, have 5 times the rate of dental decay compared to all children of that age group.² Moreover, Native American children ages 6–8 suffer twice the dental decay experience and have 2–3 times the untreated dental decay than similar aged children in the U.S.² In adults, gum disease is 2.5 times greater than in the general U.S. adult population.²

Florida has no dental disease burden or dental health care utilization data on Native Americans.

Haitians³⁹

Haitians bring to the health care system a different set of beliefs and values about health and illness that is a challenge to health care practitioners who must try to explain treatments while acknowledging their clients' cultural convictions. The uniqueness of their culture and subsequent personal behaviors make delivery of oral health care services challenging.

Haitians do not believe in orthodox medicine as a first resort. Instead they try home remedies for treating illness. Because Haitians perceive orthodox medicine as a second choice, Haitians usually present with more severe disease or complex issues. Haitians also practice certain risky behaviors that contribute to poor health. Drinking alcohol and smoking cigarettes are culturally accepted for men and are used socially when friends gather. However, Haitian women drink in moderation and have a low smoking rate.

Additionally, many Haitians speak Creole or French and do not speak the English language well. Thus, language is a barrier to health care as it is difficult for them to fully explain their needs or understand prescriptions and treatments.

Many Haitians are refugees or immigrants and thus, are in low-paying jobs that do not provide health insurance. Therefore, economics can also act as a barrier to health promotion and access. While many Haitian children may be eligible for Medicaid or SCHIP or other government programs, many Haitians do not take advantage of such programs because they believe they are at risk of deportation.

Rural Populations

Twenty-five percent of Americans live in rural areas.⁴⁵ Oral health is a critical unmet need in rural America. Eleven percent of rural residents have never seen a dentist.⁴⁶ Rural persons are more likely to have lost all their teeth than their non-rural counterparts.⁴⁶ In fact non-elderly adults (i.e., 18–64 years of age) are nearly twice as likely to be edentulous if they are rural residents.⁴⁶ Moreover, rural adults are significantly more likely than non-rural adults to have untreated dental decay (32.6% v. 25.7%).⁴⁶ Rural areas are proportionately older, sicker and have lower-incomes than urban/suburban populations.⁴⁶

Rural people have lower incomes on average and have reduced access to private dental insurance.⁴⁶ Therefore, **many persons who live in rural areas are dependent on Medicaid** or the Children's Health Insurance Program for insurance coverage compared to their urban counterparts.⁴⁶

Additionally, there is a **lack of actual health care providers** that limits access to oral health care services for rural Americans.⁴⁶ On average, there are 61–62 dentists per 100,000 population in large metro areas; compared to 40 dentists per 100,000 population in rural cities and 30 per 100,000 population in rural non-city areas.^{2, 46} Population density issues restrict the numbers of health care providers who are willing to locate in rural, low-density areas. Many rural areas have considerable shortages of physicians, physician assistants, nurse practitioners, dentists, and other health care providers and are designated as Health Professional Shortage Areas (HPSA), Dental Health Provider Shortage Areas (D-HPSA), and Medically Underserved Areas/Medically

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

Underserved Populations (MUA/MUP).⁴⁷ The number of D-HPSA designations nationally has increased to 10,789, that encompass just under 42 million people.^{48,49} According to the Health Resources and Services Administration (HRSA), Florida had approximately 200 D-HPSAs based on low-income and migrant farm worker populations.⁴⁸ These underserved areas are mainly inner city and rural areas.^{46,49} Economics in the form of student indebtedness, the high overhead costs of practicing in rural areas, the lower income of rural residents and thus, lower income potential for health care providers create disincentives for dental health care providers to practice in rural areas.⁴⁶

Rural areas lack coordinated school or community-based oral health education programs; have geographic and transportation barriers encountered by residence in remote, isolated areas, and suffer from confidentiality issues and perceptions (in a small town it is believed that “everyone knows everyone else’s business”).^{46,47}

Several Federal programs, including the Rural Health Clinics Program, the National Health Services Corps, and Community Health Center Grants, help to recruit, stabilize, and support rural providers and the provision of health care services in rural communities.⁴⁷

Other Disadvantaged Populations

Florida has other disadvantaged population such as the elderly, women, individuals with HIV/AIDS, the homeless, immigrants and refugees, migrant farmworkers, and the incarcerated. Many of the barriers to care for these disadvantaged populations also revolve around workforce issues. Florida has limited data on the oral health burdens and needs of these populations. For a more in depth treatment of these and all of Florida’s disadvantaged populations go to www.oralhealthflorida.com, follow the “background” link and see the “background information” report.⁵⁰

BARRIERS TO CARE

A variety of provider, patient, and government/policy issues directly or indirectly contribute to the composition, distribution and function of Florida’s dental workforce that can result in limited access to, utilization of dental services by, and the provision of dental care for Florida’s disadvantaged and underserved populations.

Provider Issues

REIMBURSEMENT RATES Dentists and dental associations in most every state claim that Medicaid and SCHIP reimbursement rates are too low.^{2,51,52} Estimates are that if dentists were paid at the 75th percentile, more dentists would participate in accepting Medicaid and SCHIP clients.⁵² Inadequate reimbursement rates may result in “MASH dentistry” and a “double standard of care” with some profiteering dentists setting up Medicaid-only clinics and performing “factory dentistry.”⁵²

Many dental health professionals believe that the methods many states use to calculate reimbursement rates for Medicaid are outdated and inadequate.⁵²

Barriers to access also result when some procedures or services receive no reimbursement.⁵²

For example, coordination between physicians and dentists is rarely funded. Moreover, many states do not provide extra reimbursement for the elderly or people with disabilities.⁵²

A number of states that have increased Medicaid reimbursement rates have had success in increasing access and utilization of dental care services. (See, Smile Alabama^{53,54}, and TennCare⁵⁵)

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

BROKEN OR MISSED APPOINTMENTS Failure to keep appointments is another factor that limits dentists' willingness to serve low-income patients.^{51,52} State Medicaid officials agree with dentists that no-shows are problematic, but states have made little headway in addressing the problem.^{51,52}

ADMINISTRATIVE ISSUES Other factors that make dentists unwilling to serve low-income patients are complex and confusing Medicaid administrative procedures. Some states have instituted electronic billing, begun using ADA billing codes and claim forms, and reduced or eliminated prior authorization requirements that have created some of the administrative backloads.^{51,52}

ANXIETY AND FEAR OF TREATING DISADVANTAGED POPULATIONS Dental providers who receive inadequate training regarding the care of disadvantaged patients may be anxious or fearful and thus, unwilling to treat disadvantaged populations.¹⁰

INFORMED CONSENT Medical malpractice law requires that patients give informed consent before health care providers can initiate treatment.⁵⁶ Certain legal disabilities, such as mental incompetence and minority (under 18 years old), prevent the individual from granting informed consent.⁵⁶ Current informed consent regulations require a parent or guardian of an incompetent person or child to consent to treatment. This requirement may restrict the ability of dental providers to offer oral health care services, especially emergency services, in school and nursing home settings where it may be difficult to contact a parent or guardian.

Patient Issues

TRANSPORTATION Physical and mental limitations, geographic distance, or economics may restrict a disadvantaged persons ability to travel to a dental facility.^{10,57}

TIME OFF WORK Many private dental offices and safety net dental clinics have limited hours of operation—generally 9–5.¹⁰ The near poor or low-income working persons may be unable to take time off from work for economic reasons or for fear of being fired.

LANGUAGE AND CULTURAL DIFFERENCES Culture influences ideas about oral health, oral hygiene practices, reactions to pain, diet, eating habits, and the use of dental services.^{57,58} Non-English speaking patients present communication issues that may cause misdiagnosis or failure of the patient to follow treatment regimens.^{57,58}

PERCEIVED NEED/PUBLIC ORAL HEALTH EDUCATION Lack of education and awareness about what constitutes quality oral health care is pervasive throughout society. There is a need for educating the public about the importance of oral health, about disease prevention, the safety and proven effectiveness of fluoridation, and the links between oral health and general health so that the public can make more informed decisions concerning their health.^{2, 10, 20, 44, 52, 57, 59, 60}

Low-income persons and immigrants are in particular need of education because they tend to practice poor preventive oral and general health measures and tend to primarily seek care when they experience pain.⁵² Some low-income immigrants and certain cultural groups also have differing views concerning oral health.⁵² For example many immigrants (and the elderly) feel that losing teeth is a normal part of aging. Moreover, many older persons with dentures do not realize that they should still seek dental services, particularly so that they can be screened for oral cancers.^{2,52}

Compounding this issue is a host of barriers related to enlisting the media in the effort to educate the public.⁵²

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

HEALTH CARE INSURANCE Ability to pay for services is the primary barrier to health care services.^{2, 10, 26, 44, 57} Approximately, 15 percent of Americans lack any kind medical insurance and approximately 45 percent of Americans lack any kind of dental insurance.^{2, 26, 44} Medicaid has very limited dental coverage of adults.^{2, 10, 11} Moreover, when persons retire, many lose any work-provided dental insurance.^{2, 26, 44, 57} Thus, the elderly tend to have no or very limited dental insurance.^{2, 26, 44}

PHYSICAL OR MENTAL DISABILITIES Physical and mental disabilities may cause functional problems that prevent or limit home care, proper diet and nutrition, mobility and transportation, and the ability to follow instructions and give informed consent.^{2, 10, 35, 56, 57}

DENTAL DISTRUST, FEAR, ANXIETY, OR PHOBIA Distrust and fear are two primary reasons why individuals, especially from differing cultures, do not seek early medical attention.⁵⁷ Nine to 15 percent of all Americans avoid needed dental treatment due to fear or anxiety.⁶¹ Many of these dentally fearful or anxious are children.¹⁰ Most dental providers are not adequately trained to manage the severely dentally fearful, anxious, or phobic patient.

CONTINUATION OF CARE/FOLLOW-UP ISSUES/COMPLIANCE ISSUES Certain disadvantaged populations such as foster children, the homeless, migrants, immigrants and refugees have no or constantly changing addresses.⁵⁷ This prevents the establishment of a “dental home” and creates issues regarding continuation of care and follow-up of treatment.^{10, 57}

GOVERNMENT/POLICY ISSUES

LACK OF KNOWLEDGE AMONG POLICY MAKERS THAT ORAL HEALTH IS IMPORTANT There is a low level of education, awareness, and interest among legislators about the importance of oral health, the need among specific populations, and gaps in dental services.⁵² If policymakers do not understand that oral health is essential to overall health, oral health will continue to be a low priority for state health agency officials.⁵² New state-only initiatives regarding dental health are unlikely to be funded unless officials can be convinced that oral health initiatives are necessary and important.

In order for oral health issues to gain a prominent role, there need to be legislative champions in each chamber of the legislature promoting oral health issues.⁵² Moreover, it is important to educate legislative staff about oral health issues.⁵² Staffers are the “detail” people who work on bill drafting, cost estimates, program analysis, committee hearings, and executive branch oversight that ultimately influence legislators.⁵²

ADVOCACY There is a lack of effective advocacy for oral health issues in general, and advocacy for access to dental care for disadvantaged persons in particular.⁵² Although organized dentistry is extremely powerful at the state level, dental associations may be biased towards private practice issues.⁵² Thus, professional associations may not be the best advocates for programs for low-income populations.⁵² Moreover, many decisions affecting oral health programs are made in isolation.⁵² There seems to be no oral health consensus-building function or authority within the State.⁵²

Additionally, oral health tends to be a low priority for private advocacy groups in the disability or special needs children communities.⁵² Oral health concerns tend to be less important than other medical concerns and thus, receive less energy and funding.⁵²

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

DATA Nationally and in Florida there is little state-specific data about unmet oral health needs in specific populations.⁵² Advocates, legislators, and legislative staff need data to be able to make educated decisions about health care policy devised for specific interventions.⁵² Moreover, data about the economics and feasibility of dental strategies is needed to support or counter policy such as raising Medicaid and SCHIP reimbursement rates.⁵²

FUNDING/BUDGET CONSTRAINTS Most any strategy or initiative is restricted by the fact that states are always facing budget crises. Funds to improve or expand existing programs or funds to create new programs are limited.¹⁰

RESTRICTIVE POLICY Every state has the power to regulate the professions that practice within their state.^{13,56} States regulate the practice of dentistry in many direct and indirect ways.¹³ Moreover, the federal government, along with each state, regulates programs such as Medicaid and SCHIP.¹³

Many states have a ban on the corporate practice of dentistry in their dental practice acts.⁵² This ban prevents dentists from working for any entity other than another dentist.⁵² This regulation may act to prevent the development of dental managed care.⁵²

State dental practice acts regulate the licensing of dentists, dental hygienists, and dental assistants and set forth continuing education requirements for relicensure. State dental practice acts set forth the supervision and scope of practice for dental hygienists and dental assistants. How a state regulates licensure, supervision, and scope of practice can affect the availability of the dental workforce in that state.^{10,13}

Additionally, federal and state regulations regarding Medicaid and SCHIP affect not only eligibility for Medicaid and SCHIP, but also the nature of dental services available to eligible adults and children.^{13,52} For example, federal law prohibiting enrolling children with health insurance in SCHIP has created access problems for children with health insurance but no dental coverage.⁵² Because SCHIP is not an entitlement, benefits can be capped.⁵²

1. Valachovic RW, Weaver RG, Sinkford JC, Haden NK. Trends in Dentistry and Dental Education. *Journal of Dental Education*. June 2001;65(6):539–561.
2. U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research; 2000.
3. Edelstein BL. Dental Care Considerations for Young Children. *Special Care Dentistry*. 2002;22:11S–25S.
4. U.S. Constitution, Amendment XXVI: Voting Age set to 18 years; 1971.
5. Florida Constitution, Article VI, Section 2: Electors.
6. Children’s Dental Health Project. *The Interface Between Medicine and Dentistry In Meeting the Oral Health Needs of Young Children*. Washington, DC: Children’s Dental Health Project and the American Academy of Pediatric Dentistry; 2003.
7. U.S. Census Bureau. *Census 2000*. U.S. Department of Commerce, Economics and Statistics Administration, U. S. Census Bureau. Available at: <http://www.census.gov/main/www/cen2000.html>.
8. Child Trends DataBank. *Unmet Dental Needs*. Washington, DC: Child Trends DataBank; 2001.
9. Burt BA, Eklund SA. *Dentistry, Dental Practice, and the Community*. 5th ed. Philadelphia, PA: W.B. Saunders Company; 1999.
10. Casamassimo PS. *Pediatric Oral Health Interface Background Paper: Children with Special Health Care Needs; Patient, Professional and Systemic Issues*. Columbus, OH: Children’s Dental Health Project; 2002.
11. Krol D. *Pediatric Oral Health Interfaces Background Paper: Educational Considerations to Improving Physician Competencies in Oral Health*. New York, NY: Children’s Dental Health Project; 2002.
12. Rogers K. Personal communication from Dr. Kenneth Rogers, DMD, president of the Florida Academy of Pediatric Dentistry, regarding pediatric dentistry in Florida. Available upon request. Gainesville, FL; 2004.
13. Rosenbaum S, Kamoie B. *Pediatric Oral Health Interfaces Background Paper: Expanding Access to Pediatric Dental Care: Opportunities and Challenges Created by the Law*. Washington, DC: Children’s Dental Health Project; August 2002.

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

14. Accreditation Council of Graduate Medical Education. Pediatric General Competencies. Accreditation Council of Graduate Medical Education. Available at: http://www.acgme.org/acWebsite/RRC_320/320_genComp.pdf. Accessed November 10, 2006.
15. American Academy of Pediatric Dentistry. American Academy of Pediatric Dentistry 2006–07 Definitions, Oral Health Policies, and Clinical Guidelines. American Academy of Pediatric Dentistry. Available at: <http://www.aapd.org/media/policies.asp>. Accessed September 6, 2006.
16. American Academy of Pediatric Dentistry. Fluoride. American Academy of Pediatric Dentistry. Available at: <http://www.aapd.org/publications/brochures/floride.asp>. Accessed September 29, 2006.
17. American Academy of Pediatrics. Oral Health Risk Assessment Timing and Establishment of the Dental Home. *Pediatrics*. May 2003;111(5):1113–1116.
18. American Academy of Pediatrics. Policy on baby bottle tooth decay (BBTD)/early childhood caries (ECC). American Academy of Pediatrics. Accessed September 23, 2006.
19. Jones K, Tomar SL. Estimated Impact of Competing Policy Recommendations for Age of First Dental Visit. *Pediatrics*. April 2005;115(4):906–912.
20. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*, 2nd ed. Washington, DC: U.S. Government Printing Office; November 2000.
21. Institute for Healthcare Improvement. *Improving Healthcare for Children in Foster Care*. Boston, MA: Institute for Healthcare Improvement and the Casey Family Programs; 2004.
22. The Lawton and Rhea Chiles Center for Healthy Mothers and Babies at the University of South Florida, Department of Health Policy and Epidemiology Institute for Health Policy Research University of Florida. *Medical, Developmental and Behavioral Problems of Foster Children and the Capacity Foster Care Providers in Florida*. Tallahassee, FL: Florida Department of Children and Families; 2001.
23. *Deshaney v. Winnebago*. 489 U.S. 189; 1989.
24. Rosenbach M, Lewis K, Quinn B. *Health Conditions, Utilization, and Expenditures of Children in Foster Care*. Washington, DC: U.S. Department of Health and Human Resources; 2000.
25. U.S. Census Bureau. *Poverty in the United States: 2002*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U. S. Census Bureau; September 2003.
26. Association of State and Territorial Dental Directors. *Guidelines for State and Territorial Oral Health Programs*. Jefferson City, MO: ASTDD; 2001.
27. Warren RC. *Oral Health for All: Policy for Available, Accessible, and Acceptable Care*. Washington, DC: Center for Policy Alternatives; September 1999.
28. Oral Health America, W.K. Kellogg Foundation. *The Disparity Cavity: Filling America’s Oral Health Gap*. Chicago, IL: Oral Health America; 2000.
29. Florida Department of Health. *2002 Behavioral Risk Factors Surveillance Telephone Survey*. Tallahassee, FL: Florida Department of Health, Bureau of Epidemiology; 2002.
30. Americans with Disabilities Act, 42 U.S.C. sec, 12102(2); 1990.
31. U.S. Census Bureau. *Disability Status: 2000*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U. S. Census Bureau; March 2003.
32. National Center for Health Statistics. *Health, United States, 2003*. Hyattsville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Health Statistics; 2003.
33. National Center on Birth Defects and Developmental Disabilities. *Birth Defects*. Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities. Available at: <http://www.cdc.gov/ncbddd/bd/faq1.htm>. Accessed February 20, 2004.
34. *Developmental Disabilities Assistance and Bill of Rights Act of 2000*. Public Law 103–230; 2000.
35. The University of Florida College of Dentistry and Nova Southeastern School of Dental Medicine. *Access to Oral Health Care for Florida’s Citizens with Developmental Disabilities*. Tallahassee, FL: Florida Developmental Disabilities Council, Inc.; January 2002.
36. National Center on Birth Defects and Developmental Disabilities. *Developmental Disabilities*. Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities. Available at: <http://www.cdc.gov/ncbddd/dd/default.htm>. Accessed February 20, 2004.
37. Agency for Health Care Administration. *Developmental Services/Home and Community-Based Services (DS/HCBS) waiver*. Florida Department of Health and Human Services, Agency for Health Care Administration. Available at: http://www.fdhc.state.fl.us/Medicaid/dev_serv/index.shtml. Accessed May 13, 2004.

Appendix A—Florida Disadvantaged Populations, Dental Disease Burdens, Needs and Barriers to Care (Abridged)

38. Florida Public Health Dental Program. Information obtained from Medicaid FREEDOM (DSS) data. Florida Department of Health, Public Health Dental Program. Accessed April 12, 2004.
39. Colin JM, Paperwalla G. Haitian-Americans. F. A. Davis Company. Available at: <http://www.unix.oit.umass.edu/~efhayes/haitian.htm>. Accessed May 25, 2004.
40. National Conference of State Legislatures. The Health Care Workforce in Ten State: Education, Practice and Policy: Florida. Washington, DC: National Conference of State Legislatures; 2001.
41. United States Department of Health and Human Services (DHHS). Financing Dental Education: Public Policy Interests, Issues and Strategic Considerations. Rockville, MD: United States Department of Health and Human Services, Health Resources and Services Administration; 2005.
42. Office of Economic and Demographic Research. Florida Demographic Summary. Tallahassee, FL: Florida Legislature, Office of Economic and Demographic Research; December 2003.
43. Florida Department of Health. Florida Community Health Assessment Resource Tool Set (CHARTS). Available at: <http://www.floridacharts.com/charts/Domain2.aspx?Domain='03'>. Accessed March 22, 2004.
44. Dental Oral and Craniofacial Data Resource Center. Oral Health U.S., 2002. Bethesda, MD: National Institute of Dental and Craniofacial Research, National Institute of Health and the Division of Oral Health, Centers for Disease Control and Prevention; 2002.
45. U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office; November 2000.
46. National Rural Health Association. National Rural Health Association Policy Brief: Oral Health in Rural America. National Rural Health Association. Available at: <http://www.nrharural.org/dc/policybriefs/oralhealthbrief.pdf>. Accessed December, 2002.
47. Hartley D, Gale J. Rural Health Care Safety Nets: Tools for Monitoring the Safety Net. Rockville, MD: Agency for Healthcare Research and Quality; September 2003.
48. U.S. Department of Health and Human Services. Shortage Designation. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professionals. Available at: <http://bhpr.hrsa.gov/shortage/>. Accessed April 20, 2004.
49. American Dental Education Association. Dental Education At-A-Glance 2004. Washington, DC: ADEA Institute for Public and Advocacy; 2004.
50. Public Health Dental Program. State Oral Health Improvement Plan for Disadvantaged Persons. Florida Department of Health. Available at: <http://www.doh.state.fl.us/family/dental/sohip/reports/Background.pdf>. Accessed August 10, 2006.
51. Genshaw S, Hauck P, Scales J. Increasing Dentists' Participation in Medicaid and SCHIP. Washington, D.C.: National Conference of State Legislatures, Forum for State Health Policy Leadership; 2001.
52. Genshaw S, Straw T. Access to Oral Health Services for Low-Income People-Policy Barriers and Opportunities for Intervention for the Robert Wood Johnson Foundation. Washington, DC: The National Conference of State Legislators; October 2002.
53. Greene-McIntyre M, Finch MH, Searcy J. Smile Alabama! Initiative: Interim Results From a Program to Increase Children's Access to Dental Care. *Journal of Rural Health*. September 2003;19 Supplemental 2003:407-415.
54. Medicaid A. Smile Alabama! Medicaid's Dental Outreach Initiative. Alabama Medicaid. Available at: <http://www.medicaid.state.al.us/SCHEDULE/Family%20Planning.txt>. Accessed July 2, 2004.
55. Nashville Business Journal. TennCare dental network has doubled since fall. Nashville Business Journal. Available at: <http://nashville.bizjournals.com/nashville/stories/2003/03/17/daily46.html>. Accessed July 2, 2004.
56. Pollack BR. Law and Risk Management in Dental Practice. Chicago, IL: Quintessence Publishing Co., Inc.; 2002.
57. Isman R, Isman B. Access to Oral Health Services in the U.S.: 1997 and Beyond. Chicago, IL: Oral Health America; December 1997.
58. Jacobs EA, Goldin GL. Overcoming Language Barriers Part I: For Clinicians: A Volunteers in Health Care Guide. Pawtucket, RI: Volunteers in Health Care; 2002.
59. U.S. Department of Health and Human Services. National Call to Action to Promote Oral Health. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institutes of Health, National Institute of Dental and Craniofacial Research; Spring 2003. NIH Publication No. 03-5303.
60. Beltran-Aguilar ED, Beltran-Neira RJ. Oral diseases and conditions throughout the lifespan. I. Diseases and conditions directly associated with tooth loss. *General Dentistry* 2004;52:21-27.
61. Krochak M. The Psychodynamics of Dental Anxiety and Dental Phobia. *Dental Clinics of North America*. October 1988:647-654.

Appendix B—Oral Healthcare Workforce Background Paper

Dental Workforce Demographics, Trends, and Deficiencies

The Surgeon General’s 2000 Report, *Oral Health in America: A Report of the Surgeon General (Report)*, concluded that “oral health is essential to the general health and well-being of all Americans and can be achieved by all Americans.”¹ The Report stated that there is a “silent epidemic” of dental and oral diseases that “restricts activities in school, work and home, and often significantly diminishes the quality of life.”¹ The burden of oral disease tends to be borne heavily by individuals with low socioeconomic status; the very young and the elderly; individuals living in isolated areas; and those individuals with special needs.¹⁻³ Additionally, access to dental care is disproportionately distributed depending on racial, ethnic, geographic, and socioeconomic factors.⁴ In 2004, in response to the Surgeon General’s Report¹, his Call to Action⁵ and the Healthy People 2010 report², the Department of Health’s Public Health Dental Program, facilitated by a federal grant, established a broad based coalition that included participants from professional organizations, public organizations, government and academia. Objectives of this initiative were to increase public awareness of oral health issues in Florida and to develop and maintain a State Oral Health Improvement Plan for Disadvantaged Persons (Plan) that would facilitate partnerships working toward common goals.⁶ A key recommendation of the Plan was to assure a highly trained, diverse, appropriately allocated dental workforce. The Plan and current activities of the coalition can be accessed at www.oralhealthflorida.com.

Workforce concerns involve a complex range of public policy, professional practice issues, supply and demand influences, educational and training matters, and regulatory issues. This paper will present a sampling of these concerns and their implications.

POPULATION DEMOGRAPHICS⁷

Based on the 2000 census, the U.S. population is projected to increase to 400 million or around 42 percent by the year 2050. During this same period, Florida’s population is projected to grow even faster, from approximately 16 million in 2000 to around 24 million or 50 percent by the year 2050. It is estimated that 20 percent of the population, will be over the age of 65 with 25 percent of these seniors being over the age of 85. With continued improvements in oral health, more people are retaining more teeth longer. These increases in population and numbers of teeth that need care will create an increased need for oral health care and oral health care providers.

The projected race and ethnic composition of the population will also show significant changes. By 2050, the Black/African American population is projected to increase slightly from 12.1 to 13.6 percent. Native Americans will increase slightly, from 0.7 to 0.9 percent. Asian/Pacific Islanders will increase from 3.5 to 8.2 percent. The largest increase will be in the Hispanic/Latino population, from 10.8 to almost 25 percent of the population. The White/Caucasian population will decline from about 73 to 52.8 percent.

DENTAL PROVIDER DEMOGRAPHICS

NUMBER OF PROVIDERS⁶⁻⁸ The dental workforce is aging. The American Dental Association (ADA) predicts that more dentists will be leaving than entering the workforce by 2014. As dentists age they tend to work fewer hours per week.

Additionally, the number of dentists per 100,000 population (the dentist to population ratio) is declining as the population grows. The dentist to population ratio is an indication of the availability of dentists to a given population—Florida had a dentist to population ratio of 49.97 with a range of 0.00 in Glades and Union Counties to 91.00 in Alachua County (mainly due to the University of Florida College of Dentistry’s location there) in 2004.⁶ The national dentist to population ratio was 58.0 for the same time period.

GENDER⁷⁻⁹ The dental profession is becoming more female. The proportion of practicing dentists who are women is projected to increase to 22 percent by 2010 and 28 percent by 2020. How this gender shift will affect the profession of dentistry is not yet clear. A number of reports suggest this shift will result in dentists averaging less working hours per week.

Appendix B—Oral Healthcare Workforce Background Paper

Dental Workforce Demographics, Trends, and Deficiencies

ETHNICITY^{7,8,10} A long-standing goal of dental education has been the development of a dental workforce that reflects the diversity of society. Studies have shown that minority dentists tend to practice in minority communities or have a greater percentage of minority patients.

About 14 percent of professionally active dentists are non-white; with almost 7 percent Asian/Pacific Islander; 3.4 percent Black/African American; 3.3 percent Hispanic/Latino, and 0.1 percent Native American. While the percentage of minority students has significantly increased since 1980, from about 13 to 34 percent, the number of Black/African American students has fallen 19 percent, from 215 to 174. The number of Hispanic/Latino students has fallen 16 percent, from 245 to 205.

The percent of applications from under-represented minorities for Florida dental schools was 15% in 2001.⁸ The percent of enrollees who are under-represented minorities in Florida dental schools was 18% in 2001 (this was down from 19% in 1996).⁸ Many states have developed recruitment programs (as early as high school) in an attempt to steer potential minority scholars into the dental professions.

FLORIDA DENTAL WORKFORCE DEMOGRAPHICS¹¹

Florida Active Licensed Dentists as of June–06.	9,464
Florida Active Licensed Pediatric Dentists (estimated).	250
Florida Active Licensed Dental Hygienists as of June–06	9,686
Dental Assistants as of 2004	17,090
Dentists Enrolled as Medicaid Providers as of Dec. 18, 2006	1,479
Dentists as Active Medicaid Providers as of FY 05–06	912
Pediatric Dentists Enrolled as Medicaid Providers as of Dec.18, 2006	156
Pediatric Dentists as Active Medicaid Providers as of FY 05–06	100
Dentists as Active Medicaid Developmental Disabilities Children Providers as of CY 2005	772
Dentists as Active Medicaid Developmental Services Waiver Providers as of FY 05–06	67
Dentists Contracted for HIV Program (Ryan White Title II) as of Sept 04.	95

SPECIALTY PRACTICE^{6,7} As private practice dentistry has become very profitable, fewer graduating dentists seek entry into specialties and academia, creating a shortage of pediatric dentists. A little over 79 percent of professionally active dentists are general dentists. Approximately 21 percent are specialists. Pediatric dentists comprise a little over 16 percent of the specialists.

PUBLIC HEALTH/SAFETY NET PROVIDER^{6,8,11} In Florida, 93 percent of dentists—both general and specialist—are in private practice with only ten to eleven percent of graduates entering government service and less than one percent immediately entering dental academia or research.

Safety net facilities such as dental schools, community-based clinics, migrant and rural health centers, school-based or school-linked programs, and mobile vans that target underserved populations primarily in inner-city and rural areas are relatively few in number, but represent important access points for those who have difficulty obtaining care through the private sector.

In 2005, Florida had 246 safety net clinics in various settings throughout the state. These consisted of 80 county health department dental clinics in 44 of 67 counties; 41 Project: Dentist Care Clinics; 48 Federally Qualified Health Center (FQHCs) clinics; 7 dental school clinics, 18 dental hygiene programs, 25 dental assisting programs; and 14 Community Health Center Dental Clinics (CHCs).

Appendix B—Oral Healthcare Workforce Background Paper

Dental Workforce Demographics, Trends, and Deficiencies

County Health Department (CHD) dental programs have a history of difficulty filling dental provider positions, especially in the more rural counties. As of December 2007 there were 9 dentist positions and 4 dental assisting positions listed seeking providers.¹² The reasons for the difficulty in recruiting and retaining dental providers in CHDs and other safety net programs is not fully known. Studies are needed to determine the exact reasons. But it is generally assumed to be related to salaries, population density and types of services offered.

DISTRIBUTION OF PROVIDERS

DENTAL HEALTH PROFESSIONAL SHORTAGE AREAS (D-HPSAs)¹³ The Department of Health and Human Services has identified 1,171 areas of the U.S. (containing more than 25 million Americans) that are seriously, medically (including dental) underserved areas (MUA), or medically underserved populations (MUP), or have been designated as dental health professional shortage areas (D-HPSA). These areas are predominantly in inner city or rural areas. According to the Health Resources and Services Administration (HRSA), Florida had approximately 200 D-HPSAs based on low-income and migrant farm worker populations.

LOCATION AND TYPES OF PRACTICES (SOCIOECONOMICS) Dental practices are businesses and must be profitable to exist. In general, dental practices have higher overheads than medical practices. Factors affecting economics of the practice may influence the decision regarding location of practice, type of practice, and the insurance plans and clients a practice will accept.

DISTRIBUTION OF DENTAL AUXILIARIES—DENTAL HYGIENISTS AND DENTAL ASSISTANTS Mapping software programs have shown that dental hygiene and dental assisting graduates tend to apply to programs and remain in the areas where they acquire their degrees. Because most dental hygiene and dental assisting schools tend to be located in more affluent urban and suburban population centers, it is often difficult to recruit them to rural or less affluent areas.

EDUCATION AND TRAINING

DEMOGRAPHICS^{7,8} There are currently 56 accredited dental schools, approximately 240 dental hygiene programs, and 250 dental assisting programs in the U.S. Florida has 2 accredited dental schools—1 public and 1 private—that produced 182 graduates in 2003, 18 accredited dental hygiene programs and 25 accredited dental assisting programs. Approximately 92 percent of Florida dental school graduates remain in the state after graduation.

Additionally, there are 3 accredited pediatric dental residency programs in Florida that produce 14 graduates each year—Nova (6 graduates), UFCD (5 graduates), and Miami Children's Hospital (3 graduates).

DENTAL EDUCATIONAL INSTITUTIONS—COST OF OPERATION; LACK OF EDUCATORS; LITTLE ROOM FOR EXTRA TRAINING REQUIREMENTS^{7,8} The cost of providing a dental education has increased over 90 percent since 1985, \$33,550 to \$63,800. Tuition and fees and clinic income cover only approximately 36 percent of dental school expenditures. The remainder of expenditures is met through federal, state, and local support, as well as endowments, gifts, and alumni support.

An adequate and well-qualified dental school faculty is imperative to train the next generations of dental providers. However, there is a growing shortage of dental school faculty and dental researchers. Reasons for the shortage of faculty include high levels of debt upon graduation, substantial incomes that can be earned in private practice, and a culture that does not foster interest in an academic career. The dental school faculty is aging and will exacerbate faculty shortages as individuals retire.

There is a lack of dental training and experiences with patients with special needs—patients who need special care due to age, handicapping condition, or social condition including homelessness. This lack of training may be due to an already overburdened academic schedule and staff.

Appendix B—Oral Healthcare Workforce Background Paper

Dental Workforce Demographics, Trends, and Deficiencies

EDUCATIONAL COSTS/BURDENS^{7,8} Nationally since 1985, average resident tuition and fees have increased more than 120 percent. In the year 2003, dental student educational debt upon graduation averaged \$118,720. The debt levels that most students now acquire to finance their education likely influence their career decisions—pursuing private vs. public practice opportunities. Some states such as Minnesota offer loan forgiveness programs to attract recent graduates to practice in rural areas for a set period of time (e.g. 3 years).¹⁴

Florida does not offer state subsidization, repayment or loan forgiveness programs for dentists, dental hygienists, or dental assistants who agree to practice for stipulated periods of time in underserved areas or serve specified levels of individuals covered by public programs (e.g., Medicaid) beyond those that may be offered by federal entities such as the US Public Health Service Corps and the Indian Health Service.

FOREIGN GRADUATES⁸ In Florida, foreign trained dentists by rule (64B5-2.0146) are required to complete a 2 year supplemental education program at an ADA accredited dental school before they can sit for the Florida dental licensure exam which can be time consuming and expensive. Minnesota, Connecticut, Arkansas, Mississippi, and California have developed programs to utilize foreign-trained dentists as dentists and dental hygienists in facilities that care for special needs patients and public health settings. Foreign trained dentists are able to take the Florida dental hygienist examination if their dental education meets the Board's requirements.

RESIDENCY PROGRAMS^{8,10} Residency training as a prerequisite for practicing as a physician has been mandatory in medicine for some time, but many states generally have resisted taking this step for dentistry. However, Delaware and Minnesota have such requirements for dentistry; New York has enacted legislation that will require dentists to complete an accredited residency program as a prerequisite for initial dental licensure beginning in 2007; and California has proposed such legislation (SB 683). Other States have initiated or are considering allowing a dental residency experience as an alternative to a clinical board examination as a prerequisite for licensure.

The concept of utilizing dental providers in-training (dental students, dental hygiene students, dental assisting students, and general practice residency students) as providers in mentored programs that care for special needs patients or in public health settings may be a strategy that could expand the workforce for disadvantaged population. It may also be a way to provide training to providers in the care of special needs patients and children.

CONTINUING EDUCATION OPPORTUNITIES Dentists and dental hygienists must complete biennially continuing education as per section 466.0135 and 466.014 F.S. of the Dental Practice Act in order to renew their dental licenses.¹⁵ Continuing education opportunities for dental graduates in the areas of pedodontics, special needs dental care, and geriatric dental care are made available through the dental schools and various organizations such as the Special Olympics (Special Smiles) and Sunrise Community, Inc. However, many general dentists are not comfortable or are not set up to treat these disadvantaged populations. Additionally, the Florida Dental Practice Act does not mandate continuing education in these areas. Historically, these courses have not been well attended.

ABILITY TO PAY/REIMBURSEMENT

INSURANCE^{1,7} Approximately 44 percent of the U.S. population does not have dental insurance. Insurance does not guarantee access to dental care. Many of the insured population are enrolled in managed care dental benefit plans. However, many dentists do not participate in these plans due to poor reimbursement levels and administrative problems.

MEDICAID AND MEDICARE^{1,7} Nationally and in Florida, only about 20 percent of Medicaid eligible children receive any dental care. In Florida, adult oral health care is limited under Medicaid to extractions and dentures. Medicare provides

Appendix B—Oral Healthcare Workforce Background Paper

Dental Workforce Demographics, Trends, and Deficiencies

reimbursement for few dental services. Anecdotal evidence indicates that many dental providers do not become Medicaid providers due to poor reimbursement levels and perceived administrative burdens.

REGULATION

LICENSURE⁸ State boards of dentistry, licensure statutes, and rules can affect the population of eligible dental providers available in a state. It has become a common practice for states to use licensure regulations to attract additional dentists. Examples of some of these common practices are: allowing foreign dental school graduates who complete U.S. dental residencies eligible for licensure; conveying reciprocity or licensure by credentials; and granting special licenses or providing incentives (e.g., limiting liability) for dentists who work in public health/safety net clinics. Florida is one of only two states that do not provide some form of licensure by credentials or reciprocity. Absent changes in graduating more dentists, these practices merely serve to influence the distribution of dentists; the gains in dentists achieved by some states are offset by losses in other states.

The Florida Board of Dentistry (Board) administers the Florida dental licensure exams.¹⁶ The Board sets the number, dates, and locations of exams. Licensure examinations are given at least twice a year depending on the projected candidate population.¹⁶ A qualified applicant must successfully complete a laws and rules exam, a diagnostic skills exam, and a 2–4 day clinical exam in order to qualify for licensure.¹⁶ The clinical examination includes demonstration of dental procedures on mannequins and live patients (even though the applicant is not yet a licensed dentist in Florida).¹⁶ There are two fees associated with the licensure examination—\$1700 to the Board of Dental Examiners for administration of the licensure examination and \$760 to the Department of Health for application fee, exam development and licensure.¹⁶ Additionally, the applicant must supply any live patients and assume all associated costs to ensure the patients are present at the exam.¹⁶ For applicants who have not taken the National Boards within the last 10 years (e.g. a licensed dentist from another state who may have been in practice for 10 years or more), he or she must also retake Part II of the National Boards.¹⁶

SCOPE OF PRACTICE, SUPERVISION AND DEVELOPMENT OF MID-LEVEL DENTAL PRACTITIONERS The American Dental Education Association (ADEA) has recognized the need for better utilization of allied dental professionals, as one way to improve access to oral health care.⁴ The current dental workforce has an extra capacity to see more patients, in large part through the under utilization of allied dental personnel.⁷ Increasing the numbers of dental auxiliaries, expanding their duties, reducing the level of supervision, or allowing physicians to supervise dental hygienists have all been suggested as ways to increase the capacity of dental practices and clinics or increase access to dental care.¹⁰ As the number of dentists continue to decline, there will be an even greater need to utilize this extra capacity by extending the use of allied personnel.⁷ In most states, including Florida, statutory or rule changes are necessary to expand duties or reduce the level of supervision.

Many states are investigating the development of a new mid-level dental providers modeled after nurse practitioners in the medical field. A variety of models are currently under consideration or in various stages of development. The following chart lists some current and proposed models and the status of these models.¹⁰

MID-LEVEL PROVIDER MODEL	STATUS
Advanced Dental Hygiene Practitioner (ADHP)	Proposed by American Dental Hygiene Association
Community Dental Health Coordinator (CDHC)	Proposed by American Dental Association
Oral Preventive Assistant (OPA)	Proposed by American Dental Association
Increased utilization of Expanded Function Dental Assistants (EFDAs)	Kentucky, Indiana, Minnesota, Missouri, Pennsylvania, Ohio, California, Massachusetts, Tennessee, Wyoming and Washington
Dental Health Aide Therapist (DHAT)	Alaska, New Zealand, Canada
Minnesota’s Collaborative Practice Program	Minnesota
Unsupervised practice of registered dental hygienists (RDH) in public health programs	Arizona, California, Connecticut, Iowa, Kansas Maine, Michigan, Minnesota, Missouri, Montana, Nevada, Oklahoma, Oregon, Texas and Washington

Appendix B—Oral Healthcare Workforce Background Paper

Dental Workforce Demographics, Trends, and Deficiencies

Florida's current statutes and rules would need to be amended to recognize a mid-level dental practitioner. Other considerations include reimbursement which may be an issue if the new mid-level practitioner provides services without supervision of a dentist unless insurers and federal program requirements are changed.

WORKFORCE DEVELOPMENT

UTILIZING NON-DENTAL PROVIDERS^{10,17} Many states such as North Carolina, Minnesota, and Washington State have developed programs to utilize non-dental personnel to increase access points to the dental system and to provide education and preventive services. Infants and toddlers (and parents of infants and toddlers) visit physicians for well baby visits more often than they see a dentist during the child's first 3 years of life. This frequency provides an opportunity for non-dental providers to provide a child (and his or her parents) with an early access point to dental services and educational and preventive dental services. The University of Florida College of Dentistry has been awarded a federal grant to address using non-dental providers based on the North Carolina model. The Public Health Dental Program has developed a protocol to train medical staff to conduct early childhood caries preventive programs in county health departments. Implementation of this training program will commence in 2008.

ENCOURAGING VOLUNTEERISM¹⁰ Encouraging volunteerism in safety net dental clinic settings may increase service to underserved populations. Most states have a population of retired and active altruistic dental providers that would provide time and services if the right incentives were offered.

Some states provide that licensed dentists and dental hygienists who volunteer in public health settings are not liable for damages in a tort or other civil action. Additionally, there may be some other policy issues or options that may act as incentives to stimulate the volunteer process, such as fee waivers and continuing education credits.

Florida currently provides sovereign immunity to volunteers who provide free services in public health dental settings or as employees in CHDs. In 2003, Florida dentists provided 19,001 hours (equivalent to 10 FTEs) and Florida dental hygienists provided 3,349 hours (equivalent to 2 FTEs) of voluntary care through Project: Dentists Care.

INCREASING THE USE OF TECHNOLOGY^{6,10,11} Some states have developed teledentistry programs to test technology that can augment dental delivery systems by providing for supervision, expansion of dental auxiliary duties, and increased training opportunities. However, financial and regulatory barriers prevent full utilization of this technology. Florida is currently conducting a pilot program in Nassau County and a pilot program is under development in Wakulla County.

INCREASING DATA COLLECTION AND ANALYSIS¹⁰ Nationally and in Florida there is a lack of objective information on which to focus policy discussion concerning the shortage of health professionals. In order for Florida to monitor dental workforce trends and to develop policy and initiatives, Florida needs to implement a system of collecting and analyzing reliable, publicly available data through surveys or other instruments.

CONCLUSION

The dental workforce challenges that Florida faces include a complex mix of public policy and professional practice issues that ultimately will require the involvement of many state, private, and professional entities to realize adequate outcomes. This paper serves as a starting point to identify the broad scope of factors underlying dental workforce problems and the variety of approaches to possible solutions.

Appendix B—Oral Healthcare Workforce Background Paper

Dental Workforce Demographics, Trends, and Deficiencies

1. U.S. Department of Health and Human Services. Oral Health in America: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research; 2000.
2. U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health, 2nd ed. Washington, DC: U.S. Government Printing Office; November 2000.
3. Dental Oral and Craniofacial Data Resource Center. Oral Health U.S., 2002. Bethesda, MD: National Institute of Dental and Craniofacial Research, National Institute of Health and the Division of Oral Health, Centers for Disease Control and Prevention; 2002.
4. McKinnon M, Luke G, Bresch J, Moss M, Valachovic RW. Emerging Allied Dental Workforce Models: Considerations for Academic Dental Institutions. *Journal of Dental Education*. 2007;71(11):1476–1491.
5. U.S. Department of Health and Human Services. National Call to Action to Promote Oral Health. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institutes of Health, National Institute of Dental and Craniofacial Research; Spring 2003. NIH Publication No. 03-5303.
6. Public Health Dental Program. State Oral Health Improvement Plan for Disadvantaged Persons. Florida Department of Health. Available at: <http://www.doh.state.fl.us/family/dental/sohip/reports/Background.pdf>. Accessed August 10, 2006.
7. Valachovic RW, Weaver RG, Sinkford JC, Haden NK. Trends in Dentistry and Dental Education. *Journal of Dental Education*. June 2001;65(6):539–561.
8. United States Department of Health and Human Services (DHHS). Financing Dental Education: Public Policy Interests, Issues and Strategic Considerations. Rockville, MD: United States Department of Health and Human Services, Health Resources and Services Administration; 2005.
9. Carlisle LD. Is there a difference in the way men and women practice dentistry? Part II. Available at: <http://www.spiritofcaring.com/public/513.cfm>. Accessed December 20, 2007.
10. Health Policy Institute of Ohio. Report of the Ohio Dental Workforce Roundtable. Columbus; May 2006.
11. Florida Department of Health. About the Department of Health. Florida Department of Health. Available at: http://www.doh.state.fl.us/planning_eval/about/index.html. Accessed May 12, 2007.
12. State of Florida. People First. State of Florida. Available at: <https://peoplefirst.myflorida.com/logon.htm>. Accessed December 10, 2007.
13. U.S. Department of Health and Human Services. Shortage Designation. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professionals. Available at: <http://bhpr.hrsa.gov/shortage/>. Accessed April 20, 2004.
14. Minnesota Department of Health. Guidelines for the Minnesota Dentist Loan Forgiveness Program. The Office of Rural Health and Primary Care (ORHPC), Minnesota Department of Health. Available at: <http://www.health.state.mn.us/divs/orhpc/funding/loans/dentloan.html>. Accessed January 9, 2008.
15. Dental Practice Act. Chapter 466; 2008.
16. Florida Board of Dentistry. Applicant Information. Available at: http://www.doh.state.fl.us/mqa/dentistry/dn_applications.html. Accessed December 10, 2007.
17. Rozier GR, Sutton BK, Bawden JW, Haupt K, Slade GD, King RS. Prevention of Early Childhood Caries in North Carolina Medical Practices: Implications for Research and Practice. *Journal of Dental Education*. 2003;67(8):876-885.

Appendix C—Oral Health Florida Coalition

In 2004, in response to the Surgeon General’s Report, his Call to Action and the Healthy People 2010 report, the Department of Health’s Public Health Dental Program, facilitated by a federal Health Resources and Services Administration (HRSA) grant, established the Oral Health Florida Coalition (Coalition); a broad based coalition and integrated network of statewide and community coalitions that are developing action plans aimed at improving oral health for all people in Florida. The Coalition included participants from the health professions, government agencies, academia, private industry, foundations, and consumer and advocacy groups. Objectives of the Coalition were to increase public awareness of oral health issues in Florida and to develop and maintain a State Oral Health Improvement Plan (Plan) that would facilitate partnerships working toward common goals. The Plan and current activities of the coalition can be accessed at www.oralhealthflorida.com.

In 2004, the Coalition began with approximately 40 participants. Today the Coalition boasts over 300 participants and this collaboration and cooperation may be its greatest success. Coalition participants include representatives from various divisions of the Department of Health, the University of Florida College of Dentistry, Nova Southeastern College of Dental Medicine, the Florida Dental Association, the Florida Dental Hygiene Association, the Florida Academy of Pediatric Dentists, the Florida Medical Association, the Florida Board of Dentistry, the Agency for Health Care Administration, Head Start, and many others all of whom have come together to collectively find solutions to affect access to oral healthcare for all persons in Florida.

The goal of the Coalition is analogous to the goals of the United States Surgeon General’s Report on Oral Health and the U.S. Department of Health and Human Services’ Healthy People 2010 document. The goal was to develop a state oral health improvement plan to prevent oral disease and promote oral health in order to increase the quality of life and eliminate oral health disparities for all persons in Florida, especially focusing on disadvantaged populations. Central to the Plan is the concept that without good oral health, individuals cannot have good general health and quality of life. A key recommendation of the Plan is to assure a highly trained, diverse, appropriately allocated dental workforce.

Execution of various recommendations and strategies with continued updating of the action plan is on-going. To date, the Coalition has formed similar workgroups on community water fluoridation, maternal and child oral health/early childhood caries, individuals with special health care needs, and senior oral health. Each of these workgroups has concluded that workforce is an important factor in crafting solutions or in implementing programs that can improve the oral health of specific disadvantaged population groups and of all persons in Florida.

The Coalition and Workgroups through the Plan recommend increasing community-based oral health education and prevention to lessen dental disease and consequently the demand on dental providers. Community water fluoridation, school-based dental sealant and fluoride programs, school and community-based oral health education programs, and improved diet and nutrition, all provide educational and preventive opportunities to reduce the dental disease burdens for all people in Florida. Additionally, the Coalition recommends assuring a highly trained, diverse, appropriately allocated workforce to improve access to oral health care. The Plan suggests oral health education of school health providers; oral health education and clinical preventive training of medical providers; increasing the number of minority dental providers; attracting dental providers to rural areas through loan forgiveness or other incentive programs; expanding training opportunities for dental students and licensees; providing incentives to increase volunteerism; reforming policy to better utilize the existing dental workforce or to create new dental workforce providers; creating new models to expand the reach and abilities of safety-net practices to provide dental services; improving Medicaid to attract more dental providers to participate in the program; exploring new technology and models, such as teledentistry, to expand the reach of dental services; and providing the public with internet resources, links and provider directories as methods directly or indirectly related to workforce that may improve access to oral health care for all people in Florida.

Appendix D—Oral Health Workforce Strategies Considered

STRATEGY	NUMBER DESCRIPTION
1	Educate non-dental health care providers
2a	Special Needs Continuing Education
2b	Special needs school curriculum
2c	Externships in CHDs and CHCs
3a	Loan forgiveness
3b	Minority recruitment
3c	Federal Dental Public Health Service Corp
4a	Sovereign immunity
4b	Tax credits
5a1	ADA Community Dental Health Coordinator
5a2	ADA Oral Preventive Assistant
5a3	ADHA Advanced Dental Hygiene Practitioner
5b	Reduced supervision of dental auxiliaries
5c	Expanded duties of dental auxiliaries
6a	Medicaid reimbursement rates
6b	Medicaid admin burdens for providers
6c	Medicaid admin burdens for patients
6d	Medicaid dental pool of funds
7	Oral Health Education in Medical Schools
8	Public health dentist on the BOD
9a	Licensure by credentials
9b	Post Graduate Year—1 year residency
10	Mandatory pro-bono service
11	Statewide Coordinated Volunteer Workforce
12a	Additional dental schools
12b	Additional dental hygiene programs
12c	Additional dental assisting programs
13	Increase compensation for state dentists
14	1 year in a rural or underserved for students
15a	Train physicians and staff
15b	Train social workers
15c	Train teachers
15d	Train other non-dental
16	Limit the number of dental licenses
17	Recruit from local population
18	College and professional school scholarships
19	Loan forgiveness program
20	Build office building and gift to doctor
21	Social sabbaticals
22	Sovereign immunity
23	Build a State Dental Corps of dentists
24	Program of co-pay
25	Financial support from foundations
26	Dental Health Manpower Task Force
27	FQHCs and their business models
28	Dentists in these positions must pass board
29	Fund short-term training opps in ped. dentistry
30	Scholarship opps for pediatric residency
31	Dental school extern or residency programs
32	Community-based preventive services

Appendix E—Survey of Strategies by Impact and Feasibility

Strategies are listed in the following order (or as otherwise noted): 1) Strategies which the State Oral Health Improvement Plan (SOHIP) coalition considered and placed in the State Oral Health Action Plan (Plan); 2) Strategies which the SOHIP coalition considered, but did not place in the initial Plan; and 3) Other strategies which have currently been suggested.

For your information there is a description of the strategies the SOHIP coalition considered with benefits and barriers concerning each strategy and any examples of where this strategy had been applied following the chart containing the survey.

Please place a value of 1 to 5 for Impact and Feasibility for each strategy based upon the following value descriptions below.

IMPACT SCORING—POTENTIAL OF STRATEGY TO IMPROVE ORAL HEALTH—SCORE WITH A VALUE OF 1 TO 5.

1. Increases awareness or provides evaluation and planning capacity, but provides no direct health impact or prevention or control of disease.
2. Provides minimal prevention or control of disease; or policy change that may minimally improve prevention and control.
3. Provides moderate prevention or control; or policy change that may significantly improve prevention and control.
4. Provides moderately high prevention and control; or highly significant policy change.
5. Provides significant prevention, control or improvement of health; or major policy change.

FEASIBILITY SCORING—POTENTIAL TO IMPLEMENT STRATEGY—SCORE WITH A VALUE OF 1 TO 5.

1. High cost or major opposition or requires major policy change.
2. Moderately high cost or significant opposition or significant policy change necessary.
3. Moderate cost with minor or no opposition and minor or no policy change necessary.
4. Low cost with minor or no opposition and minor or no policy change necessary.
5. Low cost with no opposition and no policy change necessary.

Appendix E—Survey of Strategies by Impact and Feasibility

STRATEGIES SOHIP RECOMMENDED	IMPACT SCORE— (1 TO 5)	FEASIBILITY SCORE— (1 TO 5)
<p>1) Educate non-dental health care providers on the importance of oral health, the association between oral health and general health, the systemic impact of oral health, and the benefits of oral health prevention. (e.g. continuing education and training programs for medical providers, social workers, teachers, etc.)</p>		
<p>Explanation: Many non-dental health care providers see certain populations more often than a dentist—for example physicians see 0–3 year olds for well baby check-ups more often than a dentist sees these aged children.</p>		
<p>2) Expand professional dental training opportunities regarding care for special needs populations.</p> <ul style="list-style-type: none"> a. Provide Continuing Education for licensees b. Expand Dental, hygiene & assisting school curriculum c. Provide Externships in CHDs & CHCs for dental, hygiene, and assisting students 		
<p>Explanation: Dental Providers get limited training in the care of special needs patients during their schooling. Thus, many providers are uncomfortable and apprehensive about treating special needs patients. More training may make providers more comfortable and willing to treat these patients.</p>		
<p>3) Assure that an adequate number and diversity of appropriate dental care provider types exist.</p> <ul style="list-style-type: none"> a. Initiate loan forgiveness programs for dental, dental hygiene and dental assisting school graduates b. Develop minority recruitment for dental, dental hygiene and dental assisting schools c. Utilize the Federal Dental Public Health Service Corp 		
<p>Explanation: Minorities, especially Hispanics & Blacks, are under-represented in the dental professions—dentist, hygienists & assistants.</p>		
<p>4) Expand dentist volunteerism.</p> <ul style="list-style-type: none"> a. Provide Sovereign immunity b. Investigate Tax credits for service (Since Florida has no income tax—look at other tax areas such as real estate, enterprise zones, etc.) 		
<p>Explanation: The thought is that incentives will increase dental provider volunteerism. Sovereign Immunity removes the threat of liability and tax credits provide some economic benefit.</p>		

Appendix E—Survey of Strategies by Impact and Feasibility

STRATEGIES SOHIP RECOMMENDED	IMPACT SCORE— (1 TO 5)	FEASIBILITY SCORE— (1 TO 5)
<p>5) Consider statutory and regulatory reform to the State Dental Practice Act to eliminate or reduce the supervisory requirements for mid-level dental staff practicing in community health and school-based settings.</p> <ul style="list-style-type: none"> a. Create New mid-level providers <ul style="list-style-type: none"> 1. ADA Community Dental Health Coordinator 2. ADA Oral Preventive Assistant 3. ADHA Advanced Dental Hygiene Practitioner b. Provide Reduced supervision of dental hygienists & assistants c. Provide for Expanded duties of dental hygienists and assistants 		
<p>Explanation: Various professional organizations and some states have proposed new mid-level dental providers who have greater scope of practice and less restrictive or no supervision requirements similar to the medical model of certified nurse midwives, nurse practitioners, clinical nurse specialists and certified registered nurse anesthetists. The concept is that these new positions would better utilize the skills of auxiliary dental staff, thus, increasing access to oral health care.</p> <ul style="list-style-type: none"> ♦ The Community Dental Health Coordinator (CDHC) is an American Dental Association (ADA) proposed mid-level dental provider that will be specifically trained to help organize community programs and function in remote locations and other underserved areas. CDHCs will be of particular value to public programs, but could be useful in larger private practices, too. CDHCs will enable the existing workforce to expand its reach deep into underserved communities and influence local health and community organizations to adopt initiatives to promote oral health. CDHCs working in facilities without the continuous presence of a dentist could perform palliative temporization of conditions (limited to hand instrumentation only) for later diagnosis and treatment by a dentist. ♦ The Oral Preventive Assistant (OPA) is an ADA proposed mid-level dental provider that may be utilized to provide preventive services for relatively uncomplicated patients, permitting dental hygienists to focus on more complicated patients. OPAs can also fill a role in public facilities such as community health centers and schools. The OPA model is designed to create an assistant who has a solid background in providing patients with oral health education and information as well as the basic elements of preventive care. ♦ The Advanced Dental Hygiene Practitioner (ADHP) is an American Dental Hygiene Association (ADHA) proposed mid-level dental hygienist provider who is educated to competently provide diagnostic, preventive, therapeutic & limited restorative services to the public. <p>Additionally, various professional organizations and some states have proposed or legislated increased scope of practice, expanded duties, and/or reduced supervision levels for existing dental hygienists in certain situations (e.g. school-based sealant programs) to increase access to preventive oral health care.</p>		

Appendix E—Survey of Strategies by Impact and Feasibility

STRATEGIES SOHIP RECOMMENDED	IMPACT SCORE— (1 TO 5)	FEASIBILITY SCORE— (1 TO 5)
<p>6) Improve the Medicaid program.</p> <ul style="list-style-type: none"> a. Increase reimbursement rates b. Remove administrative burdens for providers c. Remove administrative burdens for patients d. Increase dental pool of funds 		
<p>Explanation: Approximately only 20% of Medicaid eligible children access oral health care services in a given year. Reasons for this lack of access include a lack of Medicaid providers and a complicated eligibility determination process. Providers cite reimbursement rates and administrative burdens (both in signing up for the program and in getting reimbursement) as the primary reasons for not participating in the Medicaid program.</p>		
<p>7) Advocate for Oral Health Education in Medical Schools.</p> <p>Explanation: Oral health is important to systemic health. Oral disease is a risk factor for many systemic diseases (e.g. periodontal disease and diabetes, heart disease, and preterm low birth weight babies) and systemic disease have many oral manifestations (e.g. leukemia and swollen gums). Thus, medical providers should have knowledge of oral health and disease.</p>		
<p>8) Advocate for a dentist with a background in public health to be on the Board of Dentistry</p>		
<p>Explanation: The Board of Dentistry promulgates rules that affect the practice of dentistry in Florida—both private practice and public health practice. The thought is that if the Board does not have a member with public health knowledge, the Board cannot adequately promulgate rules that affect the public health practice of dentistry.</p>		
<p>9) Advocate for alternative methods of licensing of dentists</p> <ul style="list-style-type: none"> a. Advocate for licensure by credentials b. Advocate for a Post Graduate Year—I year residency requirement 		
<p>Explanation: Florida is only one of three states that do not allow some sort of licensure by credentials.</p> <p>Some states (e.g. New York) require a 1-year post graduate residency before a new graduate can obtain a dental license.</p>		
<p>10) Advocate for Mandatory pro-bono service (or option of a fee instead of service) for dental licensure.</p>		
<p>Explanation: A dental license is not a right, but instead a privilege which the state can regulate. An example of Pro Bono service for continued licensure occurs in many states in regards to law licenses.</p>		

Appendix E—Survey of Strategies by Impact and Feasibility

STRATEGIES SOHIP CONSIDERED, BUT DID NOT INITIALLY PLACE IN THE STATE PLAN	IMPACT SCORE— (1 TO 5)	FEASIBILITY SCORE— (1 TO 5)
<p>11) Expand the Statewide Coordinated Volunteer Dental Workforce (e.g. Project Dentists Care—retired dentists, part time dentists, etc).</p> <p>Explanation: The state, through the Florida Dental Association, currently has a volunteer workforce program in Project Dentists Care. The thought is to provide additional incentives or reduce legal barriers to motivate more active and inactive providers to volunteer.</p>		
<p>12) Create additional dental educational opportunities.</p> <ul style="list-style-type: none"> a. Create additional dental schools (e.g. at USF or FSU) b. Create additional dental hygiene programs c. Create additional dental assisting programs <p>Explanation: One argument related to access to care is that there are inadequate numbers of providers. Moreover, workforce trends indicate more providers are retiring, than graduating (e.g. due to the baby boom, etc.). The concept is that more schools, programs, or increasing class sizes can combat this trend.</p>		
<p>13) Increase the compensation for state public health dental providers because salaries are not in line with private practice. This discrepancy in salaries makes it difficult to recruit and retain providers in CHD positions.</p> <p>Explanation: Self explanatory</p>		
<p>14) Require that all students enrolled in a state supported dental education program (dentistry or dental hygiene) must complete one year of practice in a rural or underserved area.</p> <p>Explanation: Tuition is not enough to cover a dental or dental hygiene student's education. The State and the public subsidize dental educations, especially those in a State school program. The concept is that should repay this subsidy by providing dental service to the underserved through a one year residency. Additionally, the student will gain mentored experience and training.</p>		
<p>15) Develop programs to train non-dental health professions to provide oral assessments and use of fluorides.</p> <ul style="list-style-type: none"> a. Physicians and staff providers (recently added to SOHIP recommendations—UFCD is currently providing to medical personnel) b. Social workers c. Teachers d. Other non-dental <p>Explanation: Early prevention and intervention reduces the burden and costs of dental disease.</p> <p>Physicians see 0–3 year olds for well baby visits up to 12 times a year. Many dentists do not see 0–3 year olds due to being too busy and/or uncomfortable in seeing such young children.</p> <p>Social workers and teachers have high access to children compared to dentists due to the nature of their jobs.</p>		

Appendix E—Survey of Strategies by Impact and Feasibility

STRATEGIES SOHIP CONSIDERED, BUT DID NOT INITIALLY PLACE IN THE STATE PLAN	IMPACT SCORE— (1 TO 5)	FEASIBILITY SCORE— (1 TO 5)
<p>16) Limit the number of dental licenses available per county</p> <p>Explanation: This strategy attempts to address the maldistribution of dental providers. The concept here is that the number of dental licenses in a county should be determined by population density (e.g. similar to liquor licenses).</p>		
<p>17) Recruit from local population or from similar locales</p> <p>Explanation: This strategy is intended to address the diversity and rural populations (maldistribution of providers) issues—that persons recruited from minority areas or rural areas will return to and practice in their home areas after graduation.</p>		
<p>18) Provide college and professional school scholarships</p> <p>Explanation: This strategy is an incentive to recruit from minority or underserved populations.</p>		
<p>19) Loan forgiveness program...forgive 100% after serving 5 years in location</p> <p>Explanation: Many dental students will be in debt upon graduation (many over \$100,000 in debt). Thus, in order to pay off their debt, new graduates are motivated to seek employment in lucrative private practices (which are generally located in suburban affluent areas). Loan forgiveness attempts to remove the economic burden on new graduates so that they can practice in underserved areas.</p>		
<p>20) Build office building and gift to doctor after 5 or 10 years....lease to own over 20 years...etc. Tie it to serving specific % of Medicaid patients or devote one day or one half day per week to those patients. May make this for a limited time.</p> <p>Explanation: Starting a dental practice is expensive, especially for a new graduate with a large amount of debt. This strategy can motivate new graduates to provide care to the underserved.</p>		
<p>21) Social sabbatical periods 2 or 3 times per year. Have position filled by temporary or retired docs.</p> <p>Explanation: Proposer of strategy did not offer an explanation.</p>		
<p>22) Sovereign immunity at least to a limited extent....perhaps pay premiums for malpractice ins.</p> <p>Explanation: This strategy attempts to provide incentives for volunteerism by removing liability in voluntary practice settings.</p>		

Appendix E—Survey of Strategies by Impact and Feasibility

OTHER STRATEGIES	IMPACT SCORE— (1 TO 5)	FEASIBILITY SCORE— (1 TO 5)
<p>23) Build a State Dental Corps of dentists who serve on mobile units for a period of 2–3 or 4 years. They will move into a different area and stay for 1–4 weeks meeting the needs of the Medicaid population in that area. Then move on to another area for a period of time. This service can then lead to loan forgiveness.</p>		
<p>Explanation: Self explanatory</p>		
<p>24) Establish a program of co-pay that encourages the patients to come in at least once per year for exam and cleaning. They must then follow thru to correct problems and the co-pay will be low for them. If they fail to come in annually, the co-pay goes up considerably. Failure to comply once doesn't ban them forever, they just have to use the higher co-pay until the needed treatment is completed then they can return to the lower co-pay.</p>		
<p>Explanation: Self explanatory</p>		
<p>25) Enlist financial support from foundations and other 501-C(3) organizations, Fed Gov't, and private or professional donors as well.</p>		
<p>Explanation: Proposer of strategy did not offer an explanation.</p>		
<p>26) Allow for Dental Health Manpower Taskforce to develop plans.</p>		
<p>Explanation: Proposer of strategy did not offer an explanation.</p>		
<p>27) Look closely at FQHCs and their business models. Many of them may be utilized by state program enhancing their existing funding and thus reduce investment needed by the state.</p>		
<p>Explanation: Self explanatory</p>		
<p>28) Make sure all dentists serving in these positions have passed the state board exam</p>		
<p>Explanation: Proposer of strategy did not offer an explanation.</p>		
<p>29) Fund short-term training opportunities in pediatric dentistry for dentists and dental hygienists working with at-risk children in public health units and community health centers.</p>		
<p>Explanation: This strategy attempts to increase the number of pediatric training opportunities by providing a mechanism where experienced providers can take time away from their practices and complete training without suffering undue economic burdens.</p>		

Appendix E—Survey of Strategies by Impact and Feasibility

OTHER STRATEGIES	IMPACT SCORE— (1 TO 5)	FEASIBILITY SCORE— (1 TO 5)
<p>30) Provide scholarship opportunities to complete pediatric residency training programs for general dentists working in public health units and community health centers.</p>		
<p>Explanation: This strategy attempts to increase the number of pediatric training opportunities and providers by providing a mechanism where experienced providers can take time away from their practices and complete training without suffering undue economic burdens.</p>		
<p>31) Establish dental school externships or residency programs in safety net facilities (e.g. CHDs and CHCs)—students rotate into safety nets for 3–6 months—get mentored training.</p>		
<p>Explanation: Dental schools and hygiene programs could expand their class sizes and could provide additional training opportunities for students by utilizing safety net facilities which could supply equipment, operatories, staff, and most importantly patients and mentors. Safety net programs would benefit from expanded capacity and ability to see more underserved patients.</p>		
<p>32) Increase support for and provision of community-based preventive services such as community water fluoridation and sealant programs.</p>		
<p>Explanation: Early intervention and prevention reduces the costs and burdens of dental (and systemic) disease. Expansion of proven population or community-based prevention programs will reduce the burden of dental disease and subsequently can reduce the need for dental providers.</p>		

Appendix E—Survey of Strategies by Impact and Feasibility

REFERENCE MATERIAL

Below is a description of the strategies the SOHIP coalition considered with benefits and barriers concerning each strategy and any examples of where this strategy had been applied.

1. Educate other health care providers as to the importance of oral health.

a. Explanation—The public may seek health care services from other health care providers (such as physicians, nurses, and nurse practitioners) before and many times more often than they see an oral health provider. Other health care providers need to be aware of dental diseases and conditions so that they can properly treat or refer patients in need.

b. Benefits—Expands access to oral health care services.

c. Barriers—Training; Possible insurance issues; Cooperation between various health care providers.

d. Examples—

2. Expand training regarding special needs populations into core dental, dental hygiene, and dental assisting school curriculums and establish a dental care services web that includes satellite, regional, and designated centers of excellence and advocate for or design incentives for improved training of all dental health care providers in the area of treating special needs patients.

a. Explanation 1) Establish two Centers of Excellence at the dental schools and develop a statewide treatment and referral program; 2) Establish 5 regional centers for special needs patients; and 3) Dental schools need to provide adequate training for students to provide care for the disabled, elderly, and other individuals with certain health conditions; 4) Expand dental health for special needs patients curricula in dental, dental hygiene, and dental assisting schools; 5) Residency programs; 6) Rotations in special needs clinics; 7) 8) Continuing education classes; 9) Continuing education credits for volunteerism; 10) Cultural Competency and Foreign Language Courses or Instruction; and 11) Mentoring programs

b. Benefits—Improves infrastructure; Increases workforce able to treat special needs patients; Establish a dental home for clients that cannot find a dentist practicing in a private practice setting; Increase access; More providers competent and willing to treat special needs patients.

c. Barriers—Budgetary constraints; Lack of resources and trained professionals; Lack of resources to provide training; Staffing; Time –overburdened curricula; Inadequate training for providers; Reluctance by providers to treat these populations.

d. Examples—Tacachale and UF; Special Needs clinic and NOVA have established Centers of Excellence.; Iowa (Pediatric Dental Education Program); New Jersey

3. Increase and assure appropriate types of available oral health care providers and increase diversity in the field of oral health.

a. Explanation—1) Increase efforts to encourage prospective students from underserved areas and/or from disadvantaged groups to choose a career in the dental field; 2) Implement no payment, no interest loan program, loan forgiveness programs, or other incentive programs at the State level or expand federal loan forgiveness programs in exchange for dental providers serving in designated dentally underserved areas of Florida; 3) Increase Number of Pediatric Dentists (Increase the number of programs or number of residents that programs enroll); 4) Increase the number of dental hygienists and dental assistants—more schools, larger class sizes, recruiting/incentive programs; and 5) Promote diversity in the oral health workforce by utilizing Affirmative Action (schools must enroll “x” amount of certain minority students to reflect population demographics), Minority Loan Programs, and Recruiting of Minority Dental Students.

b. Benefits—Increase the number of dental providers serving disadvantaged populations.

Appendix E—Survey of Strategies by Impact and Feasibility

c. Barriers—Funding issues; Does not guarantee that dental providers will treat or continue to treat underserved populations; Finding qualified applicants.

d. Examples—Colorado, Kansas; Maine; Minnesota, and Illinois (loan forgiveness programs in exchange for practice in dentally underserved areas). Nebraska (incentives for students to consider rural practices). North Dakota (Mentorship program in partnership with the National Health Services Corps SEARCH program to address workforce issues in underserved areas). Most of these programs already exist—just need to expand.

4. Create incentives for volunteer programs providing dental care for disadvantaged clients.

a. Explanation—Encourage the development of incentives to increase volunteerism in providing dental care to disadvantaged clients.

b. Benefits—Increase access to oral health care for disadvantaged clients; Training.

c. Barriers—Budgetary constraints; Lack of resources and participating dentists; Liability issues for volunteers.

d. Examples—Project: Dentists Care; Continuing Education credits for volunteerism; Reduced dental licensure fees for volunteerism.

5. Advocate for statutory and regulatory reform to the State Dental Practice Act to eliminate or reduce the supervision requirements for Dental Hygienists practicing in community health and school based settings.

a. Explanation—1) Allow for dental hygienists that are part of county health departments and other safety net programs to provide minimal oral disease preventive services such as dental sealants in schools without direct supervision of a dentist; 2) Allow dental hygienists to be supervised by health professionals who are other than dentists (e.g. physicians).

b. Benefit—Dental hygienists could provide care on-site to individuals instead of the patients being transported to an office, clinic or facility off-site; Increased access; Reduce the cost of school-based programs.

c. Barriers—Legislative and regulatory issues—change must come from the Legislature or Florida Board of Dentistry; Opposition from the dental community; Insurance issues—screening versus exam—how to get reimbursement for both dental hygienist exam and dentist exam if need treatment?; Medicaid provider numbers; Training issues—Expand training.

d. Examples—1) Allowing dental hygienists to perform screenings (vs. exams?) without dental supervision in 35 other states has increased Medicaid utilization. 2) Allowing dental hygienists to perform preventive care in public health facilities, nursing homes, and school settings has increased access in many states, such as California, Connecticut, Washington, Maine, Colorado, Minnesota, and Missouri. 3) Center for Health Workforce Studies, University at Albany (6/03) evaluated regulatory, supervision, tasks and reimbursement category for dental hygienists. Florida scored 33/100—Limiting Category—Only 13 other states scored lower than Florida. 4) Community Dental Health Coordinator “New team member that will be specifically trained to help organize community programs and function in remote locations and other underserved areas. CDHCs will be of particular value to public programs, but could be useful in larger private practices, too. CDHCs will enable the existing workforce to expand its reach deep into underserved communities and influence local health and community organizations to adopt initiatives to promote oral health. CDHCs working in facilities without the continuous presence of a dentist could perform palliative temporization of conditions (limited to hand instrumentation only) for later diagnosis and treatment by a dentist.” (quote from ADA: <http://www.ada.org/prof/resources/pubs/adanews/adanewsarticle.asp?articleid=2231>—for core competencies, etc. see: http://www.ada.org/prof/center/feature_letters_cdhc.pdf); 5) Oral Preventive Assistant “OPAs may be utilized to provide preventive services for relatively uncomplicated patients, permitting dental hygienists to focus on more complicated patients. OPAs can also fill a role in public facilities such as community health

Appendix E—Survey of Strategies by Impact and Feasibility

centers and schools. The OPA model is designed to create an assistant who has solid background in providing patients with oral health education and information as well as the basic elements of preventive care.” (quote from ADA: <http://www.ada.org/prof/resources/pubs/adanews/adanewsarticle.asp?articleid=2231>); 6) ADHA Advanced Dental Hygiene Practitioner The new provider will work in collaboration with existing members of the oral health care team to provide services to patients unable to access a traditional dental office. ADHPs can bring a range of oral health services directly to patients in settings they have ready access to. ADHPs will perform the traditional range of preventive services currently administered by dental hygienists as well as therapeutic, palliative, prescriptive, diagnostic, and minimally invasive restorative services. (<http://www.adha.org/media/facts/adhp.htm> and <http://www.adha.org/media/backgrounders/adhp.htm>)

6. Improve the Medicaid program to stimulate greater health care provider participation.

- a. Explanation—1) Increase Medicaid dental reimbursement rates; 2) Tax Credit/Non-Taxable Income Status for oral health providers that accept Medicaid Income; 3) Streamline administrative processes to reduce the administrative burden and requirements for oral health providers that accept Medicaid; 4) Promote outreach activities to recruit dentists into the Medicaid program; and 5) Simplify the Medicaid system for providers and Medicaid-eligible Floridians alike
- b. Benefits—Increase oral health provider participation; Increase access; Increase Medicaid eligible participation.
- c. Barriers—Budgetary and legislative constraints; Tax credits/Non-taxable income must be legislated on federal level; Does not necessarily translate to increasing numbers of Medicaid patients utilizing dental services.
- d. Examples—“Smile Alabama”; Tennessee—TennCare program; Delaware; Georgia; Indiana; Michigan; and South Carolina.

7. Advocate for oral health education in medical schools or inclusion of oral health training in medical continuing education requirements.

- a. Explanation—The Surgeon General’s Report put the medical community on notice in 2000 that oral health is a part of systemic health, but the medical community has failed to act. (e.g. medical and dental school partnerships; threat of malpractice lawsuits against medical professionals for failure to diagnose dental disease); Oral health and dental diseases are a part of systemic health; Physicians need to be trained to identify and refer patients for treatment of dental disease or needs.
- b. Benefits—Expands the workforce; Educates health care providers as to the importance of dental health; Educates the public about the importance of dental health.
- c. Barriers—Medical school resistance to teaching such courses; Overburdened curricula.
- d. Examples—Minnesota (web-based continuing education, <http://www.mchoralhealth.org/PediatricOH/index.htm>.)

Appendix E—Survey of Strategies by Impact and Feasibility

8. Advocate or encourage a public health dentist to be on the Florida Board of Dentistry.

- a. Explanation—The Florida Board of Dentistry is made up of 11 members—seven members of the board must be licensed dentists actively engaged in the practice of dentistry in this state. Two members must be licensed dental hygienists actively engaged in the practice of dental hygiene in this state. The remaining two members must be laypersons who are not, and have never been, dentists, dental hygienists, or members of any closely related profession or occupation. The majority of dental professionals on the board come from clinical backgrounds. Thus, the overwhelming influence of the Board is to implement procedures relating to individualized patient-based care, not population-based or prevention-based programs.
- b. Benefits—Public Health Dentistry will have a voice in dental decisions that regulate the profession in the State.
- c. Barriers—Turf war; Possible opposition from clinical dentists.
- d. Examples—Pennsylvania

9. Examine alternate methods of licensing of dentists—1) Option of 1 year of public service or residency vs. Exam or 2) Advocate for licensure by credentials.

- a. Explanation—1) PGY-1—Give graduating senior dental students or recent graduates from other states (less than 5 years experience) the option of working for 1 year in a public service dental setting (CHD, residency program, Indian Health Service, Public Health Service, etc.) or taking the clinical board exam. Medical school model of need for residency training before licensing. 2) Licensure by Credentials—Allow experienced out-of-state dentists and dental hygienists with good records to gain a Florida dental license by credentialing.
- b. Benefits—1) Increases workforce in designated dentally underserved areas; Experience for new dentists; Eliminates some of the controversies surrounding dental clinical boards. 2) Increases the dental workforce
- c. Barriers—1) Funding residencies (need adequate salary). 2) Controversial within the dental community; Need to properly review incoming dentists' and dental hygienists' records; Need change in Dental Practice Act.
- d. Example—1) New York has implemented this strategy and two states (Minnesota and Connecticut) are currently considering similar proposals. 2) Florida is one of only four states that do not offer licensure by credentials (Delaware, Hawaii, and Virginia are the others); The ADA supports freedom of movement for dentists.

10. Research the concept of mandatory pro-bono for licensure.

- a. Explanation—Advocate for a mandatory pro-bono requirement in order to maintain a Florida dental license. All Florida-licensed dentists must provide a certain amount of hours every two years of volunteer services to disadvantaged populations or pay a set fee if they choose not to provide services (e.g. 32 hours/2 years or \$3,200). Can provide services to nursing homes/ALFs, schools, Project: Dentists Care; Give Kids a Smile, etc. May also receive continuing education requirement for such service.
- b. Benefits—Expands workforce available to disadvantaged populations; Educates dentists to the need and burdens of disadvantaged populations; Monies generated from those dentist opting to pay fee instead of providing services can go to dental programs for the disadvantaged; Dentists can expand their patient pool.

Appendix E—Survey of Strategies by Impact and Feasibility

- c. Barriers—Resistance from organized dentistry; Compliance issues.
- d. Example—Many states have this requirement for lawyers.

11. Establish a Statewide, coordinated volunteer dental workforce utilizing retired dentists and part-time dentists.

- a. Explanation—Create a volunteer referral network utilizing the trained dental professions that are not practicing full-time in the state.
- b. Benefits—Expands access for disadvantaged groups.
- c. Barriers—Liability issues for volunteers; Some providers do not want to be placed on certain volunteer lists due to fear of stigma attached to treating disadvantaged patients.
- d. Example—Project: Dentists Care, Inc.; Nebraska; Pennsylvania.

12. Create additional dental school(s) (USF or FSU), dental hygiene schools, and dental assisting schools.

- a. Explanation—Most reports indicate that there is currently a shortage of all dental health care providers. Moreover, these reports expect the shortages to grow in the next two decades
- b. Benefits—Expand the dental workforce
- c. Barriers—Funding; Staffing; Opposition from existing dental professionals (more dentists means more competition)
- d. Examples—Arizona School of Dentistry and Oral Health (2003)

13. Advocate for increases in compensation for State public health dental providers.

- a. Explanation—State public health providers are paid less than their private counterparts, work more hours, and are overwhelmed with patients in need.
- b. Benefits—Increased provider willingness to become a State provider; Increases access; Staff retention.
- c. Barriers—Funding.
- d. Example—

14. As a requirement of acceptance into a state-supported dental or dental hygiene school, dental and dental hygiene students must commit to a year of practice in rural, underserved areas of Florida.

- a. Explanation—The State subsidizes dental educations at state-supported schools. Thus, as a condition of acceptance in a state-supported school (and the subsequent financial benefits of receiving their education at a State school), dental and dental hygiene students would be contractually required to provide a year of dental service in rural, underserved areas of the State.
- b. Benefits—Increase workforce in rural, underserved areas; Extra year of mentoring for new graduates; Offsets the State's investment in educating dental providers.
- c. Barriers—Opposition form dental community; Legal and Statutory issues.
- d. Examples—FSU requires this policy of incoming medical students; Delaware requires a 1-year General Practice residency or a similar hospital-based program to meet the requirements for state licensure.

Appendix E—Survey of Strategies by Impact and Feasibility

15. Advocate for programs to train non-dental health professions to provide oral assessments and use of fluorides.

- a. Explanation—Train medical personnel (e.g. physicians and nurses) to perform oral health screening assessments on children for referral to dentists. Additionally, medical personnel could be trained in the application of fluoride varnish.
- b. Benefit—Medical personnel often see children at a younger age than dental providers. Earlier intervention; Improved access; Earlier and more preventative and oral health education for the public.
- c. Barriers—Legal issues; Lack of reimbursements for services; Legislative issues; Lack of awareness on the benefits of such interventions; Dental Practice Act issues.
- d. Examples—Minnesota—<http://www.mchoralhealth.org/PediatricOH/index.htm>; Missouri (physicians administer appropriate fluoride treatments during immunization visits).

Appendix F—Ranking of Oral Health Workforce Strategies by Impact

RANK	STRATEGY NUMBER	DESCRIPTION	IMPACT SCORE
1	6b	Medicaid admin burdens for providers	4.40
2	6a	Medicaid reimbursement rates	4.27
2	30	Scholarship opps for pediatric residency	4.27
2	32	Community-based preventive services	4.27
5	6c	Medicaid admin burdens for patients	4.14
6	13	Increase compensation for state dentists	4.13
7	6d	Medicaid dental pool of funds	4.07
8	19	Loan forgiveness program	4.07
8	31	Dental school extern or residency programs	4.07
10	5c	Expanded duties of dental auxiliaries	4.00
11	5a3	ADHA Advanced Dental Hygiene Practitioner	3.93
11	5b	Reduced supervision of dental auxiliaries	3.93
13	29	Fund short-term training opps in ped. dentistry	3.87
14	11	Statewide Coordinated Volunteer Workforce	3.80
14	12b	Additional dental hygiene programs	3.80
14	12c	Additional dental assisting programs	3.80
17	23	Build a State Dental Corps of dentists	3.73
18	28	Dentists in these positions must pass board	3.69
19	3c	Federal Dental Public Health Service Corp	3.67
19	20	Build office building and gift to doctor	3.67
21	14	1year in a rural or underserved for students	3.60
22	3a	Loan forgiveness	3.53
22	10	Mandatory pro-bono service	3.53
22	24	Program of co-pay	3.53
25	12a	Additional dental schools	3.47
26	2c	Externships in CHDs & CHCs	3.40
26	15a	Train physicians and staff	3.40
26	18	College and professional school scholarships	3.40
29	1	Educate non-dental health care providers	3.33
29	2b	Spec. needs school curriculum	3.33
31	27	FQHCs and their business models	3.29
32	4b	Tax credits	3.27
32	5a1	ADA Community Dental Health Coordinator	3.27
32	5a2	ADA Oral Preventive Assistant	3.27
35	22	Sovereign immunity	3.14
36	4a	Sovereign immunity	3.13
36	9b	Post Graduate Year—1 year residency	3.13
38	7	Oral Health Education in Medical Schools	3.08
39	2a	Spec. Needs Continuing Education	3.07
40	9a	Licensure by credentials	3.00
40	8	Public health dentist on the BOD	3.00
42	17	Recruit from local population	2.86
43	15c	Train teachers	2.79
44	3b	Minority recruitment	2.67
44	25	Financial support from foundations	2.67
46	15b	Train social workers	2.64
47	15d	Train other non-dental	2.43
47	21	Social sabbaticals	2.46
49	26	Dental Health Manpower Task Force	2.40
50	16	Limit the number of dental licenses	1.18

Appendix G—Ranking of Oral Health Workforce Strategies by Feasibility

RANK	STRATEGY NUMBER	DESCRIPTION	FEASIBILITY SCORE
1	28	Dentists in these positions must pass board	4.23
2	8	Public health dentist on the BOD	3.53
3	2a	Spec. Needs Continuing Education	3.47
4	11	Statewide Coordinated Volunteer Workforce	3.40
5	32	Community-based preventive services	3.29
6	25	Financial support from foundations	3.27
7 (tie)	31	Dental school extern or residency programs	3.20
7 (tie)	27	FQHCs and their business models	3.14
7 (tie)	4a	Sovereign immunity	3.14
10	22	Sovereign immunity	3.14
11	1	Educate non-dental health care providers	3.13
12	7	Oral Health Education in Medical Schools	3.08
13	3b	Minority recruitment	3.07
14 (tie)	2c	Externships in CHDs & CHCs	3.00
14 (tie)	15a	Train physicians and staff	3.00
14 (tie)	17	Recruit from local population	3.00
17	2b	Spec. needs school curriculum	2.93
18	26	Dental Health Manpower Task Force	2.89
19 (tie)	15b	Train social workers	2.86
19 (tie)	15c	Train teachers	2.86
21	6c	Medicaid admin burdens for patients	2.79
22	15d	Train other non-dental	2.77
23	6b	Medicaid admin burdens for providers	2.73
24 (tie)	5c	Expanded duties of dental auxiliaries	2.67
24 (tie)	19	Loan forgiveness program	2.67
26	3a	Loan forgiveness	2.64
27	12c	Additional dental assisting programs	2.55
28	21	Social sabbaticals	2.54
29	30	Scholarship opps for pediatric residency	2.53
30	5b	Reduced supervision of dental auxiliaries	2.50
31	10	Mandatory pro-bono service	2.47
32	29	Fund short-term training opps in ped. dentistry	2.40
33 (tie)	3c	Federal Dental Public Health Service Corp	2.33
33 (tie)	18	College and professional school scholarships	2.33
35	24	Program of co-pay	2.27
36	5a3	ADHA Advanced Dental Hygiene Practitioner	2.21
37	9a	Licensure by credentials	2.20
38	6d	Medicaid dental pool of funds	2.14
39	13	Increase compensation for state dentists	2.13
40	12b	Additional dental hygiene programs	2.10
41 (tie)	4b	Tax credits	2.07
41 (tie)	5a2	ADA Oral Preventive Assistant	2.07
41 (tie)	9b	Post Graduate Year—I year residency	2.07
44 (tie)	6a	Medicaid reimbursement rates	2.00
44 (tie)	14	1 year in a rural or underserved for students	2.00
44 (tie)	5a1	ADA Community Dental Health Coordinator	2.00
47 (tie)	20	Build office building and gift to doctor	1.73
47 (tie)	23	Build a State Dental Corps of dentists	1.73
49	16	Limit the number of dental licenses	1.69
50	12a	Additional dental schools	1.67

Appendix H—Additional Views of Committee Members

This appendix represents additional views of Committee Members where there was not unanimous support among Committee members in the following two areas indicated below. The appendix recites the consensus view of the Committee citing the page number in the Report, followed by the additional view of some of the Committee members.

GENERAL OBSERVATIONS

CONSENSUS VIEW: The Committee stresses the need for adequate and appropriate training as a requirement for any provider, program, or new model of dental care delivery in the state of Florida. (See page 12 of the Report.)

ADDITIONAL VIEW: A minority believes that there is a need for adequate and appropriate training, but also that the requirement should be stronger in that the training should result in some form of formal certification process or professional designation. All providers should have formal, American Dental Association (ADA) Commission on Dental Accreditation (CODA) training and required credentials. This opinion relates to the lack of licensure requirements for dental assistants and the discrepancy in dental assisting training (from formal, accredited programs to informal, unaccredited training opportunities) that exists in the state.

LEGAL/POLICY APPROACHES TO EXPAND WORKFORCE OR SERVICES

Expand duties and reduce supervision levels for allied dental providers who practice in health access settings.

DENTAL HYGIENISTS

CONSENSUS VIEW: The Committee recommends that the State investigate policy reform that would expand the scope of practice and eliminate or reduce supervisory requirements for dental hygienists practicing in health access settings in order to improve access to dental care. The Committee recommends that such dental hygienists could practice expanded scope of practice without the presence or prior authorization of a dentist. The Committee recommends such dental hygienists have a required level of experience, receive appropriate training, and acquire certification. Such dental hygienists may need to be affiliated with a dentist in a health access setting so they can perform the following designated preventive dental services with reduced or no supervision of a dentist and without the necessity of a prior examination and authorization of a dentist. The Committee recommends such dental hygienists should be able to provide dental charting, prophylaxis, scaling (no root planning or curettage), fluoride varnishes, topical fluorides, and dental sealants without the presence or prior authorization of a dentist. (See page 14 of the Report.)

ADDITIONAL VIEW: A minority believes the State should pursue policy reform that would eliminate or reduce supervisory requirements for dental hygienists practicing in health access settings in order to improve access to dental care. The minority view does not recommend expanding dental hygienist scope of practice, but rather changing the restrictions and supervision required to perform duties for which they are already trained. Current law either does not allow dental hygienists to perform some duties in which they are trained or limits the performance of some duties in which they are trained to specific supervision levels. Furthermore, additional training and certification is not necessary for duties in which dental hygienists are already trained.