![ASTDD logo - Where oral health lives]

Best Practice Approaches
for State and Community Oral Health Programs

A Best Practice Approach Report describes a public health strategy, assesses the strength of evidence on the effectiveness of the strategy, and uses practice examples to illustrate successful/innovative implementation.

Date of Report: March 2019

Best Practice Approach Report
The Role of Oral Health Workforce Development in Access to Care

I. Description

What determines access to oral health care?

Oral health is an integral, but often disregarded, element of overall health and quality of life.[1] Good oral health is the collective result of individual preventive care, early detection, treatment, and regular maintenance, as well as community-based prevention efforts, such as water fluoridation. Yet many people still experience poor oral health. One of the key elements in obtaining optimal oral health is access to oral health services.

The ability to access health care is a multifactorial process. One definition of access to care incorporates five components: accessibility, availability, acceptability, affordability, and accommodation, though many would include awareness, both on the part of the individual and health care providers, as an additional component.[2-4]

- **Accessibility** is the relationship between the physical location of dental services and the location of people who need them. Geography and transportation resources are factors that contribute to an increase or decrease in accessibility. In this definition, there is no reference to disability-related accessibility.

- **Availability** is the providers' ability and willingness to see those who are seeking care. At the practice level, it relates to the necessary personnel, equipment, and technology needed to meet patient demands. The number and type of specialists in an area and/or those willing to accept Medicaid beneficiaries or uninsured individuals influence availability.

- **Acceptability** refers to an individual's perception of provider treatment, including dignity and respect.

- **Affordability** refers to a patient's ability to pay for dental services or the perception that dental care may be too costly. Indirect costs not directly tied to a service, such as lost income from time off work or the cost of transportation and childcare incurred, are also influential.

- **Accommodation** is the delivery of healthcare to meet the needs of the patient, such as offering extended hours of operation, translation services or meeting audiovisual accessibility needs, as well as making adjustments for cultural barriers.

- **Awareness** refers to an understanding and/or appreciation of the provider for the unique needs of a community and its members, including considering cultural differences, evaluating the health literacy of the patient, and continually assessing the changing needs of the community. Do patients have sufficient knowledge of services provided in their area and an understanding of the value of oral health to overall health?

Racial and socioeconomic disparities play a role in one's ability to access dental care and subsequent oral health status. Racial/ethnic minorities and populations with low socioeconomic status (SES) are less likely to utilize dental care compared to white and high-SES groups, resulting in a prevalence of dental disease and tooth loss that is disproportionately high.[5-10] For example, recent National Health and Nutrition Examination Survey (NHANES)15 data show that untreated tooth decay in children and adults is more prevalent in Hispanics and non-Hispanic blacks as compared to non-Hispanic whites.[2,3] Poor oral health can have a negative impact on overall health and quality of life; the effect of these disparities spreads far beyond the oral cavity.[11,12]

This report provides an overview of two components of access directly influenced by workforce development initiatives: **accessibility** and **availability**. Recommendations to improve oral health workforce capacity and its ability to meet a diverse population's needs for prevention and care follow.

<u>Factors that influence accessibility and availability of the oral health workforce</u>

Workforce composition and projected supply: Dentists

Evaluating the oral health workforce to determine whether it matches the needs of an increasingly diverse U.S. population is important. In 2016, there were 196,441 dentists with active licenses working in the United States, which included those in both private practice and public health settings. Of those, 80% were in general practice, which represents approximately 61 dentists per 100,000 population.[13] In 2016, there were approximately 4,500 dentists employed by Health Resources and Services Administration (HRSA)-funded Health Centers.[14]

<u>Demographics</u>: In 2016, males made up 70% and females 30% of active licensed U.S. dentists.[20] Over the last 15 years, the proportion of female dentists increased by nearly 14%. The racial composition of the U.S. dentist workforce does not reflect that of the U.S. population. In 2015, Black and Latino dentists were under-represented in the dental profession as compared to the U.S. population, whereas White and Asian dentists were over-represented.[15,16] Under-represented minorities often are more likely to serve the communities from which they come. (See Attachment A)

The age composition of the U.S. dentist workforce has changed in recent decades. The proportion of dentists age 55 or older increased from 27% in 2001 to 39% in 2016.[20] Average retirement age for dentists increased from 65 in 2001 to 69 in 2015.[22]

<u>Education</u>: The number of U.S. dental schools fluctuated from 1950-1990 due to changing demand for dental care; however, the number has increased since the mid-1990s until 2017, when there were 66 dental schools in the U.S.[17-19] Number of new dental graduates has increased by 32% over the past decade, from 4,515 in 2006 to 5,957 in 2016.[20]

<u>Licensure</u>: Dentists must complete formal training from a Commission on Dental Accreditation (CODA) accredited program and complete a regional or state board examination to attain licensure in the U.S. Differing licensure procedures and requirements may limit dentists from moving to other states.[21,22]

Some states, such as California, offer a portfolio option in place of a patient-based board examination. This allows students to keep track of treatment completed during their clinical

training following specific criteria, thus allowing for a more complete assessment of the student's abilities versus a limited evaluation based on treatment provided to a small number of patients over a one- or two-day exam.[23]

Another option under consideration is a single national licensing examination, the Objective Structured Clinical Examination, where candidates answer problem-solving questions based on models, radiographs, casts and case studies.[22] This simulation attempts to address ethical concerns to the potential provision of care for live patients that does not meet a minimum standard.

Practice Location: Geographic proximity is a key factor affecting access to care. There has been a decline in the number of dentists practicing in rural areas leading to lower rates of utilization and poorer oral health status for rural residents as compared to urban residents.[24,25] Although maldistribution of dentists is particularly problematic in rural areas, it is often replicated in urban areas where there may be an insufficient number of dentists available to care for low-income populations, such as those eligible for Medicaid.

Practice Patterns: Limited clinic hours can influence a patient's likelihood to seek dental care, which increases the likelihood of seeking care in emergency rooms. In 2016, active U.S. dentists were working fewer hours than in the past.[13] In 1990, dentists worked 35 hours per week on average; in 2015, they averaged 33 hours per week. Those office settings with evening and/or weekend hours contribute to greater access to care.

The changing gender composition among U.S. dentists plays a role as well. A recent study revealed that Iowa dentists working part time increased from 11% in 2011 to 17% in 2013, with female dentists 1.8 times as likely to work part time as their male counterparts did.[25] Nationwide in 2014, female dentists worked on average 2.2 fewer hours per week (32.8 hours) than males (35.0 hours).[13,27]

In 2014, approximately 70% of U.S. dentists were solo practitioners, 27% provided care in group practices, and 4% were independent contractors. Recent trends have shown a decline in solo practice and a concomitant increase of large, multi-site and group practices, generally known as Dental Service Organizations (DSOs), which demonstrate significant heterogeneity in practice ownership, size and structure. In 2011, about 6% of active dentists stated their practice was part of a larger organization with more than one office site, with younger dentists more likely to participate in this model. In 2017, 7.4% of U.S. dentists affiliated with a DSO, with a higher percentage of participating dentists being female.[13,28,29,30]

Looking to the Future: Conjecture on future dentist supply offers conflicting conclusions as to whether an increasing supply of dentists will be sufficient to meet demand in the coming decades. HRSA projects a 6% increase in the dentist workforce from 2012-2025 if dental utilization remains stable; yet HRSA believes this increase will be insufficient to meet demand, thus projecting a national shortage of dentists.[31] The ADA Health Policy Institute (HPI) also projects an increase in supply (8% from 2015-2035), but disputes HRSA's claim of insufficiency due to an increase in dentists' retirement age and evidence of a decline in adult dental utilization.[15,27,32]

Additional factors that may influence access to care are the anticipated transition from fee-for-service payment models to value-based payment, as well as the growing movement towards medical-dental collaboration in relation to overall health. Having dentists screen and refer for medical conditions and medical providers screen and refer for oral health conditions are opportunities to lessen the burden of disease through interdisciplinary prevention practices.[33]

Workforce composition and projected supply: Dental Hygienists

In 2017, there were 204,990 actively practicing U.S. dental hygienists nationwide.[34] From 2006 to 2016, the number of graduates nationwide increased 16% annually, from 6,126 to 7,323.[35] In 2013, general dentists employed on average nearly two FTE dental hygienists per office.[36]

According to the ADA's Survey of Dental Hygiene Education Programs, private dental offices employed 67% of 2015 U.S. graduating dental hygienists, 11% were continuing their education or waiting to take board exams, 5% were unemployed, and 18% had another or unknown employment status.[35] In 2017, HRSA-funded Health Center grantees employed 2,497 FTE dental hygienists.[14] A 2012 American Dental Hygienists' Association (ADHA) survey of dental hygiene education program directors reported that a student's ability to find employment after graduation ranged from average (41%), to difficult (38%), to very difficult (10%).[37]

Demographics: The dental hygiene workforce is comprised mainly of women (97%) with approximately 80% White, 9% Hispanic, 5% Black or African American, and 3% Asian.[38] This does not reflect the general makeup of the overall U.S. population.

Education: The number of U.S. dental hygiene programs has increased steadily from 285 in 2005 to 335 in 2015. Of the current programs, 288 offer two-year associate degrees, 56 offer baccalaureate degrees, and eight offer certificates with a dental hygiene emphasis.[37]

Licensure: Dental hygienists must complete formal training from a CODA accredited program and complete a national written examination and a state or regional clinical examination to attain licensure in the U.S.

Practice Patterns: The 2000 Surgeon General's Report on Oral Health led many states to review and, in some cases, expand dental hygiene scope of practice.[1] There are vast differences in legal scope of practice across states, particularly in public health settings. Implementing a broader scope of practice for dental hygienists can positively and significantly improve oral health outcomes in a state's population. The following graph from the Oral Health Workforce Research Center shows the variation in dental hygiene scope of practice by state.[39] (See Attachment B)

As of 2017, forty states give dental hygienists the ability to initiate treatment without the presence of a dentist if provided in specific public health settings, which include nursing homes, public health clinics, and schools.[40-42] In 2017, 18 states allowed dental hygienists to be directly reimbursed by state Medicaid programs for completed services.[43]

Looking to the Future: By 2025, the dental hygiene workforce supply is projected to increase 28%. HRSA has reported that California, Florida and Texas will see the largest increase in dental hygienists, while West Virginia, Mississippi, Montana, South Dakota and North Dakota will experience significant shortfalls in their dental hygiene workforce by 2025.[31]

While no national-level data are available for the dental hygiene workforce for hours worked, several state-level reports provide insight. Roughly one-half of the dental hygiene workforce in Iowa work part-time.[44] A majority of hygienists work multiple part-time jobs.[7] More research can identify underutilized capacity within the workforce, as increased capacity may translate into improved access to preventive services.

Independent dental hygienists can practice outside the traditional dental office, thus providing the opportunity for patients to access services where they are, rather than requiring patients to come to an existing dental practice. Colorado allows licensed independent dental hygienists to provide preventive care and refer for restorative treatment.[45] In California, a registered dental hygienist in alternative practice has specialized education to practice in settings outside the traditional dental office. Studies show that these independent practices provide care that does improve the oral health of the public.[46]

Workforce composition and projected supply: Dental Assistants and Expanded Function Dental Assistants

In 2016, the Bureau of Labor Statistics reported there were 294,000 employed dental assistants[38] and a projected 18% job growth for dental assistants by 2024.[47] According to an ADA survey of active U.S. dentists in 2013, general dentists employed an average of 1.5 chair-side dental assistants per dentist.[36]

Demographics: Dental assistants in the United States are predominantly female (94%), averaging 35 years of age.[48] In 2016, the dental assisting workforce was more racially/ethnically diverse than dentists and dental hygienists with 58% White, 24% Hispanic, 11% Black or African American, and 7% Asian, but still does not reflect the makeup of the general U.S. population.[38] About 93% of assistants work in private, for-profit dental practices an average of 34 hours per week.[48]

Education: Requirements for training and certification of dental assistants vary among states. Some states require formal training from a CODA accredited program, some require a national certification exam, and others permit training "on the job." As of 2016, there were 264 U.S. dental assisting programs, a slight decrease from 271 in 2005. In 2015, there were 6,875 new graduates of dental assisting programs nationwide.[35]

In some states, dental assistants have the opportunity to be certified as an expanded function dental assistant (EFDA) by completing state dental board-approved continuing education courses and obtaining a certificate. The clinical roles and responsibilities of EFDAs vary from state to state. Some states permit EFDAs to take occlusal registration, place sealants, and/or apply cavity liners and bases, all under dentist supervision.[49] In other states, EFDAs may place simple and/or complex amalgam and composite restorations, depending upon the extent of their training.[49]

Looking to the Future: There is considerable variation in qualifications, allowable services, and job titles for dental assistants and EFDAs in the U.S., with more than 40 different job titles for EFDAs.[48] One study found that expanded function allied dental professionals, including EFDAs, contributed to increased efficiency and capacity in both private practice and public health settings.[50] Another study found that many dentists are willing to assign reversible procedures to EFDAs,[51] which could increase the potential for increasing access to care.

Workforce composition and projected supply: Midlevel Dental Providers

Midlevel dental providers, such as dental therapists and advanced dental hygiene practitioners, are a relatively new part of the oral health workforce in the U.S. Depending upon their training, these individuals may provide some preventive services, restorative treatment, and limited non-reversible dental procedures, such as extractions and restorations. Midlevel providers typically work under general dental supervision.

Demographics: In 2017, there were 74 practicing dental health aide therapists (DHATs) in Alaska. In 2015, there were 51 active licensed dental therapists in Minnesota.[52] In 2016, the University of Minnesota began offering a dual licensed dental hygienist/therapist program.[53]

Education: The first midlevel dental model in the U.S. was the DHAT model initiated in 2003 in Alaska, with the first cohort trained in New Zealand. Subsequently the Alaska Native Tribal Health Consortium and the University of Washington created a training program in Alaska to increase the dental therapist workforce.[54]

In 2015, CODA voted to implement national standards for midlevel dental provider programs.[55] Even with standardization of educational curricula, programs still vary by prior education required. Some programs require that applicants be licensed dental hygienists who have completed additional educational requirements to provide expanded services. Alaska and Minnesota have developed educational programs. Maine and Vermont are currently in the process of developing their own curricula.[56]

Licensure: In 2018, Arizona, Maine, Minnesota and Vermont have passed legislation regarding midlevel practice. Alaska, Oregon and Washington have mid-level providers/dental therapists practicing on tribal lands.

Practice Location: Dental therapists in Minnesota are limited to practicing in settings that serve low–income, uninsured and underserved patients, including within designated dental health professional shortage areas (HPSAs).[52] According to a 2015 survey assessing Minnesota's dental

therapist workforce, 74% were employed in clinic/professional office/health center/ambulatory care, 17% by a community or faith-based organization, 6% in a hospital setting, and 3% in an academic setting.[57]

Practice Patterns: In 2015, 57% of Minnesota dental therapists reported working more than 36 hours per week, 41% worked 16-35 hours per week, and 3% worked less than 15 hours per week.[52]

Looking to the Future: Proponents of midlevel providers believe the current dental delivery system is broken for both patients and dentists. It is an access to care issue for patients, while future practice sustainability may depend upon expanding the market to people not now served. These proponents advocate for strong, diverse dental teams with "new members" to increase efficiency, effectiveness, productivity and profitability.

Other members of a diverse oral health team

The current dental delivery system focuses primarily upon treatment and the eradication of existing dental disease. There is a growing appreciation of the importance of oral disease prevention and oral health education and activities both within interdisciplinary clinics and in the community. Expanding the "oral health team" can reduce the oral disease burden and lessen future demand for treatment, thus opening up more access to care.

Looking towards inclusion of dental professionals into an interdisciplinary healthcare team invites a plethora of non-dental personnel who have an interest in promoting the importance of oral health to overall health. These include family practice physicians, nurse practitioners (NPs), physician assistants (PAs), midwives, pediatricians, obstetrician/gynecologists (OBGYNs), community health workers (CHWs), and various types of nurses and emergency room personnel, who contribute to an interdisciplinary approach to patient care. These individuals can provide oral health education and some services outside the traditional dental delivery system. For example, all state Medicaid programs now reimburse some primary care providers for preventive oral health services.[58]

The Integration of Oral Health and Primary Care Practice (IOHPCP) initiative incorporates the provision of preventive oral health services within the clinical practice of primary care practitioners in safety-net communities.[59] The primary care practitioners that IOHPCP focuses on are already members of a healthcare delivery system who could integrate oral health core clinical competencies into their existing scope of practice. HRSA developed the IOHPCP initiative to provide recommendations and a framework for the design of interprofessional practice to integrate oral health and primary health care.[60] It recommends the integration of five oral health core clinical competencies into education programs for and the clinical practice of primary care clinicians: risk assessment, oral health evaluation, preventive interventions, communication and education, and interprofessional collaborative practice. In some states, pediatricians have integrated oral screenings, caries risk assessment and fluoride varnish applications into their routine well-child visits.

In 2006, the ADA introduced the community dental health coordinator (CDHC) as a new member of the dental team. CDHCs possess oral health and social work skills, while utilizing them in underserved rural, urban, and Native American communities to provide oral health education for individuals and communities, case management, and care coordination services under the supervision of a dentist. An advantage of CDHCs is their ability to connect and work with communities. They typically come from the same communities in which they work, promoting a cultural connection with the population. Their goal is to nurture trust with these communities and focus on oral health education and disease prevention. In August 2018, there are approximately 18 schools offering the CDHC curriculum and almost 400 CDHCs in the field and/or in training.

Community health workers are frontline public health workers who are trusted members of and/or have an unusually close understanding of the community served. This trusting relationship enables CHWs to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.

CHWs build individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy.

CHWs serve as the "eyes, ears, hands and feet" of medical professionals in the community, working across the lifespan to promote prevention, compliance and continuity of care. Adding an oral health component to the training and experience of CHWs would improve overall health. According to the Association of State and Territorial Health Officials (ASTHO), 15 states have adopted a CHW scope of practice, core competencies, or both through state statutes, regulations, or CHW certification or training programs (IL, IN, MA, MD, MN, MS, NE, NM, NY, NV, OH, OR, RI, TX, and WA).[61]

Promotoras de salud is a Spanish term for trained community health workers who serve the communities in which they live, often Hispanic communities, especially migrant farmworkers. [62,63] The *Contra Caries* Oral Health Education Program is a four-session oral health education program targeting low-income Spanish-speaking parents of children ages 1–5 in rural California. Encouraged and conducted by promotoras, parental attendance in the program was high and their appreciation of their children's oral health as a priority grew. [64]

<u>Implications</u>

Changing composition and practice patterns in the oral health workforce and their impact on access to care

- State-by-state variations in licensure requirements may play a role in the oral health workforce's ability to relocate to areas of need. Various members of the dental team must be enabled to work to the top of their licensure when they go into areas of need to provide the services for which they are trained.

- As the population of the United States becomes more diverse, equip the oral health workforce to treat diverse individuals and communities. Oral health professional recruitment should target diverse populations to build bonds within underserved communities. For this reason, CHWs are incredibly successful in community outreach, showing that underserved individuals prefer to receive information from those who understand their specific needs and cultural circumstances.

- Although there are conflicting projections about whether there will be a dentist shortage in the coming decade, recent trends in the dentist workforce suggest a potential impact on access to care, which includes fewer dentists practicing in rural areas, dentists working fewer hours per week, and a growing proportion of dentists nearing retirement age.

- Changes in oral health care delivery may mitigate potential dentist shortages by expanding the capacity of other members of the oral health workforce. These changes include ensuring that members of the oral health care team work at the top of their scope of practice; and integrating dental, medical, and other allied health care and social services personnel into the overall provision and coordination of oral health care in support of improving overall health.

- Further evaluation of the impact of non-traditional oral health workforce members on oral health outcomes is needed. By embracing diversity across all levels of health care providers as potential partners in oral health, the potential for the underserved to achieve better oral health outcomes is increased.

Recruitment and preparation of the future oral health workforce:

Recruiting students into oral health professions: Supporting student interest in the oral health professions early is an important component in getting additional applicants for professional education programs. Many dental and allied health schools offer programs for interested high school students to explore the oral health field. Creighton University School of Dentistry[65] and the University of New England College of Dental Medicine offer high school students the chance to participate in a hands-on dental program.[66] Some high school dental assisting programs allow for a new entry-level certification, National Entry Level Dental Assistant (NELDA) that provides high school students experience in the field and a stepping-stone for a future career.[67]

By introducing high school students to dental and allied health professions, they can determine if this is a potential career path. It may provide an opportunity to work with populations with which they are unfamiliar, perhaps sparking an interest to continue to work within these communities.

Dental school models: Challenges facing the predominant dental education system include increasing programmatic and tuition costs, limiting clinical experience for students to treat diverse patient populations, and the inability to adequately prepare students for participation in the oral health team.

Changes have been taking place in dental education over the past few decades, including the implementation of new education models.[68] From 2001 to 2010, the Robert Wood Johnson Foundation (RWJF), through its *Pipeline, Profession & Practice: Community-Based Dental Education* Initiative, sought to change dental education through expanding community-based education and recruiting under-represented minority and low-income students into dentistry.[69] In Round 1, this program made grants to 11 dental schools (with another four supported by the California Endowment) to expand community-based clinical education programs, revise curricula to support these programs, and increase recruitment and retention of underrepresented minority and low-income students. In Round 2, the program made grants to eight additional schools: four focused on recruitment of under-represented minority or low-income students and four focused on community-based education.

Another example is the Arizona School of Dentistry and Oral Health (ASDOH), which was developed by a College of Osteopathic Medicine. Unlike a traditional curriculum where a majority of patient care experiences occur within the confines of the dental school, fourth year ASDOH students complete their clinical requirements in community-based clinics. Dental students have the opportunity to earn a DDS degree concurrently with a certificate in Public Health.[69-72]

Educational debt: Rising tuition costs may determine where a dentist practices, thereby affecting the populations served. A survey of 2017 dental graduates found the average educational debt was $287,331, with 39% owing more than $300,000.[73] Studies have found that the higher the educational debt, the more likely a graduating dentist will go into private practice. [74,75]

To help ease the burden of educational debt, students have the option to apply for scholarships. The Indian Health Service (IHS),[76] Army,[77] Navy[78] and Air Force[79] all offer scholarships that pay for tuition and living expenses; in exchange the student agrees to serve a minimum number of years in those services. The National Health Service Corps (NHSC) offers various scholarship and loan repayment programs.[80] In 2018, there were approximately 10,200 NHSC providers treating patients. Of those, 12% were dentists and 2% were dental hygienists. [81] Dental and dental hygiene students have the option of applying for a variety of federal/state loan repayment programs with stipulations on where and whom they can treat.[82-84]

Increasing the diversity of the oral health workforce: The oral health workforce is predominately white. An ethnically diverse workforce is crucial for improving access to care for underserved populations. Providers who are under-represented minorities themselves are more likely to treat racial/ethnic minority, inner city urban and rural, less educated, and lower-income patients compared to their White counterparts. [17,85-87] Actively recruiting diverse students is one way to increase diversity within the workforce. A diverse faculty is also helpful to share their own experiences as mentors.[88]

In 1971, state and regional Area Health Education Centers (AHECs) were established to recruit, train, and retain a diverse health care workforce to care for underserved populations. As of 2017, 56 AHECs with more than 235 centers operate in the U.S. AHECs are located in designated areas where health care and health care education needs are not sufficiently met. Dental students often work as part of interdisciplinary health care teams tackling a specific project under the guidance of an AHEC.[89]

The Summer Health Professions Education Program (SHPEP) is a free six-week summer program funded by RWJF to provide career development and preparation to under-represented students interested in health care professions. This educational program has existed since the 1980s and focused mainly on students interested in medicine; in 2006, it expanded to include other health care professions such as dental, nursing, and public health.[90,91] From 2006-2012, there were 6,681 students participating in SHPEP with 19% pre-dental students who later had a 75% acceptance rate into dental school.[92]

Cultural competence: With the racial/ethnic and cultural composition of the U.S. projected to change considerably in the coming decades, it is important that health professionals increase their efforts to provide culturally competent care. Cultural competence is an individual's ability to appreciate and interact with people from various cultures and backgrounds that differ from their own.[93,94] Many dental schools have implemented cultural competence education into their curriculum. [95,96]

Interprofessional Education (IPE) involves students from two or more health or social professions working as a team to learn with, from, and about each other to facilitate effective collaboration and ultimately improve health outcomes. [97] ADEA has stated that IPE is a "necessary step" toward a more collaborative practice-ready workforce.[98] A majority of dental schools has integrated IPE into their curricula; however, a minority of dental schools have formal university-led and promoted IPE programs.

The National Interprofessional Initiative on Oral Health (NIIOH) seeks to increase the capacity of primary care providers to disseminate oral health information, deliver preventive dental services, and network with participating dentists.[99] NIIOH supports *Smiles for Life: A National Oral Health Curriculum*, which was developed in 2005 to provide education on oral health to physicians training in a family medicine residency. The curriculum has been extremely successful, with most residency programs incorporating the curriculum within two years. The curriculum has been endorsed by 18 national organizations.[100]

The New York University (NYU) College of Dentistry has an alliance with the NYU College of Nursing. This co-located program has competencies for nursing students to conduct oral health assessments, dental students to complete general health assessments, and for both to collaborate to identify oral-systemic conditions.[101] The University of Michigan has an IPE center that coordinates collaborative efforts among various disciplines, including dentistry, medicine, nursing, pharmacy and social work.[102,103] While most dental and dental hygiene programs report that IPE is a priority, its integration into their curricula has been difficult due to a strong aversion to changing the status quo. [104-107]

Required community-based post-graduate year residency: To further education and provide care to underserved populations, New York and Delaware require completion of a one-year post-graduate residency (PGY1) for dentist licensure. Some states offer it as an alternative to a clinical board examination.[108] There has been considerable debate as to whether a PGY1 should be required of all students. Opponents state that the needs of the patients may not meet the needs of the students, while proponents believe PGY1 would increase access to care for the underserved. Opponents note that many residency programs are in schools or hospital settings that may not focus on treating underserved populations. [109] Proponents believe PGY1 can increase access to care, decrease emergency visits, and provide additional education for students.

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| **Implications** |
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| **Preparation of the <u>future</u> oral health workforce & impact |
| on access to care** |
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| • Oral health education is facing new challenges: cost of programs, |
| cost of tuition, and increasingly diverse populations with |
| complex health conditions. |
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| • Community engagement and community-based clinical experiences |
| are extremely important for increasing student comfort and |
| willingness in treating underserved populations. |
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| • New dental school models focus on serving underserved |
| populations, while attracting a more diverse faculty and |
| student body. |
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| • PGY1s have the potential to help increase access to care; however, |
| their effectiveness needs further evaluation. |
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| • Support of federal and state loan repayment programs may decrease |
| student educational debt, while increasing access to care for |
| underserved populations. |
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Capacity of the dental safety net

<u>Health Centers</u>: HRSA-funded health centers are community-based and patient-directed organizations that provide primary health care services to underserved populations in areas where economic, geographic, and/or cultural barriers limit access to affordable health care. These services may include pharmacy, mental health, substance abuse, oral health, and enabling services.[110,111]

Health centers operate under specific federal requirements. No individual is refused care due to an inability to pay.[112] Health centers are required to offer patients and families with incomes between 100-200% of the Federal Poverty Guidelines[113] a sliding fee discount schedule based on income and family size. Individuals living at or below 100% of the FPL receive a full 100% discount, though a nominal fee may be requested.

As of 2017, there were 1,373 HRSA health center grantees in the U.S.[14] In 2015, 71.2% of those grantees had an oral health care program.[114] The Affordable Care Act (ACA) invested $11 billion to expand health center facilities over a five-year span, and $1.5 billion to increase available providers through the National Health Service Corps (NHSC) loan repayment incentives.[115]

<u>Local health departments with a dental component</u>: According to Healthy People 2020, in 2008, approximately 25.8% of local health departments had an oral health program, defined as an "administrative or service unit of local or state government concerned with health and carrying out some responsibility for the health of a jurisdiction smaller than the state."[116,117]

During fiscal year 2015-2016, 48 states reported having at least some local health departments providing restorative dental services, and 46 reported having local health departments providing dental education and preventive dental services. [118] Some states, such as California, provide assistance to local health departments to provide preventive dental services through earmarked funding from tobacco taxes.[119,120] The Florida Department of Health works with local health departments by providing help with local policy related to oral health, promoting community dental programs, collecting and analyzing oral health data, and providing assistance in administering direct care services.[121]

<u>School-Based Health Programs</u> (SBHPs) and <u>School-Based Health Centers</u> (SBHCs): SBHPs are located in or close to school buildings and established by the school, community, and health professionals to provide services to underserved, low-income children. Because of their ability to

reach these populations, the Affordable Care Act (ACA) appropriated $200 million from 2010–2013 to develop and increase health services provided in public school systems.[122-124]

As of 2014, there were more than 2,300 SBHCs in 49 states, an increase of 385 programs since 2011. Federally Qualified Health Centers (FQHCs), community health centers or "look-alike" programs, operate approximately 45% of SBHCs, and this percentage is continuing to grow. One out of five SHBCs provides oral health exams or screenings by a dentist or dental hygienist, and 18% have oral health providers on staff.[125,126]

SBHCs are distinguished from stand-alone school-based dental programs, as they provide an array of primary care services that may or may not include dental services; school-based oral health programs generally focus on preventive oral health services, with some including dental treatment.[127]

The Whole School, Whole Community, Whole Child (WSCC) model was created as an expansion of the Coordinated School Health Model, which was designed to improve health and academic performance. The WSCC model highlights the inclusion of components that influence healthy behaviors, such as health education, nutritional environment and family engagement.[127] It can serve as a guide for the implementation of SBHCs. Guidance on how to incorporate oral health into this model is available on the ASTDD School Health webpage.[128]

Teledentistry: A promising approach for extending the geographic reach of the traditional dental office is the use of teledentistry, in which oral health professionals use digital technology such as videoconferencing, radiographs and photographs to provide services in non-traditional settings under the general supervision of a dentist. A goal of teledentistry is to improve access to oral health care in rural and other areas that lack dental offices or access to oral health care providers.[129,130]

California is a leader in teledentistry through its Virtual Dental Home model. From 2010-2016, this program treated more than 3,000 patients, demonstrating that teledentistry is a safe and effective way to increase access to dental care.[131] The model has been criticized as not meeting the attributes of a dental home. [132]

In 2015, Oregon began a pilot virtual dental home program that had reached more than 400 children in their school by 2016. A dental hygienist visually assesses children, photographs suspicious lesions, and takes radiographs, as well as providing preventive care. Within 24 to 48 hours, a dentist from an affiliated office develops a treatment plan. For needed dental care, children are referred to an affiliated office, their existing dental home, FQHC, or a local dental office.[133]

Mobile/Portable dental clinics: Mobile clinics provide services to those living in underserved communities, utilizing a vehicle that can travel from site to site, with the dental operatory located on the vehicle itself. Portable clinics set up movable dental equipment in various community settings, such as long-term care facilities, senior activity centers, housing developments, Head Starts, and schools.[134] Both mobile and portable dental clinics focus on delivering care for those who experience transportation challenges and other barriers to care.

In 2015-16, 22 state oral health programs reported sponsoring or administering mobile dental clinics offering restorative dental services, while 18 supported mobile clinics providing preventive services. [118] Additional mobile clinics are run by non-profit organizations or as private enterprises. In a systematic review completed in 2014, mobile dental clinics were an effective adjunct to fixed-site oral health services providers. [135]

Success of a mobile or portable dental clinic often rests upon having a patient referral system and access to emergency/after-hours care. Many use case management systems to ensure that patients receive comprehensive care. Connections within the local community are key for patients to access and receive the care needed.

Dental school/dental hygiene school clinics provide a wide variety of services to complex and underserved populations. [136] Pre-doctoral dental and dental hygiene students with faculty supervision provide primary dental services. Fees are typically lower than in private practice settings but are considered substantial by many low-income persons. Post-doctoral dental clinics offer services by faculty-supervised dentists who are receiving advanced specialty training.

Hospital emergency departments (ED) often substitute as a safety net for individuals unable to receive care in a traditional dental setting. From 1997-2000, 0.7% of all ED visits nationwide, approximately 4.1 million visits, were due to dental conditions, most of which were preventable.[137,138] Most EDs do not have oral health providers on site and are unable to provide a diagnosis of presenting dental conditions.[139] The number of ED visits primarily for relief of dental pain continues to escalate.[140] In 2012, ED dental visits cost the health care system $1.6 billion, an average $749 per visit, with most care consisting of pain medication and antibiotics.[141]

Volunteer efforts by oral health professionals: Though not a system of care, volunteerism continues to provide episodic services for underserved individuals through a variety of means. Formed in 1985, the Donated Dental Services program has provided more than $330 million in free comprehensive dental treatment to individuals with disabilities, the elderly, or those who are fragile.[142] Missions of Mercy, launched in 1994, provide free dental care and medications to largely uninsured and underserved adults. Give Kids A Smile (GKAS), an ADA Foundation program launched in 2003, has provided care to more than 5.5 million underserved children, whereby dental offices choose to provide uncompensated care for uninsured individuals. [143,144]

Private practice dentist participation in Medicaid: Despite concerns regarding Medicaid participation among private practice dentists, those who do accept Medicaid comprise the largest component of the safety net. In 2012, among Medicaid-enrolled children who received dental care, 53% received their care from a private practice general or pediatric dentist, followed by 21% from dental management company-affiliated practices and 10% from public safety net clinics.[145]

Low Medicaid participation rates among private dentists have long been an issue affecting access to dental care for Medicaid enrollees. The most commonly cited barriers to Medicaid participation are low reimbursement rates, the high rate of broken appointments, low compliance with treatment plans, and administrative burdens.[146-148] Studies examining the effect of increasing reimbursement rates on Medicaid participation have found that increasing reimbursement is a necessary, but not sufficient, approach to improving access to dental care.[149,150]

Dentist characteristics associated with higher Medicaid participation include being from racial/ethnic minority groups, young, and practicing in rural areas.[148, 151-153] Female dentists (42%) are more likely than their male counterparts (36%) to participate in Medicaid or CHIP programs.[32]

There is considerable variation in how Medicaid participation is calculated.[154] Some sources consider participation to mean a dentist enrolled as a Medicaid provider, which does not take into consideration whether the dentist actually saw any Medicaid-enrolled patients, whereas others gauge participation based on the number of Medicaid-enrolled patients treated or the number or dollar value of services billed to Medicaid.

Because there is no standardized approach to measuring Medicaid participation, it is challenging to provide an accurate account of participation; recent national estimates range from 20% to 74% depending on the method of measurement.[154] The proportion of private practice dentists who report treating any patients on public assistance within the previous year has hovered around 38% from 2000-2015.[13] Additionally, participation rates vary considerably among states; one source estimates participation rates range from 15% in New Hampshire to 84% in Iowa for those treating children.[155]

Implications

Capacity of the dental safety net: impact on access to care

- The current capacity of the dental safety net is not sufficient to meet population need. In FQHCs, only 1 in 5 patients receive an oral health service. Rates of private practice dentist participation in Medicaid vary, but are consistently low.

- Expand the capacity of the dental safety net through increasing use of teledentistry, emergency department diversion, and increased funding to expand FQHCs and SBHCs.

- Although there are conflicting opinions on how many dental providers will be working in the coming years, there are still millions of individuals who have difficulty obtaining care. Teledentistry, mobile clinics, and volunteer programs have contributed to greater access to care.

- Alternative models of care can increase access to care for underserved populations. Additional research is needed to determine how better utilization of "new members of the dental team" can positively affect dental utilization, services completed, and quality of care received.

II. Guidelines & Recommendations

This section provides recommendations related to increasing the capacity of the oral health workforce to meet the population demand for care. Recommendations relate to workforce size, quality, and ability to integrate with other components of the healthcare system.

Recommendations related to workforce composition projected supply: An evaluation of the current oral health workforce team and services delivery systems is essential for understanding how to better accommodate the needs of the population. The questions and recommendations go beyond whether there will be a surplus of dentists in the next 25 years and/or whether those dentists will be practicing in the areas of most need. There is a need for substantial reforms to adequately prepare other members of the oral health team to participate fully in a reformed delivery system, including a reconsideration of current accreditation guidelines and more flexibility with scopes of practice.

Recommendations

- Develop an accurate measurement system to enumerate the oral health workforce within their various work settings and the impact they are making upon health outcomes. This should incorporate statewide efforts, such as Medicaid, managed care, FQHCs and volunteerism. State Medicaid contracts should delineate expected data sharing to alleviate proprietary non-disclosure of such information.

- Identify ways to involve oral health professionals' expertise after retirement through involvement in mentoring, teaching, serving on nonprofit or health boards, committees or as consultants.

- Advocate for scope of practice changes to enable dental hygienists to provide oral health services in non-traditional or public health settings with indirect supervision by a dentist. Members of the dental team should be working at "the top" of their professional ladder.

> - Support exploration of utilizing "new members of the dental team" to further increase access to care.
>
> - Expand incentive programs for professionals to practice in underserved areas or with underserved populations through federal/state loan repayment programs.

Recommendations related to Education: The educational system provides the foundation that oral health care providers will utilize in their everyday practice. Providing well-rounded and varying educational experiences can increase student comfort with caring for a wide variety of patients, yet worries about increasing student debt and growing numbers of underserved individuals with a less than adequate dental safety net continues to confound and confuse new graduates.

Recommendations

- Expand extramural and other outreach programs in dental and dental hygiene curricula.
  - o Student experiences in these programs increase the likelihood that they will elect to serve underserved populations after graduation.
  - o Exposure to underserved populations during their training is likely to increase student comfort while treating these populations.

- Recruit more low-income and minority students across the range of oral health careers.
  - o Implement a mentoring system to increase familiarity with health care careers for these students.
  - o Encourage low-income and minority students from rural and inner-city areas to choose dental careers:
    - Develop programs that introduce middle and high school students to oral health professions, as well as undergraduate college students to be aware of the breadth of oral health opportunities.
    - Enhance federal and state scholarship and loan repayment opportunities to supplement the cost of an oral health education.

- Evaluate the impact of PGY1 requirements to practice in the state and determine if this results in a sustained increase in access to care for underserved populations.

- Create a public health certificate program for dental hygienists that will meet state course requirements for practicing in public health settings. Integrate CDHC competencies into dental hygiene and dental assisting curricula, so that graduates have both an educational degree and a CDHC certification.

- Encourage greater levels of integration across interprofessional education activities and evaluate to determine if such integration sustains improved oral health and overall health outcomes.

- Ensure that all members of the oral health team receive education about cultural competency and health literacy to communicate effectively with diverse populations as they often serve as gatekeepers to overall health care.

- Create learning opportunities to increase confidence and necessary skills in caring for diverse populations in multiple patient settings.

Recommendations related to the dental safety net: The dental safety-net system provides oral health care for millions of underserved individuals in the U.S. With health policy in flux, it is critical that there be an evaluation of the capacity of the current dental safety-net models to improve access to care. Expanding oral health access through greater medical/dental integration is essential, but the critical details of financing, regulations, education and delivery remain unanswered.

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Recommendations

- Maximize the impact of dental safety net clinics, including FQHCs and local health departments.
  - Regularly assess the oral health needs within states and communities to better align capacity with demand.
  - Assess whether expanding current or adding new FQHCs with dental programs is advisable within the state.
  - Identify opportunities to increase efficiency, effectiveness, productivity and profitability within FQHCs and other dental safety net entities.
  - Encourage greater collaboration among private and public practitioners to enhance oral health education and preventive services and access to care.

- Advocate for policies that encourage greater dentist recruitment and retention within Medicaid by seeking to:
  - Include adult dental Medicaid benefits to encourage greater family-centric care.
  - Improve reimbursement and reduce administrative burden to encourage Medicaid participation.
  - Assess need for outreach programs in areas with poor oral health care access, including mobile, portable, and school-based oral health programs to enhance access to Medicaid-eligible individuals.

- Advocate for the continuation of HRSA funding to increase safety net capacity and support to providers within these programs.

- Increase entry points into the oral health delivery system by supporting provision of preventive services by non-dental providers. Supportive activities include:
  - Conducting in-service trainings for non-dental professionals.
  - Advocating for expanding Medicaid reimbursement for preventive services by non-dental providers.
  - Advocating for inclusion of CHWs, CDHCs, dental therapists and *promotoras* into the oral health workforce with adequate Medicaid reimbursement for their community-based efforts of case management, care coordination and education.
  - Collecting data on the impact of new members of the dental team on improving access to care for underserved populations.

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III Best Practice Criteria

The ASTDD Best Practices Project has selected five best practice criteria to guide state and community oral health programs in developing their best practices. For these criteria, initial review standards are provided to help evaluate the strengths of a program or practice to prevent and control tooth decay.

1. **Impact / Effectiveness**

   - **A practice or program that enhances the processes to improve the oral health status and/or improve access to dental care for the U.S. population.**

Example: increased number of programs to train oral health workforce to provide culturally competent and high-quality care to diverse patient populations.

2. **Efficiency**

   - **A practice or program shows cost savings by utilizing dental therapists/mid-level providers in dental HSPA areas.**

     Example: savings based on comparison of the cost for services delivered by a dental therapist/mid-level provider to the projected cost of dental treatment from a licensed dentist.

3. **Demonstrated Sustainability**

   - **A practice or program that shows sustainability or plans to maintain sustainability.**

     Example: a program that has served low-SES individuals for many years and receives funding in addition to reimbursement from public and private insurers.

4. **Collaboration / Integration**

   - **A practice or program that establishes partnerships or collaborations that integrate oral health efforts with other disciplines to improve access to care.**

     Example: curriculum integration for dental, medical, and other students to support medical/dental integration and increase provider comfort with treating a variety of individuals and situations.

5. **Objectives / Rationale**

   - **A practice or program that has similar objectives with federal or state agenda to promote public health supervision for dental hygienists.**

     Example: working with legislators and state licensing boards to advocate for the utilization of dental hygienists in non-traditional settings to increase access to care.

Evidence Supporting Best Practice Approaches

The ASTDD Best Practices Committee takes a broad view of evidence to support best practice approaches for building effective state and community oral health programs. The Best Practices Committee will report on practices, which are linked by strong causal reasoning to the desired outcome of improving oral health and total well-being of priority populations. Strength of evidence from research, expert opinion and field lessons fall within a spectrum. On one end of the spectrum are **promising best practice approaches**, which may be supported by little research, a beginning of agreement in expert opinion, and very few field lessons evaluating effectiveness. On the other end of the spectrum are **proven best practice approaches** that are supported by strong research, extensive expert opinion from multiple authoritative sources, and solid field lessons evaluating effectiveness.

Research may range from a majority of studies in dental public health or other disciplines reporting effectiveness to the majority of systematic reviews of scientific literature supporting effectiveness. Expert opinion may range from one expert group or general professional opinion supporting the practice to multiple authoritative sources (including national organizations, agencies or initiatives) supporting the practice. Field lessons may range from success in state

practices reported without evaluation documenting effectiveness to cluster evaluation of several states (group evaluation) documenting effectiveness.

To access information related to a systematic review vs. a narrative review: Systematic vs. Narrative Reviews. (Accessed: 6/23/2016)

IV. State Practice Examples

The following practice examples illustrate various elements or dimensions of the best practice approach of *The Role of Oral Health Workforce Development in Access to Care*. These reported success stories should be viewed in the context of the states and program's environment, infrastructure and resources. End-users are encouraged to review the practice descriptions (click on the links of the practice names) and adapt ideas for a better fit to their states and programs.

A. Summary Listing of Practice Examples

Table 1 provides a listing of programs and activities submitted by states. Each practice name is linked to a detailed description. (Scroll over title to open link.)

Table 1. State Practice Examples Illustrating Strategies and Interventions for *The Role of Oral Health Workforce Development in Access to Care*			
#	**Practice Name**	**State**	**Practice**
1	The Virtual Dental Home	CA	06007
2	Oral Health Workforce Assessment	LA	21010
3	Maryland Dent-Care Loan Assistance Repayment	MD	23001
4	Children's Dental Services	MN	26005
5	Dental Therapists: Safe, Effective, Productive and Cost-effective Dental Team Members	MN	26010
6	Enrolling Dental Hygienists as Medicaid Providers	VT	51007

B. Highlights of Practice Examples

Highlights of state practice examples are listed below. (Scroll over title to open link.)

CA The Virtual Dental Home (Practice #06007)

The Virtual Dental Home (VDH) is a community-based oral health delivery system in which people receive diagnostic and preventive services in community settings. It utilizes telehealth technology to link dental hygienists and assistants in the community with dentists in dental offices and clinics forming a complete system of care. Equipped with portable imaging equipment and an internet based dental record system, the dental hygienist collects electronic dental records such as X-rays, photographs, charts of dental findings, and dental and medical histories, and uploads the information to a secure web server where the dental record is reviewed by a collaborating dentist.

LA Oral Health Workforce Assessment (Practice #21010)

Louisiana conducted a Dental Health Needs Assessment, which utilized a collaborative approach looking broadly at oral health in across the state. The process included: synthesis of existing data on social, economic, and health indicators; scan of existing oral health services and programs; analysis of information from a survey of oral health stakeholders and providers (N=365); and interviews with oral health and medical providers, school nurses, and public health administrators with a medical degree (n=17).

MD Maryland Dent-Care Loan Assistance Repayment Program (Practice #23001)

During the 2000 Maryland legislative session, House Bill 543/Senate Bill 519 was passed providing State funding for a loan repayment program for dentists, known as the *Maryland Dent-Care Loan Assistance Repayment Program (MDC-LARP)*. Dentists who agree to provide oral health services must serve three years in a full-time practice and provide services to a minimum of 30% MMAP recipients as a proportion of their total patient population. This information must be documented along with the submission of written reports. This program provides loan repayment for up to five *Maryland licensed* dentists a year for a three-year commitment (a maximum of 15 participants in the program for the 3-year period), depending on available funding.

MN Children's Dental Services (Practice #26005)

Children's Dental Services (CDS) is an independent, non-profit agency that, since 1919, has dedicated itself to improving the oral health of low-income children by making affordable and culturally-targeted dental care and education available. CDS' innovative approaches include its site-based care within public schools and Head Start centers, its leadership in implementing teledentistry, and the effective use of mid-level providers in both permanent and portable care locations.

MN Dental Therapists: Safe, Effective, Productive and Cost-Effective Dental Team Members (Practice #26010)

In 2009, Minnesota became the first state to authorize the education and licensure of dental therapists to address long-standing access to dental care issues for Minnesota Health Care Program (Medicaid) enrollees and other under-served populations. Apple Tree has employed dental therapists since 2011, beginning with 2 members of the first graduating class and now employs 10 dental therapists. From 2012 through 2018, dental therapists at Apple Tree collectively provided over 58,000 dental encounters in both urban and rural settings and delivered diagnostic, preventive, and basic restorative dental services valued at more than $11 million for patients of all ages, including older adults and people with special needs. They have proven themselves to be safe, effective, productive and cost-effective team members.

VT Enrolling Dental Hygienists as Medicaid Providers (Practice #51007)

The Commissioners of the state Medicaid agency and Department of Health convened a workgroup to develop strategies to increase access to dental care for adult Medicaid beneficiaries and enrolling hygienists as Medicaid providers was one of the strategies identified by the workgroup. The short-term outcome that has been achieved is that there are at least six new Medicaid providers in Vermont. Intermediate and long-term outcomes include increased access to dental care for adult Vermonters insured by Medicaid, reduction in emergency department visits and general assistance voucher use for dental related pain, and ultimately a reduction in dental health disparities.

V. Acknowledgements

This report is the result of efforts by the ASTDD Best Practices Committee to identify and provide information on developing successful practices that address *The Role of Oral Health Workforce Development in Access to Care.*
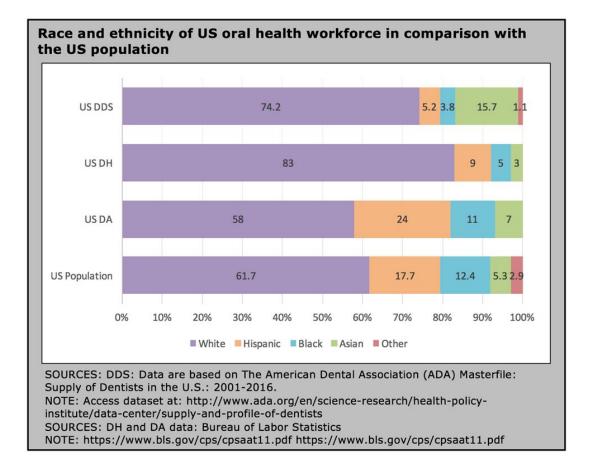
VI. Attachments

Attachment A

Race and ethnicity of US oral health workforce in comparison with the US population

SOURCES: DDS: Data are based on The American Dental Association (ADA) Masterfile: Supply of Dentists in the U.S.: 2001-2016.
NOTE: Access dataset at: http://www.ada.org/en/science-research/health-policy-institute/data-center/supply-and-profile-of-dentists
SOURCES: DH and DA data: Bureau of Labor Statistics
NOTE: https://www.bls.gov/cps/cpsaat11.pdf https://www.bls.gov/cps/cpsaat11.pdf

Variation in Dental Hygiene Scope of Practice by State

The purpose of this graphic is to help planners, policymakers, and others see differences in legal scope of practice across states, particularly in public health settings.

Research has shown that a broader scope of practice for dental hygienists is positively and significantly associated with improved oral health outcomes in a state's population.[1,2]

Dental Hygiene Diagnosis
Prescriptive Authority
Local Anesthesia
 D Direct I Indirect* G General
Supervision of Dental Assistants
Direct Medicaid Reimbursement
Dental Hygiene Treatment Planning
Provision of Sealants
Direct Access to Prophylaxis
Not Allowed / No Law

Dental Hygiene Diagnosis

The identication of oral conditions for which treatment falls within the dental hygiene scope of practice, as part of a dental hygiene treatment plan.

Prescriptive Authority

The ability to prescribe, administer, and dispense fluoride, topical medications, and chlorhexidine.

Local Anesthesia

The administration of local anesthesia.

LEVEL OF SUPERVISION

D **Direct:** The dentist is required to be physically present during the administration of local anesthesia by the dental hygienist.

I **Indirect:** The dentist is required to be on the premises during the administration of local anesthesia by the dental hygienist.*

G **General:** The dentist is required to authorize the administration of local anesthesia by the dental hygienist but is not required to be on the premises during the procedure.

Supervision of Dental Assistants

The ability to supervise dental assistants when performing tasks within the dental hygiene scope of practice.

Direct Medicaid Reimbursement

The direct Medicaid reimbursement of dental hygiene services to the dental hygienist.

Dental Hygiene Treatment Planning

The ability of a dental hygienist to assess oral conditions and formulate treatment plans for services within the dental hygiene scope of practice.

Provision of Sealants Without Prior Examination

The ability of a dental hygienist working in a public health setting to provide sealants without prior examination by a dentist.

Direct Access to Prophylaxis from a Dental Hygienist

The ability of a dental hygienist working in a public health setting to provide prophylaxis without prior examination by a dentist.

Not Allowed / No Law

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