

Examining America's Dental Safety Net

What amounts to “a silent epidemic” of oral diseases is affecting our most vulnerable citizens.¹

The Surgeon General said it best in 2000,² “oral health and general health should not [and cannot] be interpreted as separate entities.” The adage regarding oral health is that the mouth reflects overall health and well-being and is inextricably linked to the rest of the human body. Oral diseases are progressive and can be fatal. Dental caries (tooth decay), periodontal disease, tooth loss, oral mucosal lesions, oropharyngeal cancers, oral manifestation of HIV/AIDS, necrotizing ulcerative stomatitis (noma) and orodental trauma are serious public health problems. They affect personal appearance, certainly, but can also affect the ability to eat, speak and even obtain and keep employment.³

There is no doubt that oral diseases' impact on individuals and communities in terms of pain and suffering, impairment of function, economic loss and reduced quality of life is pronounced. Yet, in the United States, there are striking disparities in *which individuals* can actually access dental care. If not for dental safety net providers, such as academic dental institutions (ADIs), many Americans would be without access to dental care. This paper first examines the persistent unmet need for dental care, and then outlines the contributions of dental

safety net providers, including ADIs, in addressing it.

The Need for Dental Care in America

The need for dental care in the United States is not debatable. It is well-documented that vulnerable and underserved populations, including low-income individuals, the elderly, racial and ethnic

minorities and medically compromised persons, face substantial barriers to accessing dental care.⁴

Reasons for disparities in the delivery of care vary—they may stem from a combination of complex factors or just the lack of understanding of the importance of oral health. But the end result is the same: a significant percentage of the American population routinely goes without dental care.

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The American Dental Education Association (ADEA) engages in policy research and dialogue in order to lead the thoughtful consideration of important contemporary problems in dental education and to improve the oral health of the public.

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Children and Oral Health

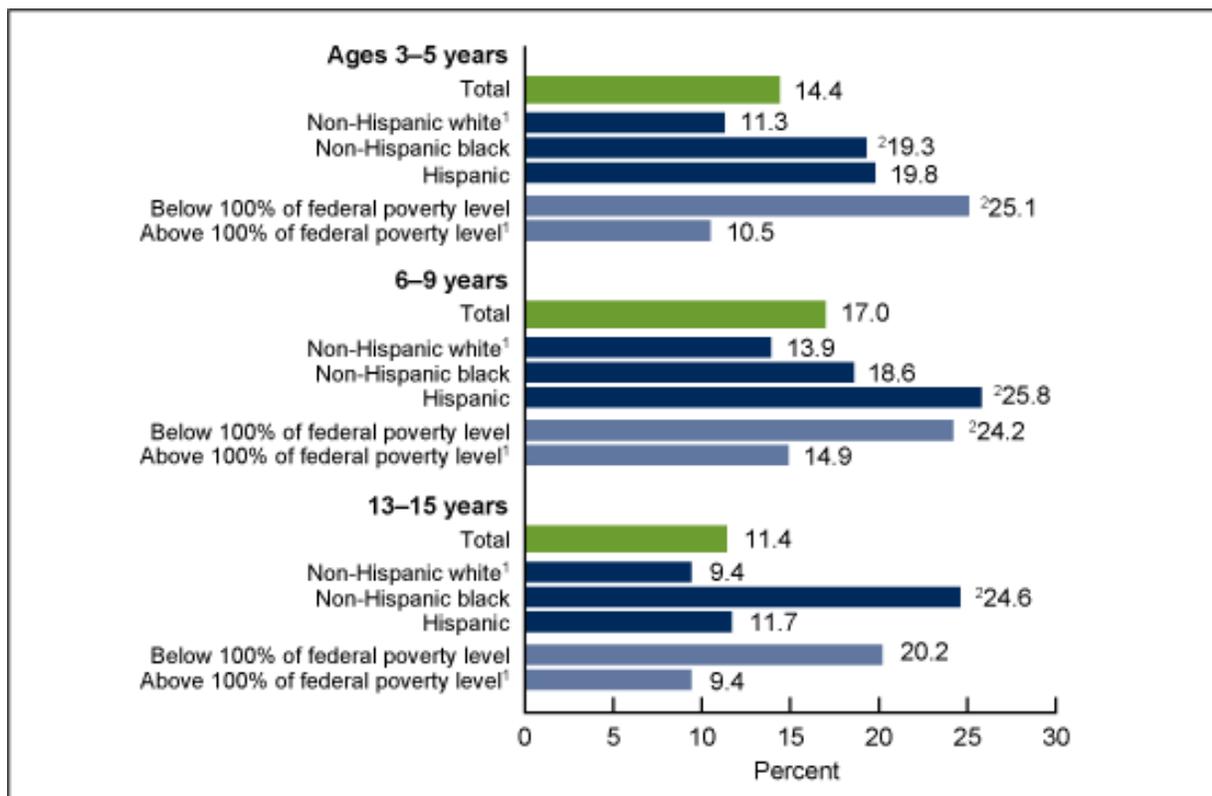
Children are disproportionately affected by a lack of access to dental care. In 2010, 4.2 million children aged 2–7 years were in need of dental care and were unable to access it.⁶ The implications are severe, especially for lower-income children. Although dental caries has declined significantly among school-aged children since the early 1970s, it remains the most prevalent chronic disease of childhood.⁷ In fact, dental caries among children is five times more common than asthma and seven times more common than hay fever.⁸ Among children aged 3–5 and 6–9 years, untreated caries was significantly higher for those living at or below the federal poverty

level (FPL) compared with those living above the poverty threshold.⁹

Oral health disparities in children:

In 2009–2010, 14% of children aged 3–5 years had untreated dental caries. Among children aged 6–9 years, 17% had untreated dental caries, and among adolescents aged 13–15, 11% had untreated dental caries. Among children aged 3–5 years, the prevalence of untreated caries was significantly higher for non-Hispanic black children (19%) compared with non-Hispanic white children (11%). Untreated caries was nearly twice as high for Hispanic children (26%) compared with non-Hispanic white children (14%) aged 6–9 years, and was

Figure 1¹⁰—Prevalence of untreated dental caries (tooth decay)¹¹ among children and adolescents, by age, race and ethnicity, and poverty level: United States, 2009–2010.



more than twice as high for non-Hispanic black adolescents (25%) compared with non-Hispanic white adolescents (9%) aged 13–15. For children aged 3–5 and 6–9 years living at or below 100% of the FPL, untreated dental caries was significantly higher compared with children living above the poverty level.

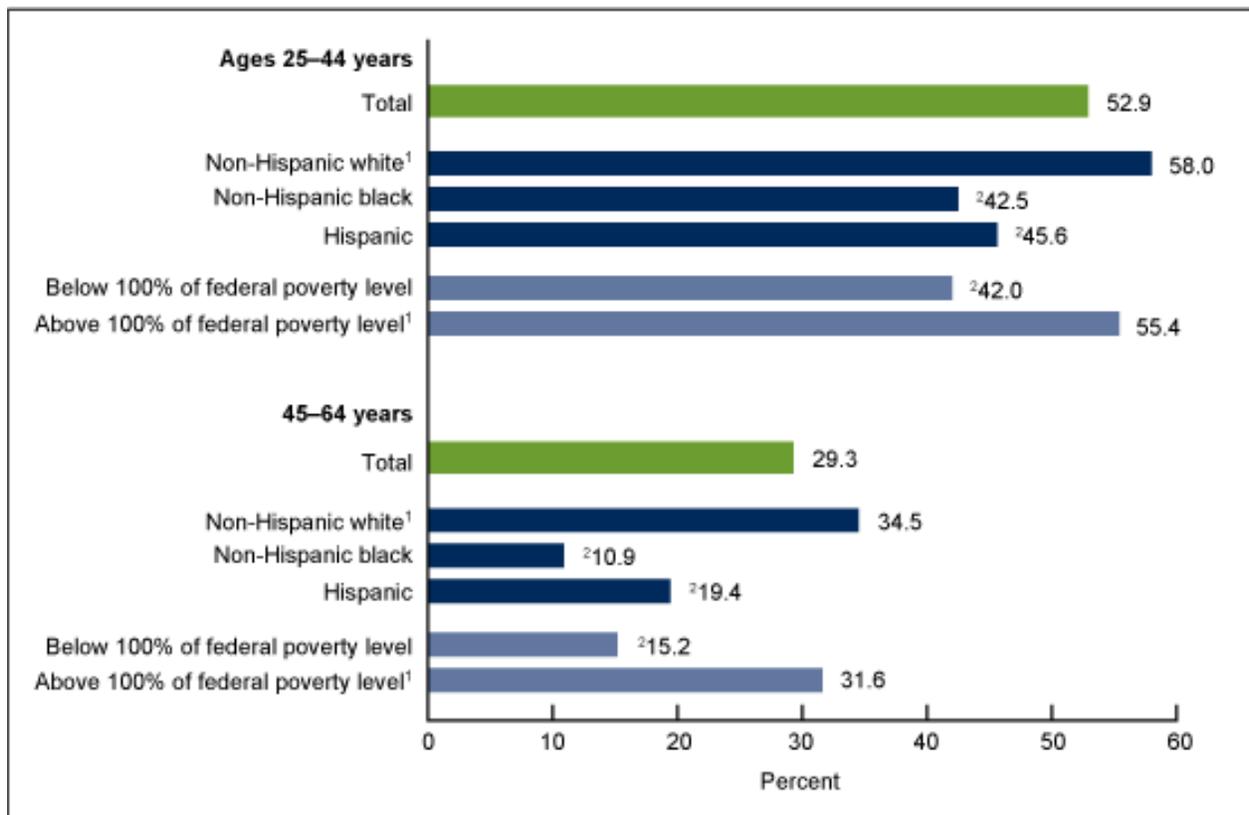
The social impact of oral diseases in children is substantial. More than 51 million school hours are lost each year to dental-related illness.¹² Unfortunately, poor children suffer almost 12 times more restricted-activity days than children from higher-income families. It does not take much extrapolation to conclude that

children experiencing pain and suffering ultimately have difficulty paying attention and learning.

Adults and Oral Health

The U.S. adult population also endures pronounced oral health disparities.¹³ Adults with incomes below 100% of the FPL¹⁴ are three times more likely to have untreated dental care needs. Among adults and the elderly, prevalence of complete tooth retention was significantly higher among adults aged 45–64 living above the poverty level compared with those living in poverty.

Figure 2¹⁵—Prevalence of complete tooth retention¹⁶ among adults, by age, race and ethnicity, and poverty level: United States, 2009–2010.



Oral health disparities in adults:

Fifty-three percent of adults aged 25–44 and 29% of adults aged 45–64 had a full set of permanent teeth (excluding third molars). Among adults aged 25–44, tooth retention was lower for Hispanic (46%) and non-Hispanic black (43%) adults, compared with non-Hispanic white adults (58%). For adults living at 100% of the FPL or lower, 42% had lost a permanent tooth, whereas for adults living above the poverty level, approximately 55% had retained all of their permanent teeth. Complete tooth retention was more prevalent among non-Hispanic white adults (35%) aged 45–64 compared with non-Hispanic black (11%) and Hispanic adults (19%). Complete tooth retention was also higher for adults aged 45–64 living above the poverty level (32%) compared with those living at or below the poverty level (15%).

The Elderly and Oral Health

As the “baby boomers”¹⁷ age, access to dental care for older adults has become a growing health care concern. According to AARP, Inc., the first of the baby boom generation has reached age 65. Baby boomers will be turning 65 at a rate of about 8,000 a day until 2029. By 2029, when all of the baby boomers will be 65 years and over, more than 20% of the total U.S. population will be over the age of 65.¹⁸ Oral health will continue to be important for this population. Twenty-three percent of 65- to 74-year-olds have severe periodontal disease (measured as six millimeters of periodontal attachment loss).¹⁹ Additionally, it is estimated that about 30% of adults 65 years and older are edentulous (lacking

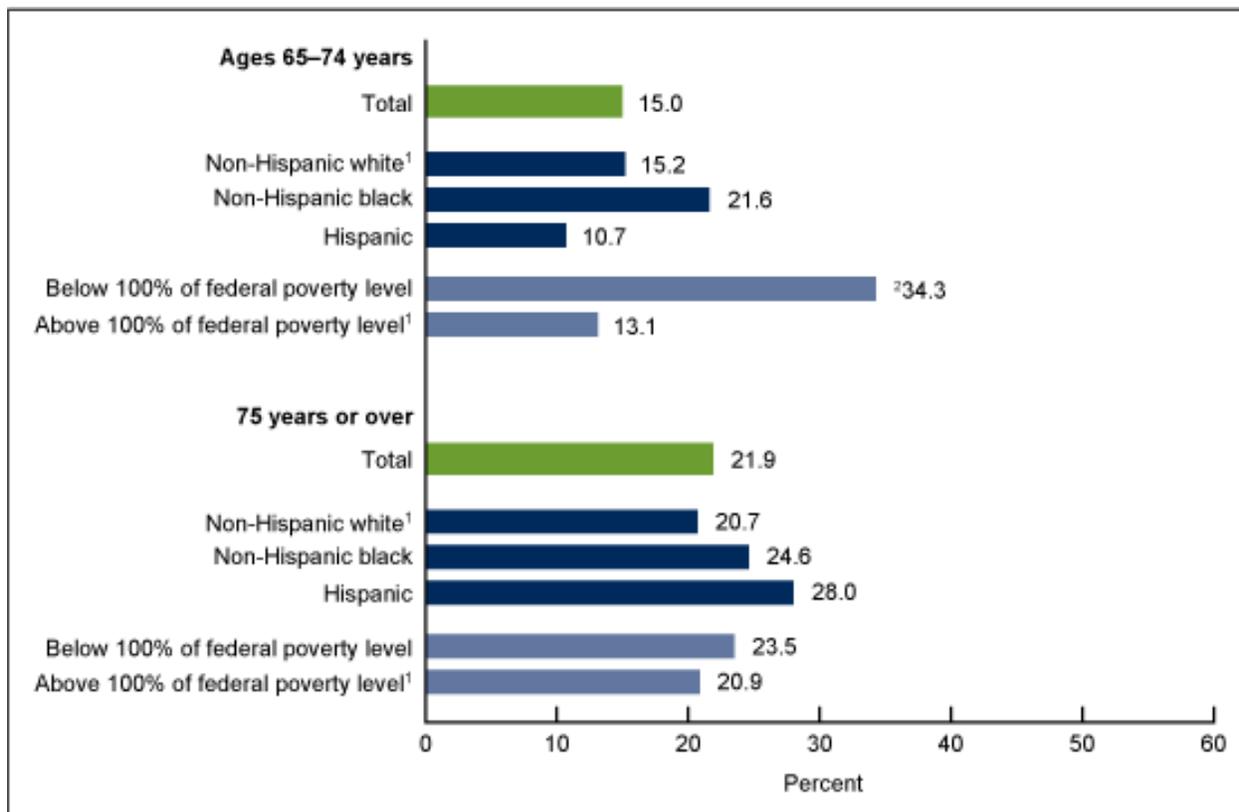
teeth).²⁰ At any given time, 5% of Americans age 65 and older (currently 1.65 million people) are living in a long-term care facility where dental care is unreliable.²¹

Complete tooth loss was significantly higher among adults aged 65–74 living at or below the poverty level compared with those with higher incomes.²⁴

Additionally, in 2008 the Centers for Disease Control and Prevention found that for adults age 65 and older, the prevalence of total tooth loss varied by state, ranging from 9.6% in Hawaii to 37.8% in West Virginia.²⁵ Tennessee closely followed West Virginia, with 31.5% of adults age 65 or older with edentulism, and Mississippi came in with the third highest percentage with 27.3%. California fared much better, closely following Hawaii with 10.1%, and Maryland came in with the third lowest percentage at 12.4%.

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Figure 3²²—Prevalence of edentulism²³ among older adults, by age, race and ethnicity, and poverty level: United States, 2009–2010.



Oral Health in Health Professional Shortage Areas

The case for dental care is borne out in the statistics and illustrated below in the map of Health Professional Shortage Areas (HPSAs)²⁶ in the United States (see Figure 4). As of October 2014, there are 4,968 dental HPSAs. In comparison, there are 4,051 mental health HPSAs. There are more than 49 million people living in dental HPSAs throughout the United States. According to the U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA), dental HPSAs are based on a dentist-to-population ratio of 1:5,000. In other words, when there are

5,000 or more people per dentist, an area is eligible to be designated as a dental HPSA. HRSA has stated that applying this formula, it would take approximately 7,300 additional dentists to eliminate the current dental HPSA designations.²⁷

The Affordable Care Act and Oral Health

The implementation of the Patient Protection and Affordable Care Act (ACA) will also impact health care and access to dental care. In a nutshell, it 1) expands access to dental care for some adults via Medicaid expansion, and 2) requires pediatric dental coverage be available for children under age 19.

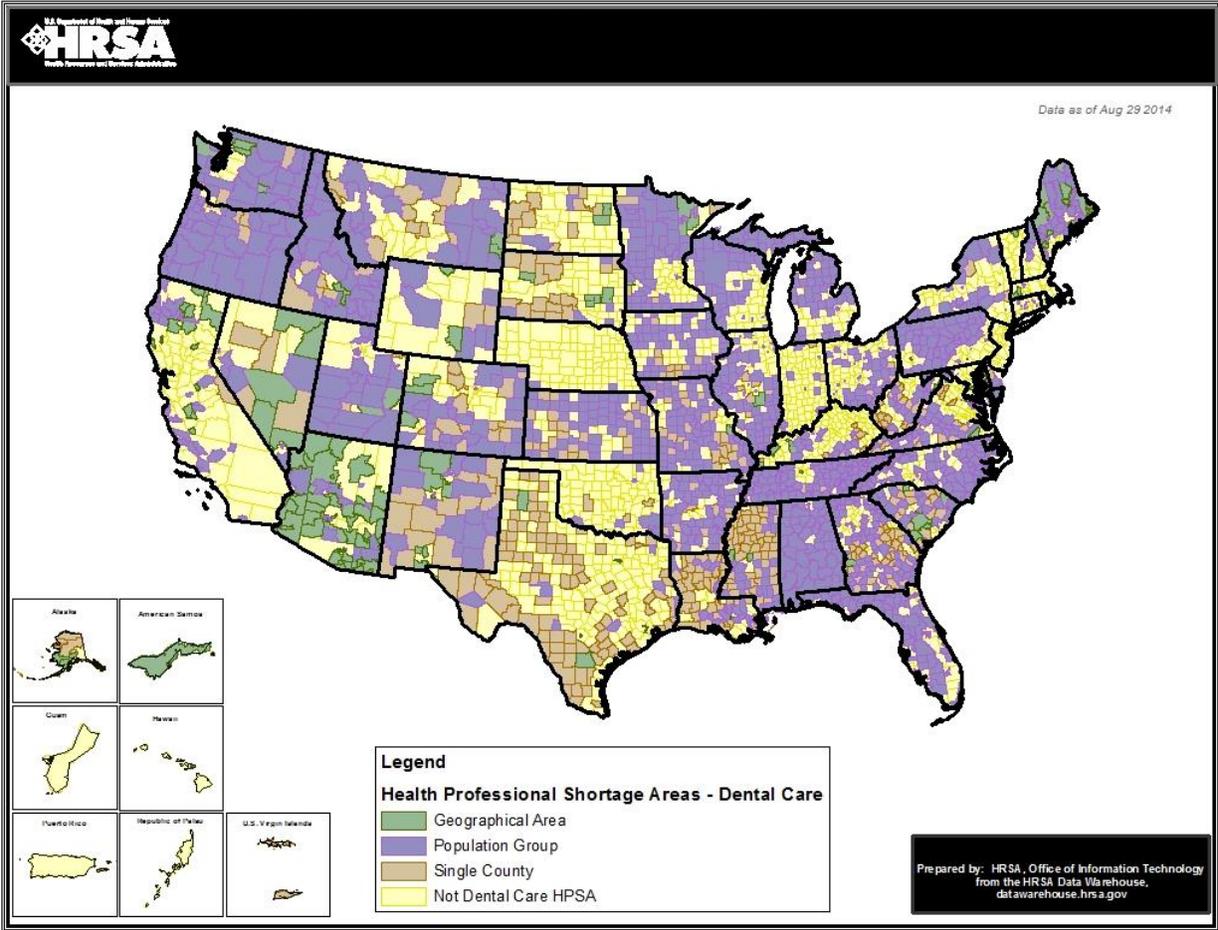
Medicaid Expansion Under the ACA

The ACA expands Medicaid coverage to all individuals living under 138% of the FPL—\$16,105 a year for one person or \$32,913 for a family of four. The federal government under the ACA pledged to fund 100% of Medicaid expansion costs through 2016, gradually reducing funding to 90% by 2020 and beyond with the states responsible for making up the difference. In 2012, the U.S. Supreme Court decided that Medicaid expansion is optional for states, so the increase in federal funding is only applicable to those who choose to opt-in.²⁸

Also in 2012, the Centers for Medicare & Medicaid Services (CMS) issued an [FAQ document](#) stating that there is no deadline by which a state must let the federal government know its intention to either opt-in or opt-out.²⁹ The longer a state takes to opt-in to Medicaid expansion, the less federal funding the state may receive as the federal funding match is gradually reduced to 95% by 2017, and to 90% by 2020 and beyond.

To date, 27 states and the District of Columbia have indicated that they will participate in Medicaid expansion.³⁰ The

Figure 4—HRSA’s Health Professional Shortage Areas for Dental Care



number of states electing to expand their Medicaid program is fluid and can change as governors and state legislatures make final Medicaid expansion determinations and CMS approves or rejects state waivers.

Although Medicaid includes dental benefits for children, coverage for adults is optional. Most states generally only cover emergency dental care for adults, and unfortunately in many states this level of coverage will not change as states choose to expand Medicaid under the ACA. Furthermore, adult dental benefits under Medicaid are often cut when state budgets are tight and

legislators are looking for ways to address budget shortfalls. However, in states that expand Medicaid under the ACA and offer comprehensive dental coverage for eligible adults, many adults will gain dental coverage.

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adults, an estimated 2.9 million were eligible to gain extensive dental benefits while 5.4 million were eligible to gain limited adult dental benefits. If all states were to expand Medicaid eligibility, this would further increase the number of adults with Medicaid dental benefits by 2.7 million.³¹

Pediatric Dental Coverage Under the ACA

As of 2014, all private and public insurance coverage must contain the set of 10 Essential Health Benefits,³² which includes pediatric dental coverage³³ under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit.³⁴ It is important to note that under the ACA, dental insurance is treated differently for adults and children age 19 and under.

Dental coverage for children as an essential health benefit means that if an individual is obtaining coverage for someone 19 years old or younger, dental coverage must be available as part of a health plan or as a stand-alone dental plan. While it must be made available, pediatric dental coverage does not have to be purchased to avoid a penalty fee under the ACA.

The Dental Safety Net and Dental Care Delivery

The dental safety net has been defined as a “composite of all places, providers, and programs that deliver dental services to people disenfranchised from the predominant private dental delivery system.”³⁵ Whether you accept that definition or another, the hypothesis is the same—it is dental care for those who

generally have no access to care or the means by which to pay for it.

The dental safety net refers to the structures supporting populations facing considerable barriers to accessing dental care. This typically involves individuals without private insurance and/or those who are unable to pay for services out-of-pocket. It is composed of practitioners, payment programs and facilities that provide clinical, nonclinical and support services. It includes Medicaid, the State Children’s Health Insurance Program (SCHIP),³⁶ federally qualified health centers (FQHCs), school-based health centers and academic dental institutions, among other entities.³⁷

Advancing Oral Health in America, a 2011 Institute of Medicine report, defined two primary access points for dental services in the United States—the private dental care delivery system and the dental safety net. The two systems largely function independently from one another with different patient populations, practice settings and financing streams.³⁸

The private delivery system reflects care via either employer-sponsored health insurance or the ability to pay out-of-pocket in private dental practices. While private practice dentists play a critical role in serving underserved populations, HRSA estimates that only 20% of practicing dentists accept Medicaid.³⁹ More private practice dentists will be needed to begin to address the lack of access to dental care felt in urban and rural communities across the United States.

Academic Dental Institutions

In the United States, there are [65 dental schools](#), or ADIs, all of which are members of the American Dental Education Association (ADEA). The focus of these schools is dental education, which includes allied and advanced dental education programs.

ADEA’s mission is to lead individuals and institutions of the dental education community to address contemporary issues influencing education, research and the delivery of dental care—ensuring access, of course, being a significant part of meeting that mission. ADIs have become dental safety net providers in the United States for various populations that lack access to dental care, whether due to economics, a lack of dental insurance or residence in an HPSA.

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In communities across the country, ADIs are at the center of the delivery of dental care to the economically disadvantaged, the elderly, the uninsured, under-insured and those residing in rural or urban oral health deserts.

All ADIs have clinics either on or off the campus where patients can receive a full range of high-quality dental services at an affordable cost. The care is provided by dental and allied dental students, under the close supervision of faculty and residents. In addition to this role in their areas, many ADIs also serve as one of the larger Medicaid and SCHIP providers within their respective states. In 2010–2011, it is estimated that predoctoral dental students provided care during more than 3,000,000⁴⁰ dental visits.⁴¹ The following are just a few examples of services provided by ADIs as dental safety net providers.

Herman Ostrow School of Dentistry of the University of Southern California:

The Herman Ostrow School of Dentistry mobile dental clinic provides comprehensive dental services, at no cost, to approximately 80,000 children in 10–12 geographic areas throughout central and southern California each year. More than 17,500 low-income individuals receive free dental services each year by students in the dental hygiene program through the school's Mobile Dental Clinic, community health clinics, health fairs and other outreach activities. Dental students and faculty provide comprehensive dental services to nearly 1,300 homeless patients in downtown Los Angeles. Students and faculty also volunteer at free clinics such as

Ayuda, Inc., to provide dental care to approximately 2,100 children annually.⁴²

Tufts University School of Dental Medicine:

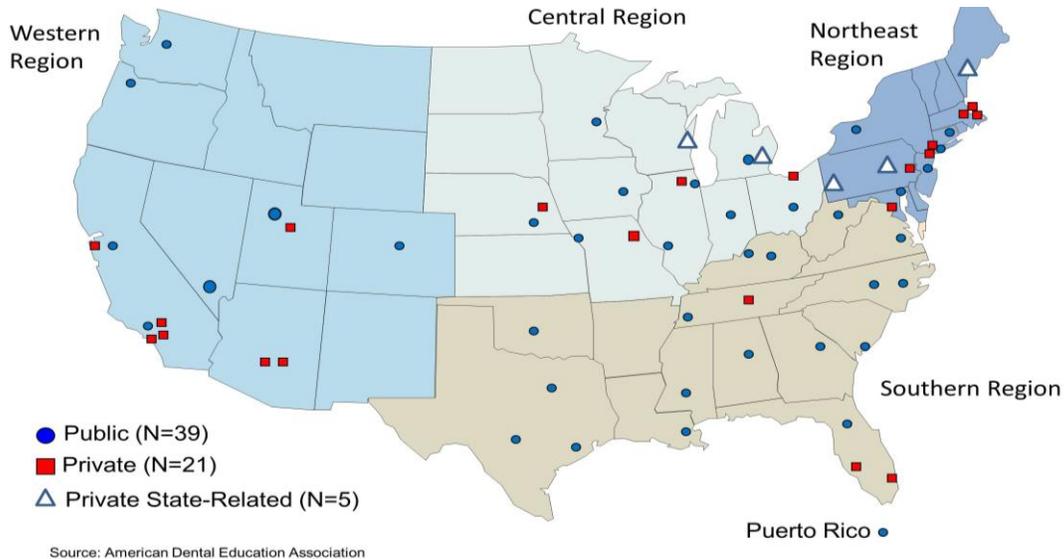
The Tufts Community Dental Health Program provides on-site dental services to 10,000 patients each year in schools, Head Start programs, adult day activity centers, community residences and sheltered workshops. Using portable dental equipment, eight dental hygienists travel throughout Massachusetts to deliver oral health education, dental screenings, dental cleaning, fluoride applications and dental sealants to high-risk populations, including low-income children and children with special needs.



University of North Carolina at Chapel Hill School of Dentistry:

The University of North Carolina at Chapel Hill School of Dentistry has several community service and outreach activities, including [Dentistry in Service to Communities \(DISC\)](#), [Student Health Action Coalition \(SHAC\)](#) and [ENNEAD](#). ENNEAD is a student-led organization that serves underserved populations in North Carolina and prepares students to work in these areas. ENNEAD members provide oral hygiene instruction, information about tobacco use and oral cancer prevention and education to properly manage traumatic

Figure 5—Distribution of Dental Schools in the United States



injuries. In addition, students participate in local health fairs and free dental clinics through the North Carolina Mission of Mercy Organization, where hundreds of patients receive free dental care.

University of Pennsylvania School of Dental Medicine:

The PennSmiles Program is a mobile dentistry program that improves the oral health of children living in Philadelphia. PennSmiles works with the community to increase access to care by forming collaborative partnerships with parents, school nurses and school administrators, and educates dental students about providing high-quality care to children who would otherwise lack it. PennSmiles features a mobile dental clinic that can provide comprehensive and preventive dental services directly to children in Head Start schools and underserved neighborhoods. Participation in the program is a school requirement for dental students, which has

translated to more than 1,500 dental students promoting the importance of oral health and delivering needed dental services to children in the Philadelphia community.⁴³

Government Safety Net Providers

On the state government level, states are required to provide dental services to low-income children covered by Medicaid and SCHIP. But even with this coverage, the utilization of dental services is low. Only 46.4% of children enrolled in Medicaid saw a dental care provider in 2010. The picture is even bleaker for adults. According to a February 2014 ADA research brief, three states do not offer any adult dental benefits under Medicaid and 16 states offer only emergency dental benefits.

Various state-supported models of delivery of dental care contribute to the dental safety net, providing dental services,

coordinating dental care and promoting oral health and education.

Health Centers:

The Health Center program, under HRSA, supports health centers that provide comprehensive primary care to an underserved community or population. Health Center Program grantees include FQHCs, federally qualified “look-alikes,” and health programs operated by tribal organizations.

Health Center Program grantees must meet the following criteria:

- Receive funds under section 330 of the Public Health Service Act and provide comprehensive primary care.⁴⁵
- Meet administrative, clinical and financial performance and accountability requirements.⁴⁶
- Are governed by a board comprised of a majority of the center’s patient population.⁴⁷

- Provide services on a sliding fee scale based on income and family size.⁴⁸
- Serve Medically Underserved Populations or be located in a designated Medically Underserved Areas (MUAs).⁴⁹

Federally Qualified Health Centers:

FQHCs are “safety net” providers, some operating as community health centers, public housing centers, outpatient health programs funded by the Indian Health Service and programs serving migrants and the homeless. The main purpose of the FQHC Program is to enhance the provision of primary care services in underserved urban and rural communities.⁵⁰ FQHCs are considered one of the critical providers of dental care in the dental safety net⁵¹ and FQHCs are required to provide basic preventive dental services—dental screenings and fluoride application—to children or refer them to local providers for treatment.⁵²

Figure 6⁴⁴—Adult Dental Benefit Provided in State Medicaid Programs

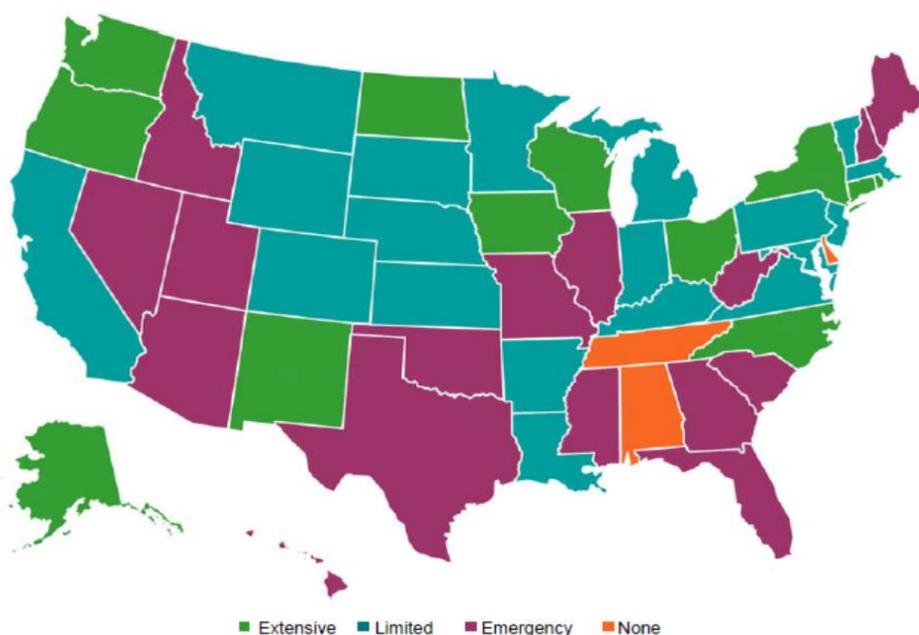
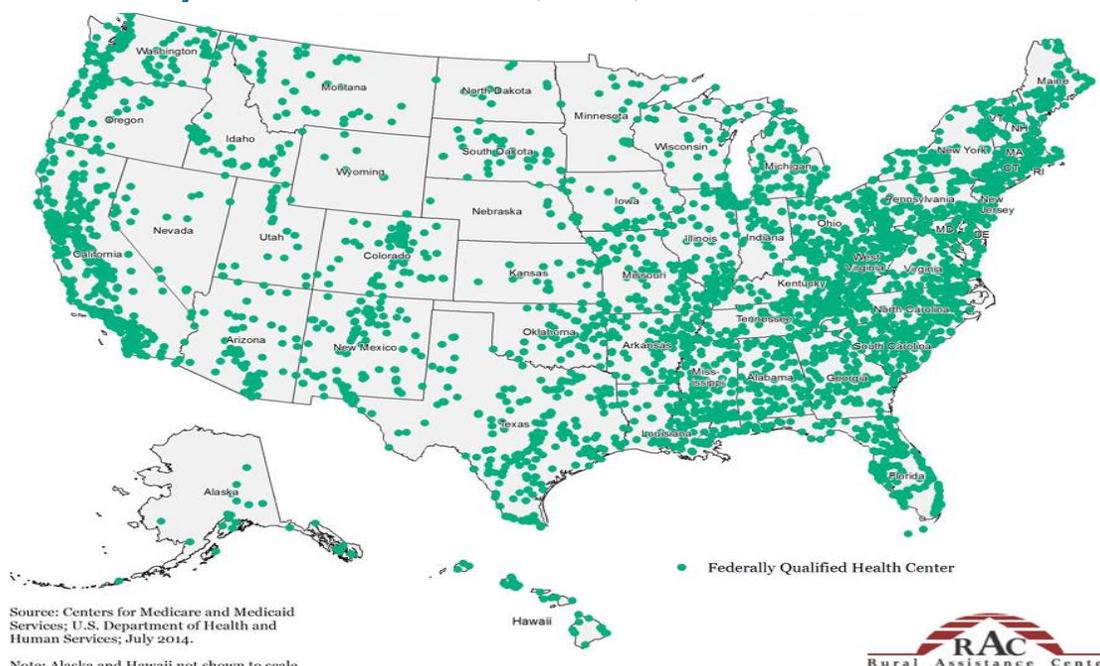


Figure 7—Federally Qualified Health Centers (FQHCs)



- 1,200 health centers serve nearly 20 million people, accounting for one of every 15 people living in the United States.⁵³
- 92% of those served at these centers live below the FPL, of which 67% are racial and ethnic minorities and 32% are children.⁵⁴
- 820 health centers offer dental services and provide care to over 3.7 million patients.⁵⁵

Health Programs Operated by Tribal Organizations:

The Indian Health Service (IHS), an agency within the U.S. Department of Health and Human Services, is responsible for providing federal health services to American Indians and Alaska Natives. The provision of health services to members of federally recognized tribes grew out of the special government-to-government

relationship between the federal government and Indian tribes. This relationship, established in 1787, is based on Article I, Section 8 of the Constitution, and has been given form and substance by numerous treaties, laws, Supreme Court decisions and Executive Orders. The IHS is the principal federal health care provider and health advocate for Indian people. The IHS provides a comprehensive health service delivery system for approximately 1.9 million American Indians and Alaska Natives who belong to 566 federally recognized tribes in 35 states.⁵⁶

- Supported under the Self Determination Act, P.L. 96-638 or Indian Health Care Improvement, P.L. 94-437.⁵⁷
- The IHS provides resources to improve the health and well-being of all American Indians and Alaska Natives.⁵⁸

Free Clinics

A 2010 census of all known free clinics in the United States found that the clinics provided care for 1.8 million individuals, accounting for 3.5 million medical and dental visits.⁶¹ A total of 1,007 free clinics (or 75.9% of those that received the national survey) responded to the census questionnaire.⁶² Overall, the 1,007 free clinics operated in 49 states and the District of Columbia.⁶³ The mean operating budget was \$287,810, and it should be noted that 58.7% of the free clinics receive no government revenue.⁶⁴

- 86% of the total 2010 IHS budget was allocated to health care services.⁵⁹
- Throughout 35 states, the IHS manages 230 dental facilities staffed by nearly 1,800 dental providers.⁶⁰

School-based Health Centers:

School-based health centers (SBHCs) are classified as health centers that provide care to children and adolescents in a school setting. School-based delivery systems include school-based sealant, fluoride and screening programs. SBHCs exist in all types of schools; however, the vast majority, 81.3%, are located in traditional public

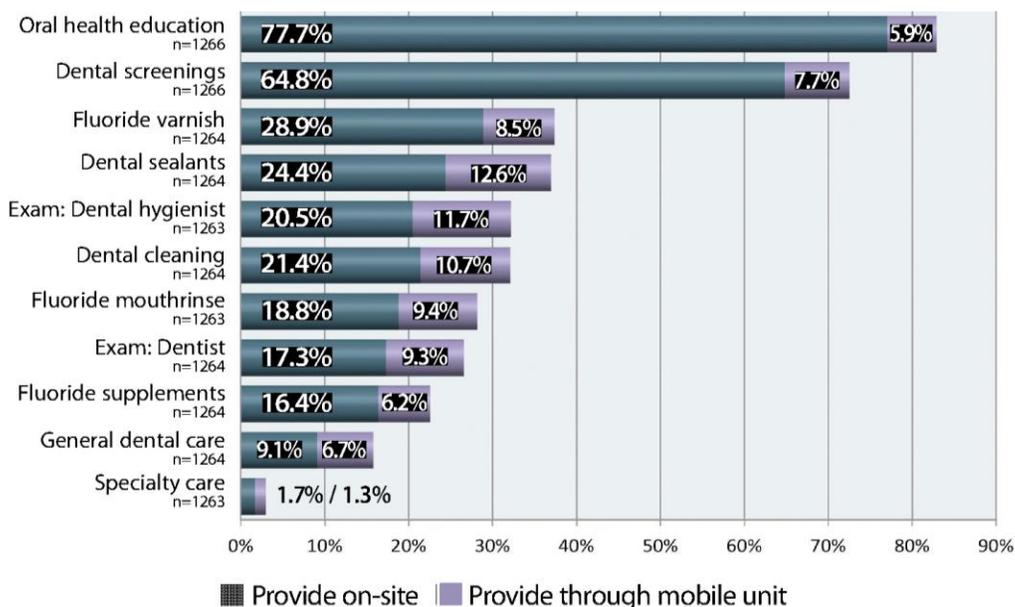
schools throughout United States. According to the School-Based Health Alliance:

- 38.7% of all SBHCs provide dental examinations by either a dentist or dental hygienist.⁶¹
- 83.6% of SBHCs provide oral health education.⁶²
- 15.9% of SBHCs have dental providers on site.⁶³

Rural Health Clinics:

Under the Rural Health Clinic Services Act, Rural Health Clinics (RHCs) are located in MUAs, designated health shortage areas or

Figure 8—Oral Health Services Provided in SBHCs



governor-certified shortage areas. Shortage areas make up approximately 60% of all rural counties in the United States.²¹ The RHC program is intended to increase primary care services for Medicaid and Medicare patients in rural communities. RHCs can be public, private or non-profit. The main advantage of RHC status is enhanced reimbursement rates for providing Medicaid and Medicare services in rural area.⁶⁴ Currently, there are approximately 4,000 RHCs nationwide, providing access to primary care services in rural areas.⁶⁵ However, RHCs are not required to provide preventive dental services and as a result are not considered a major participant in the dental safety net.

Local Health Departments, Mobile Dental Vans and Free Clinics:

Across the country, states are expanding the use of mobile dental units/vans, also called portable dental units, to improve access to care. Following are snapshots of what two states are doing:

Kentucky

In August 2014, the Kentucky Department for Public Health gave five local health departments grants to operate portable dental units. The concept to create these grants for portable dental units was born out of the governor's budget. The one-year awards of \$160,000 pay for a full-time dental hygienist and assistant, portable dental equipment to set up two treatment areas, a transport vehicle and transportation costs, and dental supplies. Children and certain adults without chronic health conditions may use the portable dental units.

Five more health departments are slated to receive grants in 2015–2016. The Kentucky legislature appropriated \$1.2 million in the current fiscal year and \$2.1 million in FY16 for the grants and other enhancements to the state oral health program, overseen by the state dental director.

Virginia

In 2013, a total of 44,789 patients received dental care at a safety net facility in Virginia.⁶⁶ This represents 7.4% of the estimated 607,000 adults in Virginia, aged 19 to 64, who do not have health insurance or have incomes below 200% of the FPL.⁶⁷ The Virginia Joint Commission on Health Care developed a [decision matrix](#) of policy options to address the lack of dental care for consideration of the Virginia General Assembly but as of this writing, no action has been taken.

Hospital Emergency Departments:

Hospital emergency departments (EDs) are often referred to as the “provider of last resort.” Low-income populations who lack access to dental care often default to EDs for these services.⁶⁸ Yet EDs are generally not equipped to offer treatment for oral health conditions since they usually do not have dental providers on staff and lack the dental equipment and technology required for treatment.

In 2012, the Healthcare Cost and Utilization Project, in conjunction with the Agency for Healthcare Research and Quality, published a statistical brief on ED visits for dental care. They found that in 2009, over 900,000 ED visits and nearly 13,000 hospital inpatient stays were related to dental conditions.

Between 2006 and 2009, the incidence of ED visits for patients seeking dental treatment increased by 16%, rising from 874,000 to 936,432 visits.⁶⁹ The brief also highlighted the following:

- Dental caries was the first-listed diagnosis for 42% of the ED visits; and dental abscess was the principal diagnosis for 63% of the inpatient stays.⁷⁰
- Persons aged 18–44 years accounted for nearly 62% of dental-related ED visits (611 per 100,000 population).⁷¹
- Dental-related ED visit rates were more than twice in rural areas than in large metropolitan areas.⁷²

- Dental-related ED visits were four times higher among patients from the lowest income communities than for patients in the highest income communities.⁷³

As one can imagine, the frequency of dental-related visits to EDs varies by state. According to the brief, dental visits to the ED totaled \$23 million in Georgia in 2007 and nearly \$88 million in Florida in 2010.⁷⁴ EDs, whether or not they want to be designated as the “provider of last resort” are used as part of states’ dental safety nets, even if most are not equipped to provide dental care.

Conclusion

The 2000 Surgeon General’s Report on oral health gave voice to the “silent epidemic” of oral disease in the United States. A decade and a half later, the lack of access to dental care that gave rise to the epidemic persists. As the gateway to the body, the mouth responds to the external world and mirrors what is happening inside the body, reflecting overall systemic health. The need for dental care as part of overall good health for every citizen cannot be overstated. The patchwork of academic dental institutions, state government entities and hospitals that comprise the dental safety net are working to help meet that need across the nation.

As we look ahead, the needs of the dental safety net are multi-faceted: to provide adequate resources to support the dental safety net, develop policies that will facilitate access and delivery of dental care, and educate the next generation of dental providers to meet the growing demand. Access to dental care is equally important to the young, the old, the medically compromised and citizens who reside in dental health professional shortage areas.

As a nation, we must ask ourselves: Are we ready to do more? Over 108 million Americans in need of dental care are awaiting a response.

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- ⁷ Ibid.
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- ⁹ National Center for Health Statistics. National Health and Nutrition Examination Survey, 2009–2010. Atlanta, GA: Centers for Disease Control and Prevention.
- ¹⁰ Ibid.
- ¹¹ *Untreated dental caries*: dental cavities that have not received appropriate treatment.
- ¹² U.S. Department of Health and Human Services (HHS). Oral health in America: a report of the surgeon general. Rockville, MD: HHS, 2000.
- ¹³ Health disparities are differences in the incidence, prevalence, mortality and burden of diseases and other adverse health conditions that exist among specific population groups in the United States.
- ¹⁴ An index based on the ratio of family income to poverty. Additional information can be found on the [HHS website](#).
- ¹⁵ National Center for Health Statistics. National Health and Nutrition Examination Survey, 2009–2010. Atlanta, GA: Centers for Disease Control and Prevention.
- ¹⁶ Having all natural permanent teeth present, excluding third molars.
- ¹⁷ *Baby boomers*: people born between 1946 and 1964.
- ¹⁸ Colby SL, Ortman JM. The baby boom cohort in the United States: 2012 to 2060. Current Population Reports. Washington, DC: United States Census Bureau, May 2014. At: <http://www.census.gov/prod/2014pubs/p25-1141.pdf>.
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- ²⁰ Ibid.
- ²¹ Ibid.
- ²² National Center for Health Statistics. National Health and Nutrition Examination Survey, 2009–2010. Atlanta, GA: Centers for Disease Control and Prevention.
- ²³ *Edentulism*: Having all natural permanent teeth missing, including third molars.
- ²⁴ Ibid.
- ²⁵ The CDC's [Behavioral Risk Factor Surveillance System](#) (BRFSS) is a state-based, ongoing data collection program designed to measure behavioral risk factors in the adult, non-institutionalized population 18 years of age or older. Every month, states select a random sample of adults for a telephone interview. This selection process results in a representative sample for each state so that statistical inferences can be made from the information collected. These data were taken from the 2008 BRFSS.
- ²⁶ Dental Health Professional Shortage Areas are designated by Health Resources and Services Administration as having shortages of dental providers and may be geographic (a county or service area), demographic (low-income population) or institutional (comprehensive health center, federally qualified health center or other public facility).
- ²⁷ Office of Shortage Designation Bureau of Health Professions, Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services.
- ²⁸ Nat'l Fed'n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566, 183 L. Ed. 2d 450, 53 EBC 1513 (2012). At: <http://origin-www.bloomberglaw.com/iframe/document/X5M0417/download>
- ²⁹ CMS Frequently Asked Questions on Exchanges, Market Reforms, and Medicaid dated Dec. 10, 2012.
- ³⁰ The 27 states that have indicated they will expand Medicaid are: AZ, AR, CA, CO, CT, DE, HI, IL, IA, KY, MD, MA, MI, MN, NV, NH, NJ, NM, NY, ND, OH, OR, PA, RI, VT, WA, WV.
- ³¹ Research brief by the Health Policy Institute and the ADA, February 2014, titled, "More than 8 Million Adults Could Gain Dental Benefits through Medicaid Expansion."

³² Essential health benefits must include items and services within at least the following 10 categories: ambulatory patient services; emergency services; hospitalization; maternity and newborn care; mental health and substance use disorder services, including behavioral health treatment; prescription drugs; rehabilitative and habilitative services and devices; laboratory services; preventive and wellness services and chronic disease management; and pediatric services, including oral and vision care.

³³ Pediatric" is defined as under the age of 19, unless a state extends the definition.

³⁴ At a minimum, dental services include relief of pain and infections, restoration of teeth and maintenance of dental health. Dental services may not be limited to emergency services. Each state is required to develop a dental periodicity schedule in consultation with recognized dental organizations involved in child health. More information can be found [here](#).

³⁵ McKernan SC; Reynolds JC. Singhal A; Kuthy RA; Damiano PC. Access to dental care and the oral health safety net. Iowa City, IA: University of Iowa Public Policy Center, 2013.

³⁶ State Children's Health Insurance Plan, also known as SCHIP, provides health insurance to uninsured children in families with income too high to qualify for Medicaid but too low to obtain private insurance. Similar to Medicaid, SCHIP is jointly funded by the federal and state governments and administered by the states under Title XXI of the Social Security Act.

³⁷ Edelstein B. The dental safety net, its workforce, and policy recommendations for its enhancement. J Public Health Dentistry 2010;70(s1):S32-S39.

³⁸ Institute of Medicine and National Research Council. Improving access to oral health care for vulnerable and underserved populations. Washington, DC: The National Academies Press, 2011.

³⁹ Medicaid pays for specific health care services for eligible low-income individuals and families. It is administered by states but jointly funded by the federal and state governments under Title XIX of the Social Security Act.

⁴⁰ Of the 3,065,499 dental visits, 2,591,211 were provided in dental school clinics and 474,288 in extramural facilities.

⁴¹ American Dental Association. 2010-11 Survey of Dental Education: Academic Programs, Enrollment and Graduates. Chicago, IL: American Dental Association, 2012.

⁴² Herman Ostrow School of Dentistry of the University of Southern California [community programs](#).

⁴³ Head Start is a federally funded child development program designed to promote school readiness for children under age five from low-income families through education, health, social and other services.

⁴⁴ ADA Health Policy Institute analysis of state Medicaid policies as of December 6, 2013. Notes: Kansas' Medicaid program officially covers emergency dental services, but all of the plans contracted with Kansas' Medicaid program offer two routine dental check-ups (exams and cleanings) per year for adults over age 21. Maryland's Medicaid program officially covers emergency dental services, but the majority of Medicaid beneficiaries are enrolled in the Medicaid managed care program, which provides limited adult dental benefits.

⁴⁵ Health Resources and Services Administration, [Primary Care: The Health Center Program](#).

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Center for Medicare & Medicaid Services (CMS). Federally Qualified Health Center, [Rural Health Fact Sheet Series](#), January 2013.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Indian Health Services website, "About IHS" available at <http://www.ihs.gov/aboutihs/>

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ CMS. Health care reform: tracking tribal, federal, and state implementation. May 2011. At: <https://www.cms.gov/Outreach-and-Education/American-Indian-Alaska-Native/AIAN/Downloads/CMSHealthCareReform5202011.pdf>.

⁶⁰ CMS. Federally Qualified Health Center, [Rural Health Fact Sheet Series](#), January 2013.

⁶¹ Lofink H, Kueble, J, Juszczak L, Schlitt J, Even M, Rosenberg J, White I. 2010-2011 school-based health alliance census report. Washington, DC: School-Based Health Alliance, 2013. At:

<http://www.sbh4all.org/atf/cf/%7BB241D183-DA6F-443F-9588-3230D027D8DB%7D/2010-11%20Census%20Report%20Final.pdf>

⁶² Ibid.

⁶³ Ibid.

⁶⁴ The Rural Assistance Center (RAC).

⁶⁵ CMS. Federally Qualified Health Center, [Rural Health Fact Sheet Series](#), August 2014.

⁶⁶ Joint Commission on Health Care. Decision matrix: policy options for 2015 general assembly session. November 5, 2014, p. 9. At: <http://jchc.virginia.gov/Final%20Decision%20Matrix.pdf>

⁶⁷ Ibid.

⁶⁸ Institute of Medicine and National Research Council. Improving access to oral health care for vulnerable and underserved populations. Washington, DC: The National Academies Press, 2011.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Ibid.