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Improving Dental Care Access for Vulnerable Populations

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Key Messages

- *Dental care presents more financial barriers compared to other health care services. Racial and ethnic minorities, people in rural counties, and populations covered by public insurance particularly struggle with dental care access. There are significantly fewer dentists per capita in rural counties compared to urban counties.*
- *Dental care access can be impacted by dental practice structure. Dentists who are affiliated with dental support organizations (DSOs) have higher rates of participation in Medicaid compared to dentists who are not part of DSOs. DSOs may offset the costs and administrative burdens associated with Medicaid participation.*
- *Federal and state policy reforms can further improve access to dental care for vulnerable populations. Medicaid can be expanded to cover a comprehensive range of services for adults, and states can reduce cumbersome credentialing and prior authorization procedures for providers. Dental schools and debt relief programs could also target dental students to help them settle in underserved areas to practice.*

Introduction

Practitioners, policymakers and patients alike are increasingly appreciative of the link between oral health and overall health, recognizing oral health as equally or more important than other aspects of one's personal health.[1,2] Inflammation within the oral cavity has known implications for a host of chronic diseases and conditions, including diabetes, coronary heart disease, pregnancy, and others.[3] These same chronic conditions are empirically linked to health care cost savings when oral health issues are addressed and prevented.[4,5] Oral disease can lead to higher health care costs as well as loss of productivity among workers and students.[6] The fiscal and public health toll of oral disease is high.

The U.S. health care system and population cannot afford to put off dental care, and yet, dental care itself is unaffordable for vulnerable groups. Dental care presents more financial barriers than other types of health care services,[7] and 17% of working-age adults reported that they did not obtain needed dental care due to cost in 2022.[8] Among those at or under 100% of the federal poverty level, this figure was around 30%.[8] Public programs such

as Medicare and Medicaid are taking on an increasing share of dental expenditures,[9] but disparities in cost barriers and dental care utilization for low-income and elderly populations persist.[8] Oral health outcomes and utilization are not improving among low-income and elderly populations due partly to a lack of comprehensive coverage for adult dental care under public programs. A recent survey of Medicaid beneficiaries in eight states revealed that nearly three out of five beneficiaries find that provider access is the main barrier to dental care,[10] meaning they cannot find the time or means to travel to the dental office, they have difficulty finding a dentist who participates in Medicaid, or they have difficulty finding a dentist who speaks their language or is of their cultural background. Affordability issues, such as prohibitive out-of-pocket costs and lack of covered services, are also barriers for two out of five beneficiaries. This same study also surveyed dentists; nearly three-fourths reported that the lack of comprehensive procedures covered by Medicaid is an extremely or very important barrier to their participation in their state's Medicaid program.[10]

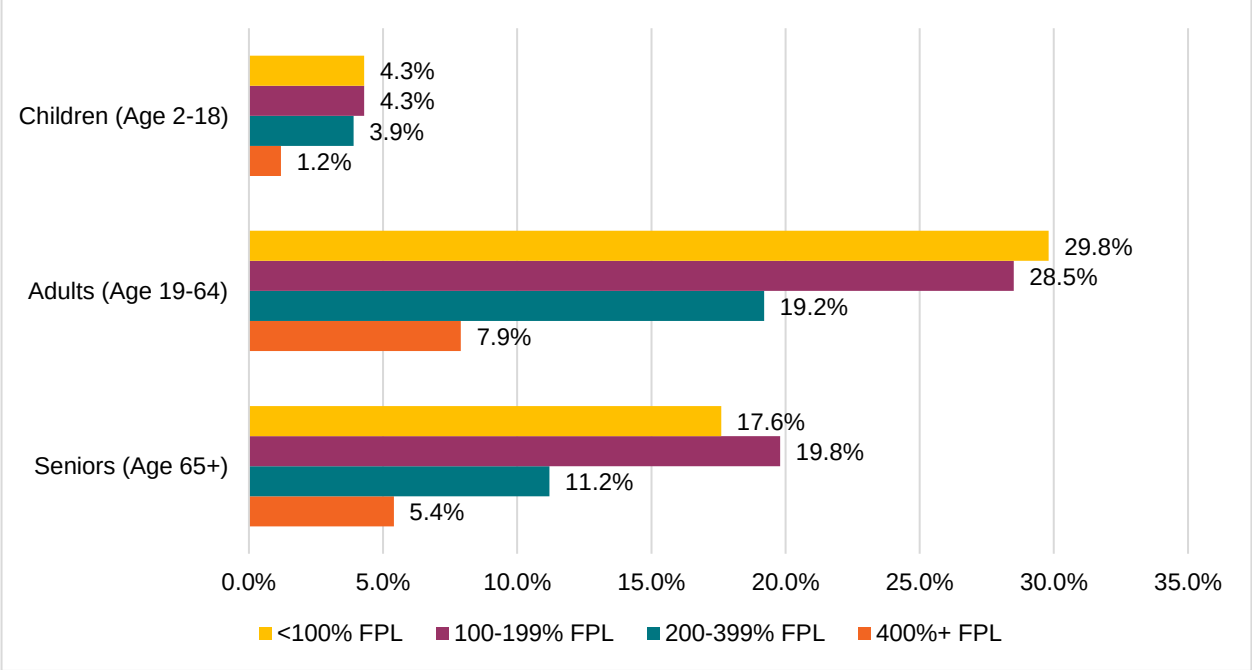
Significant policy reforms are needed at the federal and state levels to improve access to dental care for vulnerable populations and for those in underserved rural areas. In this paper, the American Dental Association's (ADA) Health Policy Institute (HPI), in partnership with the Association of Dental Support Organizations (ADSO), explores possible reforms to bolster access to dental care for the underserved and increase provider engagement with public health.

The Problem: Access to Dental Care an Issue for Vulnerable Populations

In 2000, the Oral Health in America report released by U.S. Surgeon General David Satcher called for the "removal of barriers between people and oral health."[11] The latest Oral Health in America report, published 20 years later, found that racial and income disparities in terms of access to oral health have widened over the last two decades. For example, individuals who identify as Black or African American, Hispanic, and Native American were found to have higher rates of tooth caries and tooth loss along with inadequate access to care.[12] Low-income children and adults saw an increasing amount of decay on tooth surfaces over a similar timespan. Between 1988-1994, children from low-income families had 2.4 more decayed or filled tooth surfaces than children from high-income families. In 2011-2012, this number had increased to 4.2 more affected tooth surfaces despite an increase in dental care utilization among children.[12] These outcomes indicate persistent and increased cost barriers, insurance limitations, and other social and economic factors limiting access to oral care for low-income populations.

The previously mentioned survey of Medicaid beneficiaries in eight states confirms that coverage limitations in public programs make dental care access difficult. Around one-fourth of Medicaid beneficiaries (23.9%) stated that many services are not covered by their Medicaid plan, and 22.9% said they could not afford to go to the dentist.[10] National data confirm that low-income adults – more than any other age and income group – have the highest levels of cost barriers to dental care (Figure 1).[8] Survey respondents also noted that getting to the dental office is a challenge. Twenty-six percent of Medicaid beneficiaries noted that it was too hard to find a dentist that accepts their Medicaid plan, and 17.9% said they could not travel to a dentist easily.[10]

Figure 1: Prevalence of Cost Barriers to Dental Care by Age and Income Level



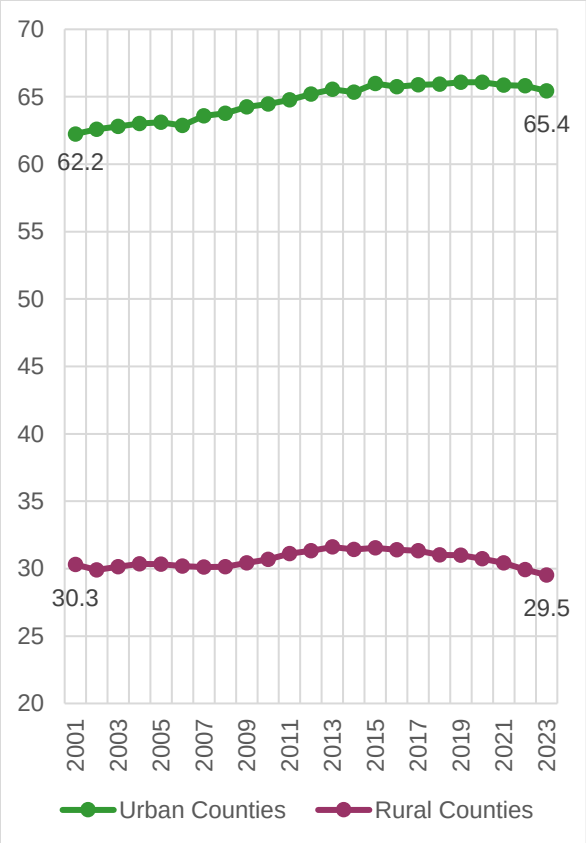
Source: Health Policy Institute analysis of National Health Interview Survey data for 2022. **Note:** Percentages indicate those who needed dental care but did not obtain it in the past 12 months due to cost. FPL – federal poverty level.

In addition to coverage limitations, access to dental care under Medicaid is also inhibited by an insufficient supply of dentists who participate in Medicaid. When asked what factors keep them from treating Medicaid beneficiaries, around nine out of 10 dentists in eight states said that the reimbursement rate from their state's Medicaid program is extremely or very important.[10] A similar number of dentists strongly agreed or agreed that low reimbursement from Medicaid would hurt their practice's overall profitability. Forty-five percent of dentists cited more comprehensive procedures not being covered by Medicaid as an extremely or very important barrier to participating in Medicaid, and eight out of 10 of dentists agreed that it is challenging to provide comprehensive treatment to Medicaid beneficiaries due to the limitations from the states' Medicaid programs.[10] Even dentists who already participate in Medicaid agree that these barriers and others prevent them from treating more Medicaid beneficiaries.

Residents of rural areas also face major challenges when it comes to accessing dental care. The supply of dentists in urban areas has increased in the past decade, but in rural areas, it has not. As of 2021, the supply of dentists per 100,000 population is 65.8 in urban counties and 29.9 in rural counties. This gap has widened since 2001 (Figure 2).[13] To put this another way, only 14% of professionally active dentists are in rural counties, which is where 20% of the U.S. population lives.[14] The dentist supply issue in rural counties is exacerbated by the fact that the U.S. dentist workforce is facing a "retirement cliff." As of 2023, 15.8% of dentists are ages 65 and older;[15] within rural counties, it's 19.8% and in urban counties, 15.5%.[13] While a large share of dentists is near retirement, enrollment in U.S. dental schools has steadily increased over the years, going up 4.6% from 2019 to 2022.[16] Recognizing dental

care accessibility issues in rural areas, several dental schools have implemented specialized programs to train students to practice in underserved communities.[17,18,19] However, the full impact of these programs will not be felt until years in the future. In the meantime, we are not succeeding in addressing rural health care shortages. Given that rural dentists are older and dental schools need time and resources to direct new dentists to shortage areas, the health care accessibility problem in rural communities will likely worsen in the coming years.

Figure 2: Dentists per 100,000 Population, Urban and Rural Counties



Sources: ADA Health Policy Institute analysis of HPI Masterfile; U.S. Census Bureau. County-level Urban and Rural information for the 2020 Census; U.S. Department of Housing and Urban Development HUD-USPS ZIP Crosswalk Files; U.S. Census Bureau. County Population Totals. **Notes**: Urban and rural county types are based on 2020 U.S. Census data. Rural counties are those with at least 50% rural population.

Solutions: Evidence-Based Policies that Help Address Access Issues

Though increasing access to dental care for Medicaid beneficiaries will require a variety of reforms at the state and federal levels, the solution may lie in part in dental support organizations (DSOs). DSOs provide non-clinical administrative services to a network of supported practices that are owned by dentists who retain their clinical autonomy. DSOs vary in terms of size, geographical reach, and dental specialization (e.g., pediatric or orthodontic DSOs), and as a group practice type, they are increasingly popular among new dentists. As of 2022, nearly one-quarter of dentists less than 10 years out of dental school are affiliated with a practice that is supported by a DSO, compared to 7% of dentists more than 25 years out of dental school.[20]

Research has shown that dental providers from varying backgrounds are treating Medicaid beneficiaries, and dentists affiliated with practices supported by DSOs have a higher rate of Medicaid participation (53.3%) than their non-DSO counterparts (40.3%) (Table 1).[21] There are many potential reasons why this is the case (see box). In particular, DSOs, as well as other types of consolidated practice models, have the advantage of scale and centralized non-clinical services. However, DSOs and their supported dentists face similar barriers to treating Medicaid beneficiaries as other dentists in the field. There are two major solutions that have ultimately proven to help dentists from all practice settings provide more care to Medicaid beneficiaries.

Table 1: Medicaid Participation Among Dentists by Years of Experience and DSO Status

DSO Status	Overall	0-5 Years Experience	6-10 Years Experience	11-25 Years Experience	26 or more Years Experience
Non-DSO Dentist	40.3%	49.9%	52.0%	43.0%	31.1%
DSO Dentist	53.3%	51.8%	60.9%	55.4%	45.0%

Source: HPI analysis of ADA masterfile. **Note:** DSO – dental support organization.

WHY MIGHT DSO-SUPPORTED PRACTICES BE POSITIONED TO TREAT MEDICAID BENEFICIARIES?

- Due to the economies of scale of DSOs, these organizations may provide more services at a lower cost to the individual practices as DSOs are often ordering supplies for multiple practices at a discount.
- The administrative burden imposed by states to treat Medicaid beneficiaries may be reduced through process efficiencies that come with DSO-supported networks and economies of scale.
- Dentists in practices supported by DSOs may worry less about the non-clinical administrative aspects of the practice and can focus more time on prevention and health education with patients. These aspects of care are critical to improving the oral health of vulnerable populations.
- While dentists of any practice can deliver high quality care, DSOs are equipped to offer supported practices strong quality programs that may enhance Medicaid's program integrity and beneficiaries' oral health outcomes.

Area 1: Medicaid Program Reform

Extensive adult dental coverage in state Medicaid programs and sufficient funding for reasonable reimbursement rates are still needed. While not every state offers comprehensive dental coverage for adult beneficiaries under Medicaid, there is evidence that such a benefit reduces costly emergency room visits and improves employability prospects for beneficiaries.[22,23] Medicaid programs have historically provided significantly lower reimbursement for dental services compared to commercial plans. DSO-supported practices, like any other dental practice, cannot afford the heavy losses that stem from lower reimbursement. On average, Medicaid has reimbursed 53.3% of what commercial plans traditionally pay to dentists for services to adults.[24] When states enact reforms to provide a comprehensive adult dental benefit or increase reimbursement for Medicaid services, Medicaid participation increased more among dentists supported by DSOs compared to their non-DSO counterparts.[25]

Streamlining administrative arrangements in state Medicaid programs will increase provider participation. Besides inadequate reimbursement rates, dentists who treat and do not treat Medicaid beneficiaries have similar views on how current administrative burdens make it difficult to participate in Medicaid.[10] In multiple states, dentists have to pursue credentialing with multiple Medicaid managed care organizations (MCOs), submit prior authorization requests for comprehensive work, and spend extra administrative hours justifying medical necessity of certain procedures. Several states have taken steps to reduce the administrative burden on dentists. Nebraska is collaborating with MCOs to simplify the credentialing process via a single, centralized website.[26] Several states have reduced the number of

dental procedures requiring prior authorization.[27] However, administrative burdens are still cited as one of the biggest barriers for dental providers to actively participate in their state Medicaid programs.[10]

Efforts to diversify the workforce may help with increasing access to dental care for Medicaid beneficiaries. Black, Hispanic, and Asian dentists and dentists who practice in rural areas have higher rates of Medicaid participation than White dentists or dentists in urban areas.[28,29] Policies that promote the racial/ethnic diversification and geographic distribution of the dentist workforce could lead to a more robust network of Medicaid providers.[28]

According to a recent survey by the American Dental Education Association, working in a practice supported by a DSO remains a popular choice for new graduates who are wishing to work in private practice settings.[30] This trend specifically held for providers from highly underrepresented racial and ethnic (HURE) backgrounds. In 2023, the survey found that 40% of HURE graduating dentists who planned to work in private practice were selecting a practice supported by a DSO as their place of employment. [31]

Area 2: Access to Care for Vulnerable Populations, Including Rural Areas

Community-based dental school programs can transform underserved areas. Several dental schools have recently implemented programs that focus on recruiting dental students who are interested in practicing in rural and underserved communities after they graduate.[17,18,19] Community-based dental education (CBDE) programs offer students financial aid, and the curriculum is specialized toward training dentists in population health to meet the specific needs of rural populations. The Harvard School of Dental Medicine, as an example, has an advanced education in general dentistry (AEGD) program that would place new dentists in rural areas of New Hampshire—a state that does not have a dental school of its own,[32] which can be a contributing factor to dental provider shortages since data indicate dental students tend to practice in rural areas if they are originally from rural areas.[33] Harvard's goals include training residents to provide dynamic, multidisciplinary care and to coordinate with other health professionals—critical skills for providers to have in areas with limited health resources.[18] The effectiveness of these CBDE programs depends on their ability to provide students both clinical and didactic understanding of social determinants of health and health policy. In other words, these programs create providers who are both dentists and public health advocates.[34] New dentists may find practice in a rural area preferrable; underserved areas can be a career launching pad for younger dentists since demand is high and cost of living is low.[35]

Loan forgiveness programs are effective, but we need more of them. Data is limited, but loan forgiveness programs may make the retention and recruitment of health care providers easier in underserved areas.[36] Uptake of loan forgiveness programs has been on the rise in recent years, and participation in the National Health Service Corps (NHSC) in particular drives more primary care practitioners to underserved areas.[37] Each additional NHSC practitioner is associated with an increase in 2,802 dental care visits per year in community health centers.[38] A simulation model found that increased provisions for NHSC dentists lead to reduced risk of dental caries among children as well as cost savings.[39] More data is needed to determine how many more loan forgiveness awards are needed to resolve dental care access issues in rural communities.

Licensure portability is a way to get out-of-state dentists into the provider pool. States have differing requirements for dentists and dental hygienists to be licensed to practice. Obtaining licensure after migrating

across state lines to practice elsewhere can be time-consuming and costly.[40] States can ameliorate this barrier through interstate compacts to make licensure in other states more straightforward for providers. Licensure portability empirically increases out-of-state practices among physicians and thus can increase access to and continuity of care for patients.[41]

Next Steps for Advocacy

The ADA and the ADSO have supported efforts to improve access to dental care for underserved populations, including Medicaid beneficiaries. Both organizations support reforms to provide a comprehensive adult dental benefit for Medicaid beneficiaries. At the federal level, efforts include the **Medicaid Dental Benefit Act** and the **Strengthening Medicaid Incentives for Licensees Enrolled in Dental (SMILED) Act**. The Medicaid Dental Benefit Act would mandate dental coverage for all adult Medicaid beneficiaries, rather than a patchwork of coverage that varies by state. The SMILED Act would reduce administrative burdens that often discourage dentists from signing up for or staying in the Medicaid program. This legislation would also simplify credentialing so that dentists do not have to wait a long time to become Medicaid providers. This bill encourages states to use an integrated system such as the Council for Affordable Quality Healthcare (CAQH) to minimize paperwork and complete the credentialing process within 90 days. Additionally, SMILED would reduce unfair Medicaid audits by requiring that they be performed by a dentist from the same specialty and be based on clinical practice guidelines from dental organizations. The ADA and the ADSO will continue collective efforts to advance oral health equity and access to care for all individuals, including those covered by Medicaid.

The ADA and the ADSO have also worked together to strengthen the dental workforce and increase licensure portability through enactment of the Dentist and Dental Hygienist Compact (DDH Compact). The compact provides a faster, more efficient way for providers to practice in multiple states by allowing a provider to obtain a privilege to practice in member states without going through the full licensure application process. Participating states agree to recognize the validity of a provider's license from another member state, pending background checks and other jurisprudence requirements. Licensure portability decreases provider wait time while preserving board disciplinary authority and patient safety.

In addition to the SMILED Act and the DDH Compact, the ADA and the ADSO have also advocated for several oral health care workforce reforms currently being considered in Congress. The following bills would support a robust dental workforce nationwide.

Lower Costs, More Transparency Act would extend programs that are integral to bolstering the dental and medical workforce and increase access to health care, particularly in underserved communities. This bill has been passed by the House of Representatives and is pending passage in the Senate.

Bipartisan Primary Care and Health Workforce Act includes funding extensions for the State Oral Health Workforce Improvement Grant Program (Action for Dental Health), Community Health Center Fund, National Health Service Corps, and Teaching Health Center Graduate Medical Education Program.

Action for Dental Health Act (ADH) is a bipartisan reauthorization of the ADH program through 2028 and would direct funding to state and local organizations through a Health Resources and Services Administration oral health workforce grant program. The bill has been passed by the House of Representatives, and we continue to advocate for its passage in the Senate.

References

[1] Heaton LJ, Santoro M, Martin P, Tranby EP. Experiences with and outcomes of oral health care: Perspectives from nationally representative data. CareQuest. Research report. March 2024. Available from: https://www.carequest.org/system/files/CareQuest_Institute_Experiences-With-and-Outcomes-of-Oral-Health-Care_3.20.24_FINAL.pdf. Accessed March 22, 2024.

[2] DentaQuest. Reversible decay: oral health is a public health problem we can solve. Research report. 2019. Available from: https://www.astdd.org/docs/dentaquest-evaluation-report-sept-2019.pdf. Accessed March 22, 2024.

[3] Kane SF. The effects of oral health on systemic health. *Gen Dent*. 2017;65(6):30-34.

[4] Vujicic M, Fosse C, Reusch C, Burroughs M. Making the case for dental coverage for adults in all state Medicaid programs. American Dental Association. Health Policy Institute White Paper. July 2021. Available from: https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/whitepaper_0721.pdf. Accessed March 22, 2024.

[5] Borah BJ, Brotman SG, Dholakia R, et al. Association between preventive dental care and health care cost for enrollees with diabetes or coronary heart disease: 5-year experience. *Compend Contin Educ Dent*. 2022;43(3):130-139.

[6] Centers for Disease Control and Prevention. Health and economic benefits of oral health interventions. December 21, 2022. Available from: https://www.cdc.gov/chronicdisease/programs-impact/pop/oral-disease.htm. Accessed March 26, 2024.

[7] Vujicic M, Buchmueller T, Klein R. Dental care presents the highest level of financial barriers, compared to other types of health care services. *Health Affairs*. 2016;35(12): 2176–2182.

[8] American Dental Association. National trends in dental care use, dental insurance coverage, and cost barriers. Health Policy Institute. November 2023. Available from: https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/national_trends_dental_use_benefits_barriers.pdf. Accessed March 22, 2024.

[9] American Dental Association. National dental expenditures, 2022. Health Policy Institute. Infographic. December 2023. Available from: https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/national_dental_expenditures_2022_infographic.pdf. Accessed March 22, 2024.

[10] American Dental Association. Survey of Medicaid beneficiaries and survey of dentist opinions on Medicaid: combined results report. Health Policy Institute. 2024.

[11] U.S. Department of Health and Human Services. Oral health in America: a report of the Surgeon General—executive summary. Rockville, MD: National Institute of Dental and Craniofacial Research. 2000. Available from: https://www.nidcr.nih.gov/sites/default/files/2017-10/hck1ocv.%40www.surgeon.fullrpt.pdf. Accessed April 16, 2024.

[12] U.S. Department of Health and Human Services. Oral health in America: advances and challenges—executive summary. Rockville, MD: National Institute of Dental and Craniofacial Research. 2021. Available from: https://www.nidcr.nih.gov/research/oralhealthinamerica. Accessed April 16, 2024.

[13] American Dental Association. Health Policy Institute analysis of ADA masterfile.

[14] Henderson-Frost J, Deutchman M. Eight ways to mitigate US rural health inequity. *AMA J Ethics*. 2022;24(1):E73-79.

[15] American Dental Association. Supply of dentists in the United States: 2001-2023. Available from: https://www.ada.org/resources/research/health-policy-institute/dentist-workforce. Accessed March 25, 2024.

[16] American Dental Association. Dental education program enrollment and graduates trends report: 2023-24. Health Policy Institute. Available from: https://www.ada.org/resources/research/health-policy-institute/dental-education. Accessed March 25, 2024.

[17] Pacific Northwest University. PNWU begins construction on one of the country's "most innovative" dental schools. Available from: https://www.pnwu.edu/blog/2023/10/26/delta-dental-equity-hall-groundbreaking/. Accessed March 25, 2024.

[18] Bruett C. New program in U's School of Dentistry helps improve access to dental care in Utah. University of Utah. December 13, 2023. Available from: https://uofuhealth.utah.edu/inclusion/news/2023/12/new-program-us-school-of-dentistry-helps-improve-access-dental-care-utah. Accessed March 25, 2024.

[19] The University of Alabama. New rural dental scholars program launched. September 26, 2023. Available from: https://cchs.ua.edu/new-rural-dental-scholars-program-launched/. Accessed March 25, 2024.

[20] American Dental Association. Distribution of dentists according to size of dental practice and affiliation with a Dental Support Organization (DSO). Health Policy Institute. 2023. Available from: https://www.ada.org/resources/research/health-policy-institute/dental-practice-research. Accessed April 16, 2024.

[21] HPI analysis of ADA office database

[22] Giannouchos TV, Reynolds J, Damiano P, et al. Association of Medicaid expansion with dental emergency department visits overall and by states' Medicaid dental benefits provision. *BMC Health Serv Res*. 2023;23(625).

[23] Kieffer EC, Goold SD, Buchmueller T, et al. Beneficiaries' perspectives on improved oral health and its mediators after Medicaid expansion in Michigan: a mixed methods study. *J Public Health Dent*. 2022; 82: 11–21.

[24] American Dental Association. Reimbursement rates for child and adult dental services in Medicaid by state. Health Policy Institute. 2021. Available from: https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/hpigraphic_1021_1.pdf. Accessed April 2, 2024.

[25] Brickhouse TH, Dahman BA, Peters BWR, Liu H, Kumar AM. The impact of dental Medicaid reform on dental care provider activity and market penetration of dental support organizations. *JADA*. 2021; 152(10): 822–31.

[26] Nebraska Medicaid. 2024 dental changes: provider frequently asked questions. Available from:

https://dhhs.ne.gov/Documents/Dental%20FAQ%20for%20Medicaid%20Providers.pdf. Accessed April 16, 2024.

[27] Milliman. Medicaid dental program delivery systems. 2020.

[28] Nasseh K, Fosse C, Vujicic M. Dentists who participate in Medicaid: who they are, where they locate, how they practice. *Med Care Res* Rev. 2023;80(2):245-252.

[29] Mertz E, Calvo J, Wides C, Gates P. The Black dentist workforce in the United States. *J Public Health Dent*. 2017;77(2):136-147.

[30] Istrate EC, Cooper BL, Singh, P, Gül G, West KP. Dentists of Tomorrow 2023: An Analysis of the Results From the ADEA 2023 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series. Issue 6, October 2023.

[31] Istrate EC, Cooper BL, Singh, P, Gül G, West KP. Dentists of Tomorrow 2023: An Analysis of the Results From the ADEA 2023 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series. Issue 6, October 2023.

[32] Harvard School of Dental Medicine. AEGD program – rural track. Available from: https://hsdm.harvard.edu/aegd-program-rural-track. Accessed March 26, 2024.

[33] Vujicic M, Sarrett D, Munson B. Do dentists from rural areas practice in rural areas? *JADA*. 2016;147(12):990-992.

[34] Smith PD, Mays KA. Dental students' non-clinical learning during community-based experiences: A survey of U.S. dental schools. *J Dent Educ*. 2019;83(11):1289-1295.

[35] Collazo LM. Why I chose to practice in rural Michigan. *J MI Dent Assoc.* 2024;106(3):36-40.

[36] Pathman DE, Sewell RG, Rauner T, Overbeck M, Fannell J, Resendes J. Outcomes of states' loan repayment and forgiveness programs from the perspective of safety net practice administrators. *J Am Board Fam Med*. 2022;35(5):1015-1025.

[37] Davis CS, Meyers P, Bazemore AW, Peterson LE. Impact of service-based student loan repayment program on the primary care workforce. *Ann Fam Med*. 2023;21(4):327-331.

[38] Han X, Pittman P, Erikson C, Mullan F, Ku L. The role of the National Health Service Corps clinicians in enhancing staffing and patient care capacity in community health centers. *Med Care*. 2019;57(12):1002-1007.

[39] Choi SE, Shen Y, Wright DR. Cost-effectiveness of dental workforce expansion through the National Health Service Corps and its association with oral health outcomes among US Children. *JAMA Health Forum*. 2023;4(3):e230128.

[40] Versaci MB. ADA, partners take steps to achieve greater licensure portability for dentists. ADA News. September 8, 2022. Available from: https://adanews.ada.org/ada-news/2022/september/ada-partners-take-steps-to-achieve-greater-licensure-portability-for-dentists/. Accessed April 16, 2024.

[41] Deyo D, Ghosh S, Plemmons A. Access to care and physician-practice growth after the interstate medical licensure compact. Social Science Research Network. 2023. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4629647. Accessed April 16, 2024.

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