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The Dental Health of Rural Elderly People and Its Social Justice Implications

Jacqueline Fox
University of South Carolina School of Law

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**THE DENTAL HEALTH OF RURAL ELDERLY PEOPLE AND ITS
SOCIAL JUSTICE IMPLICATIONS**

*Jacqueline Fox**

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I. INTRODUCTION

Dental cavities and gum disease, both preventable conditions, have affected 91% of all United States adults.¹ The severity of the problem and the lingering impact of poor preventive care and ongoing access to care are disparately spread within the population, and poor people, older people, less educated people, rural people, and people of color all have worse access. Having multiple of these characteristics leads to even worse access and resulting oral health, so that poor, rural, undereducated, older Americans, particularly those who are Black, are highly likely to have painful, diseased mouths.²

* Professor, University of South Carolina School of Law. The author would like to thank the members of the West Virginia Law Review for organizing the conference, where an earlier version of this Article was presented, and her fellow panelists at the conference for their helpful comments.

¹ Bruce A. Dye et al., *Dental Caries and Tooth Loss in Adults in the United States, 2011–2012*, CTR. FOR DISEASE CONTROL AND PREVENTION (2015), <https://www.cdc.gov/nchs/products/databriefs/db197.htm> (last visited Mar 2, 2022).

² Anne Braswell & Nalo Johnson, *Rural America’s Oral Health Care Needs*, NAT’L RURAL HEALTH ASS’N POL’Y BRIEF, [https://www.ruralhealth.us/getattachment/Advocate/Policy-Documents/RuralAmericasOralHealthCareNeeds-\(1\).pdf.aspx?lang=en-US](https://www.ruralhealth.us/getattachment/Advocate/Policy-Documents/RuralAmericasOralHealthCareNeeds-(1).pdf.aspx?lang=en-US) (last visited June 1, 2022); see also *Disparities in Oral Health*, CTR. FOR DISEASE CONTROL AND PREVENTION (2021), https://www.cdc.gov/oralhealth/oral_health_disparities/index.htm (last visited Feb. 16, 2022) [hereinafter *Disparities*];

Patterns of problematic access to dental care and resultant poor oral health are very similar to patterns regarding who has borne the worst impacts of COVID-19. This overlap and echoing are evidence of persistent patterns of disrespect and devaluing on a national scale. In the face of the striking similarities in outcome, even as the supposed reasons for these outcomes are so different and the mechanisms of harm are so different (the slow, cumulative impact of poor dental care across a lifetime and the sudden, rapid spread of a novel coronavirus), approaches to improving healthcare financing and resource allocation in an effort to improve dental health (or any health status) need to be reassessed.

In discussions about COVID policies and burden allocations, many people openly embraced eugenics language, minimizing harms that were suffered by vulnerable populations.³ With dental care, systems have not been effectively altered to prevent pain and poor health outcomes even when existing systems cost more money overall than changing them would. Looking at these different challenges and similar problematic outcomes, it seems something very problematic is skewing healthcare financing and allocation on a national level. This tracks the social determinants of health as well as related societal injustices. Consider a healthcare system that leaves large percentages of its people in constant preventable and untreated dental pain for years of their lives. This same system did not adequately respond to emerging pathogens. The care it does provide costs a large amount of a country's gross national product, while still leaving substantial percentages of people in significant medical debt. This is not a description of an admirable system.

Prior to the availability of the vaccine, COVID risks were discussed as though some people were more vulnerable to the virus and, thus, suffered higher losses. These discussions focused primarily on older people, Black or Hispanic people, people with diabetes,⁴ obese people, people with disabilities,⁵ and people with poorly functioning or suppressed immune systems.⁶ The problem with this

³ See Christophe Lesschaeve, Josip Glaurdic & Michal Mochtak, *Health Versus Wealth During the Covid-19 Pandemic: Saving Lives or Saving the Economy?*, PUB. HEALTH Q. 5 (Oct. 15, 2021), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8524622/pdf/nfab036.pdf> (Texas lieutenant governor, Dan Patrick, suggested in March 2020 that he believed "lots of grandparents" would rather die than let COVID-19 harm the U.S. economy).

⁴ *How COVID-19 Impacts People with Diabetes*, AM. DIABETES ASS'N, <https://www.diabetes.org/coronavirus-covid-19/how-coronavirus-impacts-people-with-diabetes> (last visited June 1, 2022).

⁵ *Id.*

⁶ *Federal Report Finds Foreseeable, Disproportionate COVID-19 Fatalities, Heavy Toll for People with Disabilities*, NAT'L COUNCIL ON DISABILITY, (Oct. 29, 2021), <https://ncd.gov/newsroom/2021/federal-report-release-COVID-19> (last visited Mar. 2, 2022). This is only one part of the story, as people also used blame and shame language to describe the excess deaths in many groups as well as expressing relief when deaths could be described as being in a group at higher risk than "normal" people.

story about COVID, who suffered the worst from it, and why they did, is that it glosses over our preexisting refusal to alleviate other forms of suffering in the same populations. Numerous health policy experts and community advocates were pointing this out in real time as the initial stages of the COVID-19 crisis unfolded, but it did not change the prevalent story of innate vulnerability.

As this idea of innate vulnerability took hold of popular discourse, political decision makers and their spokespeople repeatedly delineated between deaths being suffered by those at increased risk of dying and those suffered by those not at increased risk, implying those not at risk were measurably different.

This Article explains the problem of lack of access to dental care, how its cumulative effects have caused tremendous suffering for older, rural Americans, and how failing to treat these problems is both cruel and inefficient. It then explains the legal steps necessary to provide funding and access to necessary care, so the immediate problem is addressed and the pipeline of people growing old with poor dental health is interrupted. Finally, it shows how costly it is to not provide this care. However, in light of how COVID disease patterns expose how inhumane the country is towards many of its own, this Article does not expect change in the face of its arguments. Rather, it offers this analysis of dental care access and funding as further proof of the continuing national inhumanity that allows people to suffer unnecessarily. Dental care is an excellent example for this purpose because it is so obviously important and cost effective and still not provided properly.

Rural communities have a difficult time accessing appropriate dental care.⁷ The failure to provide proper dental care leads directly to infection, loss of teeth, increased risk of developing numerous diseases, poorer health generally, and often excruciating pain or dull, constant pain—both of which resist treatment with over-the-counter pain medications.⁸ Some of this is due to cost and some is due to not having an adequate supply of properly trained dental care providers.⁹

Elderly people in rural communities have a particularly awful, complex, and problematic relationship with dental care, experiencing the cumulative effects of a lifetime of poor care, high levels of current problems, little to no access to providers, and burdensome costs for care even if it is available. The problems in this population are staggering. The patterns of race, gender, and socioeconomic-based health care deprivation persist even within the rural elderly

⁷ *Improving Oral Health Care Services in Rural America*, NAT'L ADVISORY COMM. ON RURAL HEALTH & HUM. SERV. (Dec. 2018), <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/rural/publications/2018-Oral-Health-Policy-Brief.pdf>.

⁸ Jacqueline Fox, *The Epidemic of Children's Dental Diseases: Putting Teeth into the Law*, 11 YALE J. HEALTH POL'Y, LAW, & ETHICS 223 (2011), <https://openyls.law.yale.edu/handle/20.500.13051/5886>; Leonard A. Cohen, Shelly L. Harris, Arthur J. Bonito, Richard J. Manski et al., *Coping with Toothache Pain: A Qualitative Study of Low-Income Persons and Minorities*, J. PUB. HEALTH DENTISTRY (2007), <https://pubmed.ncbi.nlm.nih.gov/17436976/>.

⁹ Fox, *supra* note 8.

population. For example, elderly black people in rural communities have worse levels of care and worse dental health than white people.¹⁰ The same holds true for education level, etc.

Congress recently considered, then failed to implement, an expansion of Medicare coverage to include dental care.¹¹ This would have been an important step towards making Medicare benefits better address the needs of its members and improving the health outcomes of the Medicare population overall. The proposal was important, and, while not sufficient to truly ameliorate the problem of poor dental care in rural elderly people in the United States, would have been very helpful. That it was not passed is, by itself, an interesting commentary on Congress' relationship with elderly rural Americans.

There is much that can be done to address these problems, including expanding Medicare benefits to cover dental care, increasing access to Medicaid dental benefits for adults, increasing training and licensing of dental therapists in more states, and educating people about the need for preventive dental care. Because there are persistent shortages of dentists in the country, dental therapists, in particular, could be game changing for the rural elderly population.¹² When combined with expansions of insurance programs so that care is paid for, utilizing the full potential of these trained providers could ease access concerns, provide a high level of care to the populations in rural areas, and do so in a way that maximizes the public health improvements new dental coverage can lead to. The underlying problems that COVID-19 exposed will likely remain without a far more substantial reckoning.

II. DENTAL CARE: BOTH USEFUL AND COST EFFECTIVE

The importance of good preventive dental care and regular dental checkups has been known for some time, and there is little to no disagreement about what this care consists of or the harms caused by not providing it in order to appropriately protect the health of teeth and gums.¹³ Good dental hygiene starts at childhood and continues through a person's life, requiring twice-yearly cleanings, early childhood interventions to prevent plaque and other dental problems, twice-yearly assessments of tooth and gum health, and quick interventions when problems develop (such as cavities or gum disease), as these types of conditions consistently resolve much more readily and far less

¹⁰ *Disparities*, *supra* note 2.

¹¹ Medicare Dental, Vision, and Hearing Benefit Act, H.R. 4311, 117th Cong. (2021).

¹² Fox, *supra* note 8, at 227.

¹³ Susan O. Griffin, Laurie K. Barker, Liang Wei, Chien-Hsun Li et al., *Use of Dental Care and Effective Preventive Services in Preventing Tooth Decay Among U.S. Children and Adolescents - Medical Expenditure Panel Survey, United States, 2003-2009 and National Health and Nutrition Examination Survey, United States, 2005-2010*, CTR. FOR DISEASE CONTROL & PREVENTION (Sept. 12, 2014), <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6302a9.htm>.

expensively with early intervention.¹⁴ All of this—regular cleanings and exams coupled with early interventions—make it far more likely that people will keep their teeth through adulthood, and have little to no oral pain or gum disease.

Preventive dental care for children is widely accepted as being effective and generally assumed to be cost effective, especially in light of developing understandings of the impact of life-long dental health on adult health more broadly. It is difficult to prove global long term cost effectiveness as a general statement because the data has been collected from disparate healthcare systems.¹⁵ In the short term, and using a narrow concept of cost effectiveness, preventive care likely saves money throughout childhood because it reduces expensive dental problems that children can develop when they do not get proper dental preventive care. For example, proper twice-yearly cleanings and dental sealants can virtually eliminate dental decay and cavities in children.¹⁶ The overall effectiveness of childhood preventive dental care has been known for decades, making the achingly slow move towards providing better access and cost assistance somewhat disheartening, but it is moving in the proper direction.¹⁷

Children who do not receive proper preventive dental care suffer from myriad problems. The first set of problems includes dental decay and pain. Decay leads to problems in both teeth and gums. Tooth decay leads to cavities and, if a cavity becomes large enough, can lead to infections that spread to the brain, which can cause death.¹⁸ Gum infections are painful inflammatory processes in the gums that can cause enough damage to lead to tooth loss.¹⁹ It appears that gum infections also have significant connections to inflammatory processes and diseases throughout the body, though it is unclear what the causal pattern is, i.e. whether gum infections cause other inflammatory conditions, if the other conditions cause gum infections, if one increases the susceptibility to others, etc.²⁰ There is enough of a correlation between numerous inflammatory diseases and gum infections and the processes are similar enough for the connection to

¹⁴ *Impact of Dental Services on Total Cost of Care*, DECISIONS IN DENTISTRY (Apr. 17, 2020), <https://decisionsindentistry.com/article/impact-of-dental-services-on-total-cost-of-care/>.

¹⁵ Cohen et al., *supra* note 8.

¹⁶ *The Value of Preventive Oral Health Care*, UNIV. ILL. CHI. (Nov. 2, 2016), <https://dentistry.uic.edu/news-stories/the-value-of-preventive-oral-health-care/>.

¹⁷ Ben Johnson, Nicoleta Serban, Paul M. Griffin & Scott L. Tomar, *The Cost-Effectiveness of Three Interventions for Providing Preventive Services to Low-Income Children*, 45 CMTY. DENTISTRY & ORAL EPIDEMIOLOGY 522 (Jun. 21, 2017), <https://onlinelibrary.wiley.com/doi/10.1111/cdoe.12315>.

¹⁸ Fox, *supra* note 8, at 230.

¹⁹ *Periodontal Disease*, CTR. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/oralhealth/conditions/periodontal-disease.html> (last visited Mar. 2, 2022).

²⁰ N. Fine et al., *Periodontal Inflammation Primes the Systemic Innate Immune Response*, 100 J. DENTAL RSCH., 318 (Oct. 20, 2020), <https://journals.sagepub.com/doi/10.1177/0022034520963710>.

be considered important, and numerous studies are attempting to decipher the connections.²¹ At this point, the risk of untreated gum diseases in children apparently increasing the risk of other infectious or inflammatory conditions adds to an already overwhelming justification for providing preventive dental care regularly.²² Children also suffer from high rates of untreated dental pain.²³ This pain is remarkably common in children who do not have good access to dental care and, as most people realize, dental pain is a particularly awful and inescapable type of pain. Pain leads to poor concentration in school, poor nutrition when pain prevents children from chewing healthy food, missed schooling and activities, and other related problems.²⁴

Starting in 2000, the United States has taken significant steps to increase access to dental care for children, and this has borne fruit, with many more children receiving necessary cleanings and cavity prevention treatments than having done so in the past.²⁵ The country is not perfect in this regard but is steadily improving.

For adults, the problems caused by poor oral health include poor gum health, broken teeth, poor bite mechanics, untreated cavities, and relentless chronic pain. The spillover effects are also important. Chronic pain has a known detrimental effect on quality of life and also leads to self-medication with opioids or alcohol.²⁶ Pain while chewing leads to food choices driven by pain avoidance, which leads to poorer diets.²⁷ Missing front teeth make it more difficult to get jobs that require dealing with customers and also leads to an increased risk of

²¹ *Id.*; see also Xiaojing Li, Kristin M. Kolltveit, Leif Tronstad & Ingar Olsen, *Systemic Disease Caused by Oral Infection*, 13 CLINICAL MICROBIOLOGY REVS. 547 (2000), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC88948/pdf/cm000547.pdf>.

²² Fernanda Maria Sabella, Simone Nataly Busato de Feiria, Apoena de Aguiar Ribeiro, Leticia Helena Theodoro et al., *Exploring the Interplay Between Oral Diseases, Microbiome, and Chronic Diseases Driven by Metabolic Dysfunction in Childhood Frontiers*, FRONTIERS DENTAL MED. (Sept. 17, 2021), <https://www.frontiersin.org/articles/10.3389/fdmed.2021.718441/full>.

²³ *Children's Oral Health*, CTR. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html> (last visited Feb. 23, 2022).

²⁴ Fox, *supra* note 8, at 237–38.

²⁵ See Jane Keppelman & Allison Corr, *NIH Analysis Shows That Oral Health Has Improved Since 2000 but Major Inequities Remain*, PEW (Feb. 9, 2022) <https://www.pewtrusts.org/en/research-and-analysis/articles/2022/02/09/nih-analysis-shows-that-oral-health-has-improved-since-2000-but-major-inequities-remain>.

²⁶ Daniel P. Alford, Jacqueline S. German, Jeffrey H. Samet, & Debbie M. Cheng et al., *Primary Care Patients with Drug Use Report Chronic Pain and Self-Medicating with Alcohol and Other Drugs*, 31 J. GEN. INTERNAL MED. 486, 486 (2016), <https://link.springer.com/article/10.1007/s11606-016-3586-5>.

²⁷ Nita Patel, Rebecca Fils-Aime, Chien-Hsun Li, Mei Lin et al., *Prevalence of Past-Year Dental Visit Among Us Adults Aged 50 Years or Older, with Selected Chronic Diseases, 2018*, CTR. FOR DISEASE CONTROL & PREVENTION (Apr. 29, 2021), https://www.cdc.gov/pcd/issues/2021/20_0576.htm.

social isolation because people are often less comfortable around others who have missing or decaying visible teeth.²⁸ Bacteria from dental diseases can enter the body through poorly maintained teeth, increasing the risk of heart disease and strokes.²⁹ The risk of both of these conditions increases depending on the number of teeth a person has lost over time. Furthermore, untreated cavities can lead to abscesses developing.³⁰ These are very painful, usually requiring emergent care and serious pain relievers. Tooth abscesses can turn into brain infections.³¹ These are very expensive to treat and, in adults as with children, discussed previously, can be fatal.³²

Many of these problems could be prevented by having access to proper preventive care starting in childhood. The benefits of preventive care are well known.³³ Children who receive twice-yearly cleanings and treatment of teeth to prevent cavities generally do not get cavities.³⁴ Their gums are healthy. As a result, as people age, their adult teeth grow in strong and healthy and can be kept that way by continuing proper care through adulthood. All of these measures are cost effective in the short term by preventing cavities. They maintain that cost-effectiveness in the long term by preventing many of the dental problems adults

²⁸ See *Oral Health and Well-Being, Oral Health and Well-Being in the United States*, AM. DENTAL ASS'N: HEALTH POL'Y INST., <https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/us-oral-health-well-being.pdf> (last visited Mar. 25, 2022).

²⁹ Robert H. Shmerling, *Gum Disease and the Connection to Heart Disease*, HARV. HEALTH PUBL'G: HARV. MED. SCH. (Apr. 22, 2021), <https://www.health.harvard.edu/diseases-and-conditions/gum-disease-and-the-connection-to-heart-disease>.

³⁰ Healthwise Staff, *Abscessed Tooth*, UNIV. OF MICH. HEALTH: MICH. MED. (Oct. 27, 2020), <https://www.uofmhealth.org/health-library/aal19477>.

³¹ *Brain Abscess*, NAT'L HEALTH SERV. (May 20, 2019), <https://www.nhs.uk/conditions/brain-abscess/>.

³² Kristen Bayetto, Andrew Cheng, & Alastair Goss, *Dental Abscess Death and Morbidity*, AUSTL. J. GEN. PRAC. (2020), <https://www1.racgp.org.au/ajgp/2020/september/dental-abscess-death-and-morbidity>.

³³ See Susan O. Griffin, Laurie K. Barker, Liang Wei, & Chien-Hsun Li et. al, *Use of Dental Care and Effective Preventive Services in Preventing Tooth Decay Among U.S. Children and Adolescents—Medical Expenditure Panel Survey, United States, 2003–2009 and National Health and Nutrition Examination Survey, United States, 2005–2010*, CTR. FOR DISEASE CONTROL & PREVENTION (Sept. 12, 2014), <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6302a9.htm>.

³⁴ See *Children's Dentistry*, FAM. DENTISTRY OF BOYNTON BEACH, <https://familydentalboynton.com/services/childrens-dentistry/#:~:text=Your%20child%20should%20undergo%20essential%20dental%20cleanings%20twice,with%20a%20high-powered%20toothbrush%20and%20toothpaste.%20Fluoride%20Treatment> (last visited Mar. 28, 2022).

currently face.³⁵ Providing appropriate preventive dental care to children also likely reduces overall healthcare costs, as good oral health reduces population levels of heart disease, strokes, and other illnesses, as well as reducing the need for expensive dental care later in life.³⁶

Recent studies have confirmed earlier hypotheses about the long term health effects of poor preventive care and poor dental health, particularly loss of adult teeth and gum disease, plays a significant role in the development and severity of non-dental problems such as diabetes,³⁷ strokes,³⁸ and heart disease—problems that impact large percentages of the population and are extremely costly and debilitating.³⁹ Tooth loss creates areas where bacteria can invade the body and gum infection leads to inflammatory processes throughout the body.⁴⁰ Furthermore, providing appropriate preventive dental care is cost effective, as much of the work can be performed by dental hygienists and dental therapists, with highly trained dentists reserved for more complex issues where advanced training is required.

Oral health problems lead to tooth abscesses, which themselves cost billions of dollars to treat in emergency departments every year.⁴¹ There are more than 30,000 cases of oral cancer diagnosed every year, leading to 7,500 deaths.⁴²

³⁵ *Impact of Dental Services on Total Cost of Care*, J. MULTIDISCIPLINARY CARE: DECISIONS IN DENTISTRY (Apr. 17, 2020), <https://decisionsindentistry.com/article/impact-of-dental-services-on-total-cost-of-care/>.

³⁶ See Thor Christensen, *How Oral Health May Affect Your Heart, Brain and Risk of Death*, AM. HEART ASS'N (Mar. 19, 2021), <https://www.heart.org/en/news/2021/03/19/how-oral-health-may-affect-your-heart-brain-and-risk-of-death>.

³⁷ Anita M. Marks, *Diabetes and Oral Health*, 147 J. AM. DENTAL ASS'N 852 (Aug. 12, 2016) [https://jada.ada.org/article/S0002-8177\(16\)30610-9/fulltext](https://jada.ada.org/article/S0002-8177(16)30610-9/fulltext).

³⁸ Souvik Sen, Laurne D. Giamerardino, Kevin Moss, & Thiago Morelli et al., *Periodontal Disease, Regular Dental Care Use, and Incident Ischemic Stroke*, 49 STROKE 355 (Jan. 15, 2018) <https://www.ahajournals.org/doi/epub/10.1161/STROKEAHA.117.018990>.

³⁹ Gmerice Hammond, Alina A. Luke, Lauren Elson, Amytis Towfighi et al., *Urban-Rural Inequities in Acute Stroke Care and In-Hospital Mortality*, 51 STROKE 2131 (Jun. 17, 2020), <https://www.ahajournals.org/doi/epub/10.1161/STROKEAHA.120.029318>.

⁴⁰ See Aaron Kandola, *Signs and Symptoms of Tooth Infection Spreading to the Body*, MED. NEWS TODAY (Apr. 3, 2020), <https://www.medicalnewstoday.com/articles/symptoms-of-tooth-infection-spreading-to-body>.

⁴¹ Rae Lynn Mitchell, *Emergency Department Visits for Dental Conditions Take a Bite Out of Everyone's Wallet*, VITAL RECORD: NEWS FROM TEXAS A&M HEALTH (Oct. 14, 2020), https://vitalrecord.tamhsc.edu/emergency-department-visits-for-dental-conditions-take-a-bite-out-of-everyones-wallet/?_ga=2.265811151.1132454413.1646264040-1199733333.1646264040&_gl=1%2A1kxlpob%2A_ga%2AMTE5OTczMzMzMzMy4xNjQ2MjY0MDQw%2A_ga_3LYM4WJM04%2AMTY0NjI2NDAzOS4xLjAuMTY0NjI2NDAzOS42MA.

⁴² Regular visits to dentists allow them to recognize early signs of oral cancer and arrange for diagnostic tests. Dentists do not prevent oral cancer, but early identification of oral cancers is the most significant way of minimizing deaths and disfigurement from these cancers. T. Baykul, H.H.

There are strong associations between poor oral healthcare and increased risk of stroke, diabetes, and even cognitive decline in old age. It is likely that untreated and persistent dental pain leads to opioid use.⁴³ Poor oral health causes problems with obesity because it is hard to eat healthy food, social stigma due to missing teeth, poor learning outcomes for children due to pain and malnourishment making it difficult to learn, etc.⁴⁴

While some people suffer from dental problems even if they have excellent life-long care, most people respond well to good preventive care. Even if people develop dental problems, those with resources and access to care get the problems treated, and so do not have ongoing dental pain, missing teeth, and gum disease.

III. DISPARITIES AND PROBLEMS WITH ACCESS TO CARE AND DENTAL HEALTH

Given the importance of good dental healthcare and its cost effectiveness, a country's ability to provide appropriate care to its population is a good test of that country's healthcare system and commitment to its population's health.⁴⁵ The United States federal government recognizes that the dental health of the population is an important marker of the health of the country, and the federal government recently included dental health in its assessments of the state of healthcare and health of the country.⁴⁶ Overall dental health is also a good indicator of a country's capacity to make rational resource allocations to promote population health in a cost effective manner.

Dental health, and access to dental healthcare providers, mirrors the litany of other social justice problems in the United States, with the likelihood of poor outcomes often dictated by race, wealth, education, and whether one lives in a rural or urban area. All of the problems associated with poor dental health are worse in rural areas, and within those areas, worse for rural elderly people. Individuals with lower income, individuals who are less educated, and Black people all suffer disproportionately worse oral health, as well.

The burden of dental disease is not uniform across rural counties. Generally, there is a slightly higher proportion of elderly people in rural

Yilmaz, U. Aydin, M.A. Aydin et al., *Early Diagnosis of Oral Cancer*, 38 J. INT'L MED. RSCH 737, 740 (June 1, 2010), <https://pubmed.ncbi.nlm.nih.gov/20819411/>.

⁴³ Alford et al., *supra* note 26.

⁴⁴ *Id.*

⁴⁵ See *Quality of Care: A Process for Making Strategic Choices in Health Systems*, WORLD HEALTH ORG. (2006), https://www.who.int/management/quality/assurance/QualityCare_B.Def.pdf.

⁴⁶ See *U.S. Department of Health and Human Services Oral Health Strategic Framework 2014–2017*, U.S. DEP'T OF HEALTH & HUM. SERVS. ORAL HEALTH COORDINATING COMM. (Apr. 2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4765973/>.

communities than in urban communities—17% versus 13%.⁴⁷ However, some purely rural communities in some states have a much higher proportion of all elderly people in the state living there. This is particularly true in the Midwest. There are 5,869 dental health professional shortage areas, a term used by the federal government to assess counties that do not have sufficient dentists to provide the necessary care.⁴⁸ Almost 60% of these shortage areas are in rural counties.⁴⁹ The rural counties with concentrations of elderly and shortages of dental professionals are particularly worrisome.

Keeping in mind that people should see a dentist twice every year for preventive care, elderly people in the United States do not have a good rate of annual dental care. Even before COVID-19, which has led to widespread healthcare access problems, 42% of all adults in rural areas did not see a dentist in any given year.⁵⁰ This is significantly worse than in urban areas, where 33% of adults did not see a dentist in a year. Among all elderly, 40% of white women and 44% of white men did not see a dentist, while 64% of black women and 74% of Black men did not.⁵¹ For elderly people with an income of less than \$10,000, 73% did not see a dentist, whereas, for those with income above \$40,000, only 25% did not see a dentist.⁵² For elderly people in poor health, who need regular dental care more often and at a more sophisticated level than people in relatively good health, 63% did not see a dentist.⁵³ For elderly people in good health, that number drops to 41%.⁵⁴

The United States does poorly in every possible measure of dental health of its population, either when assessed simply on its own, as in, how well does it care for its own population, or when compared to countries that have prioritized

⁴⁷ Amy Symens & Edward Trevelyan, *The Older Population in Rural America: 2012–2016*, U.S. CENSUS BUREAU (Sept. 23, 2019), <https://www.census.gov/content/dam/Census/library/publications/2019/acs/acs-41.pdf>.

⁴⁸ *Designated Health Professional Shortage Areas Statistics*, BUREAU OF HEALTH WORKFORCE: HEALTH RES. & SERVS. ADMIN. U.S. DEP'T OF HEALTH & HUM. SERVS. 1, 2 (June 5, 2019), https://www.ruralhealth.us/NRHA/media/Emerge_NRHA/Advocacy/BCD_HPSA_SCR50_Smry.pdf.

⁴⁹ *Id.* at 3.

⁵⁰ Liora Engel-Smith, *Even Before Coronavirus, Almost Half of Adults in Rural Areas Went Without Dental Care*, N.C. HEALTH NEWS (July 20, 2021), <https://www.northcarolinahealthnews.org/2021/07/20/almost-half-of-adults-in-rural-areas-went-without-dental-care/>.

⁵¹ Meredith Freed, Nancy Ochieng, Nolan Sroczynski, & Anthony Damico et. al, *Medicare and Dental Coverage: A Closer Look*, KAISER FAM. FOUND. (Jul. 28, 2021), <https://www.kff.org/medicare/issue-brief/medicare-and-dental-coverage-a-closer-look/>.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.*

dental care, such as New Zealand, which achieves superlative results in its pediatric population with very little spending.⁵⁵

A closer look at the data about access to adequate dental care in the United States is, perhaps, even more revealing than the dismal overall numbers. The country does extremely well within certain populations.⁵⁶ The blinding white smile of perfectly aligned teeth in white, upper-middle-class and upper-class Americans has been a hallmark of the country for decades, and it is commonly used in international contexts as a signifier of American prosperity.⁵⁷ These Americans usually have excellent dental care for their entire lives. The rest, however, often have catastrophically bad dental care. In other words, the overall average is poor, but within some populations, access is almost absurdly worse; the overall population average masks disparities.

Access to dental care both mirrors and amplifies systemic injustices. Examining who gets this access and who does not help to illustrate whose well-being matters in a society that has the resources to provide cost effective care and prevent tremendous suffering.

Poorer children have less dental care than wealthier children.⁵⁸ Black and Hispanic children have less dental care than white children.⁵⁹ People with disabilities have worse oral health and access to care than people without disabilities, and older people with disabilities have worse problems than younger people with disabilities.⁶⁰ Older people suffer poorer dental health than younger

⁵⁵ *Publicly Funded Dental Care*, MINISTRY OF HEALTH NZ (June 25, 2019), <https://www.health.govt.nz/your-health/services-and-support/health-care-services/visiting-dentist/publicly-funded-dental-care> (last visited Mar. 27, 2022).

⁵⁶ See e.g., Shervin Assari & Neda Hani, *Household Income and Children's Unmet Dental Care Need; Black's Diminished Return*, 6 DENTISTRY J. 1 (June 4, 2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6023279/pdf/dentistry-06-00017.pdf>. White children from wealthier families tend to have higher rates of access to preventive dental care in childhood than other children do in the United States. *Id.*

⁵⁷ There is a common cultural trope of comparing American smiles to British smiles, where American smiles have perfectly aligned, blindingly white teeth, while the British smiles are yellowed and misaligned. Justin Parkinson, *The Myth of Bad British Teeth*, BBC NEWS MAG. (May 27, 2015), <https://www.bbc.com/news/magazine-32883893>.

⁵⁸ Assari & Hani, *supra* note 56, at 1.

⁵⁹ Jane Koppelman & Rebecca Singer Cohen, *Dental Health Is Worse in Communities of Color: Four Key Disparities Show How These Populations are Vulnerable*, THE PEW CHARITABLE TRUSTS (May 12, 2016), <https://www.pewtrusts.org/en/research-and-analysis/articles/2016/05/12/dental-health-is-worse-in-communities-of-color>.

⁶⁰ See Cheryl Fish-Parcham, *Improving Access to Oral Health Care for Adults with Disabilities Can Improve Their Health and Well-Being*, FAMILIES USA (SEPT. 2019), https://familiesusa.org/wp-content/uploads/2019/10/OH_Oral-Health-and-People-with-Disabilities_IssueBrief.pdf; Gloria Krahn, *A Call for Better Data on Prevalence and Health Surveillance of People with Intellectual and Developmental Disabilities*, 57 INTELLECTUAL AND DEVELOPMENTAL DISABILITIES 357 (2019),

people, with all but the wealthiest older people having less dental care than younger people.

Once a person is an adult, access to dental care is patchy, at best. For non-elderly adults, a simple way to predict access to preventive dental care and care for dental problems is to look at the social determinants of health. Income, socioeconomic status, race, gender, geographic location, disability status, obesity really just about any quality that correlates with less status and less financial security in the current system also correlates to poorer dental health and poorer access to the care that could improve it.⁶¹ Social determinants of health are known to have measurable effects on health outcomes, but dental care is actually more problematic than other health care because dental care is less likely than non-dental health care to have public or private financing mechanisms that provide meaningful access to it. This leads to the social determinants of health having a higher correlation to poor dental care than they do to other forms of health.

Providing necessary preventive care for children has significant justice implications for adults because of how the impact of dental care access plays out throughout a lifetime. This is particularly unfair because, for those who grew up receiving proper preventive dental care, their teeth are generally healthier than those who grew up without it. The social class of their childhood is permanently imprinted in many people's mouths, so that, no matter how hard a person may work to achieve financial security later in life, their teeth may make their health worse, leading to more expensive dental needs than are required by people who had more privileged childhoods.

Due to steadily improving access to good dental care for children, future generations should have fewer dental problems and require less care. The problem of access and funding is not entirely ameliorated in the future because non-elderly adults will still need proper preventive care and still suffer, to some degree, if they cannot access such care. There may also be some problems that even perfect preventive care cannot erase, but universal care for children ought to improve their lives as adults. Currently, non-elderly adults still bear the burden of not being properly cared for as children and this burden falls disproportionately on those who also suffer in other ways from bias, prejudice, etc.

Dental care for the elderly is more complex than it is for other ages.⁶² All older people require dental care from professionals who have trained in the

https://www.researchgate.net/publication/336182528_A_Call_for_Better_Data_on_Prevalence_and_Health_Surveillance_of_People_With_Intellectual_and_Developmental_Disabilities.

⁶¹ *Disparities*, *supra* note 2.

⁶² Frances Moffett, *Taking Care: How Dentists Should Prepare for Treating Aging Patients*, ACAD. GEN. DENTISTRY IMPACT (2016), <https://www.agd.org/docs/default-source/policies-and-white-papers/impact-and-gd-articles/taking-care-how-dentists-should-prepare-for-aging-patients.pdf?sfvrsn=2> (last visited Mar. 29, 2022).

unique problems and risks for the age group. The cumulative effect of one's wealth and privilege throughout a lifetime is visible in the mouth and the effect increases over the course of a lifetime, leading to far more complex and debilitating mouth problems for some of the elderly population. As an example, far more elderly people who were born into poverty have no natural teeth when compared to those who were born into relative financial comfort.⁶³ Lack of teeth, similar to other problems with dental health, also tracks disparities in educational accomplishment and disparities in educational levels of parents as well as membership in groups historically a subject to racism.

Tooth loss is a good example of how different populations have different outcomes. Lack of access to dental care has fallen particularly hard on rural populations. Adults in rural communities suffer from painful teeth and gum disease at a high rate.⁶⁴ They also have very high rates of tooth loss. Generally, elderly people in the United States have high rates of tooth loss, with lower income people having higher rates. There has been a gradual overall lessening of tooth loss as access to care has improved, but improvement has been almost exclusively in urban areas. One out of five rural elderly people have no teeth, and some counties have much worse rates. For example, in rural Louisiana's East Carroll Parish, 40% of elderly people have no teeth.⁶⁵ West Virginia, which has many rural communities, has the highest overall state rate of toothlessness in the country among individuals 65 and older, with 36% having no natural teeth.⁶⁶

In a state such as West Virginia, factors like high rates of poverty, large elderly populations, few dentists and little to no dental insurance, combine to make the level of dental care for elderly populations quite problematic. For elderly people without a high school diploma in West Virginia, 61% of them no longer have any teeth at all. The rates of diabetes and heart disease are also disproportionately high in the state,⁶⁷ and it has long been known that the absence of teeth has a causal connection with increased risk of both conditions.⁶⁸ West Virginia has one of the highest rates of diabetes in the country, and it is

⁶³ *Disparities, supra* note 2.

⁶⁴ *Id.*

⁶⁵ Candice Clark, *Louisiana: Rural Areas Lacking Dental Care Face Tooth Loss, Overall Health Drop*, *Rural Health Q.* (Oct. 26, 2021), <http://ruralhealthquarterly.com/home/2021/10/26/louisiana-rural-areas-lacking-dental-care-face-tooth-loss-overall-health-drop/>.

⁶⁶ W.VA. DEP'T OF HEALTH & HUM. SERVS., *WEST VIRGINIA ORAL HEALTH PROGRAM CONSUMER SURVEY REPORT* (December 2012), <https://dhhr.wv.gov/oralhealth/reports/Documents/Surveillance/16221%20proof%203.pdf>.

⁶⁷ *Fast Facts: Statistics About the Population of West Virginia*, WV DEP'T OF HEALTH & HUM. RES., https://dhhr.wv.gov/hpcd/data_reports/pages/fast-facts.aspx (last visited Mar. 29, 2022).

⁶⁸ Nicole Napoli, *Tooth Loss Associated with Higher Risk of Heart Disease*, *AM. COLL. CARDIOLOGY* (Oct. 3, 2019), <https://www.acc.org/about-acc/press-releases/2019/10/03/09/57/tooth-loss-associated-with-higher-risk-of-heart-disease>.

concentrated in exactly the population described here, undereducated rural elderly people.⁶⁹

All of the dental problems discussed in this Article can be cured, controlled, or at least ameliorated with access to the right level of dental care. That access is determined by cost, availability of trained professionals, and time to see them. For elderly people, even those who have dental insurance of some type, dental care is very expensive. The average out-of-pocket spending on dental care for elderly people is \$874.⁷⁰ However, given the very low percentage of elderly individuals who even see a dentist in a calendar year, it is not surprising that 20% of elderly people report spending in excess of \$1,000 a year for dental care.⁷¹ An example of high dental costs is dental implants, which are used to replace lost adult teeth, and cost roughly \$3,000–\$4,000 a tooth.⁷² A full set of them can be close to \$100,000.⁷³ Dentures, the lowest cost method for replacing lost teeth, cost between \$300 and \$1,000 for a pair, not including any dental care required for a mouth to be able to actually utilize dentures, and need to be replaced regularly.⁷⁴

IV. SYSTEMIC AND LEGAL SOURCES OF PROBLEMS AND POTENTIAL SOURCES OF IMPROVEMENT

Rural America has terrible healthcare access problems that go far beyond dental care, making it difficult, on the surface, to justify spending scarce resources to address this one facet of the access problem.⁷⁵ However, all discussions about dental care need to be firmly situated in its overwhelming cost effectiveness and relative simplicity. Providing dental care can actually help ease the many other health problems disproportionately borne by rural populations.

Access to all healthcare is especially problematic in states that have not expanded Medicaid. The original Patient Protection and Affordable Care Act (“The ACA”) was meant to include an expansion of Medicaid for all Americans

⁶⁹ *Fast Facts, supra* note 67 (finding that, as of 2018, West Virginia had the second highest rate of diabetes nationally).

⁷⁰ Meredith Freed, Nancy Ochieng, Nolan Sroczynski, Anthony Damico et al., KAISER FAM. FOUND. (July 28, 2021), <https://www.kff.org/medicare/issue-brief/medicare-and-dental-coverage-a-closer-look/>.

⁷¹ *Id.*

⁷² *Complete Dental Implant Cost Guide, DENTAL IMPLANT COST GUIDE* (May 19, 2020), <https://www.dentalimplantcostguide.com/dental-implants-cost/>.

⁷³ *Id.*

⁷⁴ Alison A., *Dentures: Complete Guide to Types, Costs & Benefits, DENTAL IMPLANT COST GUIDE* (OCT. 16, 2020), <https://www.dentalimplantcostguide.com/dentures/>.

⁷⁵ *See* NAT'L ADVISORY COMM. ON RURAL HEALTH & HUM. SERVS., *IMPROVING ORAL HEALTH CARE SERVICES IN RURAL AMERICA* (Dec. 2018), <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/rural/publications/2018-Oral-Health-Policy-Brief.pdf>.

who did not already have insurance through their jobs or did not have the means to pay premiums for private coverage.⁷⁶ Because this expansion was struck down by the Supreme Court and adoption of the expansion was left to the discretion of individual states, some states' Governors and legislators chose not to expand.⁷⁷ The ACA was also drafted assuming this insurance would cover those who historically sought care from hospitals without insurance coverage. Financing mechanisms that had protected rural hospitals from disproportionately providing this otherwise unfunded care were limited, as such subsidies were thought to no longer be necessary. Since the passage of the ACA and the subsequent failure to expand Medicaid, many rural hospitals have closed, and the remaining ones are financially vulnerable.⁷⁸ The closure rate has accelerated during the COVID-19 pandemic.⁷⁹

Dental access in rural communities has the same problems. There are dental provider shortages throughout the country, with 229 counties not having a single dentist working in them, but the problem is worse for rural communities. Dental Health Provider Professional Shortage Areas have been tracked for decades, and, currently, 60% of all areas that meet these criteria are in rural areas.⁸⁰ Looking closely at West Virginia, for example, the DHPPSA shows that only 29% of the dental needs of the state are currently met by providers in the state.⁸¹ It is estimated that West Virginia has a shortage of 136 dentists.⁸² Rural areas also have larger proportions of people living in poverty than do metropolitan areas.⁸³ Older Americans are more likely to be living in poverty and to have no dental insurance coverage, a gap in coverage the Medicare expansion was intended to fill, with the hope that this would help increase access to care.⁸⁴ The facts about elderly needs for dental care, taken as a whole, make a persuasive argument for revisiting this issue and reconsidering expanding Medicare

⁷⁶ Patient Protection and Affordable Care Act, Pub. L. No. 111-148.

⁷⁷ See *NFIB v. Sebelius*, 567 U.S. 519 (2012).

⁷⁸ Ayla Ellison, *Why Rural Hospital Closures Hit a Record High in 2020*, BECKER'S HOSP. REV. (2021), <https://www.beckershospitalreview.com/finance/why-rural-hospital-closures-hit-a-record-high-in-2020.html>.

⁷⁹ *Id.*

⁸⁰ *Dental Care Health Professional Shortage Areas (HPSAs)*, KAISER FAM. FOUND., <https://www.kff.org/other/state-indicator/dental-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D> (last visited Mar. 29, 2022).

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Families with Low Incomes*, RURAL HEALTH INFO. HUB, <https://www.ruralhealthinfo.org/toolkits/services-integration/1/high-needs-populations/families-with-low-incomes> (last visited Apr. 2, 2022).

⁸⁴ See *Older Americans Need Better Access to Dental Care*, THE PEW CHARITABLE TRUSTS (July 2016), https://www.pewtrusts.org/-/media/assets/2016/07/olderamericans_fs_final.pdf.

coverage. Currently, as discussed above, older Americans are much less likely to have regular preventive dental care. Dental insurance is not common among the elderly, with only 29.2% having any such coverage.⁸⁵ The coverage itself is usually poor, with low reimbursement rates for covered services and yearly caps that do not cover extensive interventions. As a result of this and the general expense of dental care, as of 2019, 47% of Medicare beneficiaries did not have any dental care during the year, even though all people need two cleanings and exams a year to protect the health of teeth.⁸⁶ Elderly people who are also members of vulnerable populations have even lower rates of visits and dental insurance, with far more than a majority of Blacks, Hispanics, and those with poor or fair health not seeing a dentist.⁸⁷ For those in the Medicare population who did get any dental care in the year, including those who had dental insurance, the average out-of-pocket cost was more than \$800.⁸⁸ This high cost makes sense when one considers that most Medicare dental insurance is provided through Medicare Advantage plans, and these do not fully cover costs beyond regular cleanings.⁸⁹

A. Insurance

The Medicaid expansion created in the Patient Protection Affordable Care Act (“PPACA”) in 2010 has, to some degree, helped adults get access to care.⁹⁰ States are not required to provide dental benefits to adults in Medicaid expansion programs but can choose to do so, which some have.⁹¹ ACA exchange plans have dental insurance and financial assistance to help people get access to the insurance, but most people do not seem to take advantage of it. Some have hypothesized that the failure to use this benefit is due to poor design and communication on the healthcare.gov website.⁹² On the site, it is presented as a separate form of insurance and, arguably, the funding subsidies are not clearly communicated, and so many people, including those whose income would allow them to have it for little to no cost, do not sign up for it. It may also be that people

⁸⁵ Ellen Kramarow, *Dental Care Among Adults Aged 65 and Over, 2017*, CTR. FOR DISEASE CONTROL & PREVENTION (May 29, 2019), <https://www.cdc.gov/nchs/products/databriefs/db337.htm>.

⁸⁶ Ochieng & Freed, *supra* note 46.

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ Aparna Soni, Michael Hendryx & Kosali Simon, *Medicaid Expansion Under the Affordable Care Act and Insurance Coverage in Rural and Urban Areas*, 33 J. RURAL HEALTH 217 (Jan. 23, 2017), <https://onlinelibrary.wiley.com/doi/10.1111/jrh.12234>.

⁹¹ *Medicaid Adult Dental Coverage*, THE NAT’L ACAD. FOR STATE HEALTH POL’Y (Apr. 20, 2015), <https://www.nashp.org/map-of-current-adult-dental-coverage/>.

⁹² HEALTHCARE.GOV, <https://www.healthcare.gov> (last visited June 1, 2022).

do not expect dental insurance to provide any real benefit because historically, it has not done so. Absent clear communications as to why the ACA's form of dental insurance would actually provide meaningful assistance, it makes sense that people would not look to it for any help.

Most plans to expand access to dental care, including the proposed Medicare expansion in the original Build Back Better plan, are not as generous as is truly necessary to correct for the decades of failed access and to ameliorate the burdens of poor dental health many of the elderly are carrying. Older people who have their natural teeth often need braces, as teeth shift with age.⁹³ Providing this type of intervention may be cost effective, as proper tooth placement helps prevent decay, cavities, gum diseases, etc. Dental implants can be far more effective in protecting a person's health than dentures are, yet no plan or proposed plan provides for these. Dental implants are often perceived as cosmetic and luxurious, but they can be cost effective and medically necessary, leading to great improvements in a patient's overall health when compared to dentures.⁹⁴ Covering them should at least be considered, with more research funded by the federal government to determine if some use of them is cost effective in the Medicare population, and perhaps if it is cost effective to provide coverage for this care in younger adults so they have lower rates of diseases such as diabetes in old age. Finally, some procedures considered to be entirely cosmetic, such as tooth bleaching, may also be cost effective to provide, depending on the extent of the discoloration being addressed, as social stigma and economic costs of poor dental health have impacts on people's lives and can lead to poorer overall health and well-being. The research has not been done on these and related questions, likely because the aesthetics of teeth are often dismissed or seen as concerns only for the well-off.

When looking at the poor rates of dental care for elderly people, some structural problems need to be addressed. Medical and dental insurance are historically bifurcated, and dental insurance tends to be less commonly offered and not as useful, covering very little and capping costs to low amounts every year.⁹⁵ Even with that, most elderly people, upon reaching retirement age, lose

⁹³ David Mills, *At Age 64, I'm Getting Braces for the First Time. Here's Why*, HEALTHLINE (Feb. 3, 2019), <https://www.healthline.com/health-news/getting-braces-at-age-64>.

⁹⁴ Thomas Beikler & Thomas F. Flemming, *EAO Consensus Conference: Economic Evaluation of Implant-Supported Prosthesis*, 26 CLINICAL ORAL IMPLANTS RSCH. 57 (June 15, 2015), https://onlinelibrary.wiley.com/doi/full/10.1111/clr.12630?casa_token=1znr5Jkr4IAAAAAA%3AnovQ3GRud2uuK1hL1EV4cYii8HjzC4VCSkswQ85Heiusb_44cdo4jGcj9XO8e5zsGfbLAEuYfIJqt1c.

⁹⁵ Lisa Simon, *Overcoming Historical Separation Between Oral and General Health Care: Interprofessional Collaboration for Promoting Health Equity*, 18 AMA J. ETHICS 941 (2016), <https://journalofethics.ama-assn.org/article/overcoming-historical-separation-between-oral-and-general-health-care-interprofessional/2016-09>.

any dental insurance that was provided by their employers.⁹⁶ Medicare, the federal health insurance program for the elderly and disabled, has never covered dental care. Medicare Advantage plans, the privately managed care plans made available to some of Medicare beneficiaries if they choose to sign up for them, often do cover preventive dental care, but problems of transportation, providers, high out-of-pocket costs, etc. still cause access problems for Medicare beneficiaries who have these plans but live in areas with little to no available providers.

Medicaid, the federal and state program that provides health insurance for the “deserving poor,” does provide an excellent scope of dental benefits for children, though reimbursement rates are so low as to make getting access to the covered care difficult.⁹⁷ States may choose to extend Medicaid dental benefits to adults but are not required to do so. They get federal matching funds when they do,⁹⁸ and it is estimated that covering dental benefits for all adults in the Medicaid program would create a net savings of \$273 million a year, without reference to any spillover savings from reduced rates of illnesses that are associated with poor dental health such as diabetes.⁹⁹ The trend over the last decade is for states to include some dental benefits, likely because it is extremely cost effective to do so. Elderly enrollment in Medicaid dental plans remain low,¹⁰⁰ and dental benefits are also often the first benefits that are cut when states run low on tax revenue. This has been proven to be a costly form of budget cutting. As an example of how not covering dental benefits for adults is costly, all Medicaid plans cover emergency department visits for tooth abscesses,¹⁰¹ which cost

⁹⁶ Richard J. Manski, John Moeller, Haiyan Chen et al., *Dental Care Coverage and Retirement*, 70 J. PUB. HEALTH DENTISTRY 1, 2 (2010), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2864343/pdf/nihms-172464.pdf>.

⁹⁷ Niodita Gupta, Cassandra Yarbrough, Marko Vujicic, Andrew Blatz et al., *Medicaid Fee-For-Service Reimbursement Rates for Child and Adult Dental Care Services for All States, 2016*, HEALTH POL’Y INST. 1, 1–2 (2017), https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/hpibrief_0417_1.

⁹⁸ Elizabeth Williams, *Medicaid Financing: The Basics*, KAISER FAM. FOUND. (May 7, 2021), <https://www.kff.org/report-section/medicaid-financing-the-basics-issue-brief/>.

⁹⁹ Am. Dental Ass’n & Am. Student Dental Ass’n, *Medical Dental Benefit Act of 2021*, ADA, https://www.asdanet.org/docs/programs-events/lobby_day/medicaid-dental-benefit-act.pdf?sfvrsn=27a379dd_2 (last visited June 1, 2022); see also Medicaid Dental Benefit Act, H.R. 4439, 117th Congress (2021).

¹⁰⁰ AM. PUB. HEALTH ASS’N, A CALL FOR ADULT DENTAL BENEFITS IN MEDICAID AND MEDICARE (2020) <https://www.apha.org/Policies-and-Advocacy/Public-Health-Policy-Statements/Policy-Database/2021/01/12/A-Call-for-Adult-Dental-Benefits-in-Medicaid-and-Medicare>

¹⁰¹ See Sankeerth Rampa, Allareddy Veeratrishul, Marianne Raimondo, Christine Connolly et al., *Hospital-Based Emergency Department Visits with Periapical Abscess: Updated Estimates from 7 Years*, 45 J. ENDODONTICS 250 (2019), <https://pubmed.ncbi.nlm.nih.gov/30803531/>.

billions of dollars a year and are preventable if a person has access to a dentist.¹⁰² Particularly horrifying, emergency department treatment of tooth abscesses does not cure the underlying tooth problem.¹⁰³ Instead, the infection is reduced so it is not an immediate risk to the patient's life. This treatment satisfies EMTALA requirements, as it stabilizes the patient, but, because there is no treatment of the actual tooth that is infected, the abscess will simply reemerge, threaten the patient's life again, and need to be treated again. Not covering dental care results in people suffering chronic pain and infection with repeated high-cost, wasteful hospital-level interventions when the problem becomes emergent.¹⁰⁴ Extending dental coverage to adults in the Medicaid population also increases employment rates and has a particularly positive impact on the finances of women, who often need to present attractive smiles during employment.¹⁰⁵ These cost savings are in addition to those described earlier, where people who have regular access to preventive dental care suffer lower rates of numerous chronic conditions such as diabetes.

So, recognizing that there is a substantial problem with underserved populations getting access to dental care in rural populations—and that the elderly are at particularly high risk of both poor dental health and the diseases it can lead to—it is clearly a good idea from multiple perspectives to have Medicare begin covering dental care. It is cost effective, generally, to provide regular dental care and lower-level interventions such as filling cavities and treating any infections at early stages.¹⁰⁶ It is also cost effective to provide more expensive interventions such as crowns, root canals, and dentures.¹⁰⁷ It is likely also cost effective, and may be more so than dentures, to provide implants when people lose their teeth.

When considering the scope of expense of increasing the coverage for dental care in the Medicare population, it is also useful to think of aggressive expansions of coverage and scope of benefits for dental care as, at least partially, a gap filler rather than a permanent expense for the country. Many dental problems are actually preventable when people have regular dental care starting

¹⁰² See *id.*

¹⁰³ Alan B. Douglass & Joanna M. Douglass, *Common Dental Emergencies*, AM. FAM. PHYSICIAN (Feb. 1, 2003), <https://www.aafp.org/afp/2003/0201/p511.html>.

¹⁰⁴ *A Call for Adult Dental Benefits in Medicaid and Medicare*, *supra* note 100.

¹⁰⁵ See, *Do Dental Aesthetics Affect Employment Prospects*, PLUSDENT, https://plusdent.co.uk/employability-of-a-smile?confirmed_country=en-GB (last visited June 1, 2022).

¹⁰⁶ See *supra* note 35 and accompanying text.

¹⁰⁷ Robert Vogel, Jayne Smith-Palmer, William Valentine, *Evaluating the Health Economic Implications and Cost Effectiveness of Dental Implants: A Literature Review*, INT'L J. ORAL & MAXILLOFACIAL IMPLANTS (2013), <https://pubmed.ncbi.nlm.nih.gov/23527335/>.

in childhood and carried throughout their adult years.¹⁰⁸ No one questions the cost effectiveness of regular dental cleanings.¹⁰⁹ As the provision of dental care becomes more regular for children, and if the healthcare financing system continues broadening access to this type of care throughout people's lives, it will become increasingly less expensive to provide dental care for the elderly. They will have healthier teeth and gums because of having a lifetime of good care. It will take time to readjust and help those who have not had proper access throughout their lives, but as we get better at this with children and younger adults, it should become far less of a burden to provide care for the elderly.

B. Dental Therapists

Even if systems are altered to allow for better dental care financing, expanding access to dental therapists and creative approaches to accessing care are also likely necessary parts of tackling elderly dental health in rural areas. Dental therapists are people who have training in providing dental cleaning, filling cavities, addressing some amount of gum disease, and helping to identify when more specialized and significant dental care is required.¹¹⁰ They are professionals who sit between dental hygienists and dentists in terms of training and the complexity of care they can provide. Their track record is impressive, and while dentists in the United States initially fought any move to allow therapists to be trained or to practice, states are gradually moving towards training, licensing, and encouraging dental therapists to work there.¹¹¹ National Accreditation standards were adopted in 2015,¹¹² and in 2018, the federal government formally recommended that states amend laws so that dental therapists were more easily licensed. In addition, many states that are changing laws to allow dental therapists are also implementing advanced standing rules, which make it easier for experienced dental hygienists to get the additional training they need to become dental therapists. There are at least 13 states that

¹⁰⁸ *Oral Health*, WORLD HEALTH ORG. (Mar. 15, 2022), <https://www.who.int/news-room/fact-sheets/detail/oral-health>.

¹⁰⁹ See NATIONAL COLLABORATING CENTRE FOR ACUTE CARE, DENTAL RECALL: RECALL INTERVAL BETWEEN ROUTINE DENTAL EXAMINATIONS 9–20 (2004), <https://www.ncbi.nlm.nih.gov/books/NBK54536/>.

¹¹⁰ Allison Corr, *What Are Dental Therapists?*, PEW TRUSTS (Oct. 9, 2019), <https://www.pewtrusts.org/en/research-and-analysis/articles/2019/10/09/what-are-dental-therapists>.

¹¹¹ Jay W. Friedman & Kavita R. Mathu-Muju, *Dental Therapists: Improving Access to Oral Health Care for Underserved Children*, 104 AM. J. PUB. HEALTH 1005, 1005–06 (June 2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4062028/pdf/AJPH.2014.301895.pdf>.

¹¹² COMM. ON DENTAL ACCREDITATION, ACCREDITATION STANDARDS FOR DENTAL THERAPY EDUCATION PROGRAMS (Feb. 6, 2015), https://coda.ada.org/~media/CODA/Files/dental_therapy_standards.pdf?la=en.

have dental therapist licensing laws and a number of additional states have long allowed dental therapists to practice on indigenous populations.¹¹³

Dental therapists have repeatedly been shown to be better, overall, at providing preventive care to pediatric populations than dentists are and receive training to enable them to provide this care in a way that is attuned to the needs of the pediatric population. Dental care for elderly people also requires special skills because there are different issues with the elderly population, particularly disabled or chronically ill elderly, than in the general population.¹¹⁴ Training dental therapists to provide appropriate care for elderly people seems to be a promising approach for a cost effective and high quality method of expanding access.¹¹⁵ If federal and state plans begin covering preventive care for elderly people in a more reliable and consistent manner, this will create an incentive for dental therapists to pursue this area of training.

Expanding Medicaid and Medicare coverage of dental care raise other issues, as well. Both of these programs place burdens of compliance on providers. It may not be financially feasible or rational for dentists to fund the training and staffing needed for compliance with Medicare/Medicaid payment rules, and the risk of criminal sanctions for inadvertent errors is high, a problem that already keeps many dentists from treating patients in the Medicaid population. It is not uncommon for dentists to see Medicaid patients for free, considering it a donation of time and effort, because charging for it would, perversely, be too expensive.

Any expansion of either Medicare or Medicaid needs to occur within a framework that offers support for compliance training. Compliance burdens disincentivize dentists from participating in these programs, particularly where reimbursement rates are lower than what private insurance covers.¹¹⁶

V. POOR DENTAL HEALTH, COVID, AND REALIZING WHO MATTERS

Dental pain is awful and very common. Older people require more complex, more careful dental care than anyone else, but receive the least care of any age.¹¹⁷ Disabled people, especially disabled elderly and institutionalized

¹¹³ See Corr, *supra* note 110;

¹¹⁴ P. Abdul Razak, K.M. Jose Richard, Rekha P. Thankachan, K.A. Abdul Hafiz et al., *Geriatric Oral Health: A Review Article*, 6 J. INT'L ORAL HEALTH 110 (Aug. 20, 2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4295446/pdf/JIOH-6-110.pdf>.

¹¹⁵ *Oral Health: An Essential Element of Aging*, GERONTOLOGICAL SOC'Y AM. (July 2017) <https://www.geron.org/images/gsa/documents/gsa2017oralhealthwhitepaper.pdf>.

¹¹⁶ MO. FOUND. FOR HEALTH, STRATEGIES TO ENHANCE DENTISTS' PARTICIPATION IN MEDICAID 8 (2017), <https://mffh.org/wp-content/uploads/2017/04/Policy-Strategies-to-Enhance-Dentists-Participation-in-Medicaid.pdf>.

¹¹⁷ P. Abdul Razak, *supra* note 114.

disabled elderly, have probably the most complex dental needs and get the least dental care among all elderly people.¹¹⁸

This all echoes COVID-19. Most COVID-19 deaths occurred in nursing homes, with disabled, institutionalized elderly people bearing the brunt of the first wave of infections and deaths.¹¹⁹ It seemed tragic, at the time, that such frail people were also so peculiarly vulnerable to the new virus. But with dental care, there are no mysteries and no sudden onslaught of infection. There is no disagreement about what is required to stop poor dental health and prevent or relieve dental pain. It is cost effective and not time intensive, either.

With COVID-19, we initially worked to identify who was vulnerable, then quickly shifted to expressing less concern over the vulnerable getting sick or dying than we expressed for people who were not vulnerable because the vulnerable were simply more likely to do so. This was an imperfect, chaotic, and somewhat eugenicist way of viewing the virus. As information emerged about steps that could be taken to minimize risk for particularly vulnerable people, (coupled, to be fair, with initial vaccine allocation being directed towards these vulnerable populations) the public discourse shifted to one of ‘personal responsibility’ and to discourse around justifications for not taking steps that could be helpful. The public debate routinely shifted to opening up the economy and getting back to normal, with some politicians going so far as to claim that they knew the elderly would be happy to give their lives in furtherance of other people being able to go to restaurants again.

Comparing the similarities of who suffered most from COVID-19 and who has limited access to dental care is helpful. Some people matter far less than other people. Using access to preventive dental care and overall dental health as a marker for how much someone matters to their home country is, at first glance, an oversimplification of complex problems. Mattering is a vague and inherently problematic concept, difficult to measure in a reliable way. Furthermore, who is making the judgment as to mattering is also difficult to pin down. Within the complexity of the American healthcare financing system, it is unlikely that a conscious, sustained, and coherent judgment is actually being made about anyone’s worth.

When thinking about who matters and how to assess it, though, one can consider that many children do not get the dental care they need, forcing their young bodies to permanently absorb this mistreatment even though it is less expensive to provide them with that care than to not do so.¹²⁰ They are marked

¹¹⁸ Fish-Parcham, *supra* note 60.

¹¹⁹ Stephen Frost, *Deadly Discrimination: The Forgotten Impact of Covid-19 on People with Disabilities*, FORBES (July 6, 2020), <https://www.forbes.com/sites/sfrost/2020/07/06/deadly-discrimination/?sh=3ce3b7e22b93>.

¹²⁰ Emily Murphy, (@ProfEmilyMurphy), TWITTER (Feb. 19, 2022, 8:46 PM), <https://twitter.com/ProfEmilyMurphy/status/1495213204208717826> (“poverty should be seen as

with problems that will lead to ever-increasing risks of pain, malnourishment, social stigma, and increased risk of numerous diseases throughout their lives before they ever have an opportunity to protect themselves, even though it would save money to protect them and the cure is simple and widely understood, subject to no disagreement. If it is ever a legitimate statement to claim that someone does not matter to their community, maybe this is a place for such a statement. If one uses dental health as a reflection of whose health and well-being matters, what also emerges is that few people count as little as the rural elderly and people with disabilities, except, perhaps, black rural elderly and people with disabilities, who have even worse access and worse rates of dental disease than their white rural counterparts.¹²¹ Poor, rural elderly incapacitated people have the worst of all rates of access to dental care, and the highest rate of deaths from COVID-19.¹²²

Data about social and economic vulnerability fits neatly into data about dental care and dental health. The idea that social determinants of health have a story to tell us, that social or economic status matters in terms of overall health, has gradually gotten more attention and more data supporting its claims, and now is generally accepted as an important part of the health policy discussion. People who have poor access to care and poor dental health tend to fit within groups that studies about the social determinants of health would predict, with people living in poverty, people with disabilities, rural people, elderly people, etc. all at increased risk of harm. The response to this has been to collect more data and use it to argue for incremental increases in access, an approach this Article also takes, to some degree.

When COVID-19 happened, the effects of the social determinants of health were obvious. COVID-19 deaths, severe illness, rates of poor outcomes, lack of utilization of available protections—all of it tracked who gets access to dental care and who suffers from poor dental health.

Poor dental care does not cause COVID-19, but perhaps being someone who does not matter makes both oral health and COVID-19 more problematic. From that perspective, using how COVID-19 suffering and dental health suffering overlap as a metric for who matters, the answers are quite damning and starkly obvious. It is difficult for the United States healthcare system to coherently act in ways that protect people who do not matter, even if it is more costly in the long wrong to fail to act. This seems like a good reason to reorganize

disabling because it impairs childrens' brains, and that this is problematic because it roots the cause of disability in peoples' bodies rather than unjust structures").

¹²¹ Julia T Caldwell, Haena Lee, & Kathleen A. Cagney, *The Role of Primary Care for the Oral Health of Rural and Urban Older Adults: Oral Health of Rural and Urban Older Adults*, J. RURAL HEALTH (2017), https://www.researchgate.net/publication/319715689_The_Role_of_Primary_Care_for_the_Oral_Health_of_Rural_and_Urban_Older_Adults_Oral_Health_of_Rural_and_Urban_Older_Adults; *supra* note 2.

¹²² Lauren Weber, *COVID Is Killing Rural Americans at Twice the Rate of Urbanites*, KAISER HEALTH NEWS (Sept. 30, 2021), <https://khn.org/news/article/COVID-death-rate-rural-america/>.

the entire system, as everyone in it risks becoming one of those who do not matter and so all have an incentive to design a system that is more rational and is capable of recognizing that all lives are deserving of respect. Short of this reorganization, those who seek to improve healthcare access have a choice. They must choose to be entirely transparent about the failures the system is likely to continue perpetuating and to aggressively condemn it for these failures, or choose to fight against what amounts to a system that is almost treacherous in its dismissal of people's pain and needs for care, and to do so recognizing that full transparency is simply not the best tactic.

VI. CONCLUSION

Consider a person across a lifetime and the changes in the dental care that they need. Our current ideas about this are correct, for now, but won't be accurate as broader provisions of preventive care in children bear fruit. For an older person living in a rural part of the country, old age currently means losing every single adult tooth. Those who keep any of their teeth are unusual. Compare this with urban older people who have had excellent dental care throughout their lifetimes and who keep many teeth or have dental implants to replace those they lose. Hopefully, as our dental care systems continue improving, each age swath will grow older with progressively healthier teeth. This, in turn, should reduce all healthcare spending as cardiac problems, diabetes, etc. rates are reduced due to healthier mouths. The healthcare financing system ought to change to help achieve this outcome, including by expanding the Medicare program so it includes dental care. Good access to dental care and good dental health is a marker of a just society that values all of its members and we should strive to be more just.