



Support

Senate Bill 150 - Maryland Medical Assistance Program – Dental Coverage for Adults

Senate Finance Committee

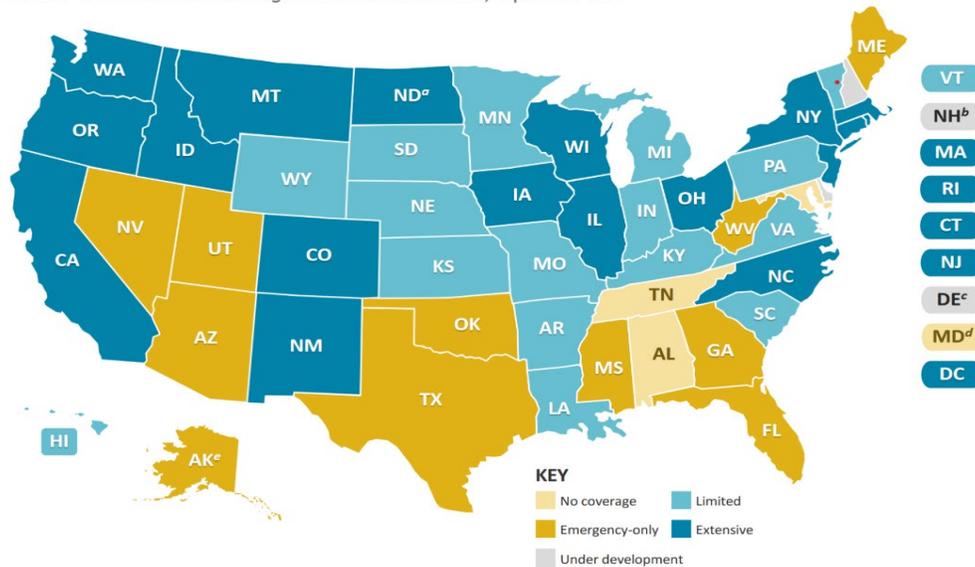
January 25, 2022

The Maryland Dental Action Coalition (MDAC) strongly supports *Senate Bill 150 – Maryland Medical Assistance Program – Dental Coverage for Adults*. The bill establishes a comprehensive dental coverage program for all adults in Medicaid.

It’s Time to Close the Gap. Dental Care is Health Care.

Maryland is behind almost every other state for adult coverage in Medicaid. Over thirty other states provide comprehensive or limited dental coverage in Medicaid, with the remaining coverage in emergency situations. Just three states – Alabama, Maryland, and Tennessee – do not provide dental coverage for adults in Medicaid.ⁱ

EXHIBIT 1. State Medicaid Coverage of Adult Dental Benefits, September 2019



Maryland has pockets of adult coverage in Medicaid: dually eligible adults under the age of 65, pregnant and postpartum individuals, and young adults who have aged out of foster care. Managed care organizations may provide some basic benefits – but Maryland law does not require it, so that it could change at any time. This means that about 750,000 adults are left without a reliable source of adult dental coverage that meets their needs for basic preventative and restorative services.

Dental coverage is not a Medicaid cost. It's an investment.

There is a reason that a majority of states provide dental coverage to adults in their Medicaid program. Health care cannot be delivered effectively without dental care. The lack of adult dental coverage drives up health care costs and contributes to health disparities, making it difficult to keep our communities healthy:

Chronic Disease	Behavioral Health	Children's Health	Emergency Dept. Visits
From a NY State Medicaid Study: Reduces chronic disease costs in Medicaid per patient each year: \$772 – Cardiovascular \$2,065 – diabetes \$8,194 – cognitive impairment ⁱⁱ	From a HRSA-Funded Study in Utah: People who receive dental care stay in substance used disorder treatment two times longer, and are more likely to complete treatment. ⁱⁱⁱ	From National Health and Nutrition Examination Survey Data: Untreated tooth decay in children dropped by 5% when the parents had Medicaid dental coverage for one year. ^{iv}	From an Evaluation of HSCRC Data: Maryland Medicaid spends over \$10 million annually on emergency dept. visits related to chronic dental conditions. ^v

Dental coverage is key to improving health outcomes for all.

Dental coverage is a key strategy to address health disparities. Older non-Hispanic Black or Mexican American adults have 2 to 3 times the rate of untreated cavities as older non-Hispanic White adults.^{vi} Medicaid coverage improves access to dental care as demonstrated with the Affordable Care Act.

Dental coverage can transform the life of someone you know.

One in four Marylanders^{vii} is covered by Medicaid. We all know someone who is covered by Medicaid, and that person may be a friend, family member, or even ourselves. Dental care can transform lives. If someone suffers from poor oral health, they may face many struggles, including: managing dental pain; controlling a chronic disease; obtaining a job; or even eating. Medicaid dental coverage can mean the difference between suffering and living a productive life for many Marylanders

More information on options for investing in dental coverage

The Maryland Dental Action Coalition appreciates the Committee's consideration of SB 150. To support the consideration of this initiative, we requested that a national consultant, M2, examine financing options for dental coverage in Medicaid. We have attached the report for your consideration. If there is any additional information that we can provide, please contact Robyn Elliott at relliott@policypartners.net.

ⁱ Center for Health Care Strategies. https://www.chcs.org/media/Adult-Oral-Health-Fact-Sheet_091519.pdf

ⁱⁱ NY State Medicaid.

ⁱⁱⁱ Hanson GR, McMillan S, Mower K, et al. Comprehensive oral care improves treatment outcomes in male and female patients with high-severity and chronic substance use disorders. *J Am Dent Assoc*. 2019;150(7):591-601. doi:10.1016/j.adaj.2019.02.016

^{iv} The Association Between Medicaid Adult Dental Coverage and Children’s Oral Health. Lipton et al. *Health Affairs* 2021 40:11, 1731-1739

^v Financial Impact of Emergency Department Visits for Dental Conditions in Maryland. CareQuest Institute, 2021. https://www.mdac.us/file_download/inline/2ed08573-f47a-47b4-a535-4bffd815823e

^{vi} Centers for Disease Control and Prevention. [*Oral Health Surveillance Report: Trends in Dental Caries and Sealants, Tooth Retention, and Edentulism, United States, 1999–2004 to 2011–2016*](#). US Dept of Health and Human Services; 2019.

^{vii} Extrapolated from September 2021 Medicaid enrollment figures presented at October 2021 Medicaid Advisory Committee meeting and 2020 Census <https://msa.maryland.gov/msa/mdmanual/01glance/html/pop.html>

For more information, please visit www.mdac.us

The Maryland Dental Action Coalition and the following organizations and individuals support adult dental coverage in Maryland Medicaid:

ORGANIZATIONS

American College of Nurse Midwives – Maryland Affiliate
American Dental Hygienist Association
Area Health Education Center West
Baltimore City Substance Abuse Directorate
Baltimore Harm Reduction Coalition
BH Health Services, Inc.
Biotechnology Health Management & Care, LLC
CareQuest Institute for Oral Health
Chesapeake Voyagers, Inc.
Clinical Management and Development Services
Eastern Shore Area Health Education Center
Health Care for the Homeless
Hilda’s Place Behavioral Health Organization
Institute for Behavioral Resources, Inc.
James’ Place, Inc.
Legal Action Center
Maryland Academy of Advanced Practice Clinicians
Maryland Addictions Directors Council
Maryland Assembly for School Based Health Care
Maryland Association for the Treatment of Opioid Dependency
Maryland Chapter of the American Academy of Pediatrics
Maryland Coalition of Families
Maryland Community Health Systems
Maryland-DC Society of Addiction Medicine
Maryland Health Care for All! Coalition
Maryland Nurses Association
Maryland Occupational Therapy Association
Mary’s Center
MDHA Dental Hygiene Well Being Committee
Mid-Atlantic Association of Community Health Centers
National Council of Alcoholism and Drug Dependence of Maryland
New Life Recovery Center
Northern Parkway Treatment Service
OCA/Soul Haven
On Our Own of Carroll County
On Our Own of Howard County
On Our Own of Maryland
Peer Wellness and Recovery Services
Planned Parenthood of Maryland
Public Justice Center
The Coordinating Center
Voices of Hope, Inc.
Wellness and Recovery Community Center, Charles County Freedom Landing, Inc.
Y of Central Maryland

INDIVIDUALS

George Acs, DDS
Salliann Alborn
Bianca Victorianna Ascenzi
Joy Auslander, RN
Katy Battani
Lisa Bress, RDH
Cathy Brill
Corey Ellen Bryce
Suzanne Burgee, RDH
Deborah L. Cartee, UMDSD
Wenzell Carter, DDS
Paige Christensen
Grace Comello
Marion Currens, CRNP
Emily Davis, DDS
Marisa C. DeStefano, RDH, BSDH
Robert Devine
Gail Devore
Caitlin Donohue-Vega, RDH
Kate Dulin
Alyssa Elder
Irene Elder
Cailin Gollubier
Sophia Flynn
Harry Goodman, DDS
Chenelle Gould
Meghan Greco
Courtney Gregson, RDH BS
Jennie Hagar, RDH
Alex Hammond, MD PhD
Qian Harasta
Brittany Harris, RDH
Alice M. Horowitz
Jill Jacobs
Matthew Konopka
Marleigh Korell
Loree Lamour
Diane Lane
Ericka Lewis
Kayla Long
Bill Maas
Denise Morton
Thomas Oates, DDS
Sonnie Price
Katherine Perez, RDH
Shirley Reddoch
Rose A. Regan
Agnieszka Roman

Marta Roman
MaryAnn Schneiderman
Laura Smith
Joan Sperlein
Patricia Stabile
Sheryl Syme
Julie Teter
Phillip Teixeira
My Truong
Miriam Yarmolinsky

Dental Care for Adults

Options for Financing Adult Dental Coverage in Maryland Medicaid

JANUARY 2022

Authors:

Brenda Gleason, MA, MPH

Jennifer Bohn, MPH, MBA

M2 Health Care Consulting



M2 Health Care Consulting

Report prepared for the Maryland Dental Action Coalition

Options for Financing Adult Dental Coverage in Maryland Medicaid

Contents

- Lack of Access to Dental Care Has Far Reaching Impacts 3
 - Background 3
 - Impact of Lack of Access to Dental Care on Health Outcomes..... 3
 - Impact of Lack of Access to Dental Care on Behavioral Health 4
 - Impact of Lack of Access to Dental Care on Health Disparities 5
 - Impact of Lack of Access to Dental Care on Income and Employment 5
 - Impact of Lack of Access to Dental Care on Health Costs..... 6
- Financial Considerations for Adult Dental Expansion in Maryland Medicaid..... 7
 - Components of Calculating Investments and Savings 8
- Options for Financing..... 9
 - Option 1: Use tobacco funds currently earmarked for Medicaid 10
 - Option 2: Appropriate spending from the General Fund 10
 - Option 3: Use current surplus funds..... 10
 - Option 4: Leverage current MCO spending 10
 - Option 5: Build on hospital rate setting and the Total Cost of Care model..... 11
- Conclusion..... 12
- Bibliography 14

Suggested citation: Gleason B, Bohn J. Options for Financing Adult Dental Coverage in Maryland Medicaid. M2 Health Care Consulting and Maryland Dental Action Coalition; January 2022.



Lack of Access to Dental Care Has Far Reaching Impacts

Background

Oral health is an important contributor to overall health. If you have ever had a bad toothache or a broken tooth, it is particularly clear: oral health affects every other part of your mind and body. Still, working age adults and older adults are less likely to have dental health coverage than medical, prescription drug, and mental health care coverage. Neither Medicaid nor Medicare is required to provide adult dental coverage. In turn, many people cite the cost of dental care as the main reason they don't seek treatment (APHA, 2020). Lack of access to dental care drives people to emergency rooms, which is expensive and treats symptoms, not problems. Lack of access also exacerbates chronic medical conditions, and is a factor in health disparities (APHA, 2020; Tranby, 2021).

Federal statute requires states to provide the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit to children under age 21 who are enrolled in Medicaid. This benefit includes screening, diagnostic, and treatment for medical, dental, and mental health, as well as developmental and specialty services. There is no similar requirement for adults, however, as dental services for adults in Medicaid is optional. States are also able to determine the scope, frequency, and duration of adult dental coverage. Maryland currently offers some dental coverage for certain adults in Medicaid, but the coverage is so limited, an analysis by The Center for Health Care Strategies named Maryland as one of just three states not offering meaningful adult dental coverage. The other two states named in the analysis are Alabama and Tennessee (Vujcic, 2021).

Maryland is a national leader in health care system reform but does not offer meaningful adult dental coverage in Medicaid

While Maryland is not one of the states providing comprehensive dental coverage to adults in its Medicaid program at present, Maryland is a national leader in health care system reform. Building on the reforms already underway to access to dental health services in Medicaid, and the innovative work being undertaken more broadly to enhance quality and patient experience, improve population health, and reduce the total cost of care for Marylanders, now could be an ideal time to consider the addition of adult dental coverage to Maryland Medicaid. This paper considers some of the main benefits of an expansion and lays out options for financing that coverage.

Impact of Lack of Access to Dental Care on Health Outcomes

Lack of access to dental care has a significant impact on health outcomes and often leads to more severe dental problems later, affecting a person's quality of life and increasing disability-adjusted life-years (Naavaal, 2020). Poor oral health and periodontal disease are also correlated with other health issues, specifically coronary heart disease, diabetes, arthritis, and liver disease (Bensley, 2011). One analysis found people with severe periodontal disease were up to 1.4 times more likely to have chronic health conditions compared to people without periodontal disease (Bensley, 2011).

Treating periodontal disease can lead to improved health outcomes. In the case of diabetes, studies show “control of periodontal infection has an impact on improvement of glycemic control evidenced by a decrease in demand for insulin and decreased hemoglobin A1c levels” (Southerland, 2005). A more recent study reviewing health outcomes and cost data for adult New York State Medicaid members ages 40 to 64 explains “clinical studies indicate that dental treatment, specifically conservative periodontal therapy, can have a beneficial effect on outcomes associated with certain chronic diseases”, including diabetes, cardiovascular disease, and atherosclerosis (Lamster, 2021). Notably, Maryland identified diabetes as a top priority area in the Statewide Integrated Health Improvement Strategy (SIHIS), so improving access to dental care for adults in Medicaid would align with those goals (HSCRC, 2020).

Improving access to dental health care for adults doesn’t just improve health outcomes for adults. Adults can also be parents (or aunts or uncles or grandparents!) and access to dental health care for an adult is not unrelated to dental health care for children. Dentists often use the phrase “tell, show, do” to explain to parents how to help children learn and perform positive dental health habits. A recent study

Improving access to dental health care for adults doesn’t just improve health outcomes for adults, but also helps children learn and perform positive dental health habits

serves as a further proof point that adult dental coverage has an effect on children’s oral health by showing a “statistically significant 5-percentage-point reduction in the prevalence of untreated caries among children after Medicaid-enrolled adults had access to coverage for at least one year” (Lipton, 2021).

Impact of Lack of Access to Dental Care on Behavioral Health

As with medical care, integrating oral health with behavioral health holds promise “to improve patient outcomes and potentially reduce health care costs” (Bowling, 2021). This is because lack of access to dental care has what are called “bi-directional connections” to behavioral health, including mental health and substance use disorder, treatment, and recovery. For example, “having a mental health or substance use challenge such as depression, anxiety or substance use disorder (SUD) can negatively impact one’s oral health, and vice versa. Poor oral health can create or exacerbate problems with mental health, self-esteem, cognitive health, substance use and impede social functioning in areas such as employability and school engagement” (Bowling, 2021).

There is a clear association between poor dental health and mental health issues, such as depression (O’Neil, 2014), as well as a “high prevalence of poor oral health among individuals with serious mental illness” such as schizophrenia or bipolar disorder (Lam, 2019). There are similar associations between poor dental health and substance use disorder, treatment, and recovery. For example, patients who seek dental care in a hospital ED “are often provided only an antibiotic and an analgesic, which frequently is an opioid, and told to seek definitive care elsewhere” (Laniado, 2020). In fact, opioids are the most common category of prescription provided at emergency dental visits (Fiehn, 2020). Improving access to preventive dental care for adults in Medicaid therefore supports another priority area

identified in the Statewide Integrated Health Improvement Strategy (SIHIS), that of addressing opioid use (HSCRC, 2020).

As with mental health issues and oral health, the relationship between dental care and substance use disorder, treatment, and recovery is bi-directional. Research shows more than half of patients with substance use disorders have “coexisting medical and emotional pathologic conditions that make managing their care difficult and expensive, thereby compromising treatment outcomes” (Hanson, 2019). But recent research showed when people in substance use treatment programs “had their oral health problems addressed by a dental professional [they] stayed in treatment approximately two times longer and had a more than 80% increase in completing their program” (Univ of Utah, 2019).

Impact of Lack of Access to Dental Care on Health Disparities

Lack of access to dental care also has an impact on health disparities, often exacerbating existing inequities. Approximately 25% of U.S. adults from 20 to 64 years of age have untreated tooth decay, but prevalence varies greatly by race and ethnicity (CDC, 2019). Nearly 41% of non-Hispanic Black and just over 38% of Mexican American adults have untreated tooth decay, compared to 20% of non-Hispanic white adults (CDC, 2019). In Maryland, there are age, race, and income disparities in ED visits for non-traumatic dental care. Even though Maryland Medicaid participants are just 17% of adults, they account for over 50% of ED visits. Adults between the ages of 25 and 34 have over five times as many ED visits for non-traumatic dental care than adults aged 65 to 74 in the state (Tranby, 2021). There are also differences by race: “Black adults have the highest rates among racial groups of ED visits, at 145 visits per 10,000 adults — nearly three times the rate of other racial/ethnic groups.” (Tranby, 2021). Many of these visits are repeat visits, indicating the ongoing nature of people’s dental conditions and that ED visits are often not fixing the problem, but simply treating pain (APHA, 2020).

Impact of Lack of Access to Dental Care on Income and Employment

Lack of access to dental care creates disparities related to income and employment as well. Studies have shown people with poor oral health say it is more difficult to find employment (Reusch, 2021). This is due to a range of issues including people’s ability to interview for a job, get hired for a job, and maintain employment. Recent studies from Maine and Virginia, for example, provide evidence regarding the link between poor oral health and the ability to interview. “In Maine, an estimated 37 percent of low-income adults indicate their oral health problems are so severe that they interfere with their ability to interview for a job” (Vujicic, [Maine] 2021). “In Virginia, more than one in three low-income adults indicate that the condition of their mouth and teeth affects their ability to interview for a job” (Vujicic, [Virginia] 2020).

Lack of access to dental care creates disparities in income and employment

Interviewing for a job may seem like a small issue, but it is just one component to be considered when it comes to income and employability. Research confirms better oral health “is linked with increases in the probability of being employed as well as lifetime earnings, particularly among women and low-income populations” (Moeller, 2017; Hamermesh, 1994). More recently, a team of researchers examined the

outcomes from improved access to dental health for Michigan Medicaid enrollees. The results found “Michigan’s Medicaid expansion contributed to self-reported improved oral health, which was associated with improved job outcomes” (Kieffer, 2021).

Interviewees in the Michigan study explained how access to dental coverage improved their “oral health, functioning, appearance, confidence, and employability” and “those reporting improved oral health were more likely to report improved job seeking and job performance” (Kieffer, 2021) More specifically, after the oral health improvements, 60% of these Michigan Medicaid enrollees said they were better able to look for a job, 76% said they did a better job at work, and 43% said better oral health helped them get a better job.

Impact of Lack of Access to Dental Care on Health Costs

The total cost of care can be reduced when dental care is integrated with health care. As mentioned previously, this is in part due to the lower cost of care for people with certain comorbidities. Emerging evidence indicates “increased access to dental care can lead to lower medical care costs among patients who are pregnant or who have chronic conditions such as diabetes and heart disease” (Vujicic, 2021).

These total cost savings are not just theoretical. The health insurer Cigna has published detailed results showing the impact on the total cost of care when oral health care coverage is provided to adults. Their research found a 67% lower hospital admission rate and a 54% lower ED rate, but more importantly, Cigna’s analysis of its own claims data also showed an average medical savings of 27.5% for their customers receiving appropriate dental care. For their patients with diabetes, the savings was 27.6%; for those with heart disease 25.4%; for people with stroke, a 34.7% average annual medical savings was realized (Cigna, 2014).

Medicaid data from New York tells a similar story to the total cost of care research published by Cigna. The state of New York added adult dental coverage to its Medicaid managed care plan in 2012 so researchers were able to compare health costs before and after the addition of adult dental coverage. Preliminary data for adults ages 40 to 64 enrolled in New York Medicaid from 2012 to 2015 showed the provision of preventive dental services reduced several types of state spending and, more importantly, reduced total health care costs for certain patients. The total cost of care for patients with cardiovascular disease decreased by \$772; for patients with diabetes, costs decreased by \$2,065; and for patients with cognitive impairment, costs decreased by \$8,194 (Malloy, 2019).

While this retrospective study of actual costs in a Medicaid program shows the effect of adding adult dental coverage to a state’s total cost of health care, estimates are also useful. Specific to Maryland, the Health Policy Institute estimated an investment of \$57,275,116 in adult dental care spending in Medicaid would result in \$23,521,013 in additional medical care savings, for a net cost to Maryland of \$33,754,102 (Vujicic, 2021). These estimates are explained in more detail in the next section.

The state of Maryland is a leader in looking at its health care spending holistically, which is why it is essential to consider adult dental coverage in Medicaid as part of the total cost of care. At the same time, Maryland Medicaid has a strong interest in reducing inefficient spending, including lowering the costs associated with treating non-traumatic dental conditions in emergency departments (ED) and

hospitals. Research conducted on the use of EDs and inpatient hospital admissions by adults in Maryland for non-traumatic dental conditions found Medicaid pays for a disproportionate share of these visits. Maryland Medicaid paid 46% of the total cost of ED visits for non-traumatic dental conditions in 2019; Medicaid members accounted for 54% of these visits, but just 17% of Maryland adults are enrolled in Medicaid (Tranby, 2021). In total, Maryland Medicaid pays approximately \$11 million annually for inpatient admissions and for ED visits related to non-traumatic dental conditions, approximately half funded by the General Fund. (Tranby, 2021).

Financial Considerations for Adult Dental Expansion in Maryland Medicaid

A broad range of stakeholders in Maryland have demonstrated a strong commitment to transforming access to oral health services over the past several years. Sweeping reforms to address the dental care access crisis that existed in Maryland began in response to the death of Deamonte Driver, and have continued since. Building on those systemic reforms, a range of supports has been provided to enhance oral health service provision in Maryland in the past few years. These efforts are supported by legislative initiatives and funds the Governor has included in annual budgets to support community-based oral health grants targeting underserved areas and individuals with unmet needs, and newly approved access to care for women for two full calendar months after the date pregnancy ends, as well as adults ages 21 through 64 who are eligible for both Medicaid and Medicare through an adult dental pilot.

Maryland is a national leader in using health financing as a mechanism to catalyze health care delivery changes

The Maryland Healthy Smiles Dental Program is the state’s main Medicaid dental care program and serves approximately 525,000 people per year, including children under the age of 21, former foster care recipients under the age of 26, pregnant women 21 years of age and older, women for two full calendar months after the date they give birth or their pregnancy ends, and adults enrolled in the Rare and Expensive Case Management (REM) program. Additionally, the nine Medicaid MCOs in the Maryland Medicaid program voluntarily cover limited adult dental services out of their profits to their members as part of their benefit package (MDH, 2021; Brown, 2021). What is still missing, however, is access to care for adults in the Maryland Medicaid program. The 2018-2023 Maryland Oral Health Plan, developed by a coalition of stakeholders led by The Maryland Dental Action Coalition (MDAC) and funded by the Office of Oral Health, includes five goals related to improving access to oral health care for all Marylanders, one of which is the establishment of “a comprehensive dental benefit for all adults who are Medicaid recipients” (MDAC, 2017).

Maryland is a national leader in using health financing as a mechanism to catalyze health care delivery changes, and is furthering its leadership position with efforts to reduce health disparities and inequities. Maryland’s unique payment system is seen as a model for many states across the country, in particular because of its Total Cost of Care Model that began in 2019. Covering dental care in Medicaid for adults should be viewed as a component of Maryland’s total health care strategy. This includes an analysis of

total health care spending that would consider comprehensive cost offsets, for example, the effect on state expenditures outside of health care.

Components of Calculating Investments and Savings

In order for policymakers to decide whether to finance adult dental coverage in Medicaid, the investment and likely savings of coverage should be calculated.

The Medicaid, Medicare, CHIP Services Dental Association (MSDA) has created a [Cost Offsets Tool](#) to help policymakers and Medicaid program administrators quantify the return on investment for funding Medicaid adult dental coverage, including an assessment of potential socio-economic cost offsets. Calculating the estimated costs of the coverage requires several inputs. While the tool provides extensive detail on how to estimate the cost of providing the dental services, the key inputs are:

- The estimated number of adults who would be *eligible to receive* the new coverage
- The estimated number of adult enrollees who *would use* the new coverage (rate of utilization)
- The estimated costs of providing the coverage

Maryland has not yet determined the benefit design for adult dental coverage in Medicaid (scope, duration, frequency of services, for example), nor the reimbursement rates for the services that would be provided, so precise cost estimates are not possible. Estimates specific to Maryland have been published by the American Dental Association (ADA) Health Policy Institute, as shown in Table 1 below, indicating an investment of \$57,275,116 in adult dental care in Maryland Medicaid would result in \$23,521,013 in offsetting medical care cost savings in diabetes and heart disease, for a total cost of \$33,754,102 (Vujicic, 2021).

Table 1: Health Policy Institute – Estimated Cost of Comprehensive Adult Dental Coverage in Medicaid Programs in All States without an Extensive Benefit

Maryland Adult Medicaid Enrollment	Utilization Rate (% with a dental visit)	Estimated PMPM	Increase in Dental Care Expenditure	Additional Medical Care Savings	Total Cost After Medical Care Savings
759,189	13.3% to 40.8%	\$3.71	\$57,275,116	\$23,521,013	\$33,754,102

In addition to medical care savings, there are likely other cost offsets to the state. The MSDA [Cost Offsets Tool](#) also helps states calculate savings that might be incurred to offset some portion of the cost of providing Medicaid adult dental coverage. These cost offsets fall into three broad categories: employability-related, pain-related, and direct medical-related. As mentioned above, data on ED and hospital spending related to non-traumatic dental visits is available, including costs specific to Maryland. That information could be useful in examining the potential direct medical-related cost savings from the provision of Medicaid adult dental coverage. Additional offsets will need to be calculated as policymakers determine the total cost of providing this coverage.

A sample of the summary table of the calculated offsets from the MSDA Cost Offsets Tool appears below.

Table 2. Summary Table of Results with More Detail on Offsets

Offsets	Category	Overall Medicaid expenditures	State-only portion of Medicaid	Overall state budget impact	Total offsets (societal impact)
Employability-related	Reduction in Medicaid spending	\$	\$	\$	\$
	Reduction in unemployment benefits paid out	\$	\$	\$	\$
	Increase in state income tax revenue	\$	\$	\$	\$
	Increase in federal income tax revenue	\$	\$	\$	\$
Pain-related	Reduction in opioid-related property crimes, secondary to chronic dental pain	\$	\$	\$	\$
	Reduction in opioid-related ED visits, secondary to chronic dental pain	\$	\$	\$	\$
	Reduction in end-stage renal disease, secondary to chronic dental pain	\$	\$	\$	\$
	Reduction in lung transplants, secondary to chronic dental pain	\$	\$	\$	\$
Direct medical-related	Reduction in dental-related ED visits	\$	\$	\$	\$
	3% reduction among one or more of diabetes, cardiovascular disease, COPD, or stroke	\$	\$	\$	\$
	VALUE OF OFFSETS	\$	\$	\$	\$

Authors' recreation of chart from Dellapenna 2020 webinar materials.

Options for Financing

While the positive effects of offering adult dental coverage in Medicaid on health outcomes, health inequities, and overall health care costs are clear, Maryland policymakers must still decide how to finance this coverage. “Medicaid financing is a shared responsibility of the federal government and the states, with states receiving federal matching funds toward allowable state expenditures” (MACPAC, 2021). States have flexibility in how they generate their share of Medicaid expenditures. The three most common sources of the state share are: general revenue, health care-related taxes and other local sources such as counties or municipalities, or intergovernmental transfers.

Most states providing adult dental coverage in Medicaid finance the coverage with appropriations from the General Fund. Some states use other funding sources; for example, Missouri first funded a portion of its adult dental coverage through a one-time tax amnesty program for delinquent taxpayers (Missouri

media release, 2016). Colorado uses a combination of funding from fees collected from hospitals and funds from the Unclaimed Property Trust Fund (Colorado Fiscal Note, 2021).

Based on a policy and financing review of other states that currently have more robust Medicaid coverage of dental care for adults and extensive conversations with a wide range of stakeholders in the state, below are five options Maryland could consider for funding adult dental coverage in Medicaid.

Option 1: Use tobacco funds currently earmarked for Medicaid

One option for funding adult dental coverage is to use some of the funds currently earmarked for Medicaid from the Maryland Cigarette Restitution Fund (CRF). The Tobacco Master Settlement Agreement, entered into by most tobacco companies in 1998, created a pool of funds for states. In 2001, the Maryland General Assembly required all tobacco settlements go to Maryland's Cigarette Restitution Fund. The state receives approximately \$100 to \$150 million annually from this Agreement. In FY 2021, Maryland Medicaid received \$57 million from the CRF.

The advantage of using the CRF as a funding source is that Maryland does not need to use its own tax receipts as it would for spending from the General Fund or surplus fund. However, the amount of funding in the CRF has been declining over the past several years as fewer people use tobacco, which in turn lowers tax receipts, making this funding stream a disappearing resource. Additionally, because Medicaid already relies on this funding stream for some provider reimbursements, it is likely adult dental coverage funded through the CRF would supplant current Medicaid funding and create a need for an additional revenue source for provider reimbursement.

Option 2: Appropriate spending from the General Fund

Another option is to fund the adult dental coverage with appropriations from the General Fund. This option has the advantage of being the simplest to execute; still, there would need to be an appropriation from the General Fund. As noted previously, there are several possible offsets for these appropriations, including lowering total health care costs, and reducing spending on ED visits and hospitalizations for non-traumatic dental visits.

Option 3: Use current surplus funds

The Comptroller of Maryland announced in September 2021 that the state finished FY 2021 with a \$2.5 billion surplus – the largest in Maryland's history. Based on estimated tax receipts and spending projections, the surplus is also projected to continue for several years, even after adding to the Rainy Day Fund (MDLS, 2021). Using current surplus funds to add adult dental coverage in Maryland Medicaid has the advantage of being technically simple. On the other hand, there are already suggested uses for the surplus, including a framework proposed by Governor Hogan focused on providing tax relief for Marylanders and exploring new benefits for state workers. Still, among the competing interests for use of the surplus funds, coverage of adult dental care in Medicaid should be a top priority.

Option 4: Leverage current MCO spending

All nine of the currently contracted Medicaid managed care organizations in Maryland “voluntarily cover limited adult dental services for their members as a part of their benefit package using their own profits” (MD Oral Health Legislative Report, 2020). While this spending by Medicaid MCOs provides

some enrollees with limited dental services, because the state does not include adult dental coverage in its rate setting for Medicaid MCOs, Maryland is not able to receive federal matching funds toward the MCO's non-emergency adult dental expenditures.

Leveraging current MCO spending could take the form of adding adult dental coverage to the Medicaid managed care contracts and including the coverage in their capitated rates. In so doing, Maryland would be able to receive federal matching funds because payment to the MCOs in their rate setting would be a state expenditure that enables federal cost sharing.

It is important to note that the Maryland Department of Health (MDH) provided a Medicaid Dental Services Review to the Chair of the Senate Budget and Taxation Committee and the Chair of the House Appropriations Committee October 19, 2021, outlining several approaches for delivering dental services in Medicaid. The approach described in this option – including the adult dental coverage in MCO's capitated rates, also known as a carved-in managed care model – is one of several models considered. All of the delivery models explained in the MDH report would enable a federal match, but the report clearly acknowledges “there are opportunities to continue to make improvements to drive quality and reduce costs under the existing administrative service organization (ASO)/dental benefits administrator (DBA) model.”

Option 5: Build on hospital rate setting and the Total Cost of Care model

Hospitals in Maryland are reimbursed based on a unique and complicated formula set by the Health Services Cost Review Commission (HSCRC) that is designed to be population- and value-driven. Maryland hospitals are not paid more for volume, but most are instead reimbursed under a Global Budget Revenue (GBR) system that prospectively establishes a fixed annual revenue cap for each hospital. Still, as described in other parts of this paper, the system is not perfectly efficient as Maryland Medicaid is spending approximately \$11 million annually on non-traumatic dental visits in hospitals (Tranby, 2021). This also means that Maryland's Medicaid MCOs are using part of their capitated rate to cover those services.

Is there another way for current funding to flow that would allow an investment in adult dental coverage in Maryland Medicaid? What if hospitals used part of their global budgets to “credit” MCOs for preventive dental coverage? What if hospitals used part of their global budgets to contribute funds to an ASO or DBA that would administer adult dental preventive benefit? A variety of innovative approaches could be pursued by Maryland in its efforts to address total costs, but currently, Maryland hospitals cannot spend a portion of their global budgets on care provided outside of the hospital, nor can they spend money on non-physician services. In the public meeting of the Health Services Cost Review Commission on November 10, 2021, the Commission staff recommended a new approach called Revenue for Reform that might be useful in thinking about ways to fund adult dental coverage in Maryland Medicaid. The types of spending that would be allowed under the program, as recommended by the staff proposal, had several requirements, but one would allow “initiatives which target demonstrated community health needs”, as documented by one of the following:

- The Hospital's Community Health Needs Assessment or the CDC's Healthy People 2030 goals;
- OR

- Primary Care, Mental Health, and Dental Care in a Medically Underserved Area (HSCRC, 2021).

Instead of relying on funding transfers between hospitals and other entities, the state could take a more direct route to providing adult dental coverage in Medicaid by leveraging the Total Cost of Care (TCOC) Model approved by the federal Center for Medicare & Medicaid Innovation (CMMI) in March 2021. The TCOC is based on Maryland’s Statewide Integrated Health Improvement Strategy (SIHIS) which aligns statewide efforts across three domains: hospital quality, care transformation across the system, and total population health (HSCRC, 2020). Under the third domain, total population health, the State identified three key health priority areas for improvement: diabetes, opioid use, and maternal and child health (HSCRC, May 2021). In anticipation of the partnership with CMMI, the HSCRC approved a five-year investment of 0.25% of statewide all-payer hospital revenue (approximately \$45 million annually) in November 2019 to support these population health goals via the Regional Partnership Catalyst Program (HSCRC, May 2021). One approach for covering adult dental in Medicaid would be to use a similar statewide investment of all-payer hospital revenue.

Another approach is to work with the HSCRC to set aside some of the funds in the Regional Partnership Catalyst Program to invest in adult dental coverage since oral health care is integral to the total cost of care and to population health. The Commission used a competitive bid process for the funding streams related to diabetes and opioid use, but for the maternal and child health spending, HSCRC staff recommended directing “the funding stream to investments led by... Medicaid, and the Prevention and Health Promotion Administration (PHPA) under the Maryland Department of Health (MDH), in conjunction with the Medicaid HealthChoice MCOs and partnering hospitals” (HSCRC, May 2021).

An advantage of using this option is that it maintains the current delivery system and financing approach that is most familiar to payers and providers in Maryland. Another advantage is that this approach is part of a broader recognition that a payment system focused on the provision of health care services, whether “fee-for-service” or global budgeting, will not be successful in lowering total spending without focusing on the whole person.

Conclusion

Maryland has a range of options available to finance adult dental coverage in Medicaid. As policymakers weigh the advantages and disadvantages of these options, selecting more than one of the options to be used at different points in time should be considered. For example, policymakers could choose to use surplus funds for the first year or two of the new coverage, then transition to the General Fund; it may take a few years for rate setting for hospitals and possibly MCOs, if the coverage is carved-in, to be determined with more accuracy. Similarly, General Funds could be used initially, then reduced, as Maryland adjusts its payment model to accomplish broader population health goals.

Regardless of which financing option is selected, it is important to recognize that ensuring access to dental care for people in Medicaid will also require continued attention to network adequacy, provider reimbursement rates, and patients’ preferred patterns of use. The state would also need to engage in education and awareness efforts to help patients and providers learn about the new coverage and how to use it. Many of these factors related to providing dental care to both children and adults in Medicaid

are ongoing in Maryland, and while they were not the focus of this paper, should be addressed in implementation planning. In addition, there will continue to be gaps in the availability of care, even if adult dental coverage is added to Maryland Medicaid. A robust safety net will still be an essential part of ensuring all patients can access at least some dental services.

Lack of access to dental health services leads to negative medical and behavioral health outcomes, exacerbates health disparities, lower incomes and employability, and creates substantial cost inefficiencies. Maryland should continue to build on its decades of efforts establishing the state as a national health reform leader by expanding access to dental services in Medicaid for adults.

We appreciate the invaluable input we received from various stakeholders and interview participants, without whom this report would not have been possible.

Bibliography

American Public Health Association. A Call for Adult Dental Benefits in Medicaid and Medicare, policy number 20204; October 2020.

Baicker K, Allen HL, Wright BJ, Taubman SL, Finkelstein AN. The effect of Medicaid on dental care of poor adults: evidence from the Oregon Health Insurance Experiment. *Health Services Research* 2018;53(4):2147–64.

Bensley L, VanEenwyk J, Ossiander EM. Associations of self-reported periodontal disease with metabolic syndrome and number of self-reported chronic conditions. *Preventing Chronic Disease* 2011;8(3):A50.

Berkey DB, Scannapieco FA. Medical considerations relating to the oral health of older adults. *Special Care in Dentistry* 2013;33(4): 164-176.

Betley CL, Idala D, James P, Mueller C, Smirnow A, Tan B. Estimating State-Specific Costs of Medicaid Adult Dental Coverage Expansion Using Comparative State Data. University of Maryland Hilltop Institute; 2017.

Bowling J, Matulis R. Oral Health, Mental Health and Substance Use Treatment: A Framework for Increased Coordination and Integration. National Council for Mental Wellbeing's Center of Excellence for Integrated Health Solutions; 2021.

Brown N. 2020 Annual Oral Health Report. Maryland Department of Health, Office of Innovation, Research, and Development; February 22, 2021.

Center for Health Care Strategies. Medicaid Adult Dental Benefits: An Overview; September 2019.

Centers for Disease Control and Prevention. Oral health surveillance report: trends in dental caries and sealants, tooth retention, and edentulism, United States, 1999–2004 to 2011–2016; 2019.

Chalmers N, Grover J, Compton R. After Medicaid expansion in Kentucky, use of hospital emergency departments for dental conditions increased. *Health Affairs* 2016;35(12):2268–76.

Chase Brexton Health Services. Narrative Interim Report, Grant Number 19-009 Reporting Period #4, November 1, 2020 – April 30, 2021; May 28, 2021.

Chazin S, Glover J. Medicaid Adult Dental Benefits: An Overview. Center for Health Care Strategies; November 2017.

Cigna Dental. The Value of Cigna Dental; June 2014.

Cohen LA, Manski RJ, Hooper FJ. Does the elimination of Medicaid reimbursement affect the frequency of emergency department dental visits? *The Journal of the American Dental Association* 1996;127(5):605–09.

Colorado Legislative Council Staff. SB 21-211 (2021). Adult Dental Benefit, Fiscal Note.

Dane J. Public Oral Health Projects, Impact and Funding: Report to Missouri Coalition for Oral Health. Missouri Department of Health and Senior Services, Office of Dental Health; March 1, 2019.

Decker SL, Lipton BJ. Do Medicaid benefit expansions have teeth? The effect of Medicaid adult dental coverage on the use of dental services and oral health. *J Health Econ* 2015 Dec;44:212-25.

Dellapenna M, Tschampl C, Halasa-Rappel Y, Foley ME. Cost Offsets to Funding a Medicaid Adult Dental Benefit. Medicaid Medicare CHIP Services Dental Association and DentaQuest webinar materials; 2020.

Eke PI, Wei L, Borgnakke WS, Thornton-Evans G, Zhang X, Lu H, McGuire LC, Genco RJ. Periodontitis prevalence in adults ≥ 65 years of age, in the USA. *Periodontology* 2000 2016 Oct;72(1):76-95.

Elani HW, Kawachi I, Sommers BD. Changes in emergency department dental visits after Medicaid expansion. *Health Services Research* 2020;55(3):367-374.

Elani HW, Simon L, Ticku S, et al. Does providing dental services reduce overall health care costs?: A systematic review of the literature. *The Journal of the American Dental Association* 2018;149(8):696–703.

Fiehn R, Okunev I, Bayham M, Barefoot S, Tranby EP. Emergency and urgent dental visits among Medicaid enrollees from 2013 to 2017. *BMC Oral Health* 2020;20:355.

Fischer DJ, O’Hayre M, Kusiak JW, Somerman MJ, Hill CV. Oral health disparities: a perspective from the National Institute of Dental and Craniofacial Research. American Public Health Association; 2017.

Hall M. The Importance of Oral Health, Schoolcare Health Benefit Plans: 2014 Annual Meeting. Cigna; 2014.

Hamermesh DS, Biddle JE. Beauty and the labor market. *Am Econ Rev.* 1994;84(5): 1174-1194.

Hanson GR, McMillan S, Mower K, Bruett CT, Duarte L, Koduri S, Pinzon L, Warthen M, Smith K, Meeks H, Trump B. Comprehensive oral care improves treatment outcomes in male and female patients with high-severity and chronic substance use disorders. *J Am Dent Assoc.* 2019 July ; 150(7): 591–601.

Huang SS. Should Medicaid include adult coverage for preventive dental procedures? What evidence is needed? *J Am Dent Assoc* 2020;151(8):607-613.

Jeffcoat MK, Jeffcoat RL, Gladowski PA, Bramson JB, Blum JJ. Impact of Periodontal Therapy on General Health, Evidence from Insurance Data for Five Systemic Conditions. *Am J Prev Med* 2014;47(2):166–174).

Jeffcoat M, Tanna NK, Hedlund C, Hahn, MS, Hall M, Genco RJ. Does Treatment of Oral Disease Reduce the Costs of Medical Care? Cigna; 2011.

Johns Hopkins Hospital Emergency Dental Grant Reporting; October 2021.

Kieffer EC, Goold SD, Buchmueller T, Nalliah R, Beathard E, Kirch MA, Solway E, Tipirneni R, Clark SJ, Haggins AN, Patel MR, Ayanian JZ. Beneficiaries' perspectives on improved oral health and its mediators after Medicaid expansion in Michigan: a mixed methods study. *J Public Health Dent* (2021): 0022-4006.

Kirksey V. Assessing the Impact of South Carolina's Medicaid Adult Dental Policy on Dental Emergency Department Visits. University of South Carolina, doctoral dissertation; 2019.

Lam PC, John DA, Galfalvy H, Kunzel C, Lewis-Fernández R. Oral Health–Related Quality of Life Among Publicly Insured Mental Health Service Outpatients With Serious Mental Illness. *Psychiatric Services* 2019; 70:1101–1109.

Lamster IB, Malloy KP, DiMura PM, Cheng B, Wagner VL, Matson J, Proj A, Xi Y, Abel SN, Alfano MC. Dental Services and Health Outcomes in the New York State Medicaid Program. *Journal of Dental Research* 2021; 100(9) 928–934.

Laniado N, Badner VM, Silver EJ. Expanded Medicaid dental coverage under the Affordable Care Act: an analysis of Minnesota emergency department visits. *J. Public Health Dent*. 2017;77(4):344–49.

Laniado N, Brow AR, Tranby E, Badner VM. Trends in non-traumatic dental emergency department use in New York and New Jersey: a look at Medicaid expansion from both sides of the Hudson River. *J Public Health Dent* 80 (2020) 9–13.

Liljestrang JM, Havulinna AS, Paju S, Männistö S, Salomaa V, Pussinen PJ. Missing Teeth Predict Incident Cardiovascular Events, Diabetes, and Death. *Journal of Dental Research* 2015;94(8):1055-1062.

Lipton BJ, Finlayson TL, Decker SL, Manski RJ, Yang M. The Association Between Medicaid Adult Dental Coverage and Children's Oral Health. *Health Affairs* 2021;40(11):1731–1739.

MACPAC. The Effect of State Approaches to Medicaid Financing on Federal Medicaid Spending. MACPAC Issue Brief; November 2021.

Maine Committee on Health and Human Services, LD 1955 (2020). An Act To Promote Cost-effectiveness in the MaineCare Program and Improve the Oral Health of Maine Adults and Children, Fiscal Note.

Malloy K, Lamster I. Impact of Dental Care on Health Care Events and Costs, New York State Medicaid, Adults 40-64 years. New York State Department of Health; 2019.

Maryland Department of Budget and Management. Fiscal Digest of the State of Maryland for the Fiscal Year 2022 Including Revenues and Appropriations with Explanatory and Supplemental Statements; July 13, 2021.

Maryland Dental Action Coalition. Improving Access to Oral Health Care for Adults and Seniors in Maryland: Report to the Leonard and Helen R. Stulman Charitable Foundation; June 30, 2015.

Maryland Dental Action Coalition. Maryland Oral Health Plan 2018 – 2023: Framework to Improve the Oral Health of All Marylanders. December 1, 2017.

Maryland Department of Health. Maryland's 2020 Annual Oral Health Legislative Report, Health-General Article, Section 13-2504(b) and House Bill 70 (Chapter 656 of the Acts of 2009); December 9, 2020.

Maryland Department of Health. Medicaid Dental Services Review; October 19, 2021.

Maryland Department of Legislative Services, Office of Policy Analysis. Spending Affordability Briefing; November 9, 2021.

Maryland Health Services Cost Review Commission, Public Post-Meeting Materials, 584th Meeting; May 12, 2020.

Maryland Health Services Cost Review Commission, Public Post-Meeting Materials, 589th Meeting; November 10, 2021.

Maryland Health Services Cost Review Commission, Statewide Integrated Health Improvement Strategy Proposal; December 2020.

Medicaid and CHIP Payment and Access Commission. Compendium: State Medicaid Fee-for-Service Adult Dental Services Coverage Policies; January 2021.

Missouri Media Release. Missouri receives federal approval to expand Medicaid dental services to eligible adults. May 11, 2016.

Moeller J, Starkel R, Quiñonez C, Vujicic M. Income inequality in the United States and its potential effect on oral health. *JADA*. 2017;148(6): 361-368.

Naavaal S, Griffin SO, Jones JA. Impact of making dental care affordable on quality of life in adults aged 45 years and older. *J Aging Health*. 2020;32:861–870.

Nasseh K, Vujicic M. Health reform in Massachusetts increased adult dental care use, particularly among the poor. *Health Affairs* 2013;32(9):1639–45.

Nasseh K, Vujicic M, Glick M. The Relationship Between Periodontal Interventions and Healthcare Costs and Utilization: Evidence from an Integrated Dental, Medical, and Pharmacy Commercial Claims Database. *Health Economics* 2017;26: 519–527.

Office of Disease Prevention and Health Promotion. Disparity details by health insurance status; 2020.

O'Neil A, Berk M, Venugopal K, Kim SW, Williams LJ, Jacka FN. The association between poor dental health and depression: findings from a large-scale, population-based study (the NHANES study). *Gen Hosp Psychiatry*. 2014 May-Jun;36(3):266-70.

Oregon leverages Medicaid to address social determinants of health and health equity. Center for Health Systems Effectiveness, Oregon Health & Science University; 2021.

Reusch C. New Study Shows Medicaid Dental Coverage Improves Employment. Community Catalyst Health Policy Hub blog; April 21, 2021.

Singhal A, Caplan DJ, Jones MP, et al. Eliminating Medicaid adult dental coverage in California led to increased dental emergency visits and associated costs. *Health Affairs* 2015;34(5):749–56.

Southerland JH, Taylor GW, Offenbacher S. Diabetes and Periodontal Infection: Making the Connection. *Clinical Diabetes* 2005;(23)4.

Tranby EP, Samtani-Thakkar M, Fager G, Jacob M, Frantsve-Hawley J. Financial Impact of Emergency Department Visits for Dental Conditions in Maryland: An Update. CareQuest Institute for Oral Health and Maryland Dental Action Coalition; July 2021.

University of Maryland Hilltop Institute. The Maryland Medicaid Dental Program: CY 2012 to CY 2016, A Chart Book; March 13, 2018.

University of Utah Office of Public Affairs & Marketing. The Healing Power of a Smile: A Link Between Oral Care and Substance Abuse Recovery; May, 2019.

U.S. Department of Health and Human Services. Healthy People 2020 Objectives; 2020.

Vujicic M, Fosse C. Estimating the Cost of Introducing Comprehensive Medicaid Adult Dental Benefits in Florida. American Dental Association Health Policy Institute Research Brief; May 2021.

Vujicic M, Fosse C. Estimating the Cost of Introducing Comprehensive Medicaid Adult Dental Benefits in Maine. American Dental Association Health Policy Institute Research Brief; March 2021.

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, Families USA, Community Catalyst; July 2021.

Vujicic M, Starkel R, Harrison B. Estimating the Cost of Introducing Comprehensive Medicaid Adult Dental Benefits in Virginia. American Dental Association Health Policy Institute Research Brief; January 2020.

Vujicic M, Starr RR, Fujii D F, Starkel Weninger R, Harrison B. Estimating the Cost of Introducing Comprehensive Medicaid Adult Dental Benefits in Hawaii. American Dental Association Health Policy Institute Research Brief; February 2020.

Wall T, Vujicic M. Research Brief: Emergency Department Use for Dental Conditions Continues to Increase. American Dental Association Health Policy Institute; April 2015.

Wallace NT, Carlson MJ, Mosen DM, Snyder JJ, Wright BJ. The individual and program impacts of eliminating Medicaid dental benefits in the Oregon Health Plan. *American Journal of Public Health* 2011;101(11):2144–50.

Yarbrough C, Vujicic M, Nasseh K. Estimating the Cost of Introducing a Medicaid Adult Dental Benefit in 22 States. American Dental Association Health Policy Institute Research Brief; March 2016.