



# A Dental Benefit in Medicare: Examining the Need in California

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**ABSTRACT** Many older adults in California lack access to oral health care due to the absence of affordable, comprehensive dental coverage. As a result, older Californians have a high prevalence of oral diseases. Forty-six percent of community-dwelling older adults and 65 percent of older adults living in skilled nursing facilities have untreated oral diseases. A comprehensive dental benefit added to Medicare Part B could help all older Californians maintain health and dignity over their lifetime.

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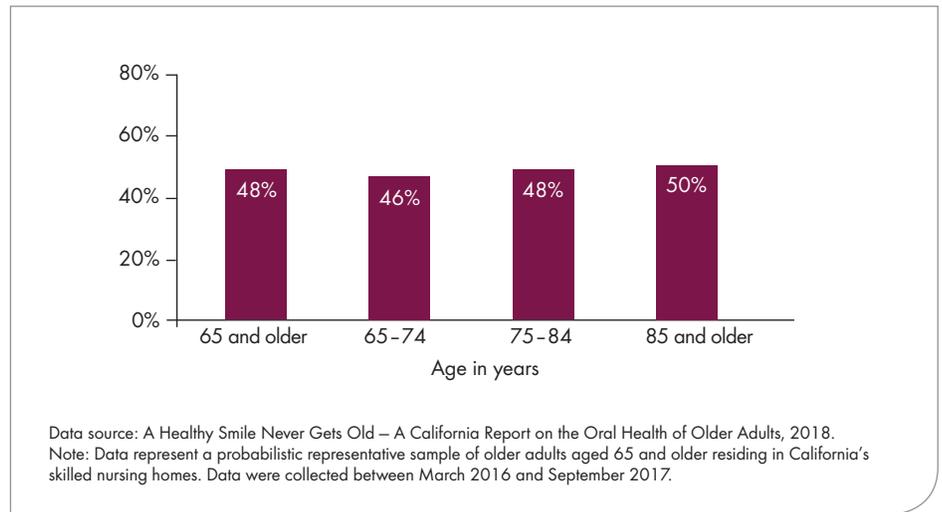
Fourteen percent of California’s population, more than 5 million people, are currently aged 65 or older and this figure is expected to almost double by 2030, when the youngest baby boomers will reach retirement age.<sup>1</sup> Upon reaching retirement, many people lose access to dental insurance when their employer-based dental coverage ends. Original Medicare, the federal insurance program that is the primary form of medical coverage for older adults, does not include an oral health benefit and dental benefits through private Medicare Advantage plans or other standalone plans are often costly and limited in scope. Without access to dental insurance, dental utilization diminishes and oral and systemic health can suffer.<sup>2</sup> While California’s poorest older adults have oral health coverage through the Medi-Cal Dental Program (Denti-Cal), California’s Medicaid dental benefit for

the state’s lowest-income beneficiaries, low provider participation and many administrative barriers make the benefit difficult to access. Californians have experienced the effects of a labile system of dental coverage through the Denti-Cal system, including the loss of adult dental benefits in 2009 that were only fully restored last year. There are also many older adults who do not qualify for Denti-Cal but don’t have the means for regular dental care. A comprehensive Medicare Part B dental benefit could address disparities in access to oral health care by providing a guaranteed benefit to all older adults in California and the nation, across all income levels.<sup>3</sup> Additionally, a comprehensive benefit would help to integrate oral health care with medical care aimed at improving health outcomes overall. Good oral health can have significant physical, psychological and social benefits that ultimately contribute to successful aging.<sup>4</sup>

This paper reviews the current oral health status of older Californians, the bidirectional relationship with systemic health and barriers to the access of affordable dental services, including the limitations of Denti-Cal. This review also lays out the rationale for a comprehensive oral health benefit within Part B of Medicare and discusses potential costs and savings. Finally, it discusses efforts to build consensus around the need and scope of a benefit and additional steps needed to move the effort forward.

### Changing Paradigms in Oral Health Care

Oral health is integral to systemic health, well-being and quality of life throughout the lifespan.<sup>5</sup> Social, political and economic influences can prevent individuals and certain populations from achieving and maintaining good oral health.<sup>6</sup> Dentistry is undergoing a



**FIGURE 1.** California skilled nursing home residents (aged 65 and older) with untreated tooth decay, by age.

paradigm shift at both the individual and population level. This includes a strong emphasis on early detection and risk assessment, minimally invasive dentistry, interprofessional collaboration across the health care delivery sector and development of models that demonstrate integration of oral health care with medical care.<sup>7</sup> In the absence of broadly accessible oral health coverage and a coordinated system for care, older adults will not have the opportunity to benefit from such efforts.

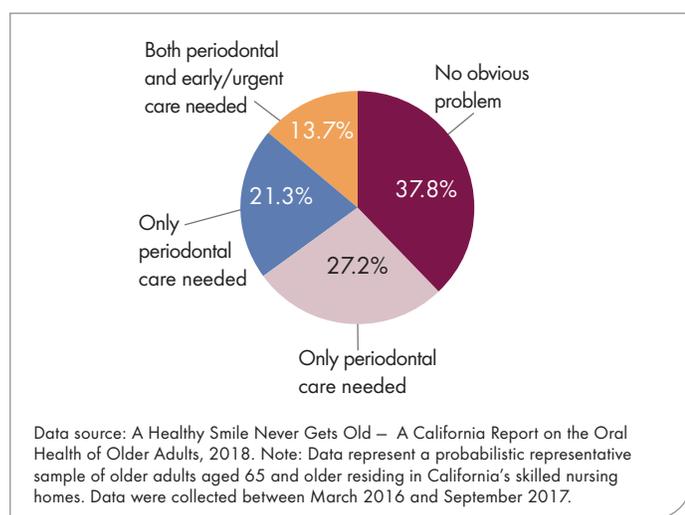
### The Unique Oral Health Needs of Older Adults

Older adults have unique needs that make access to oral health care vital to maintaining their overall health. Older adults have on average at least one chronic health condition and about 20 percent have more than one.<sup>8</sup> Chronic diseases and conditions can impact oral health, and poor oral health has been shown to have numerous associations with chronic inflammation and systemic disease.<sup>9</sup> Tooth decay, oral pain/infection, tooth loss and the inability to chew due to lack of functional, occlusal contact can result in poor nutrition and weight loss and exacerbate conditions like diabetes and heart disease.<sup>10</sup> Research indicates that diabetic individuals who have

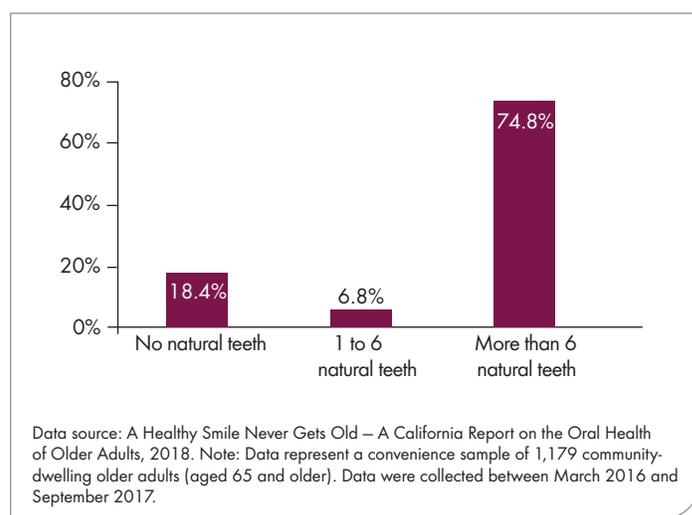
periodontal infections may have poorer glycemic control than their counterparts who don’t have a periodontal infection.<sup>11</sup> The association between oral infections and acute exacerbations of aspiration pneumonia is another example among frail older adults and nursing home residents.<sup>12</sup> One study by Hirotsomi et al. showed that older adults with 20 or more natural teeth have a significantly lower adjusted mortality rate than their counterparts with 19 or fewer teeth.<sup>13</sup>

Additionally, medications used to manage chronic diseases and conditions can increase the risk for oral diseases. Hypertension treated with calcium channel blockers can result in gingival enlargement, and COPD treated with steroid inhalers can increase the risk for oral candidiasis.<sup>14</sup> Several medications commonly used by older adults, like antihypertensives and antidepressants, inhibit salivary flow, increasing the risk of dry mouth and, resultantly, oral disease.<sup>15</sup>

Older adults face additional challenges. Nationally, approximately 50 percent of nursing home residents are unable to perform three or more of the “activities of daily living,” one of which is personal hygiene that includes oral care.<sup>16</sup> Normal age-related changes such as those that occur in hearing and vision can complicate access to and



**FIGURE 2.** California skilled nursing home residents (aged 65 and older) who need early or immediate dental treatment and periodontal care.



**FIGURE 3.** Tooth loss as measured by the number of remaining natural teeth in California community-dwelling adults aged 65 and older.

receipt of care.<sup>17</sup> Other examples include changes in dexterity and cognition, due in part to aging but often compounded by comorbidities like degenerative arthritis and other neurodegenerative disorders that challenge many older adults' ability to maintain good oral health and to access and receive services in a timely and favorable manner. Furthermore, these age-related conditions and age-prevalent diseases complicate prevention, restoration and maintenance efforts to achieve optimal oral health for older adults.<sup>10</sup>

Nationally, about 1 in 5 older adults (aged 65 and older) has lost all of their natural teeth<sup>18</sup> and 70 percent of older adults have periodontal disease.<sup>19</sup> Although largely preventable, many Americans reach adulthood and older adulthood with untreated dental diseases. Oral diseases are chronic conditions and tend to be progressive if left untreated, but are amenable to timely preventive interventions.<sup>20</sup> Owing to its chronic nature coupled with natural physiological changes that accompany aging and those that come with diseases most commonly associated with aging, addressing oral health needs of older adults is vital yet uniquely complex.<sup>21</sup>

### Oral Health Status of Older Adults in California

A recent California study presents a grim picture of the oral health of older Californians.<sup>22</sup> This study, using the Association of State and Territorial Dental Directors' Basic Screening Survey methodology for dental disease surveillance, measured the oral health status of a probabilistic sample of older adults residing in skilled nursing facilities (SNFs). The study also documented the oral health status of a convenience sample of 1,179 community-dwelling older adults. Findings showed that 48 percent of the older adults residing in SNFs have untreated tooth decay (**FIGURE 1**) and nearly 17 percent of all residents have untreated tooth decay in four or more teeth. One in 3 residents has one or more decayed root fragments and, overall, institutionalized older Californians have a significantly higher burden of untreated tooth decay than the national average of 30 percent.<sup>22</sup>

Thirty-five percent of older adults in California's SNFs are edentulous and 4 in 10 older adults do not have a functional posterior occlusal contact on either side of their mouth, either due to missing teeth and/or missing or ill-fitting dentures. The rate of periodontal disease was also found to be high. Forty percent of dentate older

adults (with at least one remaining natural tooth) showed signs of substantial oral debris or deposits covering two-thirds of their natural tooth surfaces. In summary, 65 percent of older adults residing in California's SNFs have unmet treatment needs for tooth decay and/or gingival/periodontal disease (**FIGURE 2**). Disparities by rurality of residence were also apparent. Older Californians residing in SNFs in rural counties were 9 percent more likely to have untreated tooth decay than their counterparts in urban counties.<sup>22</sup>

Of the 1,179 community-dwelling older adults in the survey, 32 percent have untreated tooth decay, 18 percent are edentulous (**FIGURE 3**) and 46 percent have unmet treatment needs for tooth decay and/or gingival/periodontal disease.<sup>22</sup>

### Barriers to Oral Health Care for Older Adults in California

As noted, traditional Medicare does not include an oral health benefit. Some private Medicare Advantage plans do offer dental benefits, but coverage varies widely from plan to plan. Benefits are typically limited in scope, often with significant co-insurance and low annual maximum benefit limits. Standalone dental plans also require enrollees to pay a premium with high

cost-sharing amounts and a limited menu of benefits with low annual maximum benefit limits. Consequently, many older adults forgo oral health coverage because it is too costly. For example, just over one-third of low-income Medicare beneficiaries had a dental visit in the last year compared to nearly three-quarters of higher-income Medicare beneficiaries<sup>23</sup> with a significant number of low-income Medicare recipients specifically citing cost as the reason for either delaying or entirely forgoing dental treatment.<sup>24</sup>

Many of the 5.3 million older adults living in California today cannot afford oral health coverage. Of this number, 49.3 percent are living below the supplemental poverty level.<sup>25</sup> Due to economic, health and social inequities compounded over time, certain groups have even fewer resources. For example, black and Hispanic Medicare recipients have average annual incomes of \$17,350 and \$13,650 respectively compared to \$30,050 for white Medicare recipients. Furthermore, while the average white Medicare recipient has \$108,250 in savings, the average black recipient has only \$16,000.<sup>26</sup>

The issue of affordability is particularly acute for the 750,000 older Californians who have income and resources that exceed the eligibility limits for public programs, but not enough income to pay for their basic needs of food, clothing and housing.<sup>27</sup> The need is projected to grow. Over the next 20 years, California's population older than 65 will almost double, with the biggest growth occurring in the age group older than 75 and within nonwhite racial groups.<sup>28</sup>

California has the second highest senior poverty rate in the country with approximately 1.4 million of California's poorest older adults and people with disabilities eligible for both Medicare and Medi-Cal, California's Medicaid program.

Enrollment is limited to individuals who have income below \$15,000 and less than \$2,000 in resources.<sup>29</sup> Medi-Cal includes a dental benefit delivered through its dental program (Denti-Cal). However, benefits through Denti-Cal have been unstable. They were eliminated for adults in 2009 in response to the recession. During the time benefits were eliminated, emergency room visits for dental-related emergencies increased.<sup>30</sup> Adult benefits were partially restored in 2014, but major services including root canals on posterior teeth, partial dentures, periodontal treatment and

While the average white Medicare recipient has \$108,250 in savings, the average black recipient has only \$16,000.

many other services remained uncovered. The Little Hoover Commission in its 2016 report on the state of the Denti-Cal program declared: "... Denti-Cal, California's Medicaid dental program, is widely viewed, historically, and currently, as broken, bureaucratically rigid and unable to deliver the quality of dental care most other Californians enjoy."<sup>31</sup>

Adult Denti-Cal benefits were entirely restored as of January 2018. Nevertheless, the permanence of dental benefits through Medicaid (Denti-Cal) is uncertain as coverage is labile and benefits are neither mandatory nor guaranteed.<sup>31</sup> Accordingly, many other states, in addition to California, reduce or eliminate dental benefits and other optional Medicaid benefits when faced with budget constraints.<sup>32</sup>

Other barriers affect access to Denti-

Cal benefits. While California's Denti-Cal benefit is fairly comprehensive compared to other states, there are numerous restrictions to Denti-Cal services, such as limited preventive care and restorative care that is not based on individual need or medical necessity, as well as low annual caps on coverage and low provider reimbursement. Low reimbursement rates have deterred providers from participating in the program. As of 2017, there were fewer than 10 participating providers in 22 of California's 58 counties with no providers available in seven rural counties.<sup>33</sup> Consequently, for the 1.4 million older adults relying on Denti-Cal, access to oral health treatment remains a challenge, which is evidenced by the fact that only 1 in 4 older adults on Denti-Cal had a dental visit in the last year.<sup>34</sup>

### Adding Oral Health Coverage to Medicare Part B: Benefit Structure and Financing

With a growing need and gap in coverage, adding oral health coverage to Medicare is essential to ensure that older adults age in good health and with dignity. Medicare provides medical coverage to individuals aged 65 and older and to people with disabilities. Medicare benefits are delivered through different parts: Part A covers inpatient hospital services, Part B provides outpatient services, Part C allows Medicare beneficiaries to select a private Medicare Advantage plan to administer their benefits and Part D provides prescription drug coverage.<sup>35</sup>

The way to include oral health coverage under Medicare seamlessly would be to lift the current exclusion of coverage for dental services in Medicare and provide coverage through Part B, which already covers outpatient and preventive services. This approach would ensure the integration of oral health coverage with overall health coverage and would mirror

the medically necessary criteria currently used to administer other Part B benefits. Inclusion under Part B would also ensure that individuals enrolled in traditional Medicare and in Medicare Advantage plans (Part C) would have access to the same benefit because Medicare Advantage plans are responsible for delivering all Part A and Part B covered benefits.

The Medicare oral health benefit would be subject to the same cost sharing as other Part B benefits and further financed through premiums just as Part B benefits are funded today. Low-income Medicare beneficiaries would receive the same financial assistance through Medicare Savings Programs as they do today for Part B benefits including help with premiums and cost sharing.<sup>36</sup>

A dental benefit through Medicare Part B would also improve access to coverage for California's low-income older adults who currently rely on Denti-Cal. A Medicare benefit could allow beneficiaries to access services based on medical necessity like other health benefits without many of the restrictions set by Denti-Cal. Additionally, the Medicare Part B payment systems and rules are well-established and Medicare reimbursement rates are historically higher than those in Medicaid, likely increasing provider participation. In fact, in a survey conducted by the American Dental Association (ADA), more than 70 percent of dental providers agree that Medicare should include comprehensive oral health coverage.<sup>37</sup>

### Potential Savings and Cost Analysis

While the ADA has not taken a position on including a dental benefit in Medicare,<sup>38</sup> the organization recently conducted a study that analyzed various cost structures for dental benefit designs within Medicare based on 2016 self-insured market rates.<sup>36</sup> The study estimated that a comprehensive benefit without

dollar value caps would cost the federal government \$32.3 billion in 2018. The estimated base premium increase for a Part B benefit would be \$14.50 per beneficiary per month. This estimate assumes a general fund contribution of 75 percent of all costs and takes into account low-income beneficiary subsidies applied to premiums and cost-sharing as well as surcharges paid by high-income beneficiaries, like the current Medicare Part B funding structure. The study assumes a reimbursement rate pegged to fees charged by at least 50 percent of dentists in the U.S.<sup>36</sup>

Several retrospective studies from insurance companies have demonstrated cost savings when their consumers utilized their dental benefits.

Research is also available to help assess potential offsetting savings in overall health costs. There is evidence that the receipt of oral health care can potentially reduce overall health care costs for individuals.<sup>39</sup> In a Cigna study, a year of dental coverage provided to its clients was associated with medical cost savings of approximately \$1,418 per patient.<sup>40</sup> In the absence of a usual source of oral health care, individuals often end up in the emergency room for nontraumatic dental conditions as a last resort, which is an expensive source of dental care, does not result in definitive treatment of the issue and is often followed by repeated visits to the emergency room.<sup>41</sup> A landmark study conducted by the University of Pennsylvania examined more than 200,000 patients with

periodontal disease and found that good periodontal maintenance resulted in an annual reduction of health care costs of \$2,840 (40.2 percent) for patients with Type 2 diabetes, \$5,681 (40.9 percent) for patients with cerebral vascular disease, \$1,090 (10.7 percent) for patients with cardiovascular disease and \$581 (6.3 percent) for patients with rheumatoid arthritis.<sup>42</sup> The study also found a reduction in hospital admissions among patients with Type 2 diabetes (39.4 percent reduction), cerebral vascular disease (21.2 percent) and cardiovascular disease (28.6 percent).<sup>42</sup>

Several retrospective studies from insurance companies have demonstrated cost savings when their consumers utilized their dental benefits.<sup>3,39</sup> A study conducted for Pacific Dental Services by Avalere Health LLC estimated that over 10 years the potential medical cost savings to Medicare from providing periodontal treatment alone was \$63.5 billion.<sup>43</sup> This does not suggest that these savings should or would pay for dental services if they were included in Medicare, but including the services would help offset costs through those savings and by improving outcomes in other areas of medical care. Importantly, without better integration of medical and dental services and broader access to dental care, more deliberate, prospective study of these interactions will be difficult to achieve.

### Building Consensus

Several groups including The Santa Fe Group, Oral Health America and others have convened meetings of stakeholders to discuss the need for the Medicare dental benefit and ideas about benefit structure. In 2015, Oral Health America held its first Dental in Medicare symposium.<sup>44</sup> Seeing that more broad awareness and input was needed to advance the effort, groups engaged in the Oral Health

Equity and Progress Network (OPEN), including The Santa Fe Group, Oral Health America and The DentaQuest Foundation, convened and sponsored a group to examine and work on developing a dental benefit in Medicare.<sup>45,46</sup> OPEN also included adding a dental benefit to Medicare in its 2020 goals.<sup>46</sup> To move this effort forward, representatives of diverse organizations and institutions were invited to attend The Santa Fe Group Salon in 2016 and weigh in on the proposal and draft benefit proposals.<sup>47</sup> From those initial meetings, experts in dentistry and medicine, academics, policy, organized dentistry, insurance, government, senior consumer groups, law and others have continued discussion, and more consensus around developing a benefit that would more closely mirror the way the structure of the Medicare medical benefit has evolved.<sup>3,36,44,46</sup>

This broad interest demonstrates that all interested stakeholders are seriously considering the importance of creating such a benefit and the importance of a structure that adds value beyond fee-for-service structures, supports provider participation and avoids artificial caps and restrictions on necessary services.

To secure comprehensive oral health coverage in Medicare, the dental profession must educate policymakers about the oral health needs of older adults, the potential negative health outcomes of poor oral health as well as the monetary and nonmonetary costs that ensue in the absence of access to regular oral health care. Patients must also be educated. Many Medicare beneficiaries do not realize that Medicare does not include oral health coverage, so it is equally important to arm current and future Medicare beneficiaries with tools to educate their communities and empower them to advocate for these benefits with federal policymakers.<sup>36,44</sup>

National and state surveys are rich sources of self-reported data, owing to the unique and hidden nature of oral diseases. However, objective data on the prevalence and burden of dental disease is critical to help make informed programmatic and policy decisions aimed at improving older adult oral health at the population level. Inclusion of dental benefits to Medicare will not only address a key barrier faced by older adults in achieving optimal oral health finances, but will also provide a significant source of data to examine critically the unmet need, burden of disease and correlation/association/causal relationship between oral disease and systemic disease.

### Legislative Changes Needed and Strategies

Today, Medicare does not provide dental benefits due to statutory language that specifically excludes dental coverage under the Medicare program.<sup>48</sup> Accordingly, the first step to offering dental services under Medicare requires passing federal legislation to remove this statutory exclusion and specifically add oral health coverage and payment for services under Part B.<sup>3,36</sup> Legislation would also need to grant the Centers for Medicare and Medicaid Services the authority to issue regulations to implement and administer the benefit.

### Conclusion

Access to a dental benefit through Medicare would help people continue to receive dental care over their lifetime and help those who have not had regular access to care as adults, or maybe even since childhood, access treatment that can benefit their total health and well-being. It is never too late to seek the quality of life and dignity that good oral health can provide. Given California's proven

commitment to maintaining oral health care as a part of Medicaid despite its many challenges and limitations, the state is well-positioned to help lead efforts to remove the exclusion from Medicare while working toward the development of a meaningful and sustainable benefit for all. All older Californians would stand to benefit from the inclusion of dental services in Medicare Part B. ■

#### REFERENCES

1. Beck L, Johnson H. Planning for California's Growing Senior Population. 2015. [www.ppic.org/content/pubs/report/R\\_815LBR.pdf](http://www.ppic.org/content/pubs/report/R_815LBR.pdf). Accessed Jan. 11, 2019.
2. Manski RJ, Moeller J, Chen H, et al. Dental Care Coverage and Retirement. *J Public Health Dent* 2010;70(1):1-12. doi:10.1111/j.1752-7325.2009.00137.x.
3. Chávez EM, Calvo JM, Jones JA. Dental Homes for Older Americans: The Santa Fe Group Call for Removal of the Dental Exclusion in Medicare. *Am J Public Health*. 2017;107 (Suppl 1):S41-S43. doi:10.2105/AJPH.2017.303864
4. Griffin SO, Jones JA, Brunson D, Griffin PM, Bailey WD. Burden of Oral Disease Among Older Adults and Implications for Public Health Priorities. *Am J Public Health* 2012;102(3):411-418. doi:10.2105/AJPH.2011.300362.
5. U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, Md.: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health. 2000.
6. Marmot M, Friel S, Bell R, Houweling TAJ, Taylor S. Commission on Social Determinants of Health. Closing the gap in a generation: Health equity through action on the social determinants of health. *Lancet* 2008;372(9650):1661-9. doi: doi.org/10.1016/S0140-6736(08)61690-6.
7. Benzián H, Greenspan JS, Barrow J, Hutter JW, Loomer PM, Stauf N, Perry DA. A competency matrix for global oral health. *J Dent Educ* 2015;79(4):353-61.
8. Ward BW, Schiller JS. Prevalence of Multiple Chronic Conditions Among U.S. Adults: Estimates From the National Health Interview Survey, 2010. *Prev Chronic Dis* 2013;10:E65. doi:10.5888/pcd10.120203.
9. Slavkin HC, Abel S, et al. A National Imperative: Oral Health Services in Medicare. *J Am Dent Assoc* 2017;148(5):281-283. doi.org/10.1016/j.adaj.2017.03.004.
10. Association of State and Territorial Dental Directors. Best Practice Approach Report: Oral Health in the Older Adult Population (Age 65 and older). 2017. [www.astdd.org/bestpractices/bpar-oral-health-in-the-older-adult-population-age-65-and-older.pdf](http://www.astdd.org/bestpractices/bpar-oral-health-in-the-older-adult-population-age-65-and-older.pdf). Accessed Jan. 11, 2019.
11. Taylor GW, Borgnakke WS. Periodontal disease: Associations with diabetes, glycemic control and

- complications. *Oral Dis* 2008; 14(3):191–203. doi:10.1111/j.1601-0825.2008.01442.x.
12. Sjögren P, Nilsson E, Forsell M, Johansson O, Hoogstraate J. A Systematic Review of the Preventive Effect of Oral Hygiene on Pneumonia and Respiratory Tract Infection in Elderly People in Hospitals and Nursing Homes: Effect Estimates and Methodological Quality of Randomized Controlled Trials. *J Am Geriatr Soc* 2008; 56(11):2124–30. doi:10.1111/j.1532-5415.2008.01926.x. Epub 2008 Sep 15.
13. Hiroto T, Yoshihara A, Ogawa H, Miyazaki H. Number of teeth and five-year mortality in an elderly population. *Community Dent Oral Epidemiol* 2015; 43(3):226–31. doi:10.1111/cdoe.12146. Epub 2015 Jan 19.
14. Cox DP, Ferreira L. The Oral Effects of Inhalation Corticosteroid Therapy: An Update. *J Calif Dent Assoc* 2017;45(5):227–33.
15. Fardal Ø, Lygre H. Management of periodontal disease in patients using calcium channel blockers – gingival overgrowth, prescribed medications, treatment responses and added treatment costs. *J Clin Periodontol* 2015;42(7):640–6. doi:10.1111/jcpe.12426. Epub 2015 Jul 14.
16. Interagency Forum on Aging-Related Statistics. Older Americans 2016: Key Indicators of Well-Being. 2016. [agingstats.gov/docs/latestreport/older-americans-2016-key-indicators-of-wellbeing.pdf](http://agingstats.gov/docs/latestreport/older-americans-2016-key-indicators-of-wellbeing.pdf). Accessed Jan. 11, 2019.
17. Ship JA, Chavez EM. Management of systemic diseases and chronic impairments in older adults: Oral health considerations. *Gen Dent* 2000;48(5):555–65.
18. QuickStats: Prevalence of Edentulism in Adults Aged ≥ 65 Years, by Age Group and Race/Hispanic Origin – National Health and Nutrition Examination Survey, 2011–2014. *MMWR Morb Mortality Wkly Rep* 2017;66(3):94. doi:10.15585/mmwr.mm6603a12.
19. Eke PI, Dye BA, Wei L, et al. Update on Prevalence of Periodontitis in Adults in the United States: NHANES 2009 to 2012. *J Periodontol* 2015;86(5):611–622. doi:10.1902/jop.2015.140520.
20. Murray Thomson W. Epidemiology of oral health conditions in older people. *Gerodontology* 2014; 31 Suppl 1:9–16. doi:10.1111/ger.12085.
21. Hyde S, Dupuis V, Mariri BP, Dartevelle S. Prevention of tooth loss and dental pain for reducing the global burden of oral diseases. *Int Dent J* 2017; 67 Suppl 2:19–25. doi:10.1111/idj.12328.
22. Bhaskara S, Barzaga CE. A Healthy Smile Never Gets Old. 2018. [www.centerfororalhealth.org/wp-content/uploads/2018/11/Oral-Health-of-Older-Adults.pdf](http://www.centerfororalhealth.org/wp-content/uploads/2018/11/Oral-Health-of-Older-Adults.pdf). Accessed Jan. 11, 2019.
23. The Henry J. Kaiser Family Foundation. How Many Seniors Live in Poverty? 2018. [www.kff.org/medicare/issue-brief/how-many-seniors-live-in-poverty](http://www.kff.org/medicare/issue-brief/how-many-seniors-live-in-poverty). Accessed Jan. 11, 2019.
24. Jacobson G, Griffin S, Neuman T, Smith K. Income and Assets of Medicare Beneficiaries, 2016–2035. 2017. [www.kff.org/medicare/issue-brief/income-and-assets-of-medicare-beneficiaries-2016-2035](http://www.kff.org/medicare/issue-brief/income-and-assets-of-medicare-beneficiaries-2016-2035). Accessed Jan. 11, 2019.
25. Padilla-Frausto ID, Wallace SP. The Hidden Poor: Over Three-Quarters of a Million Older Californians Overlooked by Official Poverty Line. *Policy Brief UCLA Cent Health Policy Res* 2015;(PB2015-3):1–8.
26. Beck L, Johnson H. Planning for California's Growing Senior Population. 2015 [www.ppic.org/content/pubs/report/R\\_815LBR.pdf](http://www.ppic.org/content/pubs/report/R_815LBR.pdf). Accessed Jan. 11, 2019.
27. Schoen C, Davis K, Willink A. Medicare Beneficiaries' High Out-of-Pocket Costs: Cost Burdens by Income and Health Status. 2017. [www.commonwealthfund.org/publications/issue-briefs/2017/may/medicare-beneficiaries-high-out-pocket-costs-cost-burdens-income](http://www.commonwealthfund.org/publications/issue-briefs/2017/may/medicare-beneficiaries-high-out-pocket-costs-cost-burdens-income).
28. The Henry J. Kaiser Family Foundation. Oral Health and Medicare Beneficiaries: Coverage, Out-of-Pocket Spending, and Unmet Need. 2012. [www.kff.org/medicare/issue-brief/oral-health-and-medicare-beneficiaries-coverage-out](http://www.kff.org/medicare/issue-brief/oral-health-and-medicare-beneficiaries-coverage-out).
29. The Henry J. Kaiser Family Foundation. Number of Dual Eligible Beneficiaries. [www.kff.org/medicaid/state-indicator/dual-eligible-beneficiaries/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:%22asc%22%7D](http://www.kff.org/medicaid/state-indicator/dual-eligible-beneficiaries/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:%22asc%22%7D).
30. Singhal A, Caplan DJ, Jones MP, Momany ET, Kuthy RA, Buresh CT, Isman R, Damiano PC. Eliminating Medicaid Adult Dental Coverage in California Led To Increased Dental Emergency Visits and Associated Costs. *Health Affairs* 2015;34(5):749–56. doi: 10.1377/hlthaff.2014.1358.
31. Little Hoover Commission. Fixing Denti-Cal. Report #230. 2016. [lhc.ca.gov/sites/lhc.ca.gov/files/Reports/230/Report230.pdf](http://lhc.ca.gov/sites/lhc.ca.gov/files/Reports/230/Report230.pdf).
32. Center for Health Care Strategies. Medicaid Adult Dental Benefits: An Overview. 2018. [www.chcs.org/resource/medicaid-adult-dental-benefits-overview](http://www.chcs.org/resource/medicaid-adult-dental-benefits-overview).
33. Department of Health Care Services. Little Hoover Commission Hearing: Medi-Cal Dental Services. Jennifer Kent Written Testimony. 2018. [lhc.ca.gov/sites/lhc.ca.gov/files/Reports/243/WrittenTestimony/KentMar2018.pdf](http://lhc.ca.gov/sites/lhc.ca.gov/files/Reports/243/WrittenTestimony/KentMar2018.pdf).
34. California Department of Health Care Services. Medi-Cal Dental: Annual Dental Visits Statewide – Fee-for-Service and Dental Managed Care. [www.dhcs.ca.gov/services/Pages/DentalReports.aspx](http://www.dhcs.ca.gov/services/Pages/DentalReports.aspx).
35. Centers for Medicare and Medicaid Services. [www.cms.gov/Medicare/Medicare-General-Information/MedicareGenInfo/index.html](http://www.cms.gov/Medicare/Medicare-General-Information/MedicareGenInfo/index.html). Accessed Jan. 11, 2018.
36. Oral Health America. An Oral Health Benefit in Medicare Part B: It's Time to Include Oral Health in Health Care. 2018. [oralhealthamerica.org/wp-content/uploads/White-Paper-Final.pdf](http://oralhealthamerica.org/wp-content/uploads/White-Paper-Final.pdf).
37. American Dental Association Health Policy Institute. [www.ada.org/en/science-research/health-policy-institute](http://www.ada.org/en/science-research/health-policy-institute).
38. American Dental Association. (3000–3999) Committee B – Dental Benefits, Practice and Related Matters, All Inclusive.pdf. [www.ada.org/en/member-center/leadership-governance/house-of-delegates/board-reports-resolutions](http://www.ada.org/en/member-center/leadership-governance/house-of-delegates/board-reports-resolutions). [Posted Oct. 10, 2018]. Accessed Jan. 11, 2018.
39. Elani HW, Simon L, Ticku S, Bain PA, Barrow J, Riedy CA. Does providing dental services reduce overall health care costs? *J Am Dent Assoc* 2018;149(8):696–703.e2. doi:10.1016/j.adaj.2018.03.023. Epub 2018 Jun 14.
40. Cigna. Improved Health and Lower Medical Costs: Why Good Oral Health Is Important. 2010. [www.cigna.com/static/www-cigna-com/docs/employers-brokers/dental-white-paper.pdf](http://www.cigna.com/static/www-cigna-com/docs/employers-brokers/dental-white-paper.pdf).
41. California Health Care Foundation. Emergency Department Visits for Preventable Dental Conditions in California. 2009. [www.chcf.org/wp-content/uploads/2017/12/PDF-EDUseDentalConditions.pdf](http://www.chcf.org/wp-content/uploads/2017/12/PDF-EDUseDentalConditions.pdf). Accessed Jan. 11, 2019.
42. 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. doi: 10.1016/j.amepre.2014.04.001. Epub 2014 Jun 18.
43. Avalere Health. Evaluation of Cost Savings Associated With Periodontal Disease Treatment Benefit. Memo to Pacific Dental Services Foundation. 2016. [oralhealth.hsdr.harvard.edu/files/oralhealth/files/avalere\\_health\\_estimated\\_impact\\_of\\_medicare\\_periodontal\\_coverage.pdf](http://oralhealth.hsdr.harvard.edu/files/oralhealth/files/avalere_health_estimated_impact_of_medicare_periodontal_coverage.pdf).
44. Oral Health America. Adding a Dental Benefit in Medicare. [oralhealthamerica.org/our-work/advocacy/medicare-dental](http://oralhealthamerica.org/our-work/advocacy/medicare-dental). Accessed Jan. 11, 2019.
45. Jones JA, Monopoli M. Designing a New Payment Model for Oral Care in Seniors. *Compend Contin Educ Dent* 2017 Oct;38(9):616–624.
46. Chazin S, Bond M. Report on Progress Towards the 2018 Milestones. Oral Health Progress and Equity Network (OPEN), November 2018. [www.oralhealth.network/d/do/1092](http://www.oralhealth.network/d/do/1092). Accessed Jan. 11, 2019.
47. Santa Fe Group. [santafegroup.org](http://santafegroup.org). Accessed Jan. 11, 2019.
48. 42 U.S. Code § 1395y – Exclusions from coverage and Medicare as secondary payer. United States Code, 2006 Edition, Supplement 4, Title 42 – the Public Health and Welfare. 2010. [www.gpo.gov/fdsys/search/pagedetails.action?packageId=USCODE-2010-title42&granuleId=USCODE-2010-title42-chap7-subchapXVIII-partE-sec1395y](http://www.gpo.gov/fdsys/search/pagedetails.action?packageId=USCODE-2010-title42&granuleId=USCODE-2010-title42-chap7-subchapXVIII-partE-sec1395y).

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