



# State Of Decay

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Are Older Americans Coming of Age  
Without Oral Healthcare?

# A State of Decay

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## *Foreword*

The oral health of older Americans is in a state of decay. The reasons for this are complex. Limited access to dental insurance, affordable dental services, community water fluoridation, and programs that support oral health prevention and education for older Americans are significant factors that contribute to the unmet dental needs and edentulism among older adults, particularly those most vulnerable. While improvements in oral health across the lifespan have been observed in the last half century, long term concern may be warranted for the 10,000 Americans retiring daily, as it is estimated that only 2 percent of this “silver tsunami”—baby boomers turning age 65, will have access to dental insurance benefits.<sup>1</sup>

In 2003, Oral Health America published Volume I of *A State of Decay*, which focused only on cost of services and financial reimbursement rates as the primary contributing factors to the state of older adult oral health. Given the current changes associated with health care reforms under the Affordable Care Act, and in the interest of taking a broader look at multiple contributing factors, the 2013 *A State of Decay* highlights both public health and healthcare delivery factors that affect the oral health of older adults.

This report analyzes state level data on five variables impacting older adult oral health: Adult Medicaid Dental Benefits, inclusion in State Oral Health Plans, Edentulism, Dental Health Professional Shortage Areas, and Community Water Fluoridation.

This analysis asks and begins to answer the question: “Are Americans coming of age without oral healthcare?” by noting service gaps and identifying areas for improvement and policy development in both the public health and healthcare delivery arenas. It provides a tool for states to use in addressing shortfalls in oral health status, dental professional access sites, dental benefits for low income adults, and population based prevention, all of which affect the oral health of older adults.

The final evaluations for each state are variable, with most states performing well on some contributing factors, but still in need of much improvement in other important areas. Seventeen states received a “poor” score of below 50 percent of the possible top score. The top findings of this report that require scrutiny and action are:

- **Persistent lack of oral health coverage across much of the nation.** Forty-two percent of states (21 states) provide either no dental benefit or emergency coverage only through adult Medicaid Dental Benefits.
- **Strained dental health work force.** Thirty-one states (62 percent) have high rates of Dental Health Provider Shortage Areas (HPSAs), meeting only 40 percent or less of dental provider needs.

- **Tooth loss remains a signal of suboptimal oral health.** Eight states had strikingly high rates of edentulism, with West Virginia notably having an adult population that is 33.8 percent edentate.
- **Deficiencies in preventive programs.** Thirteen states (26 percent) have 60 percent or more residents living in communities without water fluoridation (CWF), despite recognition for 68 years that this public health measure markedly reduces dental caries. Hawaii (89.2 percent) and New Jersey (86.5 percent) represent the highest rates of citizens unprotected by fluoridation, an unnecessary public peril.

## *Background*

Older adults make up one of the fastest growing segments of the American population. In 2009, 39.6 million seniors were U.S. residents. This aging cohort is expected to reach 72.1 million by 2030 -- an increase of 82 percent.<sup>2</sup>

**Dental Health and Disparities:** Older adults experience an increased risk for oral conditions such as edentulism, oral cancer, and periodontal disease. The reasons for this vary but are often related to age-associated physiologic changes, underlying chronic diseases, race, gender, and the use of various medications.<sup>2</sup> These oral conditions disproportionately affect persons with low income, racial and ethnic minorities, and those who have limited or no access to dental insurance. Older adults with physical and intellectual disabilities and those persons who are homebound or institutionalized are also at greater risk for poor oral health.<sup>3</sup>

As examples of these disparities, older African American adults are 1.88 times more likely than their white counterparts to have periodontitis;<sup>4</sup> low-income older adults suffer more than twice the rate of gum disease than their more affluent peers (17.49 verses 8.62 respectively); and Americans who live in poverty are 61 percent more likely to have lost all of their teeth when compared to those in higher socioeconomic groups.

**Edentulism and Overall Health:** Despite these existing conditions, recent dental public health trends demonstrate that as the population at large ages, older Americans are increasingly retaining their natural teeth.<sup>5</sup> Today, many older adults benefit from healthy aging associated with the retention of their natural teeth, improvements in their ability to chew, and the ability to enjoy a variety of food choices not previously experienced by earlier generations of their peers.

Oral health data reveals that many older adults experience adverse oral health associated with chronic and systemic health conditions. For example, associations between periodontitis and diabetes have emerged in recent years, as well as oral conditions such as xerostomia associated with the use of prescription drugs.<sup>6 7</sup> Xerostomia, commonly known as dry mouth, contributes to the inception and progression of dental caries (cavities). For older Americans, the occurrence or recurrence of dental caries coupled with an inability to access treatment may lead to significant pain and suffering along with other detrimental health effects.

**Oral Care Provider Issues:** Although a growing number of older Americans need oral healthcare, the current workforce is challenged to meet the needs of older adults. The current dental workforce is aging, and many dental professionals will retire within the next decade.<sup>2</sup> A lack of geriatric specialty programs complicates this problem, and few practitioners are choosing geriatrics as their field of choice. Emergency rooms are seeing the results of this shrinking workforce; emergency room visits that were dental related among adults over 65 rose from 1 million from 1999-2000 to 2.3 million during 2009–2010.<sup>8</sup>

While these trends are favorable, adverse oral health consequences are emerging. Due to reasons stated in this report, together with increased demand for services, lack of access to dental benefits through Medicare, increased morbidity and mobility among older adults, and reduced income associated with aging and retirement, many older Americans are unable to access oral health care services. As a result, many older adults who have retained their natural teeth are now experiencing dental problems.

### ***Oral Health Care Delivery***

***Access to dental care is one of the greatest challenges facing older adults and their care advisors.*** The reasons for this vary; however, access to dental insurance is a major factor. Children’s dental coverage was addressed in the Patient Protection and Affordable Care Act (ACA), and is more readily available through private or public mechanisms like the Medicaid, Early Periodic Screening, Diagnosis, and Treatment Program and the Children’s Health Insurance Program.

***Access to dental coverage for older adults is limited.*** It was not addressed in the ACA. Private insurance for older adults is costly, and public insurance for low-income adults via Medicaid is limited by state programs, and is virtually nonexistent in Medicare.

***Dental insurance coverage is a primary indicator of whether or not an individual visits the dentist.*** Older adults with dental insurance are 2.5 times more likely to visit the dentist on a regular basis.<sup>9</sup> A recent Oral Health America, Harris Interactive Public Opinion Survey revealed that for people who earn less than \$35,000 per year, costs are driving their decision to seek care.

More than half in this income group reported that they do not visit the dentist routinely because they lack insurance or because they cannot afford to visit the dentist. If these low income seniors were faced with the need for a dental procedure such as a crown, implant, or bridge, many say they could not afford it. Two-thirds of those with an income less than \$35,000 per year say they could not afford a procedure of this type.<sup>10</sup>

***Close to 70 percent of older Americans do not have dental insurance.***<sup>11</sup> The primary reason is because the two major public health insurance programs serving older adults have little or no

dental benefits for older adults. Medicare, the largest health insurance provider for individuals 65 and older, does not provide coverage for routine dental care. In fact, less than one percent of dental services are covered by Medicare.<sup>12</sup> About half of older Americans purchase Medigap, a type of supplemental private insurance to Medicare, which does not cover dental services.<sup>13</sup>

Medicaid is the federal-state partnership program that provides health care coverage for low-income Americans. Under federal law, dental benefits are an optional service for state Medicaid programs. As such, states have the flexibility to include adult dental benefits in their Medicaid programs. Many states do provide dental benefits for their adult beneficiaries; however, the status and extent of those benefits vary by state and year, depending upon the availability of state funds to support such benefits. In states that do include adult dental coverage in their Medicaid programs, access to dental providers can still be challenging for older adults as limitations in reimbursement rates serve as a disincentive to provider networks.

***Efforts have been made to address the shortage of oral healthcare providers, but not enough.***

The Health Resources and Services Administration (HRSA) supports Federally Qualified Health Centers (FQHCs), which provide comprehensive oral healthcare services to low-income and uninsured individuals in underserved communities. At the national level, the number of these centers has increased 58 percent from 1997 to 2004<sup>14</sup> and totaled 1,128 in 2011.<sup>15</sup> Federal efforts are ongoing to expand the dental care safety-net, however 4,595 designated Dental Health Professional Shortages Areas continue to experience unmet needs.<sup>16</sup>

***Massive changes in the dental delivery system are underway in response to intensified focus on issues related to quality of care, accountability, and cost efficiency.***

As a result of the ACA and the “Triple Aim,”<sup>17</sup> efforts to increase access to care are not enough. In addition to increasing access to care, providers, payers, dental program administrators now must demonstrate improved quality of care, improved health outcomes, and lowered costs. Measures to assess quality in oral healthcare delivery are just beginning to be developed and tested. More needs to be done to assure that the oral healthcare quality measures being introduced are appropriate and representative of the population across the lifespan.

## ***Evaluating the States***

Given the current changes associated with health care reform, *A State of Decay* Volume I is not meant to be directly compared with this report. The 2003 report graded states primarily on financial reimbursements from both Medicaid and private insurance. This report aims to initiate a new conversation, beginning with evaluating five public health factors that impact the oral health of older adults, with other factors needing to be evaluated in the future. Following is a description of the methodology used to evaluate each of the five factors identified to reflect each state’s oral health delivery systems, public health practices and health outcomes.

## Final Evaluation Calculations

The methodology for determining each state’s total numeric score was based on a formula that weighted the five selected contributing factors to older adult oral health. The following weights were applied to each of the contributing factors based on their direct or indirect relationship to older adult oral health.

| Contributing Factor  | Methodology and Sources   | Relationship to Older Adult Oral Health | Weight |
|--|---|---|--------|
| Access to Adult Medicaid Dental Benefit                                      | Extent of dental coverage as reported on the 2011 MSDA National Profile of State Medicaid and CHIP Oral Health Programs, and the Association of State and Territorial Dental Directors (ASTDD) State Synopsis 2013.                                       | Direct                                  | 1.2    |
| Edentulism   | 2012 BRFSS State Rates of Edentulism  | Direct                                  | 1.2    |
| Current State Oral Health Plan with a Goal Promoting Older Adult Oral Health | Current State Oral Health Plan with a goal promoting older adult oral health as reported in the Children’s Dental Health Project (CDHP) Comparison Tool, and the 2012 CDC Synopses of State and Territorial Dental Public Health Programs, and from ASTDD | Direct                                  | 1.2    |
| Dental Health Professional Shortage Area                                     | Current percent of need met in relation to the 2013 HRSA Designated Health Professional Shortage Areas Statistics   | Indirect                                | 1.0    |
| Community Water Fluoridation   | Percent of persons receiving fluoridated water who are served by a CWF, as reported by the 2010 CDC Water Fluoridation Reporting System Report  | Indirect                                | 1.0    |

Each contributing factor was categorized on a scale of one to five. The three direct factors were then weighted as above. Negative scores of one and two were weighted down at .8 to give the same effect as weighting positive scores (four and five) at 1.2. The final score for each state is a percentage representing the ratio of points scored out of a possible top score of 28.

## Access to Adult Medicaid Oral Health Benefits

Access to dental insurance is a strong predictor of access to dental care. Individuals having limited or no access to dental care leads to disparities in oral health care. Medicaid is a federal-state partnership program that provides coverage for health benefits to approximately 60 million low-income Americans. Dental coverage under Medicaid is mandated for children up to age 21 under the Early Periodic Screening, Diagnosis and Treatment Program (EPSDT). For low-income adults over age 21, dental care under Medicaid is an optional state benefit.

The extent of adult dental coverage under Medicaid varies by state. The Medicaid-CHIP State Dental Association (MSDA) monitors state Medicaid dental benefits by population groups through the Annual Survey of State Medicaid and CHIP Oral Health Programs. In 2011, 46 states reported to the MSDA survey demonstrating either comprehensive, limited, emergency, or no adult Medicaid dental benefit. Data on the remainder of the states was provided to this report via the ASTDD State Synopsis Report. *State Of Decay* selected access to adult Medicaid oral health benefits as a direct contributing factor to older adult oral health, and also weighted it at 1.2 when calculating the final evaluations.

**5:** States that provided comprehensive adult Medicaid dental coverage in 2011

**3:** States that provided limited adult Medicaid dental coverage in 2011

**2:** States that provided emergency adult Medicaid dental coverage in 2011

**1:** States that provided no adult Medicaid dental coverage in 2011

## Edentulism

**5:** States with a rate of edentulism under 12.3 percent

**4:** States with a rate of edentulism between 12.4 – 14.8 percent and percent

**3:** States with a rate of edentulism between 14.9 percent and 19.8 percent

**2:** States with a rate of edentulism between 19.9 percent and 22.3 percent

**1:** States with a rate of edentulism of 22.4 percent or higher

Edentulism is the loss of all natural permanent teeth. The prevalence of edentulism increases with age, with older Americans carrying a disproportionate share of this condition. Despite a 6 percent decrease in the prevalence of edentulism between the periods of 1988-1994 to 1999-2002,<sup>18</sup> many older Americans (25 percent) still suffer adverse structural, functional, and psychosocial consequences, as a result of the condition.<sup>19</sup> Edentulism and poorly fitting dentures may cause individuals to forgo nutritious food choices due to an inability to chew properly.<sup>20</sup>

Centers for Disease Control and Prevention monitors edentulism rates via the National Health and Nutrition Examination Survey (NHANES), an ongoing survey of representative samples of the US population, and via the Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a national survey questionnaire that monitors



state-level prevalence of the major behavioral risks among adults associated with premature morbidity and mortality.

In this report, edentulism has been selected as a contributing factor to the oral health among older Americans due to its impact on healthy aging, including nutrition, ability to speak and social interaction. States were evaluated on a numeric scale based on percentage of edentate adults as reported in the 2012 Behavioral Risk Factor Surveillance System (BRFSS). This scale was determined by using standard deviations of all 50 states and Washington, DC. Due to the direct impact of edentulism on an older adult’s quality of life, this contributing factor was weighted at 1.2.

### State Oral Health Plans

**5:** SOHP dated from 2011 or later, with older adult objectives

**3:** SOHP dated 2008-2010, with older adult objectives

**1:** SOHP older than 2008, or with no older adult objectives

Forty-one of the 50 states have State Oral Health Plans (SOHPs) – a factor closely associated with the level of infrastructure for oral health promotion and disease prevention in states. The State Oral Health Plan Comparison Tool includes “seniors” among 22 searchable topic areas.<sup>21</sup>

SOHPs increasingly address the oral health of older Americans, although goals and objectives are often combined with other vulnerable population groups, such as special needs children, pregnant women, and low-income adults. Of the states with SOHPs, 31 explicitly cite older adult oral health needs in their goals or objectives. Some of the remaining nine states refer to older adults in other areas of their SOHPs.

The presence of older adult objectives in a SOHP directly indicates a state’s strategic planning on the issue of older adult oral health, and that the state makes this issue a priority. For this reason, this report weights this factor at 1.2. States were evaluated based on how recently they have updated their plan, and on the presence of plan objectives that considered older adults.

### Fluoridation

Fluoridation is a safe, effective and cost-saving public health approach to preventing and managing dental caries (tooth decay). Fluoridation – the adjusting of fluoride levels within a community water system to an optimum level that promotes oral health – provides benefits across the lifespan to all individuals at risk for dental caries. The positive impact of fluoridation on dental caries has been reported numerous times in the literature since its inception in Grand Rapids, Michigan in 1945.<sup>18,19</sup>



For over half a century, this public health measure has helped to markedly reduce dental caries, and has served to refute the myth that adults will lose their natural teeth as they age. Seventy-four percent of Americans are served by Community Water Fluoridation (CWF). Healthy People 2020, a national plan to promote healthy Americans, aims to increase this rate to 80 percent by 2020.<sup>18</sup> State based legislative and regulatory policies directly impact the public’s access to Community Water Fluoridation.

The CDC’s Water Fluoridation Reporting System (WFRS) monitors the rate of persons in each state receiving fluoridated water to the persons served by a community water system. As one of the top ten public health strategies of the 20<sup>th</sup> Century, this report has selected Community Water Fluoridation as a contributing factor to older adult oral health.<sup>22</sup> As such, state rates of persons receiving fluoridated water has been used as a proxy measure.

**Dental Health Professional Shortage Areas**

Access to dental providers is an important factor that impacts

utilization of the oral health care delivery system by all population groups. Several factors affect access to dental providers. The US Department of Health and Human Services Health Resources and Services Administration (HRSA) has developed a system to monitor and designate Health Professional Shortage Areas or HPSAs.

Dental Health Professional Shortage Areas are used to identify areas and population groups within the US that are experiencing a shortage of dental professionals. There are three types of dental HPSAs: geographic, population and facility. The key factor used to determine a Dental HPSA designation is the rate of dental professionals to the population.

This report assessed the proportion of Dental HPSA designations by state, based on the current HRSA rate of 5000 individuals in ratio to one dentist. The *percent of need met* by current supply reflects the number of providers available to serve the covered population divided by the number of providers that would be needed based on current regulations.<sup>23</sup>

- 5:** States that demonstrated a 90% or higher percentage rate of persons receiving fluoridated water/served by CWF
- 4:** States that demonstrated an 80%-89% rate of persons receiving fluoridated water/served by CWF
- 3:** States that demonstrated a 70%-79% rate of persons receiving fluoridated water/served by CWF
- 2:** States that demonstrated a 60%-69% rate of persons receiving fluoridated water/served by CWF
- 1:** States that demonstrated a rate of less than 60% of persons receiving fluoridated water/served by CWF

- 5:** States that demonstrated the Dental HPSA need met at 60% or higher
- 4:** States that demonstrated Dental HPSA need met at 50% or higher
- 3:** States that demonstrated Dental HPSA need met at 40% or higher
- 2:** States that demonstrated Dental HPSA need met at 30% or higher
- 1:** States that demonstrated Dental HPSA less than 30% dental provider need met

This report has selected Dental HPSAs as a factor contributing to the oral health of older Americans due to HPSAs impact on access to dental care. States were evaluated based on the reported *percent of need met*. Dental Health Professional Shortage Area (HPSA) data as of August 30th, 2013 were assessed.

### Evaluations By State: Alphabetical

| STATE       | Edentulism | Community Water Fluoridation | Adult Medicaid Coverage | Dental HPSA Need Met | State Oral Health Plan addresses Older Adults | Final Rating 1-100 (Percent of Possible Top Score of 28) |
|-------------|------------|------------------------------|-------------------------|----------------------|---|--|
| Alabama     | 1          | 4                            | 1                       | 2                    | 1   | 30.0   |
| Alaska      | 3          | 2                            | 5                       | 5                    | 5   | 78.6   |
| Arizona     | 4          | 1                            | 1                       | 2                    | 1   | 33.6   |
| Arkansas    | 1          | 2                            | 5                       | 3                    | 5   | 63.6   |
| California  | 5          | 2                            | 2*                      | 3                    | 1   | 47.9   |
| Colorado    | 4          | 3                            | 2                       | 2                    | 5   | 62.1   |
| Connecticut | 4          | 5                            | 5                       | 1                    | 5   | 81.4   |
| Delaware    | 3          | 4                            | 1*                      | 3                    | 1   | 42.9   |
| Florida     | 3          | 3                            | 2                       | 1                    | 1   | 33.6   |
| Georgia     | 3          | 5                            | 2*                      | 1                    | 5   | 61.4   |
| Hawaii      | 5          | 1                            | 2*                      | 3                    | 5   | 62.9   |
| Idaho       | 3          | 1                            | 2                       | 4                    | 5   | 55.7   |
| Illinois    | 3          | 5                            | 3*                      | 2                    | 5   | 67.9   |
| Indiana     | 3          | 5                            | 1                       | 4                    | 5   | 67.1   |
| Iowa        | 3          | 5                            | 5                       | 4                    | 1   | 67.1   |
| Kansas      | 3          | 2                            | 2                       | 3                    | 5   | 55.7   |
| Kentucky    | 1          | 5                            | 2                       | 5                    | 1   | 47.1   |
| Louisiana   | 1          | 1                            | 3                       | 5                    | 1   | 37.9   |

| <b>STATE</b>          | <b>Edentulism</b> | <b>Community Water Fluoridation</b> | <b>Adult Medicaid Coverage</b> | <b>Dental HPSA Need Met</b> | <b>State Oral Health Plan addresses Older Adults</b> | <b>Final Rating 1-100 (Percent of Possible Top Score of 28)</b> |
|-----------------------|-------------------|-------------------------------------|--------------------------------|-----------------------------|--|---|
| <b>Maine</b>          | 2                 | 3                                   | 1                              | 2                           | 5  | 47.9  |
| <b>Maryland</b>       | 4                 | 5                                   | 5                              | 4                           | 5  | 92.1  |
| <b>Massachusetts</b>  | 3                 | 3                                   | 2                              | 4                           | 5  | 62.9  |
| <b>Michigan</b>       | 4                 | 5                                   | 3                              | 3                           | 5  | 77.9  |
| <b>Minnesota</b>      | 5                 | 5                                   | 5                              | 3                           | 5  | 92.9  |
| <b>Mississippi</b>    | 1                 | 1                                   | 2                              | 4                           | 1  | 29.3  |
| <b>Missouri</b>       | 1                 | 3                                   | 5                              | 2                           | 5  | 63.6  |
| <b>Montana</b>        | 3                 | 1                                   | 5                              | 2                           | 1  | 45.7  |
| <b>Nebraska</b>       | 4                 | 3                                   | 5                              | 5                           | 5  | 88.6  |
| <b>Nevada</b>         | 3                 | 3                                   | 3                              | 3                           | 5  | 64.3  |
| <b>New Hampshire</b>  | 4                 | 1                                   | 3                              | 5                           | 1  | 52.1  |
| <b>New Jersey</b>     | 4                 | 1                                   | 5                              | 2                           | 1  | 52.1  |
| <b>New Mexico</b>     | 3                 | 3                                   | 5                              | 2                           | 1  | 52.9  |
| <b>New York</b>       | 3                 | 3                                   | 5                              | 4                           | 1  | 60.0  |
| <b>North Carolina</b> | 2                 | 4                                   | 5                              | 3                           | 1  | 55.0  |
| <b>North Dakota</b>   | 3                 | 5                                   | 5                              | 4                           | 5  | 85.7  |
| <b>Ohio</b>           | 2                 | 4                                   | 5                              | 2                           | 5  | 70.0  |
| <b>Oklahoma</b>       | 2                 | 2                                   | 2                              | 3                           | 5  | 50.7  |
| <b>Oregon</b>         | 3                 | 1                                   | 5                              | 2                           | 1  | 45.7  |
| <b>Pennsylvania</b>   | 3                 | 1                                   | 5                              | 2                           | 1  | 45.7  |
| <b>Rhode Island</b>   | 4                 | 4                                   | 5                              | 2                           | 5  | 81.4  |

| <b>STATE</b>          | <b>Edentulism</b> | <b>Community Water Fluoridation</b> | <b>Adult Medicaid Coverage</b> | <b>Dental HPSA Need Met</b> | <b>State Oral Health Plan addresses Older Adults</b> | <b>Final Rating 1-100 (Percent of Possible Top Score of 28)</b> |
|-----------------------|-------------------|-------------------------------------|--------------------------------|-----------------------------|--|---|
| <b>South Carolina</b> | 3                 | 4                                   | 1                              | 4                           | 5  | 63.6  |
| <b>South Dakota</b>   | 3                 | 5                                   | 5                              | 1                           | 5  | 75.0  |
| <b>Tennessee</b>      | 1                 | 5                                   | 1                              | 1                           | 1  | 30.0  |
| <b>Texas</b>          | 4                 | 4                                   | 3                              | 5                           | 1  | 62.9  |
| <b>Utah</b>           | 4                 | 1                                   | 2                              | 4                           | 1  | 43.6  |
| <b>Vermont</b>        | 3                 | 1                                   | 5                              | 5                           | 5  | 75.0  |
| <b>Virginia</b>       | 3                 | 5                                   | 2                              | 3                           | 1  | 47.9  |
| <b>Washington</b>     | 5                 | 2                                   | 2                              | 2                           | 1  | 44.3  |
| <b>West Virginia</b>  | 1                 | 5                                   | 2                              | 5                           | 5  | 65.7  |
| <b>Wisconsin</b>      | 4                 | 4                                   | 5                              | 3                           | 5  | 85.0  |
| <b>Wyoming</b>        | 3                 | 1                                   | 3                              | 5                           | 1  | 45.7  |

|                           |
|---------------------------|
| <b>90-100 = Excellent</b> |
| <b>70-89.9 = Good</b>     |
| <b>50-69.9 = Fair</b>     |
| <b>0-49.9 = Poor</b>      |

\* These five states did not respond to the MSDA survey. Data was provided on these states by the Association of State and Territorial Dental Directors (ASTDD) Synopsis Report.

**Evaluations By State: Highest Ranking to Lowest**

| <b>STATE</b>          | <b>Edentulism</b> | <b>Community Water Fluoridation</b> | <b>Adult Medicaid Coverage</b> | <b>Dental HPSA Need Met</b> | <b>State Oral Health Plan addresses Older Adults</b> | <b>Final Rating 1-100 (Percent of Possible Top Score of 28)</b> |
|-----------------------|-------------------|-------------------------------------|--------------------------------|-----------------------------|--|---|
| <b>Minnesota</b>      | 5                 | 5                                   | 5                              | 3                           | 5  | 92.9  |
| <b>Maryland</b>       | 4                 | 5                                   | 5                              | 4                           | 5  | 92.1  |
| <b>Nebraska</b>       | 4                 | 3                                   | 5                              | 5                           | 5  | 88.6  |
| <b>North Dakota</b>   | 3                 | 5                                   | 5                              | 4                           | 5  | 85.7  |
| <b>Wisconsin</b>      | 4                 | 4                                   | 5                              | 3                           | 5  | 85.0  |
| <b>Connecticut</b>    | 4                 | 5                                   | 5                              | 1                           | 5  | 81.4  |
| <b>Rhode Island</b>   | 4                 | 4                                   | 5                              | 2                           | 5  | 81.4  |
| <b>Alaska</b>         | 3                 | 2                                   | 5                              | 5                           | 5  | 78.6  |
| <b>Michigan</b>       | 4                 | 5                                   | 3                              | 3                           | 5  | 77.9  |
| <b>South Dakota</b>   | 3                 | 5                                   | 5                              | 1                           | 5  | 75.0  |
| <b>Vermont</b>        | 3                 | 1                                   | 5                              | 5                           | 5  | 75.0  |
| <b>Ohio</b>           | 2                 | 4                                   | 5                              | 2                           | 5  | 70.0  |
| <b>Illinois</b>       | 3                 | 5                                   | 3*                             | 2                           | 5  | 67.9  |
| <b>Indiana</b>        | 3                 | 5                                   | 1                              | 4                           | 5  | 67.1  |
| <b>Iowa</b>           | 3                 | 5                                   | 5                              | 4                           | 1  | 67.1  |
| <b>West Virginia</b>  | 1                 | 5                                   | 2                              | 5                           | 5  | 65.7  |
| <b>Nevada</b>         | 3                 | 3                                   | 3                              | 3                           | 5  | 64.3  |
| <b>Arkansas</b>       | 1                 | 2                                   | 5                              | 3                           | 5  | 63.6  |
| <b>Missouri</b>       | 1                 | 3                                   | 5                              | 2                           | 5  | 63.6  |
| <b>South Carolina</b> | 3                 | 4                                   | 1                              | 4                           | 5  | 63.6  |

| <b>STATE</b>          | <b>Edentulism</b> | <b>Community Water Fluoridation</b> | <b>Adult Medicaid Coverage</b> | <b>Dental HPSA Need Met</b> | <b>State Oral Health Plan addresses Older Adults</b> | <b>Final Rating 1-100 (Percent of Possible Top Score of 28)</b> |
|-----------------------|-------------------|-------------------------------------|--------------------------------|-----------------------------|--|---|
| <b>Hawaii</b>         | 5                 | 1                                   | 2*                             | 3                           | 5  | 62.9  |
| <b>Massachusetts</b>  | 3                 | 3                                   | 2                              | 4                           | 5  | 62.9  |
| <b>Texas</b>          | 4                 | 4                                   | 3                              | 5                           | 1  | 62.9  |
| <b>Colorado</b>       | 4                 | 3                                   | 2                              | 2                           | 5  | 62.1  |
| <b>Georgia</b>        | 3                 | 5                                   | 2*                             | 1                           | 5  | 61.4  |
| <b>New York</b>       | 3                 | 3                                   | 5                              | 4                           | 1  | 60.0  |
| <b>Idaho</b>          | 3                 | 1                                   | 2                              | 4                           | 5  | 55.7  |
| <b>Kansas</b>         | 3                 | 2                                   | 2                              | 3                           | 5  | 55.7  |
| <b>North Carolina</b> | 2                 | 4                                   | 5                              | 3                           | 1  | 55.0  |
| <b>New Mexico</b>     | 3                 | 3                                   | 5                              | 2                           | 1  | 52.9  |
| <b>New Hampshire</b>  | 4                 | 1                                   | 3                              | 5                           | 1  | 52.1  |
| <b>New Jersey</b>     | 4                 | 1                                   | 5                              | 2                           | 1  | 52.1  |
| <b>Oklahoma</b>       | 2                 | 2                                   | 2                              | 3                           | 5  | 50.7  |
| <b>California</b>     | 5                 | 2                                   | 2*                             | 3                           | 1  | 47.9  |
| <b>Virginia</b>       | 3                 | 5                                   | 2                              | 3                           | 1  | 47.9  |
| <b>Maine</b>          | 2                 | 3                                   | 1                              | 2                           | 5  | 47.9  |
| <b>Kentucky</b>       | 1                 | 5                                   | 2                              | 5                           | 1  | 47.1  |
| <b>Montana</b>        | 3                 | 1                                   | 5                              | 2                           | 1  | 45.7  |
| <b>Oregon</b>         | 3                 | 1                                   | 5                              | 2                           | 1  | 45.7  |

| STATE        | Edentulism | Community Water Fluoridation | Adult Medicaid Coverage | Dental HPSA Need Met | State Oral Health Plan addresses Older Adults | Final Rating 1-100 (Percent of Possible Top Score of 28) |
|--------------|------------|------------------------------|-------------------------|----------------------|---|--|
| Pennsylvania | 3          | 1                            | 5                       | 2                    | 1   | 45.7   |
| Wyoming      | 3          | 1                            | 3                       | 5                    | 1   | 45.7   |
| Washington   | 5          | 2                            | 2                       | 2                    | 1   | 44.3   |
| Utah         | 4          | 1                            | 2                       | 4                    | 1   | 43.6   |
| Delaware     | 3          | 4                            | 1*                      | 3                    | 1   | 42.9   |
| Louisiana    | 1          | 1                            | 3                       | 5                    | 1   | 37.9   |
| Arizona      | 4          | 1                            | 1                       | 2                    | 1   | 33.6   |
| Florida      | 3          | 3                            | 2                       | 1                    | 1   | 33.6   |
| Alabama      | 1          | 4                            | 1                       | 2                    | 1   | 30.0   |
| Tennessee    | 1          | 5                            | 1                       | 1                    | 1   | 30.0   |
| Mississippi  | 1          | 1                            | 2                       | 4                    | 1   | 29.3   |

|                           |
|---------------------------|
| <b>90-100 = Excellent</b> |
| <b>70-89.9 = Good</b>     |
| <b>50-69.9 = Fair</b>     |
| <b>0-49.9 = Poor</b>      |

\* These five states did not respond to the MSDA survey. Data was provided on these states by the Association of State and Territorial Dental Directors (ASTDD) Synopsis Report.

## Public Policy

This report evaluates older adult oral health based on state criteria; yet the data is implicitly related to national oral healthcare policy for older adults, particularly the absence of dental benefits in Medicare. There has been a dearth of legislation since 2003, when *A State of Decay* Volume I was published in support of a hearing convened by Sen. John Breaux ( D-LA, former) regarding the oral health crisis among older adults. In recent years, three bills of note have been introduced that bring attention to the needs of the frail elderly as well as the broader cohort of older adults in need of access to oral healthcare services.



This report recognizes the efforts made by some legislators to address the dental care crisis through the Special Care Dentistry Act of 2011; the Comprehensive Dental Reform Act of 2012; and the Comprehensive Dental Reform Act of 2013. These three acts contain objectives that address vulnerable populations by increasing access to oral health care, and they provide a critical backdrop and support for continuing the conversation around the question posed: “Are Americans coming of age without oral healthcare?”

### **Comprehensive Dental Reform Act of 2012 and 2013**

In June 2012 Senator Bernie Sanders (I-VT) introduced the Comprehensive Dental Reform Act of 2012 (S.3272). This bill aimed to improve access to oral health care for underserved populations and is arguably the most comprehensive dental care legislation in American history. The bill covered five components aimed at ending the oral health crisis in America: expanding coverage, creating new access points, enhancing the workforce, improving education, and funding new research. This bill extends comprehensive dental health insurance to millions of Americans who do not have coverage today including to all Medicare, Medicaid, and VA beneficiaries, and it would greatly improve access to oral health care for older adults. The bill was also introduced in the House (H.R. 5909) by Representative Elijah E. Cummings (D-MD) and seven co-sponsors.<sup>24</sup>

The Comprehensive Dental Reform Act was reintroduced in the U.S. Senate in September 2013 by Senators Bernie Sanders (I-VT) and Brian Schatz (D-HI). A companion bill was again introduced in the U.S. House of Representatives (H.R. 3120) by Representatives, Elijah E. Cummings (D-MD) and Janice D. Schakowsky (D-IL). Key changes to the 2013 bill include the elimination of the pay for in the bill’s text and the addition of oral health services as an essential health benefit for adults under the ACA. One other change, worthy of note, is the removal of the pro bono dental services provision, due to various coverage expansions included in the bill, funding for the coordination of pro bono dental services would not be necessary.<sup>25</sup>

### **Special Care Dentistry Act of 2011**

Representatives Eliot L. Engel (D- NY) and Jan Schakowsky (D-IL) introduced the Special Care Dentistry Act of 2011, also known as HR1606, on April 15, 2011. Eight additional democrats were co-sponsors of this bill. HR1606 seeks “to amend title XIX of the Social Security Act to require States to provide oral health services to aged, blind, or disabled individuals under the Medicaid Program”. This would have extended mandatory dental services to 8.8 million or 24 percent of adults ages 65 and older, as well as 8.5 million non-elderly disabled adults. The proposed financing was 100 percent Federal Matching Assistance Percentage, meaning the federal government would be covering 100 percent of the cost, with an estimated cost of \$500 million. This bill, however, was not sent to the House or Senate, nor was it reintroduced.<sup>26 27 28</sup>

## *Recommendations*

### **Create Payment Options for Older Adult Dental Care**

Advocating for adult benefits in Medicaid needs to be a strategic imperative for states currently providing limited or no coverage for older Americans. It is a responsibility of the world's wealthiest nation to provide for the most economically vulnerable Americans. However, the "silver tsunami" representing the growing wave of aging baby boomers points to the need for a broader solution. Dental services must be defined as an essential health benefit in the ACA. And, most critically, mouth health and the abatement of dental disease need to be prioritized along with other chronic medical conditions and included in Medicare.

### **Mitigate Dental Provider Shortages by Improving the Primary Healthcare Workforce**

The growing need for oral healthcare services for older adults must not be answered in the nation's emergency rooms. There is an opportunity to meet the demand for age and culturally competent, patient-centered care by supporting the development, testing and utilization of alternative workforce models. This may mean mainstreaming the role of Expanded Function Dental Assistants who have worked in the military and Indian Health service for over four decades; further developing the Community Dental Health Coordinator<sup>29</sup> model; and supporting demonstration projects for role expansion of hygienists and dental therapists.<sup>30</sup> Eliminating disparities among older adults necessitates identifying, training and utilizing a new culturally competent oral health workforce.

### **Expand Water Fluoridation to all Communities at CDC-recommended levels**

Community water fluoridation (CWF) is a safe, beneficial, evidence-based and cost-effective public health measure for preventing dental caries. Because it is administered at the community level rather than through payments directly by individuals, CWF has the potential to reduce disparities by narrowing the gap regarding preventive solutions. And, because prevention is important at every stage of life, communities with fluoridated water should sustain the practice, and those without should advocate for activation of one of the nation's longest-standing public health best practices.

### **Include Robust Strategies to Improve Older Adult Oral Healthcare in State Plans**

The existence of a State Oral Health Plan (SOHP) and the inclusion of strategies focused on older adults does not guarantee access to and utilization of the nation's oral healthcare delivery system. However SOHPs are a factor closely related to the level of infrastructure for oral health promotion and disease prevention in states. Therefore, states need a strategic, and ideally, a legal mandate for providing oral healthcare for older adults to ensure that broader and more equitable

payment systems are created and applied. Strategies need to address the oral health of older Americans living in their own homes and in a growing variety of assisted living, skilled nursing and long-term care homes.

### **Educate Older Adults, Care Advisors and Caring Institutions to Improve the Mouth Health of Older Adults**

A robust public health infrastructure, efficacious policies and compassionate and cost-effective healthcare delivery systems cannot improve the oral health status of older Americans if seniors, their care advisors and institutional caregivers are not educated. This report recommends collaboration among states, which have developed effective public-facing curricula and campaigns for improving older adult health, to share their findings and contribute to achieving the “Triple Aim.”

Smiles for Life<sup>31</sup> is one of the nation's comprehensive oral health curricula. Now in its third edition, the Society of Teachers of Family Medicine Group on Oral Health designed the curriculum to enhance the role of primary care clinicians in the promotion of oral health for all age groups. In a 2011 environmental scan, Oral Health America<sup>32</sup> found inadequate online consumer resources focused on the oral health of older adults. In response to the need for reliable, readily available, cost-effective and digestible oral health resources for older adults, Oral Health America has created a web portal, [www.toothwisdom.org](http://www.toothwisdom.org), a user-friendly online tool that connects older adults and their caregivers with local resources.

This website offers reliable oral care information from oral health experts across the country, so readers can learn why it's so important to care for their mouths as they age. Included is an interactive State-by-State map that links to local care resources, including dental, caregiving, financial, transportation, and other information that address barriers to accessing care. Educational resources are written in Plain Language to be accessible to older adults at all literacy levels. Toothwisdom.org also offers information and tools for health professionals: links to peer-reviewed journal articles, videos and program materials for professional care providers.

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