



Best Practice Approaches for State, Community and Territorial Oral Health Programs

A Best Practice Approach Report describes a public health strategy, assesses the strength of evidence on the effectiveness of the strategy, and uses practice examples to illustrate successful/innovative implementation.

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Best Practice Approach: Improving the Oral Health of Older Adults

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Executive Summary

Good oral health is integral to good overall health. With the graying of America, people are living longer, and retaining their teeth is a worthy goal. Poor oral health in older adults is a hidden crisis and an overlooked and pressing national concern. Neglected oral health not only affects the quality of life and well-being of older adults, it poses a significant burden on their families. Additionally, it has a negative impact on the economy and healthcare systems due to the pain and disability experienced by older adults and increased systemic health complications due to oral diseases.

As the United States (U.S.) older age group is growing exponentially, increased tooth retention, longer lifespans and limited access to dental care and insurance will exacerbate the implications of neglecting oral health.¹ Those in long-term care (LTC), individuals undergoing palliative treatment, residents of assisted living facilities, homebound individuals, patients with behavioral health and special health needs issues, and those from varied ethnic and racial backgrounds face unique challenges heightened by vulnerability, dependency, and frailty.

This best practice report highlights the oral health needs of older adults and the consequences of failing to recognize oral health as pivotal to overall well-being. It outlines the prevailing challenges and presents comprehensive care solutions. Expanding the workforce trained to provide dental care for aging adults and seamlessly integrating oral health expertise into interdisciplinary care teams are vital and low-cost steps. Advocacy for comprehensive dental coverage is essential to address the oral health needs of this population group.

Prioritizing oral health preventive initiatives for older adults is not just a health decision, but a strategic economic investment for the U.S. Age-friendly and inclusive public health systems foster an environment at the national, state, and community levels where older adults of all backgrounds and abilities can live safe, healthy and productive lives.¹

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Background and Rationale

By 2034, the U.S. is set to witness an historic demographic shift as older adults will outnumber children for the first time.² With nearly 55 million people aged 65 and older and an additional 10,000 adults turning 65 daily, projections estimate that by 2060 the U.S. will be home to more than 98 million adults aged 65 or older.³ While the nation has seen advancements in dental technology, treatment modalities and healthcare delivery, the oral health status of many older Americans remains unchanged and unhealthy. We need to expand and develop systems that increase the dental health professional workforce. Additionally, building partnerships across the healthcare system and promoting preventive measures are essential steps toward improving older adult oral health.

Legislative measures, such as the provisions in the Affordable Care Act that aimed to widen the eligibility of older adults to access health care, have led to increased dental coverage in many states. However, it is alarming that some states have refrained from expanding Medicaid to cover low-income working-age adults. This decision leaves a significant segment of this demographic without access to necessary dental care.⁴ The 2021 report, [*Oral Health in America: Advances and Challenges*](#), underscores the persistent barriers and challenges older

¹ For the purposes of this report, “older adults” does not specifically refer to individuals 65 years and older.

adults face in achieving good oral health due to the scarcity and maldistribution of dental providers and the prohibitive costs of dental care.⁵ Advocacy for the expansion of Medicaid adult dental benefits across all states and the inclusion of an oral health benefit in Medicare is crucial to improving adult oral health and overall health.

Why the Mouth and Oral Health Matters

Older adults face a higher burden of oral disease and dysfunction than their younger cohorts, including tooth decay, gum disease, tooth loss, compromised chewing ability, dry mouth, and oral and pharyngeal cancers. The effects of oral diseases complicate essential daily functions such as speaking, chewing, swallowing, and smiling. Impaired chewing may restrict dietary options, which compromises nutrition by limiting the variety and types of foods consumed and impacts overall health. The distress and embarrassment of having an unhealthy mouth and bad breath can lead adults to self-isolate, avoiding interactions with friends and family. These dental problems can not only lead to pain, but may also impact daily quality of life and routine activities, causing loss of sleep and lack of concentration.⁶

Tooth decay and gum disease are significant public health challenges among this demographic, with nearly 20% experiencing tooth decay and more than 60% having gum issues. These conditions heighten the risk of complications related to Alzheimer's disease and related dementias (AD/ADRD) and systemic diseases, such as diabetes and cardiovascular disease.^{7,8}

Routine dental exams for older patients with and without teeth are critical to evaluate the health of the mouth. More than 100 systemic diseases may be observed during a routine mouth exam resulting in referral for follow-up medical care.¹³ Older adults without access to a dental exam are at a higher risk of undetected oral and pharyngeal cancers, which account for 3% of all cancers diagnosed. The average five-year survival rate for oral cancer in the U.S. is 68% with the survival rate for Black persons at 52% and White persons at 70%. Oral cancers can be cost-effectively treated and people have higher survival rates if diagnosed early.⁹

Age brings various oral health challenges, with dry mouth being especially prevalent in almost half of older adults. Reduced saliva production is not a normal part of aging; it is a side effect of more than 500 prescription and over-the-counter medications, smoking and alcohol consumption, chemotherapy and certain systemic diseases. The effects of dry mouth often result in difficulty eating and swallowing, altered taste, and high rates of dental disease. Raising awareness among older adults and their healthcare providers about the connection between medications, saliva production, and increased risk for oral-systemic-cognitive diseases can help develop strategies to mitigate these dental and overall health consequences. With a whole person approach, primary care providers and pharmacists could counsel older adults taking such medications on their potential side effects, while recommending fluoride toothpaste to prevent decay and a saliva substitute to aid in eating and swallowing.

Dynamics of Aging: Key Concepts and Considerations

Prioritizing oral health education, prevention, and early intervention throughout one's life can lead to policies and strategies that bolster the quality of life for aging adults. Age alone does not define one's health. Additional factors, such as disease and dependence play key roles in one's overall and oral health. Healthy aging is the ability to maintain functional ability and well-being.^{10,11} Addressing the overall health needs of older adults involves considering the challenges posed by those with increasing vulnerability, dependency and frailty.^{7,12} Differences in these conditions impact prevention and management strategies, with an example being the impact of dependency as described in the Seattle Care Pathway.¹¹

Definitions of Dependency Used in the Seattle Care Pathway

No dependency	Fit, robust people who exercise regularly and are in the most fit group for their age.
Predependency	People with chronic systemic conditions, which could impact on oral health that, at point of the presentation, are not currently impacting on oral health. A comorbidity whose symptoms are well-controlled.
Low dependency	People with identified chronic conditions that are affecting oral health but who currently receive or do not require help to access dental services or maintain oral health. These patients are not frankly dependent, but their disease symptoms are affecting them.
Medium dependency	People with an identified chronic system condition that currently impacts on oral health and who receive or do not require help to access dental services or maintain oral health. This category would include patients who demand to be seen at home or who do not have transport to a dental clinic.
High dependency	People with complex medical problems preventing them from going to receive dental care at a dental clinic. They differ from patients categorized in medium dependency because they cannot be moved and must be seen at home.

Current Disparities and Challenges in Oral Health Equity and Policy

Social Determinants of Health

The social determinants of health (SDOH) are non-medical factors that influence health outcomes. They are the conditions and environments in which people are born, grow, live, work and age, which can predict the status of teeth over a lifespan. Financial constraints, lack of private and public dental insurance, and transportation challenges are primary barriers leading to disparities in dental care utilization among older adults.⁴ Lack of nutritious food and fluoridated water, inadequate dental health literacy skills, racism, poverty, and gender inequality all contribute to profound health disparities. Complicating these situations, mental and physical challenges affect nearly half of older adults, which exacerbate the difficulties faced in managing the adverse effects of SDOH, making it more difficult to seek oral care.^{10,13}

Race, Ethnicity, and Culture

Racial and ethnic minorities, including immigrants and refugees, are most affected by health inequities. Cultural differences, language barriers, and discrimination can limit access to resources and dental care. Many individuals who come to the U.S., including older adults, come with a lifetime of dental experience that may not have included an appreciation of prevention and the value of oral health. Racism affects health unto itself. It often leads to unemployment, fiscal loss and lack of health insurance. The medical and dental healthcare systems often demonstrate bias and racist attitudes towards patients “who are other,” which is yet another barrier to accessing healthcare.²

² <https://journals.sagepub.com/doi/full/10.1177/2320206819893213>

Across the U.S., Hispanic, Latino and Black Americans experience at least three times the dental disease rates of White Americans. The inability to pay out of pocket for dental care and the lack of public or private dental insurance result in significant gaps in dental utilization between wealthy and poor individuals. From 2019 to 2040, the expected increase in racial and ethnic minority populations is 115% in contrast to 29% for White populations.

With this population growth in historically marginalized and underserved communities, there will be a greater number of people with unmet oral health needs.¹³ Black dentists (63%) are more likely to participate as Medicaid providers compared to White dentists (39%).¹⁴ Increasing racial diversity among dental students could increase access to dental care for these marginalized and underserved communities.

Living Situations and Oral Health

While most older adults remain independent, high-risk groups such as those who are homebound, living in long-term care or assisted living facilities, who have special health needs, or have serious/life-limiting illness, face additional unique challenges regarding personal care. Activities of daily living (ADLs), such as eating, toileting, walking, and maintaining oral hygiene, become difficult and may require assistance.¹⁵ Most facility staff and home caregivers need additional education to better assist with oral hygiene needs and recognize potential oral health problems. Dental providers' hesitancy to treat older adults with co-morbidities further restricts access to essential care, thus compounding the risk of untreated oral health conditions.

More than 20% of older adults reside in rural areas and report having no teeth and poor oral health. They are more likely to be uninsured and less likely to have had a dental visit in the past year than their urban counterparts.⁴ Extended travel time/distance to dental facilities and dependency on community transportation restrict access to care, often leading to delayed or missed dental appointments. Utilization of digital technology in LTC facilities and in the homes of homebound and special needs patients could provide a source of dental health information for caregivers and an access point for dental care for older adults.

States should recognize the potential of embracing innovative solutions, such as teledentistry, mobile dental services, and utilizing expanded duty dental personnel, which are viable alternatives to traditional dental care. Such approaches can make it easier for diverse healthcare teams to manage the oral health of older populations, wherever they may find themselves.

Unique Considerations and Challenges in Caring for Older Adults

Older Adults with Behavioral Health and Special Needs

An estimated 21% of U.S. older adults (52.9 million) live with a mental illness, physical disability, or special needs according to the 2020 Census.^{3,16} Medications prescribed for mental health problems inadvertently increase the risk of oral diseases due to side effects, such as dry mouth, taste disturbances, and lethargy. Detrimental coping mechanisms, such as smoking, alcohol consumption and dietary habits with high sugar intake, further jeopardize their oral health status.

The lack of providers willing and trained to treat special needs patients also contributes to their higher rates of dental disease and overall disability. The Americans with Disabilities Act (ADA) requires dental offices to provide accessibility to disabled individuals, including providing ramps, elevators and other specific structural changes to accommodate wheelchairs or other mobility devices. More clinics are training staff to assist people with physical and developmental

disabilities, as well as providing the infrastructure necessary to make patients with disabilities more comfortable.¹⁷

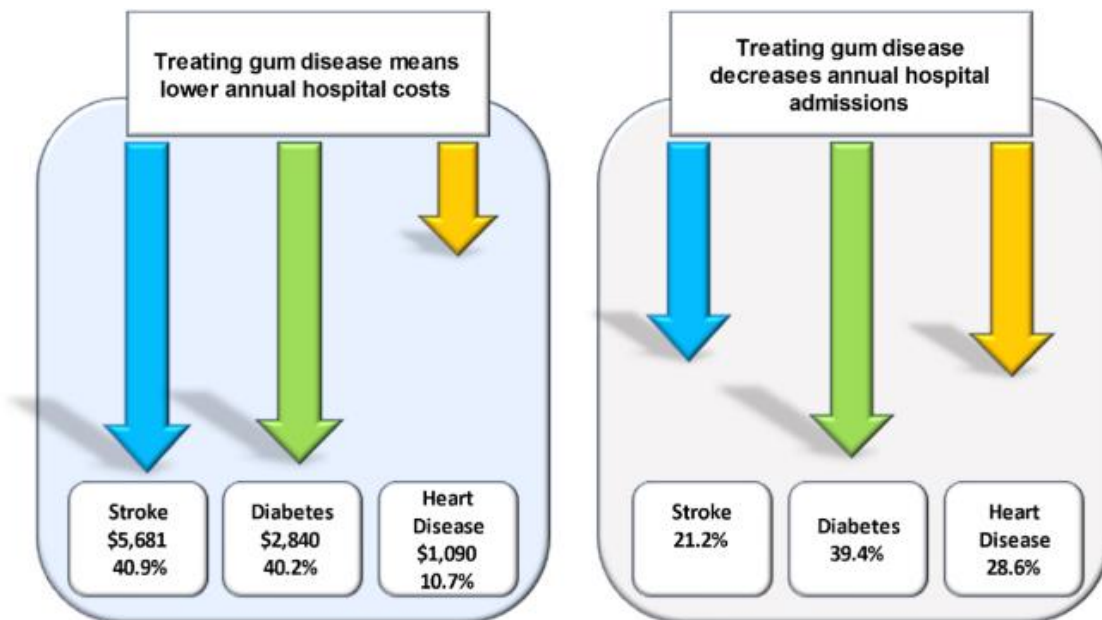
Importance of Oral Health in End-of-Life Care

Older adults often have significant unmet oral health needs at the end of life that compromise their ability to function. The primary concerns are pain management and infection prevention; however, dental professionals are rarely part of palliative care teams, which leaves a gap in oral health management and comfort care provisions. Nausea and vomiting are frequent side effects of radiation and chemotherapy, which can cause rapid deterioration of the teeth and gums, inhibiting patients from eating food or drinking liquids. Between 5-15% of people with cancer develop severe ulcers that cause excruciating pain, while hindering speech and mouth movements.¹⁸ Every healthcare professional has an obligation to prioritize and address this essential nutritional concern and provide comfort care.

The Mouth-Body Connection

Chronic medical conditions are common among older adults, with 80% having at least one chronic disease and 68% having multiple.⁴ Evidence associates gum disease with aspiration pneumonia and chronic conditions such as diabetes, cardiovascular disease and AD/ADRD, making their management difficult and expensive.⁴ An interdisciplinary team approach can highlight the crucial links between oral hygiene and chronic disease and address the patient from a wholistic perspective.

A 2023 study confirmed that addressing gum disease can considerably reduce the prevalence and associated costs of emergency department (ED) visits related to chronic diseases.¹⁹ Maintaining good periodontal health reduced both annual hospital costs and decreased annual hospital admission in the original 2014 study and subsequent reviews.



Source: Jeffcoat, M. et. al. Periodontal therapy improves outcomes in systemic conditions. American Association of Dental Research, March 2014

Adapted by Leonard Brennan D.M.D. 2023

COVID and Oral Health

The emergence of COVID-19, along with its evolving variants, has fundamentally transformed how we view chronic diseases and has reshaped healthcare delivery for vulnerable groups. While COVID can affect individuals of all ages, approximately 80% of cases occur in adults aged 30 to 69.²⁰ Older adults, especially those in LTC facilities, were critically affected, with massive loss of life. Lack of access to oral care and diminished connections with family and friends led to increased isolation and reduced quality of life. The pandemic imparted crucial lessons. Dental care, especially for older adults, is essential to prevent a rapid decline in oral health and maintain proper nutrition and overall well-being. The expansion of teledentistry proved beneficial for maintaining patient contact when in-person visits posed challenges. Approaches such as minimally invasive dentistry, atraumatic restorative treatment, and the use of silver diamine fluoride were invaluable in preventing tooth decay and alleviating patient pain. These services were not only cost-effective, but easy to administer with impactful results.

Guidelines and Recommendations to Address Gaps in Oral Healthcare for Older Adults

Key strategies encompass improving oral health literacy, expanding access to dental coverage, seamlessly integrating oral health into interdisciplinary care teams, building a dedicated and well-trained workforce to address the specific needs of older adults, advocating for policy changes, and implementing effective surveillance systems to monitor progress.

Oral Health Literacy

A correlation exists between health literacy and general and oral health status. An individual's ability to understand and act upon health information is crucial, especially for dependent older adults where caregivers and medical staff play a significant role in their oral health outcomes. Older adults' levels of education, socioeconomic status, and perception of oral health's role in overall health are predictors of their oral health. Emphasizing the importance of regular and preventive dental care, while integrating oral health into general healthcare, can lead to improved strategies and increased attention from policymakers. Broader healthcare sector recognition of the significance of oral health will encourage older adults to prioritize and seek dental care.

Elevating oral health literacy and advocacy for children's oral health led to substantial policy changes. Improving the oral health of the older adult population will require a similar approach. Simplified messaging emphasizing the connection between oral and overall health can greatly influence the public, healthcare professionals and policymakers. The rising prevalence of oral diseases, which will strain healthcare and economic resources due to the growth in this particular demographic, makes this paramount. A shortage of dental professionals trained in geriatrics will further challenge this situation.

The Santa Fe Group, a prominent oral health advocacy organization, highlights the need for an extensive public health initiative. Their perspective emphasizes raising oral health literacy, drawing attention to the consequences of poor oral health on systemic and cognitive health, and the potential financial savings from utilizing available and sought after new dental benefits. It is vital that such messages be inclusive, catering to the diverse languages and cultural backgrounds that define America's diversity.²¹

Dental Coverage

Cost is a major reason many older adults do not pursue dental care. Approximately 70% of seniors lack dental insurance and fewer than half access dental care each year.²² This increasing gap in coverage leads to high out-of-pocket expenses or lack of treatment for those who try to access dental care.²³ Medicare and Medicaid programs do not provide sufficient dental coverage for older adults to prevent, manage, and treat oral diseases. Similarly, veterans also experience limited dental benefits.²⁴

Replacing missing teeth with a full or partial denture can restore both function and appearance but is expensive and often out of reach for individuals with limited income. These appliances need regular care, adjustment and have a limited lifespan. More than 17% of older adults are missing all their teeth and struggle financially to have dentures made. On the other hand, older adults with private dental insurance are much more likely to seek dental services and preventive care.^{22,23}

Program	Benefit Structure	Challenges
Original Medicare (Part A&B)	A federal program that does not cover most dental procedures, dentures, cleanings, fillings or extractions.	Many older adults pay for dental services out-of-pocket after they retire.
Medicaid	Joint federal-state program. States decide eligibility for low-income adults.	Less than 50% of states offer a comprehensive dental care benefit.
Medicare Advantage (Part C)	Dental benefits vary from plan to plan	Spending caps and high copays.

In addition to financial constraints, limited mobility or lack of physical access to dental offices make it difficult for older adults to get care. Many LTC residents cannot afford or access care. Few dentists are willing to provide care in these settings and those that do receive little to no reimbursement for a house call or nursing home visit. These encounters often involve longer appointment times to accommodate cognitive or behavioral challenges. Most LTC facilities do not have in-house dental facilities, and getting patients to a dental office for care requires transportation.

Cost is a major concern when considering the addition of a dental benefit in Medicare. Dental problems are preventable with routine care, and there is a demonstrated potential for cost savings from the use of a dental benefit. Advocating to expand coverage of adult dental services in Medicaid across all states will lay a strong foundation for a dental benefit in Medicare.

Advocating to expand coverage of dental services in Medicare and Medicaid is critical to meeting the oral health needs of older adults.

Oral Health Integration and Interdisciplinary Care

Geriatric medicine has traditionally emphasized a team-based approach. To address the multifaceted health needs of older adults, it is imperative to move beyond the current siloed dental care model. Dentists and primary care teams can seamlessly integrate into the broader healthcare ecosystem by fostering enhanced communication.

More than 40% of older adults visit a physician more often than a dentist, largely due to the high costs associated with dental care.²⁵ Consequently, many older adults rely on medical providers as their primary source of dental information and urgent dental referrals. Oral health literacy is critical for all members of the interdisciplinary team. Integrating oral health core competencies into primary care practices would enhance comprehensive, patient-centered care and broaden access for safety net and underserved communities. Such integration demands institutional support and infrastructure to facilitate consistent communication between dental and primary care providers.⁶ Exploring existing models, such as the Program of All-inclusive Care (PACE) model, can pave the way for more cohesive medical-dental integration with new payment and care delivery options catering to the preferences of the growing older population who wish to age in place in their communities.

Expanding the Trained Workforce

Additional knowledge and skills are required to treat aging adults. The Health Resources and Services Administration (HRSA) recognizes a shortage in the oral health workforce trained to meet the needs of older adults. About 59 million individuals reside in areas with insufficient numbers of dental health professionals.²⁶ Coupled with the fact that many older adults cannot afford dental care, the situation underscores the necessity for both increasing the workforce and integrating dental benefits within Medicare as sustainable long-term solutions.²² Palliative and end-of-life care teams require training to provide these patients with oral management and comfort care. The current healthcare system cannot adequately meet the needs of an aging demographic with complex oral and medical conditions. Challenges persist with post-doctoral program closures and insufficient federal support of educational programs in geriatric education. Delayed recognition of geriatric dentistry as a dental specialty impedes geriatric curriculum development and faculty training.

Expanding a trained workforce must include a three-pronged approach:

- First, invest in geriatric dental education and training through sources, such as Title VII grant funding to support geriatric pre- and post-doctoral education and faculty development.²⁷
- Second, expand training curriculum for primary care clinicians to emphasize the importance of oral health as integral to overall health, including continuing education for primary care faculty and practitioners out in practice.
- Third, provide oral health training for caregivers, medical assistants and aides. Actively involve expanded-function dental hygienists, dental therapists and community health workers to reach older adults in a wide range of settings.

By taking these steps, we can ensure a more robust and prepared workforce capable of addressing the unique dental needs of the aging population.

Many dentists are hesitant to treat older adults with co-morbidities or with special needs, which contributes to higher rates of dental disease and overall disability.²⁸ Nearly 30% of dentists find their knowledge and experience to be insufficient in treating older adults with complex medical problems.²⁹ The risks of medical complications and potential treatment error are greater in this medically complex population.³⁰

Advocacy and Policy

There is power in recognizing that almost 25% of the U.S. population is older than 65, and a lack of policies requiring payment for dental services at the federal and state level impacts all of them. Access to comprehensive healthcare, including oral health, is a basic human right. This reality underscores an urgent call to action for policy reform. It is imperative for every individual, especially the older generation, to raise their voices and champion a robust adult oral health system to attain health equity. Older adults are a powerful voting bloc for these benefits. Dental problems are highly preventable with low-cost routine care. There is a demonstrated potential for cost savings from a dental benefit. Increased advocacy to expand dental services within Medicare and Medicaid is critical to meet the oral health needs of older adults.

Examples of Advocacy Within Public Health

Program/Policy Practice/Advocacy		Rationale for Advocacy
Medicare ³¹ Oral Health Policy and Advocacy CareQuest Institute		Linkages exist between oral health and healthy aging. Coverage enhances quality of life and reduces health care costs.
Medicaid Adult Dental Medicaid Coverage Checker CareQuest Institute		All states should include dental coverage to achieve health equity.
Title VII: Public Health Service Act ³² Increase Funding and Reauthorize the Title VII and VIII Health Professions Training Programs AAMC		Urge expansion to shape the supply, diversity and distribution of trained dental-medical students and residents.
Commission on Dental Accreditation (CODA) https://onlinelibrary.wiley.com/doi/10.1111/jphd.12129		Encourage CODA to develop standards that require dental students to be competent in managing and treating older adults before graduating.
Teledentistry in all US states Teledentistry CareQuest Institute for Oral Health		Promote the use and expansion of teledentistry for older adults in various settings to reach homebound, long-term care patients and assisted living patients.
Health Literacy ³³ Health Literacy in Healthy People 2030 - Healthy People 2030 health.gov Oral Health-Primary Care Integration Model – Rural Oral Health Toolkit (ruralhealthinfo.org) Leaders Talk About Health Literacy Health Literacy CDC 2023 100 Million Mouth Campaign		Provide continuing education on the importance of oral health to all healthcare providers. Highlight the importance of using health information...not just simply striving to understand it.
Inclusion of dental team members on palliative and end-of-life teams ¹⁸ Understanding Palliative Care and Hospice: A Review for Primary Care Providers - PubMed (nih.gov) Comprehensive Guide to Safety and Aging: Minimizing Risk, Maximizing Security - Google Books		Urge inclusion of dental team members in end-of-life care for comprehensive oral-overall health comfort.
Extend funding for the National Health Service Corp ³⁴ New HHS Initiative Aims to Strengthen Nation's Health Workforce HHS.gov ADVOCACY: Geriatrics: At-risk population for malnutrition, poor oral health Contour: February 2021 (walsworth.com)		Support continued funding for incentivizing practice in underserved areas to increase access to care.

<p>Expanded dental personnel.³⁵</p> <p>What Are Dental Therapists? The Pew Charitable Trusts (pewtrusts.org)</p> <p>Oral Care in the Long-Term Care of Older Patients: How Can the Dental Hygienist Meet the Need? Journal of Dental Hygiene (adha.org)</p>	<p>Advocate for using expanded dental roles for homebound and special needs older adults.</p>
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Taking Action to Address the Oral Health Needs of Older Adults

Advocate and collaborate with local senior community centers and assisted living facilities, as well as your state agency on aging, for outreach and to expand your knowledge and understanding of how to better address the oral health needs of older adults by enacting the following recommendations:

Roles / Stakeholders	Easy	Moderate	Challenging
Dental Professionals	<p>Educate on aging-related oral health including aging implications, disease progression, and management.</p> <p>Read the Seattle Care Pathway. (SCP)¹¹</p> <p>Make your space “Age-friendly.”³⁶</p> <p>Normalize the fact that healthy aging includes keeping one’s teeth.</p>	<p>Implement the SCP¹¹</p> <p>Increase use of SDF, MID, and ART.</p> <p>Create caries risk assessment calibration cases to discuss at lunch with your clinical team and the broader interdisciplinary team.</p>	<p>Encourage regular dental check-up routines for older adults regardless of their living situation.</p> <p>Network and interact with local community health partners and programs.</p> <p>Investigate options to provide oral health evaluations at LTC facilities (check if your state requires special licensure, fees or applications)</p>
Non-clinical team members (office, support staff and administrators)	<p>Attend geriatric oral health and disease management courses.</p> <p>Provide oral care supplies in individual bags to be distributed with Meals on Wheels programs</p>	<p>Coordinate with local senior transportation services to facilitate dental appointments.</p> <p>Use motivational interviewing to help patients and caregivers set self-management goals.</p>	<p>Explore senior-friendly oral health digital tools to aid in patient education, such as Smiles for Life and MySmileBuddy,³⁷ to search for patient engagement items that can help with self-management goal setting within their own environment.</p> <p>Ensure that older adult oral health care needs are being met by implementing a feedback system that non-dental health care providers can utilize.</p>
Dental Education	<p>Support faculty to advance their knowledge in geriatrics.</p>	<p>Integrate geriatric modules across the curriculum</p> <p>Increase students’ exposure to older adult patients with complex medical conditions, cognitive impairment, and increased functional needs in the community and in clinical settings.</p>	<p>Advocate for:</p> <ul style="list-style-type: none"> ● Geriatric dentistry as a specialty. ● Funding of advanced geriatric education.

		Initiate or join oral health campaigns for older adults and veterans.	
Policymakers and payers	<p>Understand older adult oral health challenges to achieve better oral and overall health, and implications on systemic and brain health.</p> <p>Learn more about what other state programs are doing to raise awareness of the importance of older adult oral health.</p>	<p>Support expansion of teledentistry.</p> <p>Integrate oral health into value-based care initiatives and support reimbursement for oral health by Accountable Care Organizations (ACOs), so as not to disincentivize the care of complicated older adults.</p> <p>Document the return on investment (ROI) of providing oral health services for people with chronic conditions, such as diabetes.</p> <p>Get buy-in and engagement of other community partners for long-term viability of proposed programs.</p>	<p>Support quality improvement programs fostering disease prevention and management.</p> <p>Introduce legislation to expand the scope of practice and increase payment for prevention, increased medical/oral complexity, and home care.</p> <p>Eliminate burdensome regulation and legislation limiting oral healthcare provider's ability to provide mobile oral care.</p> <p>Ensure dental coverage under Medicare on the federal level and Medicaid on the state level across all 50 states.</p>
Allied healthcare professionals	<p>Complete the <i>Smiles for Life</i> oral health curriculum, with special emphasis on the geriatric module.³⁸</p> <p>Become familiar with the Seattle Care Pathway (SCP).</p> <p>Proactively refer patients to dental services, while promoting good oral health practices at home.</p> <p>Include geriatric oral health training in annual continuing medical education trainings and meetings of professional medical organizations.</p>	<p>Everyone "Lifting the Lip" to observe the teeth.</p> <p>Review oral hygiene (OH) practices with patients and encourage good hygiene connecting it to overall health.</p> <p>Increase awareness about the value and effectiveness of community-based dental coordinators and community health workers (CHWs) in promoting oral health services and chronic disease management within the community.</p>	<p>Develop campaigns to promote senior oral health.</p> <p>Incorporate oral exams, root caries management, fluoride varnish or SDF applications for at risk of tooth decay older adults and promote good hygiene and SCP.</p> <p>Implement the SCP within your scope of practice, particularly begin applying fluoride varnish or SDF when you identify older adults at high risk for tooth decay.</p> <p>Incorporate oral health across the board in medical and nursing education.</p>
Long-term care facilities	<p>Train the non-clinical workforce in simple oral health management and easy oral health problem identification.</p> <p>Provide regular oral health screenings for residents.</p> <p>Provide oral health education materials to families and caregivers.</p>	<p>Establish schedules for routine dental check-ups for LTC residents.</p> <p>Train caregiving staff on basic oral hygiene techniques for dependent adults.</p> <p>Bring MOTIVATE to your facility.</p>	<p>Establish a relationship with dental teams to provide on-site care for appropriate expert check-ups.</p> <p>Facilitate on-site dental visits or collaborations with local dental clinics.</p> <p>Promote the inclusion of an oral health assessment and oral health care plan for LTCs.</p>

<p>State oral health programs</p>	<p>Strengthen integration of oral health into senior care programs. Be creative within your available funding to address the common oral health challenges faced by older adults. Gather pertinent data to better make your case for increased funding.</p> <p>Engage with your state disabilities service agency and your state unit on aging.</p>	<p>Create an advocacy network for older adult oral health.</p> <p>Ensure an older adult surveillance system that includes oral health needs assessment, Medicaid, and Medicare data; use the ASTDD Basic Screening Survey for Older Adults³⁹</p> <p>Collaborate with senior service organizations to maximize outreach (including providing oral care supplies to seniors), while gathering data to make your funding case stronger.</p> <p>Promote outreach efforts that engage the faith-based community.</p> <p>Include oral health in state chronic disease plans and chronic diseases in state oral health plans.</p>	<p>Develop oral health education campaigns and surveillance systems focusing on older adults.</p> <p>Educate public health advocates about how to use the correct language with policy makers when discussing older adult issues.</p> <p>Increase awareness about oral health as a health equity issue.</p> <p>Engage local health districts (LHDs) in identifying ways to address barriers to accessing medical, dental and mental health services (e.g., transportation plans).</p> <p>Promote strategies for working with Managed Care Organizations (MCOs) to offer oral health services for their Medicaid insured adult population that can save the state money.</p>
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Future Directions: Integrative Healthcare Management and Innovative Technologies

With the intricate healthcare needs of today's society, adopting a collaborative approach is not just beneficial, but vital. Establishing a strong foundation for enhancing older adult oral health requires a multi-faceted approach to create an environment tailored to their specific needs. For older adults, the utilization of innovative technology offers transformative solutions to address unique oral health challenges, enhancing both preventive care and treatment outcomes.

Given the rapid aging and growth of this population, there is an urgent call to seamlessly merge oral health with comprehensive health care, utilizing emerging technologies to address the shortage and maldistribution of dental care providers. This comprehensive approach not only ensures an enhanced quality of life but underscores the critical importance of accessibility and innovation in delivering care. Bringing dental care where older adults live through teledentistry, mobile clinics, in-facility dental services, and other innovative solutions is a significant step that can effectively address the needs and close equity gaps of this often-overlooked group.

Conclusion

Despite ongoing efforts, older adult oral health has seen minimal improvement over the last 25 years. Neglecting the oral health of older adults leads to profound social and economic consequences due to pain, debilitation, and heightened morbidity. With the anticipated surge in the older adult population, the challenge is set to intensify. There is an urgent need for a systemic change that promotes lifelong oral health, oral health literacy, universal dental coverage, and an adequately trained geriatric dental workforce. We can improve the quality of oral health for older adults and reduce healthcare costs by prioritizing preventive strategies, integrating medical and dental care and through advocacy-driven policies.

Best and Promising Practices and Criteria

Best practices demonstrate impact/effectiveness, efficiency, sustainability, and collaboration/integration. They have solid research evidence that supports their conclusions, and a consensus of experts recognizes them. Promising practices are interventions with some evidence to produce positive outcomes. Even though they require additional supporting evidence, they offer possibilities for dental management that warrant additional investigation. Raising awareness about these innovative, new options will eventually yield sufficient data to move them towards best practice status.

The evidence is still being compiled for improving the oral health of older adults, while advocacy to increase access to oral health for older adults is growing. Some leading-edge, innovative programs continue to challenge and improve traditional clinical models, especially for adults who are homebound or living in LTC facilities. Those programs that achieve success do so by ensuring access to proven preventive and evidence-based care. Practices that meet the following criteria are well-positioned for future success:

Impact and effectiveness

- Deliver dental services where older adults live using methods, such as portable equipment, mobile vans and teledentistry, while training interdisciplinary care teams on oral care for the aging, emphasizing early detection and treatment referral.
- Questions to consider:
 - Have more people received oral health services and has their oral health improved?
 - Are direct (cost of care) and indirect (lost wages or travel time) costs to patients reduced?

Efficiency

- Consider techniques or dental products that relieve pain and stop decay in older adults, which are effective and efficient, such as silver diamine fluoride, saliva substitutes and minimally invasive procedures, which are deliverable in multiple settings.
- Questions to consider:
 - Do more older adults have increased access to dental care?
 - Are dental services delivered efficiently and effectively in alternate settings?
 - Are dental services delivered where older adults live using portable equipment, mobile vans, or teledentistry?

Demonstrated sustainability

- Support older adult oral health improvement based on medical-dental integrated quality measures, which have the potential to generate and maintain funding.
- Questions to consider:
 - Are relationships or collaborative agreements to share resources leveraged to ensure sustainability?
 - What strategies are in place to continue the oral health program?
 - Is short- and long-term financing managed effectively?

Collaboration and integration:

- Instill a culture of collaboration by training interdisciplinary teams on oral care for the aging, especially the effects of medication on oral health, and ensure integrated electronic health records.
- Questions to consider:
 - Do all providers communicate the best approaches to treatment and maintenance care to their patients and each other?
 - Is continuing dental education available to all team members? Does the primary care provider follow the advice of the oral health professional?
 - Do electronic health record systems allow for interdisciplinary patient management? Does the EHR medication prescribing system have warnings for drugs that potentially cause dry mouth? Is there a list of all medications that affect saliva production included in every chart, similar to the list of forbidden abbreviations?
 - Is information shared easily and efficiently between interdisciplinary providers?
 - Does the nursing/direct care staff carry out the recommendations of the oral health providers? Is there performance monitoring of the oral care given? Is data on performance collected in an unobtrusive manner to support quality improvement, while not interfering with workflow?
 - Are recommended procedures and follow-up carried out as scheduled or as advised?
 - Do routine facility admission orders include: daily oral care, semi-annual applications of fluoride varnish or silver diamine fluoride, and a semi-annual oral exam by dental professionals? Do these default orders allow opt-out versus requiring opt-in?
 - Do interdisciplinary teams work on-site together?

Objectives and rationale

- A program that removes obstacles to dental care for older adults including finances, transportation, education, and health access.
- Questions to consider:
 - Are educational materials and training available to close gaps in health literacy?
 - Are quality measures in place to evaluate successful collaboration and patient satisfaction?
 - Are there clearly defined goals and objectives to address the needs of the community?

Practice Examples Illustrating Strategies and Interventions for Improving the Oral Health of Older Adults

#	Practice Name	State	Practice #
1	Geriatric Oral Health for Elderly Asian Patients	CA	06014
2	Maine Veterans' Dental Network (MVDN)	ME	22003
3	MOTIVATE: Maine's Team Based Initiative: Vital Access to Education	ME	22004
4	Element Care PACE (Program of All-inclusive Care for the Elderly) Oral Health Program	MA	24010
5	Apple Tree Dental as a Learning Health System: Using patient records technology to improve practice and policy	MN	26018
6	Healthy Aging Includes a Healthy Mouth: Minnesota's First Basic Screening Survey for Older Adults	MN	26019
7	Missouri's Pilot Project: Providing Care to Long-Term Care Facility Residents Using Telehealth Mediated Supervision	MO	28012
8	Access Dental Care of North Carolina	NC	36016
9	Motivational Interviewing: Patient Experience Dashboard	OR	40011
10	Rhode Island Public Health Dental Hygienist Toolkit	RI	45005
11	Advocacy for Expansion of Dental Coverage in Medicare	CMA	99009

Highlights of States Descriptive Reports

CA [Geriatric Oral Health for Elderly Asian Patients](#) (Practice #06014)

Asian Health Services (AHS), a Federally Qualified Health Center (FQHC) in Oakland, CA, was founded in 1974 by a group of University of California, Berkley students. The students saw an influx of Asian immigrants struggling to obtain health care due to their limited English proficiency. Since that time, the FQHC has expanded to provide primary medical, dental, behavioral health and specialty mental health to over 50,000 patients. AHS' Board of Directors created a policy that only allows medical patients to access dental services, which aligns with HRSA's Patient-Centered Health Home initiative.

ME [Maine Veterans' Dental Network \(MVDN\)](#) (Practice #22003)

Fewer than fifteen percent of veterans receiving health care through the Department of Veterans Affairs (VA) are eligible to receive comprehensive dental care. This led to the Maine Bureau of Veterans Services conducting a six-month needs assessment in 2020, resulting in a 105-page report, which garnered a \$35,000 grant from Northeast Delta Dental to start a pilot program and the formation of the Maine Veterans' Dental Network, now in its third year of operation. Twenty-two FQHCs, non-profit dental clinics, Maine's two dental schools and a mobile dental clinic currently participate in the network.

ME [MOTIVATE: Maine's Team Based Initiative: Vital Access to Education](#) (Practice #22004)

The Lunder-Dineen Health Education Alliance of Maine, a program of Massachusetts General Hospital, developed the MOTIVATE program as an education and quality-improvement intervention that empowers and equips the health care team with the knowledge and skills needed to improve oral health quality and staff confidence through evidence-based training, quality improvement coaching and access to external oral health

expertise. MOTIVATE's success in long-term care (LTC) demonstrates, through third party evaluation, that staff training is feasible, results in knowledge and attitudinal changes over time, greater health care provider confidence and practice changes.

MA [Element Care PACE \(Program of All-inclusive Care for the Elderly\) Oral Health Program](#) (Practice #24010)

The oral health program at Element Care PACE started as a pilot program in 2010 to address barriers to oral health for older adults and to provide oral health education and training for medical and dental fellows in geriatrics. It is a collaboration among Element Care PACE, the Harvard School of Dental Medicine's Geriatric Dentistry Program, a dentist with a portable practice, and a public health dental hygienist. It provides comprehensive on-site dental care in an interdisciplinary primary care setting using portable equipment and provides oral health education to primary care providers, patients and caregivers. The Seattle Care Pathway is used as an approach to oral health care, taking a patient's functional status into account when establishing an oral health treatment plan. All medical and dental services are covered by the patient's insurance, Element Care PACE, a Medicare and Medicaid waiver program, including other services such as transportation and personal care assistants that provide necessary support for a patient to receive oral care.

MN [Apple Tree Dental as a Learning Health System: Using patient records technology to improve practice and policy](#) (Practice #26018)

The founders of Apple Tree recognized the potential value of structuring their clinical dental records to be a source for continual learning. Their nearly 40-year longitudinal database contains records for over 190,000 patients, including rich information from community dwelling older adults and LTC residents. Internally, data is actively used for program planning and evaluation, quality improvement, grant seeking and reporting, and staff education. Dental services are not generally covered by Medicare. Efforts to expand coverage across the lifespan are based upon evidence of the impact of oral health and overall health and recognition of increased medical costs for those with untreated dental disease. Research using Apple Tree's longitudinal database has the potential to further inform policy discussions and the development of appropriate benefits for older adults.

MN [Healthy Aging Includes a Healthy Mouth: Minnesota's First Basic Screening Survey for Older Adults](#) (Practice #26019)

Minnesota conducted their first Older Adult Basic Screening Survey (BSS) in 2016. ASTDD's implicit stratified sampling methodology was applied to 373 skilled nursing facilities (SNFs) using Area Agencies on Aging and Rural Urban Commuting Areas as stratifying variables. Dental hygienists were calibrated to use the BSS and 1,032 adults aged 65+ in 31 SNFs, with 30 or more beds, resulted in 944 analyzable surveys. Data indicated a significant need for dental care in this population. Findings will inform policy and guidelines to better serve older adult populations in long-term care facilities in the state.

MO [Missouri's Pilot Project: Providing Care to Long-Term Care Facility Residents Using Telehealth Mediated Supervision](#) (Practice #28012)

In 2022 the Missouri Office of Dental Health (ODH) received a HRSA Workforce Grant that allowed them to pilot telehealth mediated supervision for Expanded Function Dental Health Care Workers, who are dental hygienists and assistants supervised by an offsite dentist. Telehealth supervision uses computers, internet, live-feed cameras, an intraoral scanner and a telephone to facilitate communication and collaboration. Telehealth allows teams to

provide care to underserved populations, specifically those in long-term care facilities. The pilot will run from September 1, 2022 through August 2026. Data will be shared with stakeholders. The Missouri Dental Board will determine if permanent changes to statutes and rules should be enacted to improve access to care using telehealth.

NC [Access Dental Care of North Carolina](#) (Practice #36016)

Access Dental Care (ADC) is a non-profit that provides mobile, comprehensive dentistry to individuals living in skilled nursing facilities, group homes for those with intellectual and developmental disabilities, participants of Program of All-Inclusive Care of the Elderly (PACE), community-based older adults, and a regional center for community dwelling HIV/AIDS patients. A large percentage of ADC's patients rely on Medicaid and are often unable to access appropriate, quality and timely dental services. Specially trained ADC dental teams provide dental services that are comfortable and accessible for their patients. Teledentistry is used to expedite treatment planning.

OR [Motivational Interviewing: Patient Experience Dashboard](#) (Practice #40011)

Neighborhood Health Center is a not-for-profit healthcare organization that provides services to low-income, uninsured and underinsured residents in northwestern Oregon. Patients are seen in five primary care clinics, three dental clinics (one co-located with a primary care clinic) and two school-based health centers. Multiple circumstances led to training the dental teams in motivational interviewing (MI). One significant outcome is the use of the patient experience dashboard by DifferentKind. Patients are surveyed about their care experience, which allows real-time feedback with the dental teams on the effectiveness of their MI skills. This information is used to inform actionable and morale-boosting feedback for the teams. It also allows assessment of challenges in access to care.

RI [Rhode Island Public Health Dental Hygienist Toolkit](#) (Practice #45005)

In 2016, the Rhode Island Department of Health (RIDOH) established regulations to allow Public Health Dental Hygienists (PHDHs) to provide services outside of the dental office in long-term care settings and senior centers. Through statute, PHDHs are permitted to become Medicaid providers and submit claims. Few PHDHs were using the license and no Medicaid claims had been submitted. As part of the plan to address this, the PHDH Toolkit committee was established, composed of leadership of the Rhode Island Dental Hygienists Association, Community College of Rhode Island dental program, RIDOH's Oral Health Program, and the Rhode Island Oral Health Coalition. The group produced a toolkit with web-based resources, which can be easily modified and linked to by multiple organizations. A PHDH Learning Collaborative provides additional information sharing via monthly presentations and discussions.

CMA [Advocacy for Expansion of Dental Coverage in Medicare](#) (Practice #99009)

The Center for Medicare Advocacy (CMA) promotes federal legislation that would establish a comprehensive dental benefit in Medicare Part B. As a public-interest law organization, CMA believes that expanding access to dental care through such coverage is vital to ensuring better health and greater equity among older persons and adults with disabilities, fulfilling the promise of the Medicare program. One of the lessons CMA has learned is having supportive data is a vital tool in administrative and legislative advocacy. Additionally, securing policy change does not end with the sought-after policy transformation. The road to effective implementation entails extensive strategy, resources, expertise, coordination and communication on many levels.

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Lori Kepler Cofano, RDH, BSDH Consultant ASTDD Best Practices Committee	Deborah Jacobi, RDH, MA Policy Director Apple Tree Dental
Russ Dunkel, DDS, FACD, FICD, FPFA State Dental Director Wisconsin Division of Public Health	Christine Wood, RDH, BS Executive Director, ASTDD
Steve Geiermann, DDS, FICD, FACD Chair, ASTDD Best Practices Committee	Samuel R. Zwetchkenbaum, DDS, MPH Chief, Oral Health Division Rhode Island Department of Health
Gretchen Gibson-Castleman, DDS, MPH Associate Professor Kansas City University College of Dental Medicine	

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