

# A qualitative assessment of dental care access and utilization among the older adult population in the United States

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**This article presents an in-depth, qualitative assessment of the needs, issues, opportunities, and barriers concerning dental access and availability of oral care among older Americans. For the rapidly aging U.S. population, access and barriers to the provision of dental services were evaluated. The nature and types of services utilized by various segments of this population were examined and the attitudes, opinions, and perceptions of dental professionals regarding the delivery of services were analyzed. From this research, potential opportunities for strategic partnerships between organized dentistry and industry were developed. These collaborative partnerships will seek to improve access to oral health care for the fastest growing segment of the U.S. population.**

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On May 25, 2000, Surgeon General David Satcher released *Oral health in America: A report of the Surgeon General*. In addition to finding a lack of awareness of the importance of oral health among the public, the report noted a significant disparity between racial and socioeconomic groups in terms of oral health and ensuing overall health issues. Based upon these findings, the Surgeon General called for action to promote access to oral health care for all Americans, especially the disadvantaged (a population that includes the older American population and minority children), who were found to be at greatest risk for severe medical complications resulting from minimal oral care and treatment.<sup>1</sup>

Americans are living longer than ever before but people are more likely to develop chronic health conditions as they age. Moreover, the U.S. Census Bureau has reported that seniors represent the fastest-growing segment of the U.S. population, one that is increasing at an average of 2.1% per year.<sup>2</sup> For adults 65 and older, the focus of care usually centers on preventing and controlling these chronic medical diseases. It is believed that this focus, as well as the side effects of chronic disease treatments, leads to neglect in the funding, management, and provision of services for dental care.

While the overall oral health and use of dental services among older adults has

improved, several significant barriers prevent access to adequate and routine dental care in this population.<sup>1</sup> As the older segment of the U.S. population continues to increase, these obstacles to dental care need to be identified and addressed through a series of proactive initiatives. These initiatives must be designed to improve not only the oral health but also the general health and well-being of the older American population by managing oral disease and mitigating disability.

## Methodology

Boston Healthcare Associates, Inc. (BHA), a health care consulting firm, conducted an in-depth assessment during the spring of 2004. This assessment was designed to understand the needs, issues, and barriers that the older U.S. population faces in terms of availability and access to dental services.

A qualitative research approach was selected as a means of determining a tangible direction for how to address unmet needs and capitalize on existing opportunities. Both primary and secondary research methodologies were used. The primary research consisted of 47 in-depth telephone interviews with decision-makers who have a direct or indirect role in the access to and delivery of oral care for older Americans. Government researchers and policy makers, leaders from dental schools, representatives of national dental

organizations, dental insurance providers, dental professionals/providers, and representatives from advocacy groups were included in the research. Many of the participants were selected based on their interest in the subject matter and/or their specific responsibility in terms of serving the needs of the senior adult. A core discussion guide was used to direct the questioning; however, BHA tailored the discussion according to each individual's responsibilities and expertise. As part of each discussion, the following primary topics were addressed: perceptions on access and barriers to oral care; types of services most typically utilized by the older adult; attitudes and opinions regarding provider delivery of services; and the degree and type of involvement and support from organized dentistry, the government, advocacy groups, and other associations. Finally, a secondary data analysis was conducted to supplement the primary research findings and to quantify the size of the older American population.

Census data and other government reports often classify the older adult population into segments based on age. For the purposes of this research, the authors decided to segment the population into groups based on lifestyle and other defining characteristics. In addition, a precursor pre-retirement group of older adults was added, since their access to oral care would play a significant role in the future. Criteria characterizing each group (see Table 1) were validated in the primary research.

## Research findings

According to the U.S. Census Bureau, the semi-dependent population segment is growing at a rapid pace. In 2000, there were 12.3 million individuals aged 75–84, representing 35% of the total senior population of 35 million. The size of the semi-dependent segment is projected to

**Table 1.** Four segments of the U.S. older adult population.

Segment	Defining characteristics
Pre-retirement adults	Working; living independently at home; have adequate dental insurance and/or sufficient income to see a dentist regularly
Retired adults	Ambulatory; living independently; have sufficient income to cover needed dental services
Semi-dependent adults	Fixed income; living at home; may have transportation problems; may need to be cared for by family members in their home; may or may not have dental insurance or the ability to pay out of pocket; may suffer from nutritional problems or have declining dental health
Frail elderly adults	Advanced age (perhaps 80+ years of age, but also younger persons who are debilitated or no longer living at home); live in an assisted care facility, nursing home, and so forth

increase nearly 200% by the year 2030, to 23.3 million, which will be 33% of the total senior population of 70 million.<sup>2</sup> In 2000, women accounted for 61% of seniors aged 75–84; 50% of these women were married.<sup>2</sup>

The need for dental services will continue to rise among older Americans as the prevalence and incidence of edentulism continue to decrease. Between 1983 and 1997, the percentage of edentulism decreased (specifically in the semi-dependent segment) from 45% to 36%.<sup>3</sup> However, Douglass et al said that while the decline in edentulism may signify a reduced need for denture services, the maturation of the baby boomer generation and the significant increase in the number of older Americans will result in a continued need for denture services in the coming decades.<sup>4</sup>

The need to perform proper oral hygiene and maintain existing restorations (in addition to the desire to retain teeth) also may create a greater demand in dental services so that older Americans may avert potential dental disease and disability. In addition, chronic diseases are prevalent among older adults; as a result, many take multiple medications with side effects that can affect oral health, resulting in dental caries, candidiasis, periodontal disease, oral cancer, and decreased salivary flow.<sup>5</sup> These factors all point to the need for older adults (and their caregivers) to be aware of these increased risks and to not only seek but also have access to dental care on a routine basis.

The primary research validated and clarified the need for access to oral care among older Americans. It also uncovered significant gaps and disparities in terms of the availability of such care and the ability to effectively deliver it to this population segment. The following discussion highlights some of the key findings from each stakeholder group included in the research.

#### *Providers*

Dentists who treat seniors noted that the cost of dental care and the amount patients are willing to pay out-of-pocket become important considerations as older adults become more dependent. Providers reported that the semi-dependent market segment is predominantly a self-pay group, more so than the other three segments. A 2000 survey conducted by the Agency for Healthcare Research and Quality (AHRQ) reported that while Americans paid out-of-pocket for approximately 50% of all dental care expenses, people 65 and older paid more than 75% of their dental expenses out-of-pocket.<sup>6</sup> The providers interviewed for the study presented in this paper indicated that when choosing the most appropriate treatment, the semi-dependent adult generally will select the least costly alternative treatment.

This segment of the population also relies more upon family and friends for transportation and therefore is less likely to return for recall or preventive visits; as a result, they are more likely to visit

the dentist only when they have an acute problem or pain. Providers agree that there is an inverse relationship between a patient's age and his or her focus on preventive care, resulting in a decrease in routine check-ups and oral health maintenance visits and an increase in restorations and extractions. Asked to describe their overall attitude toward managing the older adult, some providers expressed frustration with their inability to provide the best available care because of the patient's limited financial resources, the lack of time available to provide good dental care, and the inability to make logistical changes to their practice to accommodate older adults. Interestingly, while it is not significant statistically, the dentists with more experience recalled receiving little (if any) training in dental school that focused on the older adult population. This group stressed the importance of practical experience for learning how to manage patients with physical and/or cognitive disabilities. Conversely, younger dentists recalled taking classes and receiving hands-on experience in treating older adults.

The dental hygienist's scope of practice is limited by regulations that vary from state to state. In some states, consideration has been given to expanding the role of dental hygienists, depending on adequate training, supervision, and competency. As a result, dental hygienists, with appropriate supervision, may be able to provide limited services within nursing homes or community health centers.

A significant portion of the frail elderly population segment resides in long-term care (LTC) facilities. Discussions with the National Association of Nurse Directors and the Geriatric and Extended Care Service at the Department of Veterans Affairs revealed that maintaining and treating medical conditions was the primary focus of care within these facilities; oral health care represented only a minor part of the overall assessments completed on residents. LTC residents rely on their nursing homes to coordinate and provide access to oral hygiene and dental care. However, the availability of dentists who visit nursing homes differs from facility to facility. Moreover, according to the LTC experts interviewed, nurses and LTC staff within these facilities often are not adequately trained to handle dental

**Table 2.** Degree to which access to and provision of oral care to groups of older adults are critical (on a 4.0-point scale) to state dental societies.

	Access to care	Provision of care
Semi-dependent older adults	2.35	2.21
Elderly/dependent	2.31	2.51
Retired	1.1	1.1
Pre-retirement	0.17	0.18

**Table 3.** Impact of an aging population on state dental societies.

	Percentage responding
More likely to develop programs targeted specifically to this group	63
Will need to offer more CE to our members geared toward the senior audience	73
No impact at all	5
Other	15

care beyond tooth brushing and many consider it a low priority. This is further complicated by residents' inability to express their dental needs if they are suffering from dementia or another neurological condition.

According to the ADA 2000 Survey of Current Issues in Dentistry, the dental profession provides many *pro bono* services.<sup>7</sup> At present, there are major national initiatives targeted to provide care for children (through the Give Kids a Smile program) and the handicapped (through Donated Dental Services). The authors did not find a similar program dedicated to older Americans.

#### *Private dental insurance providers*

BHA interviewed dental directors from sizable private plans; these directors agreed that the lack of reimbursement for dental care among older adults is a clear barrier to access and a key factor in patients' reluctance to seek care. Post-retirement dental insurance often is limited to those with retiree plans, representing a minority of the population. A 1995 study reported that among adults 65 and older, only 22% were covered through private insurance.<sup>5</sup> Private dental payers recognize that the need for preventive, restorative, and periodontal services among the elderly will increase as the population ages and older adults retain their teeth. Offering insurance plans that cover those services in a cost-effective manner will pose a challenge to these organizations. Private payers view this trend as a potential commercial business, assuming they can design and market plans effectively and that older adults will recognize these insurance plans as both valuable and worth the premiums.

#### *Publicly funded care*

Medicare does not cover routine dental care such as cleanings, restorations, tooth extractions, or dentures. Medicaid programs cover few dental services for adults. Adult dental care funded by Medicaid programs is at risk of being reduced or eliminated entirely in many states, due to state budgetary deficits. Even in states with adult dental care Medicaid programs, many dentists are reluctant to treat Medicaid patients because reimbursement is so low.

Other (non-funding) activities that various stakeholders have undertaken to address the needs of the elderly are listed below.

#### *Dental schools*

BHA interviewed representatives of dental schools at the forefront of this subject matter and those schools that actively are developing programs and educational curricula focused on the older adult. Program directors noted that taking steps to include geriatric dentistry in the undergraduate curriculum at dental schools is an evolving process. Many schools do not have a specific geriatric dentistry program and dental students receive limited practical training/clinic rotation in the community before graduating and entering private dental practice. As a result, new graduates may not be optimally prepared to care for and manage the needs of older adults beyond offering routine dental care. Providers need to be well-trained and confident in their ability to manage the older adult from both a psychological and a clinical perspective. For example, dentists need to learn how best to care for a patient with cognitive issues and to understand that these patients require different management/care strategies. The directors interviewed for this

study said that establishing relationships within the community via programs such as with senior day care centers offers a dual benefit: a training environment for students and a treatment setting that allows older adults to receive much-needed dental care.

#### *American Dental Education Association*

The American Dental Education Association (ADEA) plays an advisory role in dental education and primarily is responsible for developing policy and position statements. ADEA works with the Commission of Dental Accreditation to strengthen standards but is not responsible for enforcement. ADEA believes current curricula lack focus on the older adult population; as a result, the organization is considering advocating policy changes for a fifth-year residency program that focuses on caring for and treating special-needs patients (including older adults).

#### *Commission of Dental Accreditation*

The overarching goal of the Commission is to set competency standards for providing oral health care to the population at large. Although the Commission sets the scope of practice standards, there are no specific requirements regarding the number of hours spent or content by patient type, with the exception of pediatrics. It is anticipated that as the population ages and practice patterns shift, the Commission may adapt its standards accordingly to include requirements for training on the special needs of older adults.

#### *State boards of dental examiners*

State boards establish and administer

scopes of practice and state licensure requirements. In most states, dentists must pass both written and clinical examinations before they are licensed to practice dentistry. A portion of the examination uses a patient case methodology for testing students and although there are questions focused on the older adult, they are included within the broader category of compromised patients (adults and children). Currently, gerodontology is not one of the eight dental specialties recognized by the ADA.

### **State dental societies**

In conjunction with this research, the ADA Survey Center conducted a Web-based survey with executive directors of the state constituent dental associations. The survey sought to assess the associations' current programs and future plans for oral health care for older Americans. Forty-one of 53 executive directors completed the survey. While programs and initiatives targeting children (that is, patients under the age of 18) are considered more important than those targeting other population groups, state associations agree that oral health care for older adults will be among the top five topics in the next two years (see Table 2).

Today, approximately 50% of the associations support or sponsor programs that are targeted specifically toward the older adult. Examples of these programs are the Donated Dental Services program from the National Foundation of Dentistry for the Handicapped and the Senior Dental Care program offered through the Pennsylvania Dental Association, where member dentists offer dental care at a reduced cost to seniors with low or fixed incomes. These executive directors anticipate developing audience-specific programs in the future, as well as offering continuing education to providers on caring for older adults (see Table 3).

### **Consumer advocacy groups**

Oral health care has not surfaced as a major agenda item for consumer advocacy groups, although they recognize the need among their constituency. Through their state chapters, organizations such as the Alliance for Retired Americans and the American Association for Retired Persons (AARP) have strong marketing capabilities that can reach the difficult-to-access

retired and semi-dependent older adults for potential educational initiatives.

### **National and regional dental organizations**

National and regional dental organizations, such as the DDS program of the National Foundation of Dentistry for the Handicapped and Special Care Dentistry focus and develop programs for delivering care to those who lack access. Generally, the programs implemented by these groups have focused on problem resolution rather than prevention; as a result, these programs center on delivering care to targeted groups with the greatest need.

### **Government agencies**

At the government level, public policy and research groups collect and analyze data specific to oral health care, the impact of tooth retention on root caries and periodontal disease, and links between dental and medical conditions. While most of these efforts are on the research level, organizations such as the agencies of the United States Public Health Service (which includes the CDC) recognize the need to develop educational messages and tools to communicate with older adults about prevention strategies to improve oral health outcomes.

### **Discussion**

Older adult oral care represents a substantial need and an ever-growing challenge. The U.S. Census Bureau has projected that 20% of the U.S. population (70 million of a projected 350 million people) will be 65 or older by the year 2030.<sup>3</sup> Most of this growth will occur between 2010 and 2030, when the members of the "Baby Boom" generation reach 65.

The research presented in this article indicates that both the marketplace and its stakeholders recognize the issues and are aware of the declining access to oral health among older adults; however, they are not structured or focused on addressing the concern on their own and have expressed an interest to work collaboratively with industry and/or organized dentistry. The ADA has made a commitment and currently is investigating opportunities to address and ultimately find solutions to the multifaceted access problem.

There are successful outreach programs designed to promote, improve, and

maintain the oral health of older adults through effective education and treatment at a regional and local level. Some of these programs are being considered and evaluated for expansion nationwide. A successful program is a collaborative educational initiative that reaches out to older adults as well as to providers (that is, dentists, dental hygienists, and LTC nurses) and caregivers. It is vital for the profession to shift its thinking from treating specific dental conditions (such as root caries and gingivitis) to assuming a broader vision and treating the whole patient.

### **Summary**

BHA found a baseline level of education for dental students and hygienists that focuses on the older adult. In addition, community-based services and programs often address the needs of the underserved groups (the semi-dependent and frail older adult); however, these programs focus mostly on preventive care and education. To some extent, this is due to the limited reimbursement and coverage available through dental insurance providers; more importantly, it is hindered by the inability of the semi-dependent and frail older adults to physically access and receive care. Frail older adults may show the greatest immediate need for oral care (beyond basic tooth brushing); however, the precursor groups may present a greater opportunity, because earlier interventions that make routine oral health care easily available and accessible are likely to avert significant costs and complications as these groups age. To address this opportunity successfully, it is necessary to have programs and services that drive the older adult into the dentist's office, as well as providers who are knowledgeable and comfortable managing these potentially complicated patients.

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