GUEST EDITORIAL

A national imperative

Oral health services in Medicare

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Dental benefits are not included in Medicare despite the reality that more Americans are living well beyond their 65th birthdays. In the United States, 10,000 people turn 65 every day, which drives the increasing cohort of seniors.[1] Today, the number of seniors—47 million—essentially will double by 2050 according to demographers, and there is no doubt that oral health and general well-being are inextricably bound together.[1] Many conditions that plague the body are manifested in the mouth, a readily accessible vantage point from which to view the onset, progression, and management of numerous systemic diseases. Periodontal diseases are generated by microorganisms that readily can enter the general circulation and cause bacteremia, resulting in adverse systemic effects that can promote conditions such as atherosclerosis.[2] Study investigators assert that adverse cardiovascular effects from periodontal diseases are due to a few high-risk oral microorganisms associated with the pathogenesis of atherosclerosis via increased lipoprotein concentrations, endothelial permeability, and binding of lipoproteins in the arterial intima.[2] In this guest editorial we assert that oral bacteria influence the pathogenesis of atherosclerosis and a number of other chronic degenerative diseases. We argue that sufficient scientific and health economic evidence support providing oral health benefits to older adults through the Medicare mechanism.

Oral chronic degenerative diseases, such as periodontal diseases, often cause tooth mobility and tooth loss and serve as a portal for microorganisms, their by-products, and host-generated inflammatory mediators to enter the bloodstream, and they are associated with conditions in other parts of the body—pulmonary disease, type 2 diabetes, and cardiovascular diseases.[2] Furthermore, periodontal diseases share genetically determined risk factors with other chronic degenerative diseases with an inflammatory response such as ulcerative colitis, juvenile arthritis, and systemic lupus erythematosus. These conditions are associated closely with increased production of proinflammatory cytokines that serve as indicators of susceptibility to severe chronic degenerative diseases. The same cytokines expressed in inflammation in type 2 diabetes, cardiovascular diseases, and obesity also are expressed within periodontal diseases.[3] It is now evident that there is a confounding relationship among oral infections, host inflammatory response, and host genetic characteristics.

Major scientific discoveries support the thesis that oral health care begins during prenatal care and extends over the human life span.[4] Authors of a number of reports highlight significant benefits of prevention interventions in early childhood and thereafter.[5] Despite these advances, according to

the National Health and Nutrition Examination Survey (1999-2004), 27.27% of seniors older than 65 years have no remaining teeth.[6] Seniors aged 65 to 74 years have no teeth in 24% of that cohort, with 30% of female seniors in this cohort having no teeth.[6] Education attainment (less than high school), poverty, ethnicity, age, and smoking habits are major socioeconomic determinants.[6] Of particular alarm is that close to one-half (45%) of adults aged 65 or older had incomes below twice the poverty thresholds as defined in 2013; poverty rates are higher among women than men and are significantly higher among Hispanic and black seniors than among white seniors.[7]

Introducing oral health services within Medicare programs will make a major contribution to the health and well-being of our nation's senior citizens.

It is evident that national and state policies are necessary to guarantee preventive health services to all Americans throughout the life span. Despite significant gains in children's health services, seniors living in poverty remain a major underserved population. The United States will continue to experience a burgeoning aging population with rates of oral health care use among older adults remaining low because of care access and especially because of financial issues.[8] Introducing oral health services within Medicare programs will make a major contribution to the health and well-being of our nation's senior citizens.

An economic health cost savings argument also should be considered. Inflammation is implicated in the cause and pathogenesis of several chronic degenerative diseases, including atherosclerosis and periodontal diseases. Furthermore, the relationship between periodontal health and diabetes is bidirectional; treatment of periodontal infections in patients with diabetes enhances glycemic control.[9] Results from several studies by health insurance companies and the American Dental Association have revealed reduced medical costs for people with diabetes, cerebrovascular stroke, and coronary disease who receive oral health care.[10-13] Pacific Dental Services invited Avalere Health to estimate the cost or savings to the Medicare program of a new benefit covering initial and ongoing treatment of periodontal disease for beneficiaries with diabetes, coronary heart disease, or cerebrovascular disease. These study investigators estimate that providing a periodontal disease treatment benefit will produce a savings of $63.5 billion over the period of 2016 through 2025 and should continue long term.[14] Because these chronic diseases are highly prevalent in the Medicare population, significant medical cost reduction can be achieved by including oral health preventive interventions within Medicare benefits.

With this in mind, the Santa Fe Group, along with many other advocacy groups, continues to champion the inclusion of dental health benefits into Medicare. The following position statement from the Santa Fe Group highlights our goal:

> After decades of research and thousands of scientific papers, the relationships between oral health, especially periodontal health, and systemic health are well known. Moreover, during the past ten years, data analysis by health economists, and public statements and actions by several large, private dental insurers have identified additional benefits of oral health by revealing that insured individuals who receive treatment for periodontal disease show fewer hospitalizations and reduced cost of care for a number of systemic diseases including diabetes, cardiovascular disease, and stroke. Therefore, the Santa Fe Group has concluded that sufficient evidence now exists that periodontal disease is a contributory cause to certain systemic diseases, and the public should benefit from this knowledge. Therefore, Medicare, Medicaid, and other public and private health insurance programs should incorporate oral health benefits as a component of comprehensive health insurance. These health benefits will not only improve oral health for its own sake, including speech, mastication and social acceptance, but will also produce substantial economic benefits and total health improvement for the public.[15] ■

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renowned scholars and leaders from business and the professions bound by a common interest in improving oral health. For further information, visit www.santafegroup.org.

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