

Poor Dental Hygiene and Heart Disease

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POOR DENTAL HYGIENE AND HEART DISEASE

Hundreds of thousands of lives could be saved and Medicare could save hundreds of millions of dollars if it provided dental coverage. Providing dental coverage would be cost-effective as it would lessen the risk of developing heart disease, decreasing costs spent for heart disease related issues. Heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups in the United States¹. One person dies every 34 seconds in the United States from cardiovascular disease¹. People 65 and older are much more likely than younger people to suffer a heart attack, to have a stroke or develop coronary artery disease and heart failure². Heart disease is a major cause of disability, preventing millions of people from achieving a good quality of life.

Nothing kills more Americans than heart disease and stroke. More than 877,500 Americans die of heart disease or stroke every year—that's one-third of all deaths. These diseases take an economic toll, as well, costing our health care system \$216 billion per year and causing \$147 billion in lost productivity on the job⁹. Heart disease has been the leading cause of death for Americans aged 65 years and over for the past several decades. Heart conditions as a category represent one of the most common, burdensome, and expensive health problems among the Medicare population. Congestive heart failure and heart rhythm problems are two of the five most common specific causes for inpatient admissions of Americans aged 65 years and over. Direct medical costs associated with heart disease totaled \$281 billion in 2015 in the United States – a figure that could more than double by 2035, due to the expanding population of older Americans⁸. According to the CDC, heart disease and stroke remain the most expensive chronic diseases for the healthcare system.

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Poor dental hygiene increases risk of first heart attack by 28%. Oral health and heart disease are connected by the spread of bacteria. Poor dental health increases the risk of a bacterial infection in the blood stream, which can affect the heart valves. Bacteria enters into the bloodstream and goes straight to the heart. When these bacteria reach the heart they can attach themselves to any damaged area and cause inflammation⁴. According to the Mayo Clinic, this can result in illnesses such as endocarditis, an infection of the inner lining of the heart. And according to the American Heart Association, other cardiovascular conditions such as arteriosclerosis (clogged arteries) and stroke have also been linked to inflammation caused by oral bacteria⁴. Gum disease (periodontitis) is associated with an increased risk of developing heart disease⁵. The chronic systemic inflammation and dysbiosis (bacterial imbalances in the mouth) that are characteristic of periodontal disease can exacerbate these conditions. Inflammation and dysbiosis may generate immune responses that increase the risk of cancer as well as contribute to insulin resistance that makes diabetes management more difficult. Periodontal disease is associated with increased risk of cardiovascular diseases, including arteriosclerosis, coronary artery disease, and stroke. Tooth loss patterns are connected to coronary artery disease⁷. Some studies have shown that bacteria in the mouth that are involved in the development of periodontal disease can move into the bloodstream and cause an elevation in Tooth loss patterns, a marker for inflammation in the blood vessels⁶.

Data from the 2013 Medicare Current Beneficiary Survey stated at least one heart condition was reported by 42.4% of Medicare beneficiaries aged 65 years and over. The total cost of care for beneficiaries with heart conditions averaged \$18,270, compared to \$9,302 for those without. Medicare's national health insurance program for about 60 million older adults

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and younger beneficiaries with disabilities does not cover routine dental care. The majority of people on Medicare have no dental coverage at all. Almost two-thirds of Medicare beneficiaries (65%), or nearly 37 million people, do not have dental coverage. Poor oral health care exacerbate general health issues and systemic diseases.

To make this possible Medicare needs more dentists to become Medicare providers. Medicare could do this by utilizing a Quality Payment Program, a two-track value-based reimbursement system designed to incentivize high quality of care over service volume. The two-track value based program rewards health care providers with incentive payments for the quality of care they give to people with Medicare. Incorporating a two-track value based program and getting more dentists to become Medicare providers could prevent heart disease from being the number one killer.

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