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A growing body of evidence over the past decade demonstrates to the health community that oral health and overall health are related. Dental disease and other oral infections are implicated in a host of systemic disease processes including heart disease, low birth weights, Diabetes, and Stroke. This list continues to grow. Still, efforts among advocates who promote oral health as an essential component in overall health care continue to be met with resistance and frustration.

The profession of dentistry, and the mouth in general, were separated long ago from the body as part of the national health care movement. Dentistry became a subset or "other" health related profession outside primary care and the various sub-subspecialties of medicine. This has resulted in a disconnect between health care and dental delivery systems. "I The current national health care debate over affordable health care, Medical Home, Electronic Health Record (EHR and meaningful use), and Health Reform in general have essentially sidelined dental care as a critical component in the restructuring of the American health care system. This absence of attention on oral health is also true at the state and local level.

Why is it still so difficult to impress upon the public and policymakers the need for adequate dental care; especially for those most vulnerable to dental disease and unable to take advantage of the current private dental delivery system? Dental disease was identified as the "Silent Epidemic in the U.S Surgeon General's 2000 report, and again re-emphasized by subsequent U.S Surgeon General Reports." This epidemic is more prevalent than childhood asthma and among the most prevalent diseases in America. Still, many within the general public remain unaware and most policymakers ignore this significance. What will it take to both enlighten and increase public action to assure oral health become truly integrated in state and national health reform policy?

One idea toward increasing public awareness is to show that untreated dental disease negatively impacts the state, the nation, and individual tax payers in their pocketbooks. Evidence must show that ignoring untreated dental disease is not in the best interest of a nation or state facing rapidly escalating health care costs. If the health importance aspect alone won't sway public opinion, perhaps a financial argument might prove more effective. A good method toward accomplishing this goal was to determine the impact of untreated dental disease on hospital emergency rooms (ER).

Such efforts early on were fraught with difficulty. This was mostly due to the different payment coding and tracking methods that evolved within medicine and the American hospital system. This coding method separates the health care system from the more procedure-driven coding system common to the dental delivery system. Given the separate tracks the two health

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delivery systems took, each developed a different tracking and billing language. Efforts to collect data and resolve coding language barriers periodically took place on a limited scale at various state and local levels to track dental admissions in hospital emergency rooms (ERs). However, very little information was available at the national level for evidence-based evaluation. This lack of information trend appears now to be ending.

In the late summer of 2010, three separate publications, including peer reviewed journals, featured papers on dental hospitalizations and emergency room admissions. IX X XI These articles present a broad discussion on access patterns with data from multiple states and national hospital groups. One aspect of the findings is that hospital ERs have emerged as a national safety net for dental emergencies while lacking the capability of providing appropriate dental care. Of the various aspects studied, the following are of significantly important regarding the financial burden these types of inappropriate admissions cause on the health care system:

- Ø In the Midwest, the median expense per person in 2005 was \$1,338 for office-based oral health care, while the median Emergency Department charge in Wisconsin was \$6,227 and in **lowa** it was \$4,626.
- Ø In 2007, over 10,000 visits to hospital ERs for dental-related problems occurred within one year, reaching nearly \$5 million charged to the public programs.
- Ø In 2007, over 7,886 hospitalizations were attributed to periapical dental abscesses (tooth infections) for a total charge of \$105.8 million.
- Ø Dental-related infections resulted in 23,001 hospitalization days, averaging 2.92 days respectively in 2007, with 91% off all dental related hospitalizations occurring as emergency or urgent care basis.
- Ø Urgent care dental visits in hospitals were more pronounced among the uninsured.
- Ø Barriers to regular dental care such as lack of insurance, few dental providers taking Medicaid, lack of transportation, societal and cultural habits, a lack of (dental) health literacy, an overall lack of dental providers, and insufficient public prevention and education efforts were implicated.

The significance of these newly emerging studies should serve to bring additional light on a highly invisible subject – dental-related disease. It seems clear that unaddressed dental disease not only impacts the health and well-being of underserved populations, but unaddressed dental disease is costly in terms of impact of America's health care system.

Will this new emerging evidence produce the tipping point that finally convinces a reluctant public and its leaders to take dental disease seriously? Will future planning in health

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reform and the health care system consider all of health care including oral health and the dental delivery system? Only time will tell.

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