Dental Hygiene Practice and Health Care Reform: Taking Advantage of Opportunities

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The Health Care Reform Act has afforded the health care delivery system an excellent opportunity to expand the role and scope of practice of dental hygienists. This expansion is much needed because it will provide access for oral health to largely underserved populations. This article describes the extent of the problem and provides a plan to implement the needed changes through examples of care dental hygienists can provide in alternative practice settings.

INTRODUCTION

The Health Care Reform Bill was signed into law by President Obama on March 23, 2010. While many had hoped that this signing would bring the debate over health care reform to an end, it became readily apparent that this issue will continue for months and probably years into the future. There exists a lot of uncertainty as to what the law (H. R. 4872, The Health Care & Education Affordability Reconciliation Act of 2010) will cost and what changes will accrue to both employers and employees. Similarly, there are additional concerns relative to mandates and the permanence of the law; will it be overturned by judicial fiat or by subsequent Congressional sessions?

The existence of uncertainty surrounding H. R. 4872 is unsettling, but it should not be suffocating. Clearly, health care delivery will continue to go on and policy makers will debate and push for their agendas. It is, therefore, important that constituencies within health care delivery position themselves to garner needed resources acknowledgement. This will be particularly true of sectors of health care delivery that have been neglected in the past. Dental care unfortunately has been a major member of this neglected group.

The need to increase resources and awareness of dental care comes from two considerations. The first is the chronic neglect in the United States, across age groups, of dental care. The second is the lack of a well thought out plan to increase public health dental services, or to address alternative strategies to improve care and education.

Chronic Neglect in Children

The attention being paid to and the results in improved oral health of children have at best been mixed. Improvement in the decline of caries in permanent teeth has been positive. This in all likelihood due to the use of dental sealants which has increased significantly increased. In 2000 75% of the states

has a sealant program and this increased to 85% in 2007 (Tomar & Reeves, 2009). Of concern, however, is the increase of dental caries in the primary teeth of children between the ages of two and four. The rates in this cohort increased from 18% in 1988 to 1994 period to 24% in the 1999 to 2004 period. This increase was uneven across racial lines. Among white children the increase was negligible, but among non-Hispanic black and Mexican American children, the increase was significant. Not surprisingly poverty status also was an indicator across all age groups of children. Data comparing caries prevalence between 1988 – 1994 and 1999 – 2004 showed a greater occurrence among children living at or close to the poverty level versus those living at 200% above the federal poverty level (Tomar & Reeves, 2009).

Another statistic to frame the problem is that in 2005, one-third of all children living in homes where the household income was below 200% of the federal poverty level did not see a dental provider. The recognition that for a family of four, 200% of the federal poverty level translates into an income of \$42,400 brings the issue into even starker reality (Hathaway, 2009). Part of the problem with a lack of dental care in many children rests with the fact that in many states dentists are not accepting Medicaid patients. The three primary reasons given by dentists for not accepting Medicaid are: 1) low reimbursement rates, 2) burdensome administrative requirements, and 3) problematic patient behaviors (Hathaway, 2009). It is reasonable to assume that paramount among these three is the first – low reimbursement. With the projected cuts across the board for all Medicaid and Medicare services, it seems that the lack of participation will be exacerbated. We would also suspect that low reimbursement is contributory towards a lack of dental providers in rural areas where typically we have a greater rate of poverty.

Of great concern when studying dental care access and income levels is the realization that tooth decay is the most prevalent chronic disease in both children and adults. It is five times more common in children than is asthma (Otto, 2009). The occurrence of poor oral health presages not only dentition problems and pathology, but an even more troublesome aspect of systemic health issues. The connections between oral and systemic health have been well established. Linkages between oral health and cardiovascular disease and diabetes have been extensively studied (Hein, Cobb, & Iacopino, 2007; Meurman, Sanz, & Janket, 2004). These relationships, while potentially problematic for children, are even more inimical for adults.

Chronic Neglect in Adults

The scope of dental care for adults in the United States unfortunately is not any better than that for children and adolescents. Again, one of the derivers is socioeconomic status. Adults who are on Medicaid have a significantly lower use rate of dental office visits compared to those covered by private insurance (Ku, 2009). This is not to suggest that a significant majority of adults have private dental health insurance coverage. Interestingly enough, while oral cancer kills more women than cervical cancer, and oral infections and complications can adversely affect diabetes, pregnancy, and heart disease; some 82 million adults do not have dental health insurance and subsequently relative low rates of dental visits (Otto, 2009).

The problem of lack of access to dental care for the elderly becomes even more significant when we factor in some common health findings associated with senescence. A decrease in immune efficiency is one which will precipitate a variety of medical illnesses and dental conditions. Included in the latter are: (World Health Organization [WHO], 2009).

- > Edentulousness (loss of all natural teeth)
- > Facial pain or discomfort
- > Oral cancer
- Caries (tooth decay/cavities)
- Periodontal issues
- ➤ Denture related conditions
- Xerostomia (dry mouth/lowered saliva)

Other systemic conditions such as cancer, diabetes, and osteoporosis have a negative impact on oral and functionality (CDC, 2006). Not only is the impact produced by the diseases themselves and their sequelae, but by the medications used to treat these conditions. Endentulousness is particularly problematic. It affects 19% of the elderly in the United States. It has direct impacts on diet adequacy, food enjoyment, and may increase the risk of developing periodontitis and affect body weight. All of these outcomes are related to a loss of chewing efficiency (CDC, 2009). The absence of a balanced diet many times also occurs because this population has experienced tooth loss or ill-fitting dentures. This imbalance can easily lead to further decline in dental health (WHO, 2009).

The problem of inadequate dental care exists for both the elderly residing at home and those living in long-term care facilities. In many instances this latter group has even greater difficulty getting care. Since approximately 5% of Americans over the age of sixty-five live in long-term care facilities, and available data points to low use of dental services within this group, the need for expanded care is clear (Guay, 2005).

One contributing factor to the lack of dental care to residents in long-term care facilities is the absence of caregivers having either the time or training to provide oral health care services. A lack of inhouse equipment and sufficient means of transport to off-site facilities also complicates the issue (WHO, 2009).

DISCUSSION

Health care policy in the United States is at a crossroads. There is growing concern that health care expenditures are consuming more and more of our GDP while at the same time we have major access issues. Unfortunately, the need to solve these seemingly contradictory problems is frequently over-shadowed by the issue of health care reform which remains largely focused on payment systems. It therefore seems reasonable that solutions to the difficulties confronting health care delivery will have to come from a combination of state policy makers and practitioners.

The recognition of the connections between oral and systemic health has provided new opportunities to advance access to health care and improved outcomes. Clearly, one path to improved outcomes is to expand access to oral health paradigms. This is especially true for identified underserved populations. Children and elderly living in rural areas are foremost in these populations so there is great import to develop a system to serve these groups. One recent publication, *Expand Your Practice* (Duley, Fitzpatrick, Zornosa, Barnes, 2011) reported how the dental hygienist could enhance medical practices:

Family Practice

"Dental Hygienists working in a medical practice can assess the oral health status of each patient, plan appropriate care strategies, implement oral health literacy plans, refer patients for needed dental care interventions, and assess the outcomes of the care plan at subsequent medical appointments."

Internal Medicine

"Employing a dental hygienist within an internal medicine practice provides the physician with a practitioner who can recognize and help diagnose diseases through examination of the oral cavity." "Besides providing preventive services, dental hygienists can also assist these patients with xerostomia management, a common side effect of the pharmacologic treatment of both heart disease and stroke." "Dental hygienists are well suited to perform glucometer testing, nutritional counseling, and oral health instruction with the diabetic patient population." "Dental Hygienists can perform oral examinations to reveal any exposed dentin and help confirm the presence of gastroesophageal reflux disease (GERD)." "The dental hygienist examining the oral cavity and noticing the absence of inflammation in the presence of the petechiae and/or excessive oral bleeding will be alerted to the strong possibility of underlying liver disease."

Obstetrics and Gynecology

"Evidence shows an association between periodontal infection and adverse pregnancy outcomes, such as premature delivery and low birth weight. Evidence also suggests that most young children acquire caries-causing bacteria from mothers. Dental hygienists can be a catalyst for improving the oral health of expectant and new mothers, and provide oral health counseling to reduce the transmission of such bacteria from mothers to children, thereby delaying or preventing the onset of caries."

ENT/Head and Neck

"A subspecialty of otolaryngology focuses on the treatment of cancerous and noncancerous tumors of the head and neck. In this setting, the dental hygienist can play a vital role identifying abnormal manifestations and disease processes."

Radiation/Oncology

"Dental Hygienists are the ideal professionals to provide the preventive, therapeutic, and educational services needed by cancer patients. They can help maximize the oral health of these patients prior to and during treatment. Oral hygiene instruction should be stressed, with emphasis on educating patients on what to expect and providing them with the armamentarium to alleviate symptoms."

Preventive Medicine

"The preventive medicine specialty is an ideal practice setting for the newly evolving dental hygiene specialty: oral health coach. An oral health coach creates and manages strategic plans – in collaboration with patients – to help them meet their personal oral health goals and immediate dental health needs. Oral health coaches assess the oral health status of patients, provide the information needed to make educated decisions about their oral health, and refer them for oral disease treatments as needed "

Pediatric and Adolescent Medicine

"Dental hygienists are uniquely qualified to screen for dental and oral health problems. Likewise, they can provide necessary oral health literacy information to the child and parent, apply topical fluoride, and provide proper referrals to patients who need additional or more extensive treatment. Interventions by dental hygienists can be greatly facilitated by the use of screening instruments."

Geriatric Medicine

"Dental hygienists can become part of a patient's health status screening team to guide the patient through the self-screening checklist and perform the visual examination. Dental hygienists can then develop the dental hygiene treatment plan and make appropriate referrals."

When considering the needs of the elderly it becomes apparent that their lack of care has been exacerbated by being overlooked in public health and policy interventions. This is especially critical since the elderly suffer disproportionately from oral diseases and those residing in longterm care facilities have even greater problems Lamster, 2004). The expansion of the role of the dental hygienist would include placing them in the offices of geriatricians and having them make visits to long-term care facilities on a regular basis.

One proposed policy model to increase oral health care services to the elderly is the Access Triangle. Under this model three conditions must be met: (Guay, 2005)

- 1) An adequate dental workforce must be able to provide care,
- 2) The demand for care must exist within this population,
- 3) The ability to pay and for providers to be compensated must exist.

Condition number one can be met by increasing the scope of practice and autonomy of dental hygienists. Allowing them to practice outside of dental offices will provide a cohort of practitioners that will greatly augment the dental workforce.

Condition two can be attained through education. Many people are unaware of the oral and systemic health linkages and therefore frequently neglect their oral health (Guay, 2005). The vision of the dental hygienist as a oral health coach would include a component of being an educator. This education component can be conducted in a variety of venues including churches, senior citizen centers, nursing homes, etc. If the education is successful, people will be alerted to the need to pay attention to oral health and either prevent or blunt the effects that oral diseases can have on diabetes, heart disease, and other chronic conditions.

Condition three will probably require some creativity and adjustments to existing payment systems. Currently, there is no dental coverage under Medicare. The inclusion of a dental benefit across the board in today's economic climate is highly unlikely. It would be reasonable, however, to include a means tested benefit. Making it means tested would substantially reduce the cost and allow this much needed service to be folded into Medicare. This coverage should include payments to both dentists and advance practice dental hygienists.

The three conditions of the Access Triangle model can be used to develop care plans for all segments of the population.

CONCLUSION

The Health Care Reform bill basically breaks down to two general areas of support: Title 1 addresses Coverage, Medicare, Medicaid, and Revenues; Title 2 covers Health, Education, Labor, and Pensions. Within Title 1 section 1103 of the Act speaks to adding funding to Medicare for activities that improve the quality of care (Committees on Wages & Means, Energy & Commerce, & Education & Labor, 2010). It seems reasonable that the intent of this section could be used to support cost effective health delivery and better utilization of dental hygienists would easily qualify.

Title 2 has a variety of provisions that provide funding for education (Committees on Ways & Means, Energy & Commerce, and Education & Labor, 2010). Dental Hygiene programs can tap into this funding source to develop dental therapy educational programs. With most states having budgetary constraints in many areas, including education, the Health Care Reform Bill may be a primary funding source for effecting many new roles for dental hygienists.

Many times solutions to complex problems reside in obvious, but overlooked resources. The conundrum of health care access, cost, and outcomes would fall into this category. The expansion of the role of the dental hygienist would greatly increase access to much needed care; reduce costs from higher morbidity rates; and, improve outcomes in both oral and systemic health.

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