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Making a Community Ready for Oral Health

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The Challenges of Oral Health

The epidemic of dental caries in U.S. children and poor adults is well-established.¹ Since the publication of the Surgeon General's Report, *Oral Health in America: A Report of the Surgeon General*,² advocates for children and the poor have directed attention to ameliorating this health disparity, with limited success. Those close to the problem suggest that time-tested remedies of good oral hygiene, adequate exposure to fluoride, optimal diet and regular dental care, have peaked in their effectiveness. Further, many agree that today, the strongest influences on dental caries (tooth decay) and access to care in children and the poor are lack of adequate financing of the oral health system and societal and community factors unrelated to the biology of tooth decay.³ Validation of the interrelationship among social stressors and health continues.

So, what does a community do to achieve oral health for its children? As with many diseases, a cure for dental caries is not on the horizon, and prevention presents the best hope of curtailing the condition. Fixing children's teeth is not the answer to the epidemic—the costs are too great, proof of a lasting benefit during childhood elusive, and the afflicted population too great for the oral health care system, even with addition of more providers to fix teeth. Prevention remains the best hope for reduction in dental caries, and this paper describes the constellation and character of a community that should enjoy improved oral health for its young citizens.

Economic Health and Adequate Medicaid Funding Combine for Oral Health

Occurrence of dental caries is tied to income, education, and insurance. These three characteristics predict good oral health; their absence predicts dental caries. Research delving deeper into the social stresses of populations suggests that negative social conditions that form a second tier below the above three traditional socioeconomic measures are related to dental and systemic illness. Single parenting, mental illness, domestic violence and other stressors, all present in a less-than-healthy community, track with dental caries as they increase in prevalence.⁴ It goes without saying that full employment with dental health benefits and quality education usually bring with them both access to care and better health literacy.

But what of communities not blessed with utopian resources and struggling to meet even basic needs of all or even part of their populace? Today, that description fits many of our cities, rural areas, and small towns, due to economic downturn, unemployment and decreased public

revenues. Certain essential elements of even a rudimentary oral health care system can mean the difference for many children in these communities. In better times, the oral health goal for a community might have been to provide comprehensive care—a dental home—for all its citizens. This meant an on-going relationship with a dentist or source of dental care. Today, with the fiscal challenges faced by families and communities, an achievable goal may be provision of comprehensive services so that everyone can receive basic care according to need.

First and foremost to achieve an acceptable level of oral health across a community is an adequately financed private and public health practice and system. The insured population enjoys about a 70% utilization rate of the dental care system. Conversely, those uninsured or on government programs depend upon safety net clinics and Medicaid/CHIP in order to have basic access to care. Sadly, Medicaid remains underfunded in most states, and only a few offer adult dental services. Recently, states have demonstrated that increasing provider reimbursement can mean dramatic improvement in dentist participation and a similar improvement in access to care.⁵ A recent report suggests that fee increases work best in those states that have adult Medicaid dental benefits, which unfortunately are very few.⁶ Few in decision-making roles realize that Medicaid revenues in some states afford safety net care providers enough income to support care of the uninsured in a trickle-down effect. The same is true for dental education programs whose clinical component utilizes Medicaid to offset the cost of care. If fees are low, this cost shifting is not possible, to the detriment of that part of the system caring for those with greatest need. Community advocacy to increase Medicaid fees and retain adult Medicaid benefits holds promise to provide a foundation for essential dental services for those most in need. While not popular in this economic environment, increases in dental fees often mean that those covered enjoy “parity-over-charity” with the insured population. Typically, in most states, the dental Medicaid budget is about only one percent of total Medicaid spending!

As states are strapped financially around the country, alternatives to increased funding have shown promise. The Health Provider Shortage Areas (HPSA) is the metric of public health related to adequate access to care. Private practices, public health clinics, and other sources of care exist in the economic reality of sustainability. Community steps to maximize access include full utilization of state and federal programs that encourage loan repayment to dental providers who establish practices in shortage areas, which in aggregate are called dentist loan repayment programs (DLRP). Advocates of educating lower-cost providers to fix teeth

neglect to address elements of a practice business model that require a standard of care delivery of which provider income is but a small part. A full-service dental practice or clinical enterprise has the best chance of survival and, with loan forgiveness, that likelihood of success is increased.

A Comprehensive System across Primary Care Professions Improves Chances for Success

The engagement of non-dental professionals in management of oral health holds promise to address several shortcomings of the current system. The first is lack of early engagement in prevention of families with infants by primary care medical providers (PCPs)—pediatricians, family physicians, nurse practitioners. The scientific literature warns us that, once established, dental caries in children is difficult to eradicate at the individual and community level.⁷ In spite of efforts to increase dental provider types who can restore or fix teeth, the epidemic will continue without early prevention. The argument for PCPs is based largely on their opportunistic exposure to very young children with well-child care. They can apply fluoride varnish, insure optimal water fluoridation, and support use of fluoride dentifrice, all of which have proven anti-caries benefits and do not require dental oversight. Full utilization of PCPs lags due to lack of education, reimbursement issues, and resistance by PCPs to changes in practice patterns.

The second and less obvious contribution from non-dental professionals relates to the realization noted above that biological management of dental caries must be supported by family and community systems that encourage utilization of services. Case management for dental care is a recognized service, supported in many locations by Medicaid funding. The penetration of oral health into a community can include schools, daycare services, family services, and other non-medical support systems. For example, the contribution of early dental caries to child abuse risk is not unrecognized.⁸

Lastly, the engagement of non-dental professionals fosters appropriate referral patterns when primary prevention falls short and definitive care is needed from a dentist. Successful communities demonstrate a pathway to dental services, including adequate financing of care, case management, alternatives to a dental home, and other facilitating services. While recent data suggests that dentists provide many services associated with a dental home, seemingly minor and unanticipated factors may compromise care—lack of transportation, distance, daycare, marginal employment—just to name a few.

Vertically Stacked Dental Care Delivery Capability Is Important

The oral health care system is dominated by private practice sources of care. Corporate entities are beginning to grow, matching to a minor degree the pattern of consolidation seen in medicine with hospital systems purchasing physician practices to form more efficient networks and capture patient populations. Such consolidation will not occur for some time in dental care, but will begin to occur more frequently in the coming decade, spurred by the pediatric oral health mandate of the Affordable Care Act and pressures from both government and insurers to unify data collection and management.

Currently, a community's readiness to provide care across socioeconomic strata requires a combination of solo and corporate private practice; public health and safety net clinics; educational care providers, if present in that community; and, unfortunately, hospital medical services for emergent dental needs. The stacking remains primarily an inverted pyramid, with the solo, community-based practitioner the workhorse, followed by the remaining system components in far smaller representation. This system has often been described as a cottage industry or loose network. For most communities, it has functioned well by providing personalized care in locations determined to some degree by economics, culture, and population density. The solo dental practice has the ability to provide personalized services and adjunctive support that engenders attendance and keeps families in the care cycle.⁹ The public health component catches those with financial or social obstacles to care, as does the thin care system component that is a part of training dental health providers. More and more, hospital emergency departments are managing acute dental problems for those without resources.¹⁰ While most consider this last resort an indication of a failed dental care system, the larger view is that this component is necessary to mitigate pain and serious morbidity in a community system of limited means.

Where available, dental and dental hygiene schools are an attractive alternative for providing much-needed services at a significantly reduced fee, compared to private practice care. However, in the traditional dental education setting, there are hidden expenses due to long and multiple treatment visits resulting in increased travel and parking expenses. Furthermore, the limited hours of operations at most dental schools contribute to an increase in school absenteeism and decrease in employment productivity, which place special challenges and social stressors on families who can least afford a loss in educational and working opportunities. One approach to address this problem is to bring the dental and dental hygiene students into the community to educate,

examine, and provide preventive and routine oral care to children in familiar neighborhood surroundings. This type of community-based service-learning helps to provide a practical safety net for some families, while exposing dental students to the very real challenges of poverty, lack of acculturation, and mental and physical abuse/neglect. Other hindrances include inadequate education that favors the promotion of oral health myths and biases, along with a general suspicion of health care providers because of real and perceived cultural insensitivities, personal prejudices and serious language barriers.¹¹ Despite these well documented obstacles, the educational and personal rewards to the dental and dental hygiene students and to the underserved neighborhoods make this type of service-learning valuable for building interprofessional networks, changing belief systems and fostering professional responsibility, career choices, volunteerism and empathy.^{12,13}

Community Action Should Include Oral Health Promotion

Finally, it seems that community action is prompted by health and social issues that often hinge on crisis or catastrophe. Such is the case in the State of Maryland, which lagged in its oral healthcare and Medicaid dental systems until a 12-year-old boy, Deamonte Driver, died from a disseminated brain abscess secondary to an infected tooth. His family had sought care in the Medicaid system and only found it when it was too late. Sadly, across the country, oral health is often relegated to an afterthought within healthcare, often with mental health and vision in a so-called “headless horseman” view of health. The stagnancy of Medicaid reimbursement for dental care is perhaps the best manifestation of this phenomenon. In spite of strong indications that increases bring the Medicaid-covered population to parity with the privately insured, governments resist fee increases in the absence of legal advocacy.

A partial solution is to engage oral health within a community’s health system on an ongoing basis. The oral-systemic health connection is a concept that is growing in scientific circles with recognition of the relationship of poor oral health to such medical conditions as premature birth, heart disease and diabetes. A healthy community is one which attends to oral health considerations *within its overall healthcare and public health system* and not as an afterthought prompted by crisis or public outcry. After all, if oral health is integral to a child’s overall health and general well-being, then the concept of basic access to good oral healthcare, governed by the belief in social justice, should become the standard of care for all neighborhoods.¹⁴

Conclusion

None of these factors or characteristics alone will engender improved oral health in communities. There is no magic wand to eliminate dental caries among our children, but rather, it is the steady beating of the drums, so that the message reverberates and the parade of concerned community members marches forward to advance the basic right for access to good oral healthcare. The more that we in the community are involved in attaining this beneficial goal, the greater the likelihood that children and families will enjoy improved oral health against the backdrop of a safe, tolerant and accommodating environment.

References

1. Dye BA, Tan S, Smith V, et al. Trends in oral health status: United States, 1988-1994 and 1999-2004. *Vital Health Stat 11*. 2007;(248):1-92.
2. U.S. Department of Health and Human Services. Oral Health in America: A Report of the Surgeon General. Rockville, MD: United States Department of Health and Human Services, National Institute of Dental and Craniofacial Research, NIH; 2000.
3. Fisher-Owens SA, Gansky SA, Platt LJ, et al. Influences on children's oral health: a conceptual model. *Pediatrics*. 2007;120(3):e510-e520.
4. Larson K, Russ SA, Crall JJ, Halfon N. Influence of multiple social risk factors on children's health. *Pediatrics*. 2008;121(2):337-344.
5. Connecticut Health Foundation. Impact of Increased Dental Reimbursement Rates on Husky A-insured Children: 2006-2011. February, 2013. <http://www.cthealth.org/wp-content/uploads/2013/02/impact-of-increased-dental-reimbursement-rates.pdf> (accessed December 3, 2013)
6. Buchmueller TC, Shore-Sheppard LD. Working Paper 19218: The Effect of Medicaid Payment Rates on Access to Dental Care Among Children. Cambridge, MA: National Bureau of Economic Research; July, 2013.
7. Gosnell E, Casamassimo PS. Restoration and post-surgical prevention will not solve early childhood caries. *Clinical Dentistry and Research*. 2012;36(1):35-40.
8. Valencia-Rojas N, Lawrence HP, Goodman D. Prevalence of early childhood caries in a population of children with history of maltreatment. *J Publ Health Dent*. 2008;68(2):94-101.
9. Hammersmith K, Siegal MD, Amini H, Casamassimo PS. Ohio dentists' awareness and adoption of the dental home concept. *J Am Dent Assoc*. 2013;144(6): 645-53.
10. Lee HH, Lewis CW, Saltzman B, Starks H. Visiting the emergency department for dental problems: trends in utilization, 2001 to 2008. *AMPH*. 2012;102(11):e77-e83.
11. Strauss RP, Stein MB, Edwards J, Nies KV. The impact of community-based dental education on students. *J Dent Educ*. 2010;74(suppl 10):S42-S55.
12. Hood JG. Service-learning in dental education: meeting needs and challenges. *J Dent Educ*. 2009;73(4):454-463.
13. Altman DS, Alexander JL, Woldt JL, Hunsaker DS, Mathieson KM. Perceived influence of community oral health curriculum on graduates' dental practice choice and volunteerism. *J Dent Educ*. 2013;77(1):37-42.

14. Flaitz CM, Casamassimo PS, Lunstroth R. Is social justice relative when it comes to oral health? The realities of a complex health issue. *Pastor Psychol.* 2013;62:189-198.