

Oral Health and Medicine Integration: Overcoming Historical Artifact to Relieve Suffering

"I haven't been able to kiss my wife in over a year."¹ Why? Kissing hurts her mouth too much. Why? Her teeth are fractured and painful. Why? Like many Americans, money is tight for this couple and American health care has failed them. Former US Surgeon General David Satcher, who published the landmark report *Oral Health in America* in 2000, recently observed, "Eighty percent of oral health problems affect about 20 percent of the population—the poor and minorities in this country."²

At massive weekend free clinics, dental care is the most in-demand service. Dental problems lead to underemployment, lower wages, and shame. Pain leads to both initial opioid misuse and substance use disorder relapse. A recent review concludes, "Poor oral health continues to serve as a primary physical, emotional, and psychological marker of social inequality."³(p2173)

This inequality stares at us. Look at celebrities, health care professionals, and lawmakers. Pearly white smiles are prerequisites for those with privilege. Most decision-makers will never have an untreated toothache or know the shame of being afraid to smile. Painful, cracked, broken, and missing teeth keep people down and out.⁴

Amid significant coverage gains, oral health is often ignored. Medicare, most adult Medicaid

programs, and many private plans exclude dental care. Although children and some adults on Medicaid have limited dental benefits, fewer than one third of dentists accept public insurance; coverage alone is insufficient to provide access. Dental care joins other conditions that have been historically marginalized because of stigma: cancer, tuberculosis, HIV/AIDS, mental health, and substance use disorders.

Effective dental treatment exists at a far lower cost than many medical interventions. Yet, for too many, treatment remains unattainable without disposable income. We are stymied by the historical vagaries of excluding dentistry from the medical system and the fact that dental "insurance" is largely an indemnity plan, with coverage for prevention but not treatment.⁵ This "paradox of dental need" means vulnerable patients with the highest disease burdens are also least likely to receive necessary care. This leads to illogical and harmful outcomes, such as a patient with diabetes who receives a costly and life-saving kidney transplant but cannot repair dentition so poor that he eats only the softest, least nutritious foods.

An argument for dental care can be made on the grounds of improving systemic illness. Such care has even been found to be cost saving. Yet, that argument ignores

the social, emotional, and physiological importance of oral health itself. Oral health equity should stem from not economic arguments but moral outrage with the system we have. Medical providers treat hundreds of healthy people with expensive medications for years to prevent one cardiovascular event, but we have not made it possible to help people actively suffering with dental decay and pain.

PUTTING THE MOUTH BACK IN THE BODY

We are encumbered with a sense of learned helplessness and historical artifact that keep dental care and health care apart. This separation obviously does not hold up to scrutiny. We take care of the brain and lung, mind and hormone, heart and eye in medicine. There is no rational reason we cannot take care of the mouth. Once we welcome the mouth back into the body, we can apply what works more generally for vulnerable populations who need timely, ongoing access to care (see

the box on the next page). Individual providers, health systems, and communities each play a role in prioritizing medically integrated oral health for all community members.

Central to this work is the patient's perspective: How can I get help for my teeth? A patient with pain from head trauma, appendicitis, or carcinoma can be cared for in a hospital or clinic. Patients seeking relief from dental pain in the health care system are often left with nothing but a palliative antibiotic and a directive to find a dentist. What is different when pain is in the mouth? The status quo tells us the mouth is different. Common sense tells us otherwise.

DOING THE WORK

Providers shoulder an increasing burden of unmet health needs because their geographic maldistribution is more inequitable than ever. The vast majority of dentists work in private practice in higher-income neighborhoods, where oral health need is relatively low. But changes to how dentists and medical providers practice can pave the way for a workforce more attuned to the need for oral health equity.

The number of dentists per capita is expected to increase in the coming decades, and these dentists

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ACTIONS TO INCREASE ORAL HEALTH EQUITY

Action	Providers	Health Systems	Communities
Improve coverage and payment systems for integrated oral health care	Develop collaborative practice models that improve colocation and communication between providers	Pioneer outcomes-based reimbursement that incentivizes oral health	Increase coverage for dental treatment of adults under Medicaid, Medicare, and private insurance
Enhance interactions between the medical and dental health systems	Train providers to treat populations with complex multidisciplinary health needs	Adopt interoperable electronic health records that include medical and dental information	Adopt midlevel provider models that can provide dental care in novel settings
Increase access to oral health for at-risk groups	Train primary care locations to provide basic dental treatment such as fluoride varnish, sealants, and dental anesthesia	Build referral systems that divert patients from emergency department utilization for preventable dental pain	Continue expanding access to community water fluoridation
Improve the experience of care for vulnerable patients	Provide trauma-informed dental care, including appropriate anxiolytics	Employ care navigators with knowledge of dental and medical systems to support patients	Be advocates for vulnerable community members at risk for poor oral health
Contextualize oral health within the social determinants of health	Enhance diversity and cultural humility in medical and dental education and workforce	Strengthen relationships of primary, dental, and specialist care with social services	Destigmatize poor oral health and address challenges accessing care

are less likely to select traditional practice models. They may be more likely to work in medically integrated settings such as hospitals and emergency departments, where only one percent of dentists currently work. Dental schools have adopted successful programs to recruit students from rural and underserved areas, who are more likely to practice in those communities; expanding programs like the National Health Service Corps can further strengthen dentists' ability to practice in these settings. The dentist of decades past, a solo private practice that accepts only private insurances, is on the wane.

Nor should dentists do the work alone. The creation of a dental therapist role, comparable to a nurse practitioner, would safely and significantly expand access to care; these clinicians would substantially increase meaningful dental access. Like organized medicine, the American Dental Association and state dental societies have been highly resistant to this practice innovation, and therapists currently only practice in Alaska and Minnesota. Increasingly bipartisan support has led Vermont

and Maine to pass dental therapy legislation, with several other legislatures considering it. Community support and a growing evidence base must overcome obstruction by organized dentistry.

Medical practice must meet the needs it already faces but cannot fix. Dental problems lead to two percent of emergency visits and, in some areas, more than 10% of primary care visits. Basic procedures such as dental anesthesia and differential diagnosis of dental pain must be standard components of medical and nursing curricula, with elective opportunities to acquire additional dental skills, including tooth extraction. Many health professions schools have embraced interprofessional education, with dental and other health professions students working together in preparation for further collaboration in practice. Telehealth solutions have brought specialist expertise to patients in rural areas; teledentistry to connect medical and dental providers should be increasingly adopted.

Much of this work has been and is being pioneered by dedicated practitioners and community

advocates, most often in community and federally qualified health centers.⁶ Integrated care delivery models, with enhanced communication and task sharing between medical and dental providers, are being disseminated by groups such as the Marshfield Clinic and the Safety Net Medical Home Initiative, as well as by accountable care organizations.⁷ The extension of dental services into long-term care facilities and schools has increased the reach of preventive care and treatment.

Medical and dental providers across the country have the privilege of seeing how transformative oral health is for their patients. But too many suffer for too long from an entirely preventable and treatable disease. As the dental workforce expands and evolves—including dentists, dental therapists, physicians, physician assistants, nurses, patient navigators, and more—our health system will finally have the opportunity to address the most prevalent disease in the country and put an end to the suffering it causes. **AJPH**

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Additional references can be found in the Appendix, available as a supplement to this article at <http://www.ajph.org>.

REFERENCES

- Reichert J, Zaman F. *Remote Area Medical* [film]. 2013. Available at: <http://remoteareamedicalmovie.com>. Accessed December 12, 2016.
- Scientific American. The case for oral health. 2016. Available at: https://www.scientificamerican.com/products/the-future-of-oral-health/the-case-for-oral-health/?wt.ac=SA_Custom_Colgate_RECRC. Accessed December 12, 2016.
- Mertz EA. The dental–medical divide. *Health Aff (Millwood)*. 2016;35(12):2168–2175.
- Treadwell HM, Northridge ME. Oral health is the measure of a just society. *J Health Care Poor Underserved*. 2007;18(1):12–20.
- Simon L. Overcoming historical separation between oral and general health care: interprofessional collaboration for promoting health equity. *AMA J Ethics*. 2016;18(9):941–949.
- Formicola AJ, Ro M, Marshall S, et al. Strengthening the oral health safety net: delivery models that improve access to oral health care for uninsured and underserved populations. *Am J Public Health*. 2008;98(9, suppl):S86–S88.
- Glurich I, Acharya A, Shukla SK, Nycz GR, Brilliant MH. The oral–systemic personalized medicine model at Marshfield Clinic. *Oral Dis*. 2013;19(1):1–17.