ESSAY

Why Are Family Doctors Still Not Addressing Oral Health?

John Romano, MD⁴

Hugh Silk, MD, MPH, FAAFP²

¹Greenfield Family Medicine Residency at UMass Chan Medical School – Baystate, Greenfield, Massachusetts

²University of Massachusetts Chan Medical School, Department of Family Medicine and Community Health, Worcester, Massachusetts

ABSTRACT

Oral health dramatically affects overall health and vice versa. Oral health is a key health indicator for Healthy People 2030. Yet family physicians are not addressing this important health issue at the same level they address other essential health problems. Studies show that family medicine training and clinical activities are lacking in the area of oral health. The reasons are multi-factorial including insufficient reimbursement, lack of accreditation emphasis, and poor medical-dental communication. There is hope. Robust oral health curricula for family doctors exist and efforts are being made to create primary care oral health education champions. The tide is turning on accountable care organizations adding oral health services, access, and outcomes to their systems. Like behavioral health, oral health can be fully integrated into the care family physicians offer.

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amily physicians offer full spectrum care across the lifecycle. We routinely embrace proven innovations to improve the care we offer. The Extension for Community Healthcare Outcomes (ECHO) movement delivered hepatitis C treatment into our offices; long ago we incorporated behavioral health screens, warm handoffs, and co-location. And yet with fluoride varnish, oral health screens, and dental referrals we have barely moved the needle despite several national initiatives and individuals trying to improve medical-dental integration within family medicine. What is it about this aspect of person, family, and community health that we are reluctant to embrace?

Oral health (OH) is—undoubtedly—an important aspect of overall well-being. So said former Surgeon General David Satcher after commissioning a national report in 2000 proclaiming "without oral health, you're not healthy."¹ Since then, the National Academy of Medicine, the Primary Care Collaborative, and Healthy People 2030 have all agreed.²⁻⁴ Recently, the original Surgeon General's report has been updated with even stronger language about how oral health is important across the lifespan and the need for a broader work force that addresses health inequities in community settings.⁵ This important health issue should be in the family medicine wheelhouse, given its chronicity, boundless demographic nature, and presence from cradle to grave. Children frequently develop cavities, adults often have periodontitis, and older patients tragically suffer from tooth loss and oral cancer. A 2019 systematic review found that periodontitis is correlated with heart disease, rheumatoid arthritis, and poor diabetes control.⁶ For those who practice obstetrics, periodontitis during pregnancy is associated with pre-term labor.⁷ Though the mechanism—systemic inflammation—still ignites some debate, the findings do not.

Addressing oral health should appeal to our commitment to evidence. Take the application of fluoride varnish, a level B USPSTF recommendation since 2014; it is only applied in 5% of primary care offices.⁸ Ignoring the application of this proven intervention seems out of character for our specialty.

Could it be that we still delegate OH to dentists? It turns out, if we don't address OH, no one else will. One hundred and twelve million people visit a medical professional each year but do not visit a dental professional.⁹ Worse still, an estimated 108 million Americans have no dental insurance including 62% of adults aged over 65 years (Medicare has no dental benefit).⁸ Not only is it an access issue, but it is also a health equity issue. Disease rates are worse for children with Medicaid, non-White and non-Hispanic children suffer from dental cavities more than their White counterparts.¹⁰ Our specialty is working to address social justice,

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CORRESPONDING AUTHOR

Hugh Silk HOAP c/o 199 Chandler St Worcester, MA 01609 hugh.silk@umassmemorial.org



however, when it comes to the inequity of OH outcomes, we continue to be negligent.

Another reason may be lack of training. A 2018 survey of family medicine residency program directors found only 31% of programs devote more than 4 hours to OH training, which is down 14% from 2011.¹¹ Shockingly, 1 in 5 residency programs reported 0 hours. Meanwhile, family medicine residents spend far more time in intensive care unit (ICU) settings where family doctors rarely tread in practice. The Accreditation Council of Graduate Medical Education (ACGME) still mandates an ICU experience, whereas in 2015 they removed the OH training requirement.

Reimbursement is also an obstacle. Surveys show inadequate reimbursement is a common barrier to providing OH services. States have varying reimbursement levels for fluoride varnish applications and OH assessments are often not reimbursed.¹² No preventive services have been studied robustly for adults and therefore no financial incentives exist.

Even when health care providers do attempt to incorporate OH into their practice, many struggle with referral networks and communication with dentists.³ Dental and medical providers often use different electronic health records (EHRs) which further complicates communication and referrals.

So how do we address this dilemma? Training needs to be systematic. As family medicine deliberates about future training,¹³ OH needs to be a priority. Curricula already exist, Smiles for Life (SFL) is a free OH training platform, originally authored by family physicians.¹⁴ It can be used for flipped-classroom purposes or as stand-alone online training. It takes a few hours to complete and is comprehensive enough to improve the confidence of family physicians. Results show 94% report incorporating or enhancing OH into their teaching after completing SFL. Among direct-care providers, 85% report completing the modules influenced their practice, with provision of fluoride varnish being the most widely initiated change.¹⁵

Medical homes and residency programs can also benefit by having an OH champion. Data show that family medicine residencies with champions are more likely to have residents who are well prepared to answer OH board questions and devote more hours to OH training.¹⁰ Currently, the Center for Integration of Primary Care and Oral Health is creating 50 state OH champions through its 100 Million Mouths Campaign.¹⁶ These state champions will train local faculty to connect with outside dental faculty, practitioners, and coalitions to improve resident education and clinical workflow.

In addition to training, OH needs to be incorporated into our clinical systems. Fortunately, OH prompts are available in most EHRs. For example, EPIC has created Wisdom, their dental record module. This enables family physicians to review dental records and vice versa, making management, referral, and follow-up more efficient. Additionally, clinical tools such as DynaMed (DynaMed LLC), UpToDate (UpTo-Date Inc), Epocrates (athenahealth), and Medscape (Medscape Inc) have information about diseases of the oral cavity empowering physicians to more effectively address OH issues. Workflow models have been piloted and promoted by Qualis Health (HealthInsight, Inc), and other medical-dental projects have been collated by the Primary Care Collaborative.^{3,17} Several federal reports have shown medical-dental integration is a promising strategy to reduce OH inequities, reduce costs, and improve care coordination and patient satisfaction.^{2,3,18}

Family physicians are integration and quality experts. Quality improvement incentives could be key to accelerating the uptake of OH services in primary care offices. Recently, Pacific Dental Services announced a partnership with Commonwealth Primary Care Accountable Care Organization (ACO) in Arizona. Their goal is to increase medical-dental integration for cost savings. They cite research showing treatment of periodontitis can reduce inpatient admissions by 40% in certain populations.¹⁹ Under this partnership, patients who are diagnosed with prediabetes/diabetes will receive OH care and periodontal treatment as part of their overall management. A review of integrated medical-dental ACOs shows these partnerships improve patient outcomes, decrease spending, and reduce emergency department (ED) visits.²⁰

Reimbursement likely needs better promotion. In Massachusetts, for example, applying fluoride varnish to children with Medicaid captures \$26. If an office applies varnish to 15 children a week this would result in an additional \$20,000 of revenue annually for the office. Some states pay more, some less.

Ultimately, real change will require addressing OH at all levels, including medical school curriculum, residency training, and continuing medical education (CME) for practicing family physicians. Our incorporation of behavioral health into the medical home shows us this change is feasible. System-wide changes will be necessary to provide adequate insurance coverage and office workflow models. Oral health topics need to be offered as virtual CME and at conferences. Once we make these changes and acknowledge the importance of the oral cavity on overall health, our patients will benefit tremendously.

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Key words: oral health; mouth diseases; oral diagnosis; family medicine

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REFERENCES

- US Department of Health and Human Services. Oral Health in America: A Report of the Surgeon General. US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000.
- Atchison KA, Rozier RG, Weintraub JA. Integration of Oral Health and Primary Care: Communication, Coordination, and Referral. NAM Perspectives. Discussion Paper. National Academy of Medicine; 2018.



- The Primary Care Collaborative. Innovations in oral health and primary care integration: alignment with the shared principles of primary care. Published Jan 2021. Accessed Jun 15, 2022. https://www.pcpcc.org/resource/innovationsoral-health-and-primary-care-integration-alignment-shared-principles
- 4. US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Leading indicators. Healthy People 2030. Accessed Jun 15, 2022. <u>https://health.gov/healthypeople/objectives-and-data/leading-health-indicators</u>
- National Institutes of Health. Oral Health in America: Advances and Challenges. US Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research; 2021.
- Seitz MW, Listl S, Bartols A, et al. Current knowledge on correlations between highly prevalent dental conditions and chronic diseases: an umbrella review. Prev Chronic Dis. 2019;16(16):E132. 10.5888/pcd16.180641
- Manrique-Corredor EJ, Orozco-Beltran D, Lopez-Pineda A, Quesada JA, Gil-Guillen VF, Carratala-Munuera C. Maternal periodontitis and preterm birth: systematic review and meta-analysis. *Community Dent Oral Epidemiol.* 2019; 47(3):243-251. 10.1111/cdoe.12450
- 8. Geissler KH, Dick AW, Goff SL, Whaley C, Kranz AM. Dental fluoride varnish application during medical visits among children who are privately insured. *JAMA Netw Open.* 2021;4(8):e2122953. 10.1001/jamanetworkopen.2021.22953
- Manski RJ, Rohde F. Research Findings no. 38. Dental Services: Use, Expenses, Source of Payment, Coverage and Procedure Type, 1996–2015. Agency for Healthcare Research and Quality; 2017.
- Centers for Disease Control and Prevention. Oral Health Surveillance Report: Trends in Dental Caries and Sealants, Tooth Retention, and Edentulism, United States, 1999–2004 to 2011–2016. US Dept of Health and Human Services; 2019.
- Silk H, Savageau JA, Sullivan K, Sawosik G, Wang M. An update of oral health curricula in US family medicine residency programs. *Fam Med.* 2018; 50(6):437-443. <u>10.22454/FamMed.2018.372427</u>

- Kranz AM, Opper IM, Stein BD, et al. Medicaid payment and fluoride varnish application during pediatric medical visits. *Med Care Res Rev.* 2022; 79(6):834-843. 10.1177/10775587221074766
- Mitchell D. New residency proposal aims for significant changes. AAFP News. Published Dec 2021. Accessed Jun 15, 2022. <u>https://www.aafp.org/</u> news/education-professional-development/2021122Tresidencyreqs.html
- 14. Sievers K, Clark MB, Douglass AB, et al. Smiles for Life: A National Oral Health Curriculum. 4th Edition. Society of Teachers of Family Medicine; 2020. <u>www.</u> <u>smilesforlifeoralhealth.com</u>
- Clark M, Quinonez R, Bowser J, Silk H. Curriculum influence on interdisciplinary oral health education and practice. J Public Health Dent. 2017;77(3): 272-282. 10.1111/jphd.12215
- Center for Integration of Primary Care and Oral Health. 100 million mouths campaign. Accessed Jun 15, 2022. <u>https://cipcoh.hsdm.harvard.edu/</u> one-hundred-million-mouths-project
- Safety Net Medical Home Initiative, Hummel J, Phillips KE, Holt B, Virden M. Organized evidenced-based care: oral health integration, implementation guide supplement. Published 2016. Accessed Jun 15, 2022. <u>https://www.safety</u> netmedicalhome.org/sites/default/files/Guide-Oral-Health-Integration.pdf
- Barzel R, Holt K, eds. Integrating Oral Health Care into Primary Care: A Resource Guide. National Maternal and Child Oral Health Resource Center; 2020.
- Jeffcoat MK, Jeffcoat RL, Gladowski PA, Bramson JB, Blum JJ. Impact of periodontal therapy on general health: evidence from insurance data for five systemic conditions. *Am J Prev Med.* 2014;47(2):166-174. <u>10.1016/j.amepre.</u> <u>2014.04.001</u>
- 20. American Dental Association, Health policy Institute. Dental care in accountable care organizations: insights from 5 case studies. Published 2015. Accessed Jun 15, 2022. https://www.mouthhealthy.org/~/media/ADA/Education%20and %20Careers/Files/HPIBrief_0615_1.pdf?la=en

