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### **POLICY FORUM: PEER-REVIEWED ARTICLE**

#### **Health Equity Needs Teeth**

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##### **Abstract**

People who are poor or members of communities of color face inequitable oral disease burden. Continued separation of dental and oral health from general medical care exacerbates inequity and forces members of underserved communities to seek nontraumatic dental emergency care in hospital emergency departments. This trend is unnecessarily costly and results in antibiotic prescriptions and pain management that are neither restorative nor responsive to patients' primary complaints. Value-based approaches to health care need to unify mouth care with general medical care, motivate medical-dental interprofessional practice, promote oral disease prevention, and support restorative dental care. Value-based approaches to health care must also innovate fiscal structures (eg, payment models, data sharing) to improve health outcomes for everyone.

##### **Weekend Mouth Pain**

Imagine it's Saturday evening at 6 pm, and you find yourself in pain—a pain not from a hurt foot or shoulder, but a throbbing, radiating pain in your mouth that feels as if your head and ears are on fire. You cannot sleep or eat. Previously, the pain was dull and only bothered you when you ate something sweet or cold. But now, at 6 pm on a Saturday, you find yourself in extreme pain and unable to function. While you are employed, your minimum wage job does not provide dental insurance and you live in a state that does not provide comprehensive, adult dental benefits through Medicaid. Consider also that when you saw your physician 3 months ago for your check-up to renew your blood pressure prescription, you mentioned the tooth bothering you. It is likely that your physician did not examine your mouth or refer you to a dentist for care. You thought the tooth could wait! To make things worse, because of your lack of dental coverage and your inability to pay for the out-of-pocket expense of dental care in a private practice office, you do not have a dental home to call for an emergency appointment. The last time you saw a dentist was at a charity dental event in the local college's gymnasium several years ago. In the United States, where should you go and what should you do?

### **Fragmented, Biased Oral Health Care**

Perpetuating the separation of medicine and dentistry affects how costs of services are paid, how clinicians are trained, and where their practices are located.<sup>1,2,3,4</sup> Yet the mouth has essential roles in overall health.<sup>4,5</sup> Our quality of living—the ability to eat and speak—depends upon the health of our teeth, gums, and mouth.<sup>5</sup> Research shows that health system fragmentation contributes to poor health outcomes, engenders patient and clinician dissatisfaction, results in biased treatment planning, perpetuates racism and inequity, and supports an ineffective reimbursement system.<sup>2,6,7,8,9,10,11</sup>

Members of poor and marginalized groups bear an inequitable oral disease burden.<sup>10,12</sup> Across age groups and dental conditions, non-Hispanic Black, Hispanic, and American Indian and Alaska Native individuals have worse clinical outcomes and self-reported perceptions of their oral health, as well as lower adoption of evidence-based preventative services, than non-Hispanic White individuals.<sup>13,14,15,16,17,18</sup> Similarly, individuals living below 200% of the federal poverty level have more untreated dental caries and fewer permanent teeth than those living above that threshold.<sup>13,19</sup> The underlying causes of inequity are rooted in **structural racism**.<sup>20</sup> Antiracist practices and a focus on social and political determinants of health have been proposed as ways to support health equity.<sup>21,22,23</sup> However, changes in practice and focus alone only scratch the surface of deep-seated inequity; lasting change could come from reimagining health care delivery streams, integrating medical and dental services, and implementing a reimbursement system that emphasizes value and patient-centered outcomes. Moreover, changes in payment structures might incentivize interprofessional practice and equity across the health sector.

### **Financially Unbalanced**

Having medical but not dental insurance is a reality for many Americans.<sup>3</sup> While the Affordable Care Act has lowered the percentage of the US population that lacks health insurance, especially among people with low income and people of color,<sup>24</sup> many insurance gaps—especially for adults—have not closed. In 2015, 1 in 3 US adults had no form of dental benefits coverage.<sup>25</sup> In 2017, 9.5% of US adults were unable to access dental care due to cost as compared to 7.4% of US adults who were unable to access medical care due to cost.<sup>26</sup> Improved access to dental coverage results in better health care utilization. For adults with lower incomes living in states that expanded Medicaid to include adult dental benefits, the number of people who reported having a dental visit in the past year increased 7.2 percentage points.<sup>27</sup>

Although the Affordable Care Act increased access to dental care for some adults through Medicaid expansion, hospital emergency departments (EDs) are still the only access point for dental care for many adults. In 2012, there were more than 2 million ED dental visits that incurred \$1.6 billion in expenses, with an average cost of \$749 per visit.<sup>28</sup> National average costs for fillings on permanent teeth and extractions to erupted teeth are less than one-fifth the cost of the average ED dental visit.<sup>28,29</sup> In an ED, common treatments for nontraumatic dental problems are nonsteroidal anti-inflammatory drugs, opioids, or antibiotics.<sup>30</sup> None of these treatments addresses an underlying dental problem, and each incurs unnecessary costs.<sup>31</sup>

### **Interprofessional Practice**

Integrated medical-dental care has proved successful, most notably for diabetes and hypertension prevention and management, tobacco cessation, prenatal care, and care of people living with HIV.<sup>32,33,34,35,36,37</sup> Interprofessional practice supports whole-person

care, allowing medical, dental, and other health-focused practitioners (eg, nutritionists and therapists) to optimize care planning collaboratively. When oral health was part of well-child-visits, non-Hispanic Black, Hispanic, and American Indian and Alaska Native children received earlier dental interventions and better preventive services.<sup>38,39</sup> Integrating oral health care with periodontal disease treatment and prevention also supports health of patients with diabetes.<sup>11,40,41</sup>

To facilitate interprofessional practice, health service delivery must express **equity and value** and be financed to support workforce diversity. With a focus on prevention rather than disease management, value-based payment models can support medical-dental integration by streamlining operations and supporting clinicians practicing at the top of their licenses (ie, the highest level of skill that a clinician is licensed to practice).<sup>42,43,44</sup> Medical-dental integration requires regulation and reimbursement structures that establish shared language, forge agreement on measurable outcomes, and incentivize technology use (eg, electronic health record information exchange and interoperability) that reinforces value and seamless interprofessional operations, especially referrals. Technology should also enable data collection that would facilitate assessment of services' impact and return on investment and support population health management.<sup>35</sup>

### **Value-Based Care Is Integrated**

**Value-based care** is a comprehensive term that refers to care that seeks to improve health outcomes efficiently via transformations in care delivery, data and analytics, and financing. Value-based oral health care seeks to prevent dental diseases and improve oral health outcomes with a focus on the quality of care as opposed to the quantity of restorative procedures.<sup>45,46</sup> Equitable health care can only occur in an integrated system of value-based care that supports transformations in prevention, treatment, **payment models**, and data and analytics to deliver patient-centered care and improve population outcomes.<sup>47,48</sup> Public and private insurance programs can be restructured to bundle payments, incentivize prevention and health promotion, and create flexible payment options for health services delivered outside of the clinic via telehealth and home-based care. Payment transformation that occurs through alternative models that incentivize prevention and optimal health lends itself to improved health systems outcomes, especially if the health system works to focus not on disease interventions but on the upstream, localized, and systemic causes of disease.<sup>49</sup>

A key example of value-based oral health care is the Medicaid services provided by the largest dental accountable care organization (ACO) in Oregon. Delivering services to approximately 284 000 members of the state's Medicaid program, this ACO offers a unique approach to oral health care by incentivizing prevention over surgery, community-based care, and population health management.<sup>50</sup> This value-based approach resulted in improved outcomes compared to national Medicaid samples: in 2015, 20% of children enrolled were assessed for caries risk compared to 0.1% of children in a national Medicaid sample; 85% of services provided to children were preventive or diagnostic compared to 77% of services in a national Medicaid sample; the need for restorative and surgical services for children enrolled dropped from 21% in 2011 to 15% in 2016 while the national Medicaid sample experienced no reduction over the same period; 17% less on average was spent to treat children and 21% less on average to treat adults than spent by Medicaid to treat children and adults in a national sample.<sup>50</sup>

Additional examples of value-based care include integration of oral health care with practices such as pediatric primary care and dental homes for pregnant women.<sup>50,51</sup> Continued evaluation and appropriate change management will be necessary to overcome foundational bias and discrimination, both interpersonal and institutional.<sup>52,53</sup> Moreover, health policy based on social justice can reduce inequity, address social determinants of health, and prevent some emergencies.<sup>54</sup>

While these changes to create a more equitable model of health care delivery may occur within the systems of payers, work is also needed to ensure that this new, integrated system functions as a social justice practice.<sup>54</sup> Addressing racial inequities and discrimination within health care has been described as a “wicked” problem because this problem is complex, has multiple stakeholders, and is tough to solve.<sup>20,44</sup> We contend that separating oral health care from medicine is another contributor to that wicked problem.<sup>34</sup> The current dental care system is not designed to address social disparities, rarely considers determinants of health, and does not address the inequities it causes.<sup>19,20,21</sup> Therefore, an integrated system of medicine and oral health care must bring attention to disparities and build policy, practice, and research solutions to support equity.

Improving population health must be grounded in a shared value of social justice.<sup>54</sup> There must be parity in the payment models for private and public insurance. Additionally, value-based reimbursement programs can address the social risk factors of a community by incentivizing providers and plans to improve health outcomes of those with social risk factors and thereby contribute to creating a more equitable and efficient system of health.<sup>55</sup> With fair and adequate reimbursement, the integrated health team of medical, dental, and other clinicians can democratize the patient experience and focus on improved health outcomes for all patients. Ultimately, interprofessional, value-based care encourages the wellness and health of communities in addition to the treatment and care of the individual by focusing on population-based outcomes.

### **Motivating Equity**

Although advertisers suggest that white teeth and a perfect smile are the standards of a healthy mouth, oral health actually entails a functional dentition; the ability to open one’s mouth, chew, and speak; gums that do not bleed; and a mouth free from both pain and disease. Far too often, patients face excruciating pain with no dental coverage, cannot afford to pay out of pocket, and have no clue where to access treatment. For non-Hispanic Black, Hispanic, and American Indian and Alaska Native people, this is not simply an access issue: it is a matter of social injustice. Clinicians, payers, communities, policymakers, employers, and other decision makers must collectively decide to promote justice. We recommend adoption of value-based models that incorporate interprofessional practice and reimbursement mechanisms that are integrated with value-based care. Stakeholders must unite and advance research to transform health care. After all, who knows when it will be 6 pm on Saturday and you will be the one in pain.... Where will your help come from?

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