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Firmly establishing oral health care professionals' roles as vaccinators within the health care system

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The release of *Oral Health in America: Advances and Challenges*¹ offers an opportunity to reflect on the many advances the dental profession has made over the past 20 years. A key area of advancement has been the recognition that oral health care providers have an important role in promoting the overall health of their patients. One example of this is oral health care providers screening for chronic conditions such as diabetes and hypertension in their offices.² Another example is oral health care professionals promoting human papillomavirus (HPV) vaccination among their eligible patients.^{3,4}

BACKGROUND

The COVID-19 pandemic has had a profound effect on all facets of our society, including how we perceive and value oral health care professionals. In retrospect, the pandemic may have served as an unforeseen catalyst for advancing oral health care professionals' roles in the vaccination process even further. Rather than merely being urged to promote vaccinations, oral health care professionals have been called on to aid in public health efforts by administering the COVID-19 vaccine during this pandemic.⁵ As part of the COVID-19 emergency declaration, the US Department of Health and Human Services broadly authorized dentists as vaccinators through the Public Readiness and Emergency Preparedness Act (PREP Act).⁵ Before this PREP Act authorization, several states independently had authorized dentists to administer the COVID-19 vaccine, and at least 20 states had authorized dental hygienists to administer vaccines.^{6,7} These authorizations have provided an opportunity for oral health care professionals to become further integrated into the overall health care system by increasing their direct role in general health promotion.

Although the Department of Health and Human Services extended its declaration of the COVID-19 emergency for an additional 3 months on July 15, 2022,⁸ we know that the emergency declaration will expire at some point. What will this mean for our profession's role in vaccine administration when these temporary authorizations permanently expire? Will oral health care professionals be able to continue administering the COVID-19 vaccine and potentially other important vaccines to the public? To facilitate and ensure the dental profession's role in vaccine administration within the health care system going forward, we recommend action in the following areas.

Current Dental Terminology codes

Important momentum has been made with the introduction of Current Dental Terminology (CDT) codes for vaccine administration.⁹ In addition to CDT codes for the COVID-19 vaccine, codes for administering the HPV vaccine also have been approved,¹⁰ potentially allowing dentists to have a more active role in HPV-associated oral cancer prevention.¹¹ However, this momentum must

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continue with the inclusion of CDT codes for administration of the seasonal influenza vaccine (an annual vaccine that is critical to public health). Having CDT codes for administering multiple vaccines should increase the likelihood of adopting their delivery in dental practices, and, taken together, these 3 vaccines (COVID-19, HPV, influenza) can add economic scale that can facilitate the likelihood of oral health care providers becoming vaccinators. For example, as vaccine administration becomes more frequent, the direct and indirect costs will decline, providing an economic incentive to offer vaccinations.

State dental practice acts

Oral health care providers are authorized to administer the COVID-19 vaccine under the PREP Act and under many individual state emergency plans.⁵⁻⁷ However, when the emergency declarations expire, not having explicit language in state dental practice acts that authorizes vaccine administration could act as a deterrent for dentists to continue providing this valuable health-promoting service. In addition to updating dental practice acts to codify COVID-19 vaccine administration as being within the scope of dental practice, now is also a time for states to allow providers to administer other important vaccines. In 2019, Oregon authorized dentists to broadly administer any vaccine, and dentists in both Minnesota and Illinois have been authorized to administer the influenza vaccine.⁶ It is becoming increasingly clear that severe acute respiratory syndrome coronavirus 2 (the virus causing COVID-19) will be with us for the foreseeable future, and we will need to learn to live with it. A long-term public health strategy to control the virus likely will include the regular provision of booster shots. This approach is similar to that which is used to control influenza. Updating state practice acts to allow oral health care providers to administer critical vaccines, such as those for COVID-19, seasonal influenza, and HPV, will be critical to protecting public health, facilitating person-centered health care, and supporting the overall health care system. Finally, as states consider modifying their practice acts, we encourage all states to include dental hygienists as oral health care professionals who are authorized to administer vaccines. At least 20 states have authorized dental hygienists to administer the COVID-19 vaccine during the pandemic.⁷ Given the considerable time dental hygienists are able to spend with patients during preventive visits, including them as part of the dental vaccine workforce will allow for greater flexibility in incorporating vaccine delivery into a variety of dental practice settings. Furthermore, authorizing more of the dental workforce to administer vaccinations will also help ensure there is equity in vaccine delivery across all communities, including those that are underserved.

Centralized information warehouse

States have different provider registration processes, provider training requirements, and provider reporting requirements that must be followed to administer vaccines.¹² The amount of information an oral health care provider must know to initiate vaccine administration, including information related to ordering and storing vaccines, can be daunting and may discourage provider participation. Although the American Dental Association (ADA) has developed the valuable COVID-19 Vaccine Administration Training and Educational Resources guide,¹³ the availability of detailed, state-specific information is limited. We recommend a centralized information warehouse be developed that builds on this ADA resource to include other state-specific resources that can aid oral health care professionals who wish to become vaccinators. This information warehouse should be updated frequently to provide information pertinent to other vaccines beyond the COVID-19 vaccine, as allowed by state practice acts in the future. Finally, this resource should be properly maintained and broadly disseminated to the dental community, so that providers can locate and easily access all information they will need to know to become vaccinators. The ADA, as well as other professional dental organizations, are valuable stakeholders for the dissemination of this information as proposed.

Reimbursement and liability coverage

Providing in-office vaccine administration will require initial start-up costs, adjustments to practice flow, and provider and staff member time. With the addition of CDT codes for vaccine administration, dental and medical insurance companies will need to reimburse oral health care practitioners who provide this service, as this will help encourage and maximize provider participation. Reimbursement is critical because a previous study has identified lack of reimbursement as a barrier

for dentists in implementing other health promotion services in their offices.¹⁴ If it is not economically feasible for oral health care professionals to provide vaccinations, it is unlikely that many of them will offer this service. Previous research also indicates that dental insurers may be hesitant to reimburse for health promotion services in dental offices.¹⁵ Therefore, strong advocacy for reimbursement will likely be necessary, and we recommend that the dental community partner with other health care professions to convey to insurers the public health importance of having dental vaccinators within the health care system. In addition, as vaccine administration becomes an established health care service offered by oral health care providers, dental malpractice carriers will need to update their policies to ensure that those providers who administer vaccinations are covered for any potential liability. Liability concerns have been reported in the literature as a potential barrier for oral health care professionals in providing vaccinations.¹⁶

Dental school training and continuing education

Many dental students have received training and provided COVID-19 vaccinations to the public during the pandemic.¹⁷ As dental schools continue to incorporate more interprofessional education experiences into their curricula, we encourage them to build off of experiences during the pandemic to more fully implement vaccine administration education and training. In addition to the technical aspects of vaccine administration, students also should receive didactic education related to state-specific administrative processes that are required to become a vaccinator. The Centers for Disease Control and Prevention offers a variety of immunization courses and instructional materials covering broad aspects of the vaccine administration process that can be integrated seamlessly into existing dental school curricula.¹⁸ We believe that dental and dental hygiene students will be more willing to incorporate vaccine administration as part of their routine dental practice after graduation if they are provided with robust experiences during their dental education.

To provide practicing dentists and dental hygienists with comprehensive training in the vaccine delivery process, continuing education (CE) courses will need to be developed. We suggest that CE trainings be well rounded and cover both the technical aspects and state-specific administrative processes of vaccine administration. If dental schools formalize vaccine training into their curricula, they can serve as a valuable resource for their state and local dental societies as they begin to develop CE content for oral health care providers wishing to become vaccinators.

Provider willingness and patient acceptance

Both oral health care providers' willingness to provide vaccinations and patients' acceptance of receiving vaccines from an oral health care professional likely will have a considerable impact on the degree to which vaccine administration becomes widely implemented in dental practices. A survey conducted with Indiana dentists during the early portion of the pandemic found that 58% of dentists would consider administering vaccines if their state law allowed it.⁶ A survey of Michigan oral health care professionals found that 51% of dentists and 63% of dental hygienists would administer the HPV vaccine if allowed by their state practice act.¹⁶ Vaccine storage and supply challenges, reimbursement issues, liability concerns, and insufficient knowledge and training were identified as barriers to vaccine administration among these oral health care professionals.^{6,16} Addressing these barriers is the basis for the recommendations we are making.

Another barrier to widespread implementation of vaccinations in dental offices that must be considered is the normative perceptions that both providers and patients hold about the role oral health care professionals should play in overall health promotion. Prior research on attitudes and opinions of oral health care providers offering health care services has found that both patients' and providers' acceptance of oral health care professionals in expanded roles varies.¹⁹⁻²² Therefore, even if all states amend their practice acts to permanently authorize oral health care professionals to administer vaccines, some providers and patients may feel that this health service is beyond the scope that oral health care professionals should provide. Although more established providers may possess some of these sentiments initially, we profess that if vaccine education and training become an established part of dental school education, newer graduates will be more likely to embrace the idea of oral health care professionals functioning as vaccinators. If the availability of comprehensive CE training in vaccine administration increases and vaccine administration becomes more ubiquitous in practices, we believe that established oral health care providers also will become more comfortable in accepting vaccine administration as a health care service they can offer. Finally, if

oral health care providers become more visible as established vaccinators within the health care system, patient acceptance of their role should continue to grow. For example, as pharmacists' involvement in vaccine administration has increased over time, the public is now generally accepting of their role as vaccinators.^{23,24}

CONCLUSION

We believe that now is the opportune time for the dental profession to capitalize on the momentum and experience providers are gaining in administering vaccinations during the pandemic, so that oral health care professionals can continue offering this valuable public health service in our increasingly collaborative health care environment. We recognize that it may take time for vaccine administration to become a ubiquitous part of dental practice, which is why we believe there is no time like the present to address the concerns and barriers we have discussed. As we continue to move toward more integrated health care practice models, oral health care professionals have an opportunity to play an increasingly important role in promoting the overall health of the public, ensuring that oral health care is essential health care. ■

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