

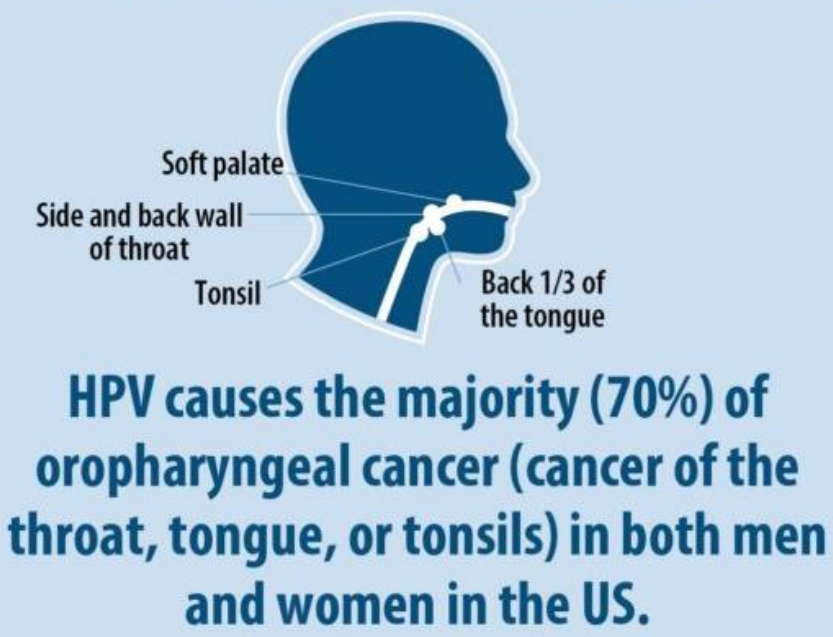
## PURPOSE

Assess dental provider knowledge, skills and attitudes regarding discussion of the Human Papilloma Virus (HPV) and the HPV vaccine with adolescent patients and their guardians during routine dental visits.

Determine the usability and feasibility of a virtual simulation based Human Papilloma Virus (HPV) and HPV Vaccine learning experience for dental providers.

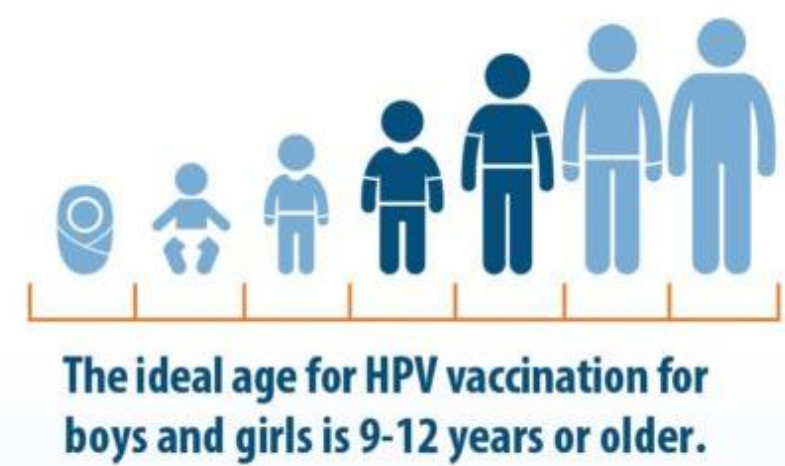
## BACKGROUND

### HPV causes cancer.



- HPV = most common sexually transmitted infection in the US
- About half of new HPV infections occur in people ages 15-24 years old
- 2014 – 2018: Oropharyngeal cancer was most common HPV associated cancer
- HPV vaccines have been shown to be over 95% effective at preventing infection of HPV types covered by the vaccine
- Both the AAPD and ADA encourage dental providers to discuss HPV and the HPV vaccine with adolescent patients and their guardians

### When to get protected:



Boys and girls who receive the HPV vaccine prior to age 15 only need two doses. If starting after age 15, the HPV vaccination is given in three doses.

## METHODS



16 Pediatric Dentistry Residents



Pre-survey to assess baseline knowledge, skills, and attitudes



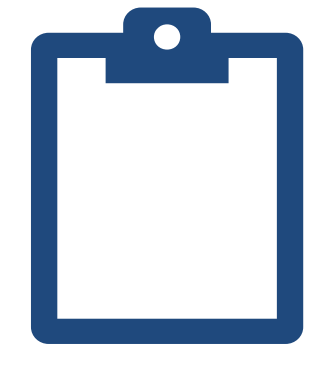
1st telehealth standardized patient encounter with teen patient and parent



Self-paced HPV virtual learning module



2nd telehealth standardized patient encounter with teen patient and parent



Post-survey to assess changes in knowledge, skills, and attitudes with qualitative comments from learners



Pre and post survey results compared using paired wilcoxon signed rank test

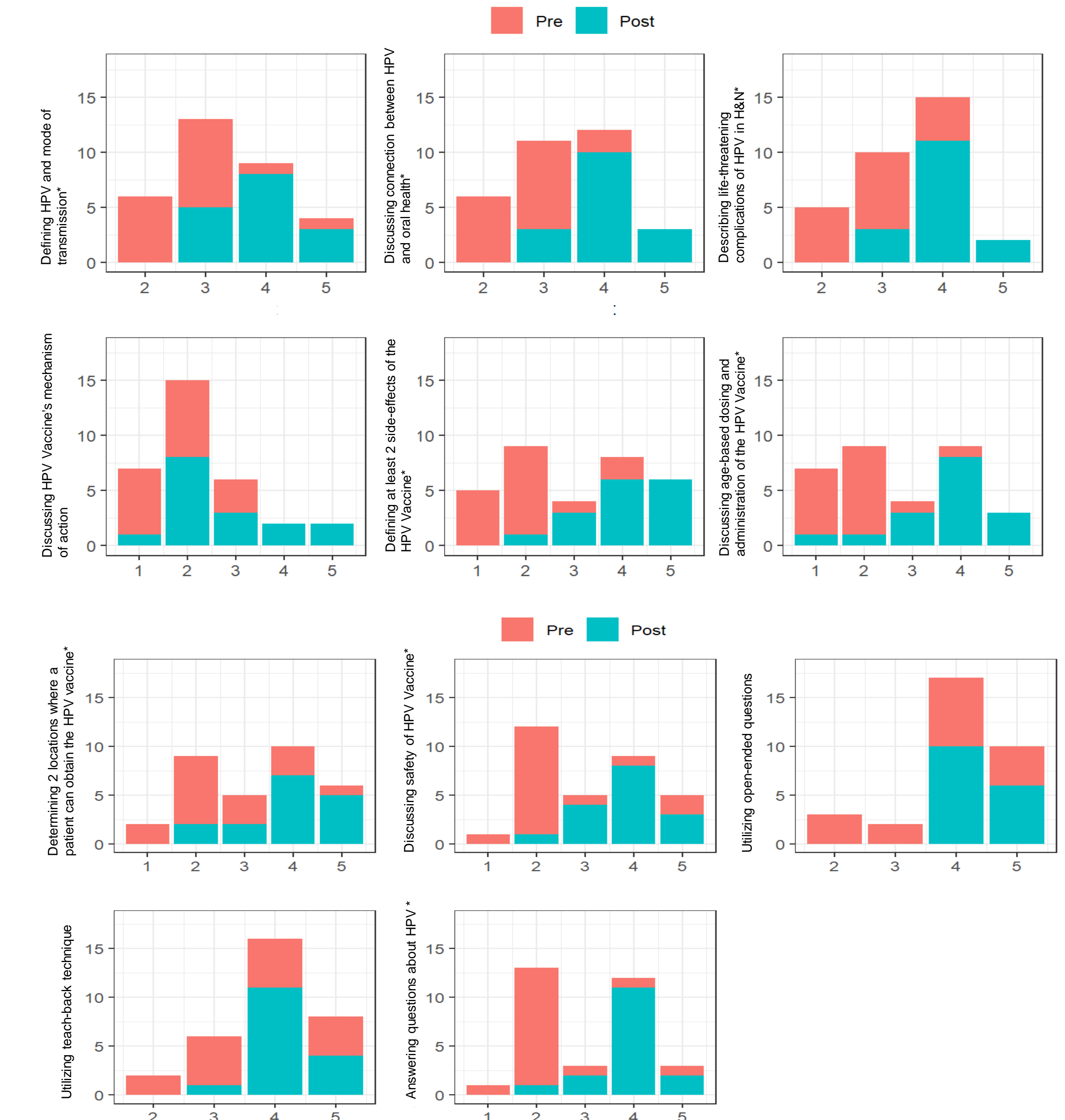
Dental providers lack the knowledge, skills and attitudes to confidently discuss HPV and the HPV vaccine with adolescent patients and their guardians.

Virtual learning experiences are an accessible and effective way to significantly improve dental providers knowledge, skills, and attitudes related to discussions about HPV and the HPV vaccine with adolescent patients and their guardians.

"I feel now that it is more important for a dentist to discuss HPV vaccination with parents and families. They may not hear it from anyone else and as a pediatric dentist, we see young children and can talk about it prior to the age of 15." -Study Participant

"Bringing up awkward topics is hard and doesn't feel like the dentists' role. But when you consider and discuss the possible consequences of HPV in the oropharyngeal region it becomes more important" -Study Participant

## RESULTS



**Figure 1.** Results of pre and post survey results. Pre-survey responses in red and post-survey responses in green per number of residents. 1 not at all confident, 2 low confidence, 3 somewhat confident, 4 confident, 5 very confident. We see a significant difference in responses between pre and post survey results for all questions except question on discussing the HPV vaccine's mechanism of action ( $p\text{-value} = 0.088 > 0.05$ ), utilizing open ended questions (adjusted  $p\text{-value} = 0.7304 > 0.05$ ), and utilizing the teach back technique (adjusted  $p\text{-value} = 1$ ). All other responses had significant difference between pre and post at significance level  $\alpha = 0.05$  noted with an \*.

### Acknowledgements:

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