

Women in Dentistry and Their Impact on Access to Care in the United States

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Introduction

- **The participation of women in higher-paying health professions has increased**
 - Currently, about 38% of physicians¹ and 36.7% of dentists² in the US are female
- **Female participation will likely grow as the percentage of female graduates from medical (51.9%)³ and dental (51.6%)⁴ education programs increases**
- While the reasons for gender diversification can be attributed to social and economic factors, **the long-term impact of professional diversification is not well understood**

References:

1. Professionally active physicians by gender. Kaiser Family Foundation website. <https://www.kff.org/other/state-indicator/physicians-by-gender>
2. Supply of dentists in the US: 2001-2017. American Dental Association Health Policy Institute. April 2023.
3. Association of American Medical Colleges. FACTS Table B-2.2: Total Graduates by U.S. MD-Granting Medical School and Gender, 2018-2019 through 2022-2023. July 2023.
4. ADA Health Policy Institute, Commission on Dental Accreditation. *2021-22 Survey of Dental Education: Report 1: Academic Programs, Enrollment, and Graduates*. May 2022.

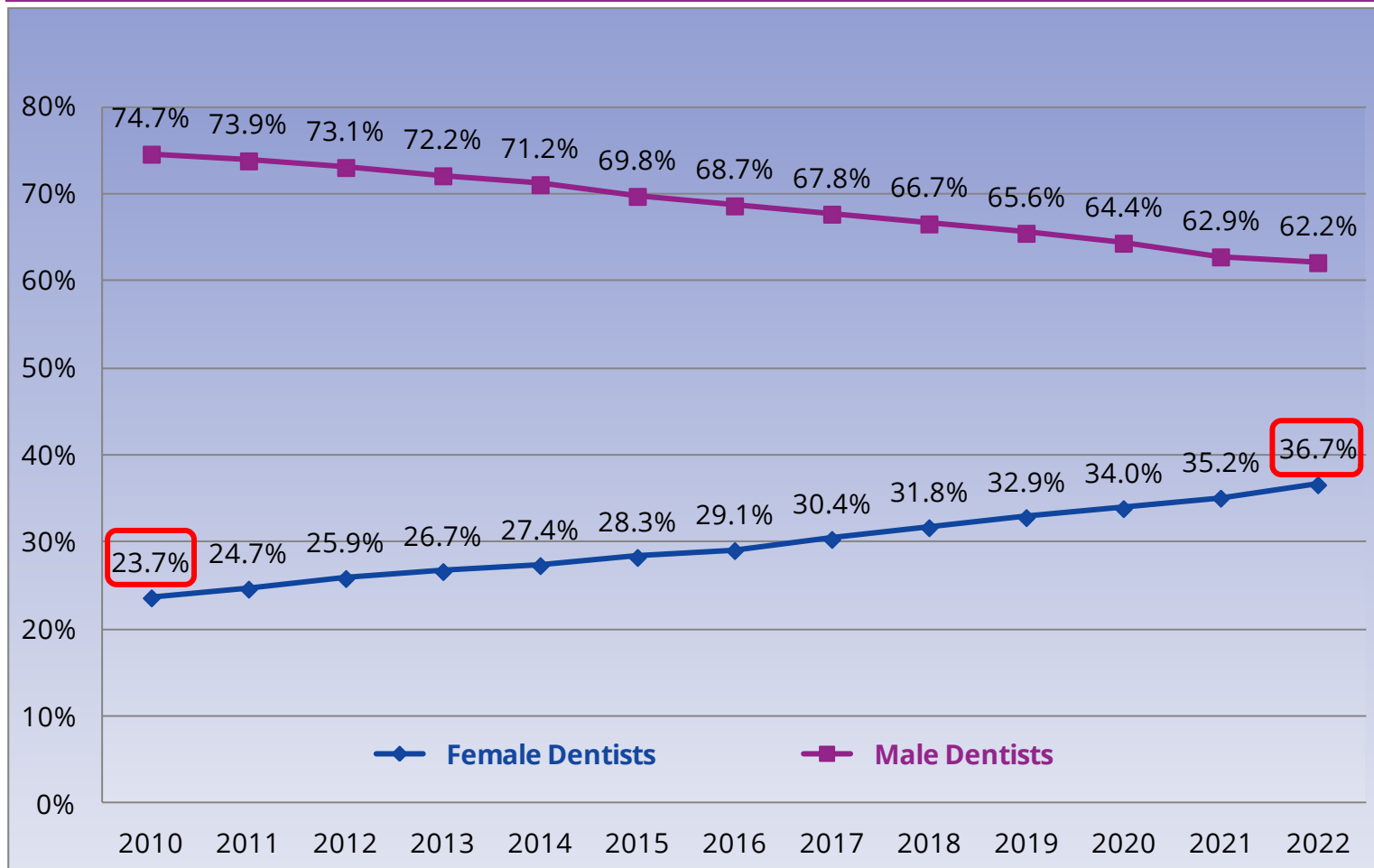
Oral Health Workforce Research Center (OHWRC) Studies On Women in Dentistry

- [A National Study of the Practice Characteristics of Women in Dentistry and Potential Impacts on Access to Care for Underserved Communities](#) (Report)
 - Surdu S, Mertz E, Langelier M, Moore J. [Dental Workforce Trends: A National Study of Gender Diversity and Practice Patterns](#). *Med Care Res Rev; Health Workforce Supplement*. Published online August 28, 2020. doi: 10.1177/1077558720952667.
- [Evaluating the Impact of Dentists' Personal Characteristics on Workforce Participation](#) (Report)
 - Gundavarapu SS, Surdu S, Lagelier M. [Exploring the Impact of Household, Personal, and Employment Characteristics on Dentistry's Income Gap Between Men and Women](#). *JADA*. Published online January 5, 2023. doi: 10.1016/j.adj.2022.11.007.

OHWRC Studies On Women in Dentistry

- **Study Aims:**
 - To evaluate characteristics of dental education and practice patterns of dentists
 - To identify differences by gender and discuss potential implications for the dental services delivery system
 - To provide an update on the income gap between male and female dentists
- **Data Sources:**
 - **American Dental Association (ADA) Masterfile:** comprehensive database of all US dentists
 - **ADA Survey of Dental Practice:** national representative survey of US dentists in private practice
 - **American Community Survey:** national representative survey of US population

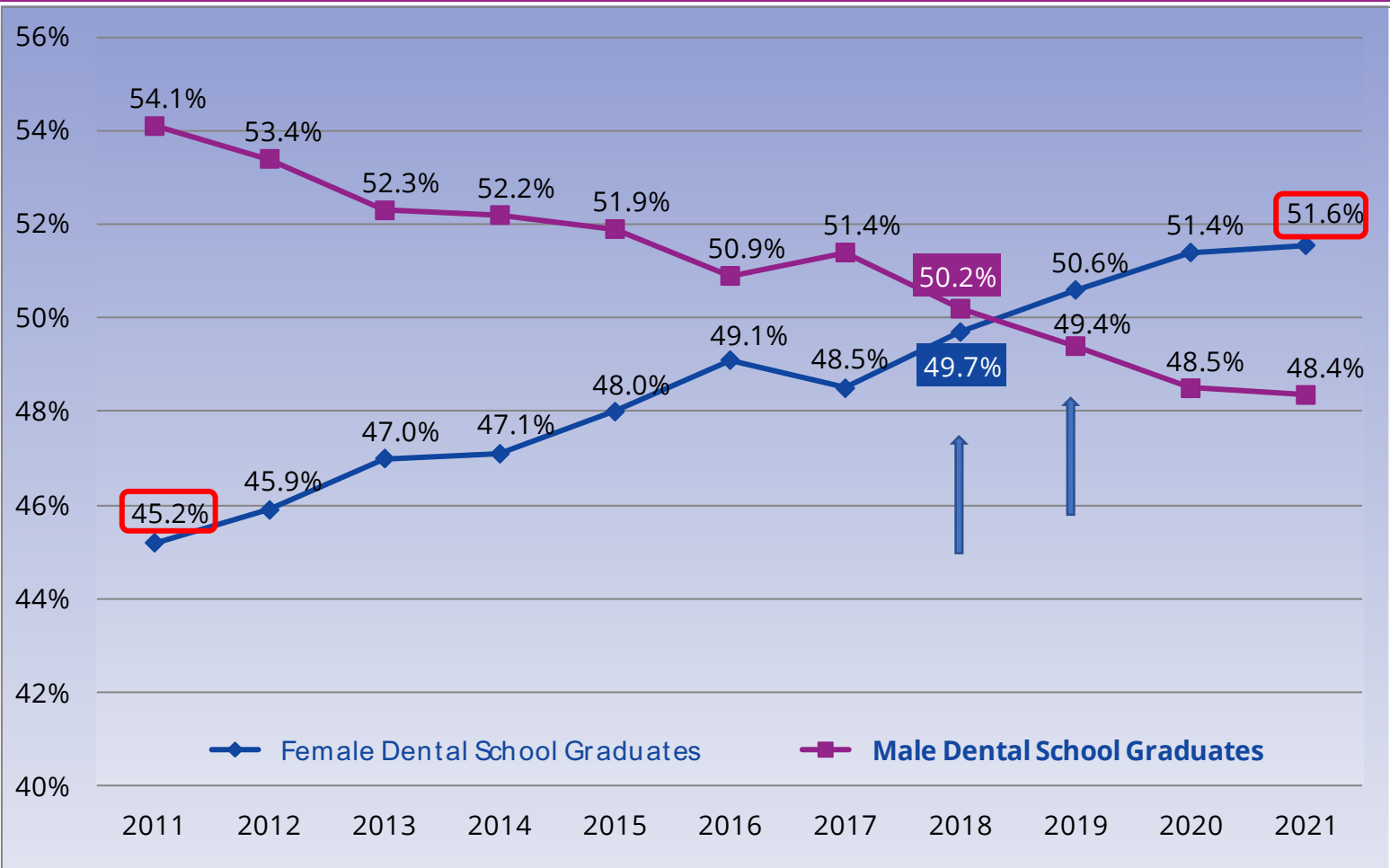
Changes in Gender Diversity in Dental Workforce, 2010-2022



The proportion of female dentists increased from 24% (n=43,421) in 2010 to 37% (n=74,331) in 2022

Source: ADA Health Policy Institute, Masterfile, 2010-2022. Total n=202,536 (2022); gender unknown: <2.0%.

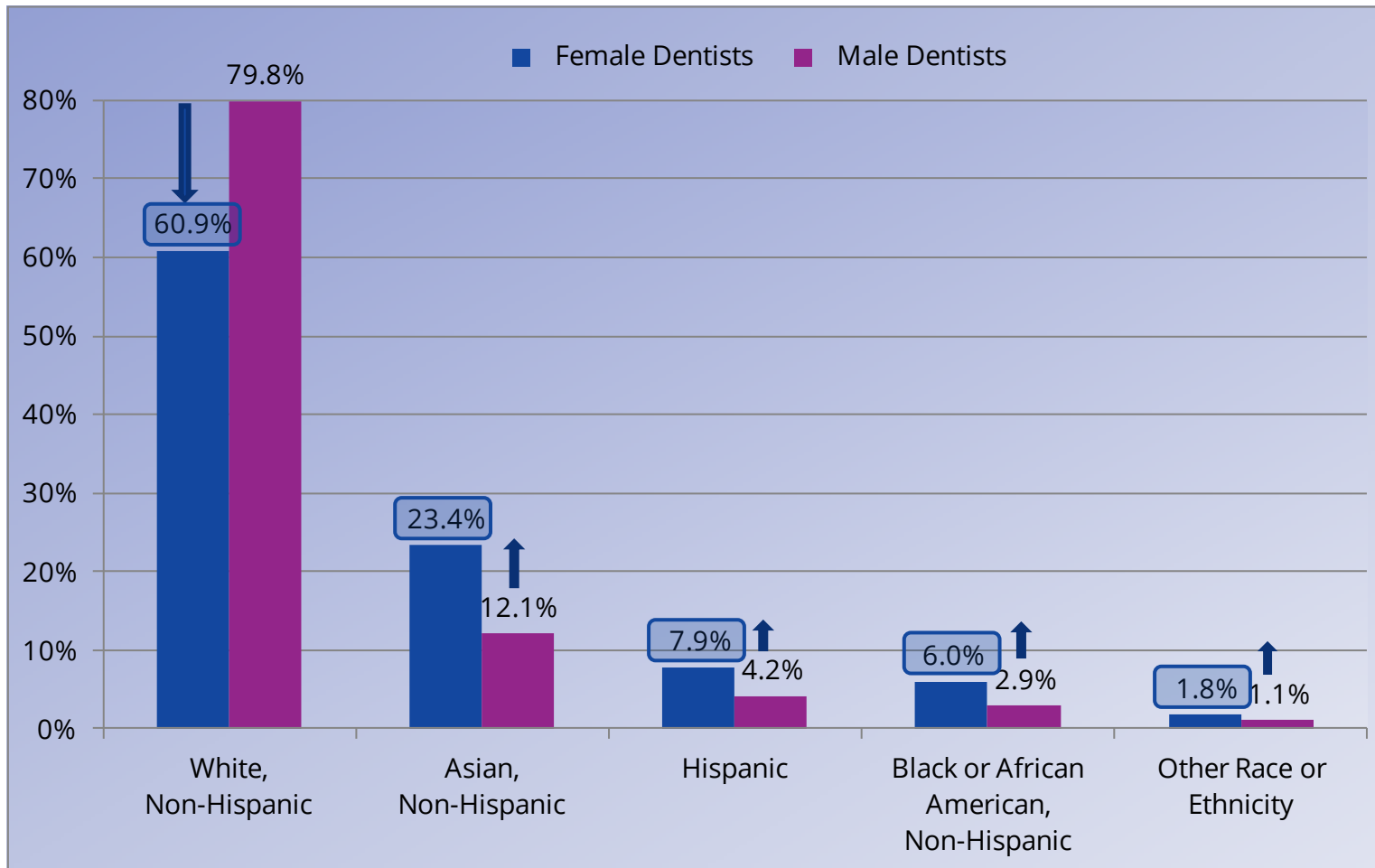
Changes in Gender Diversity in Dental School Graduates, 2010-2022



The proportion of female dental school graduates increased from 45% (n=2,308) in 2011 to 52% (n=3,436) in 2021, reaching gender parity in 2018 and surpassing male graduates in 2019

Source: ADA, Health Policy Institute, Surveys of Dental Education, 2011-2021. Total n=6,665 (2021); gender unknown: <1%.

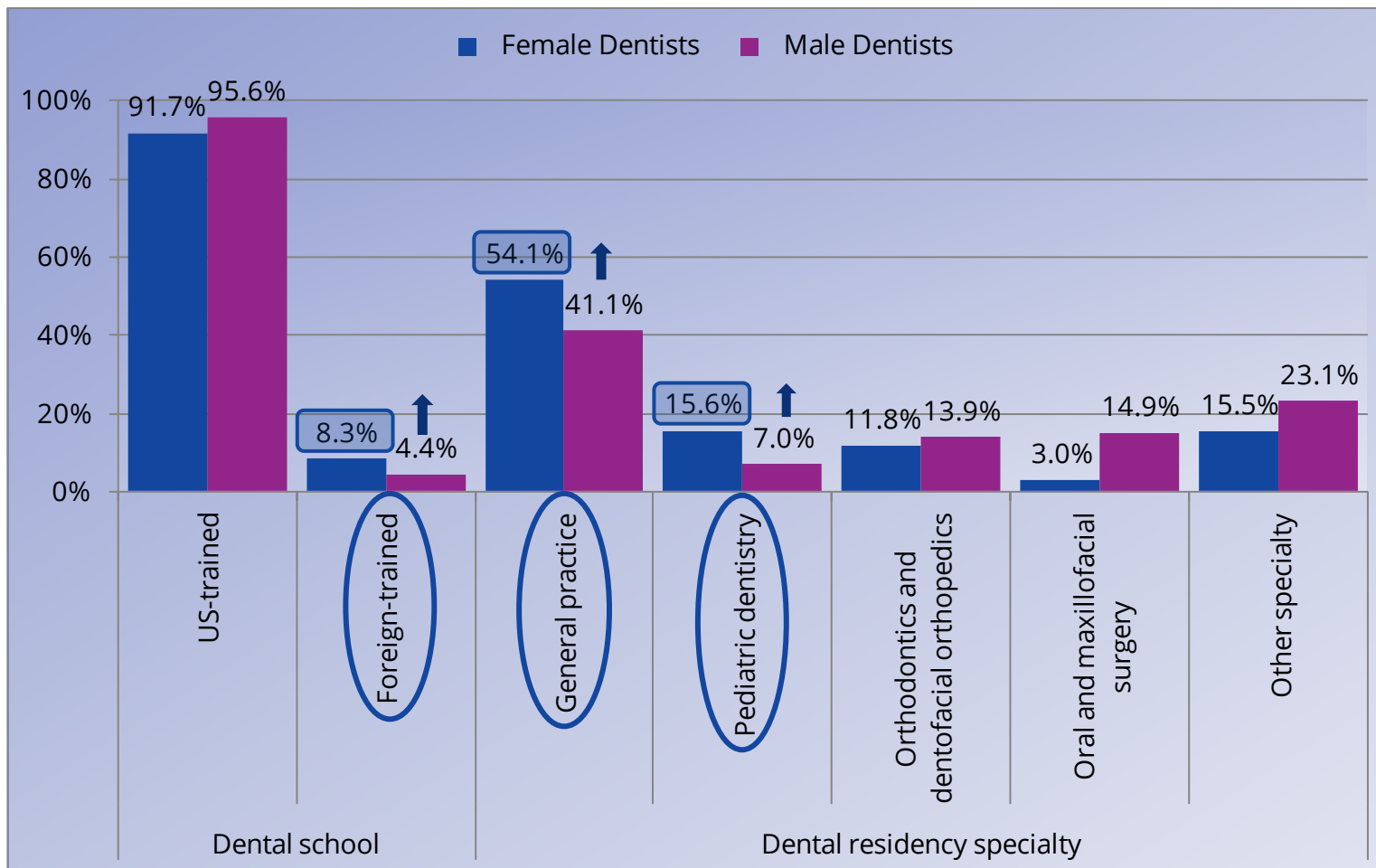
Race/Ethnicity Diversity of Dentists by Gender, 2016



A higher proportion of female than male dentists were Asian, Hispanic, Black/African American, or of another race or ethnicity

Source: ADA Health Policy Institute, Masterfile, 2016. Total n=196,468; gender unknown: <1%.

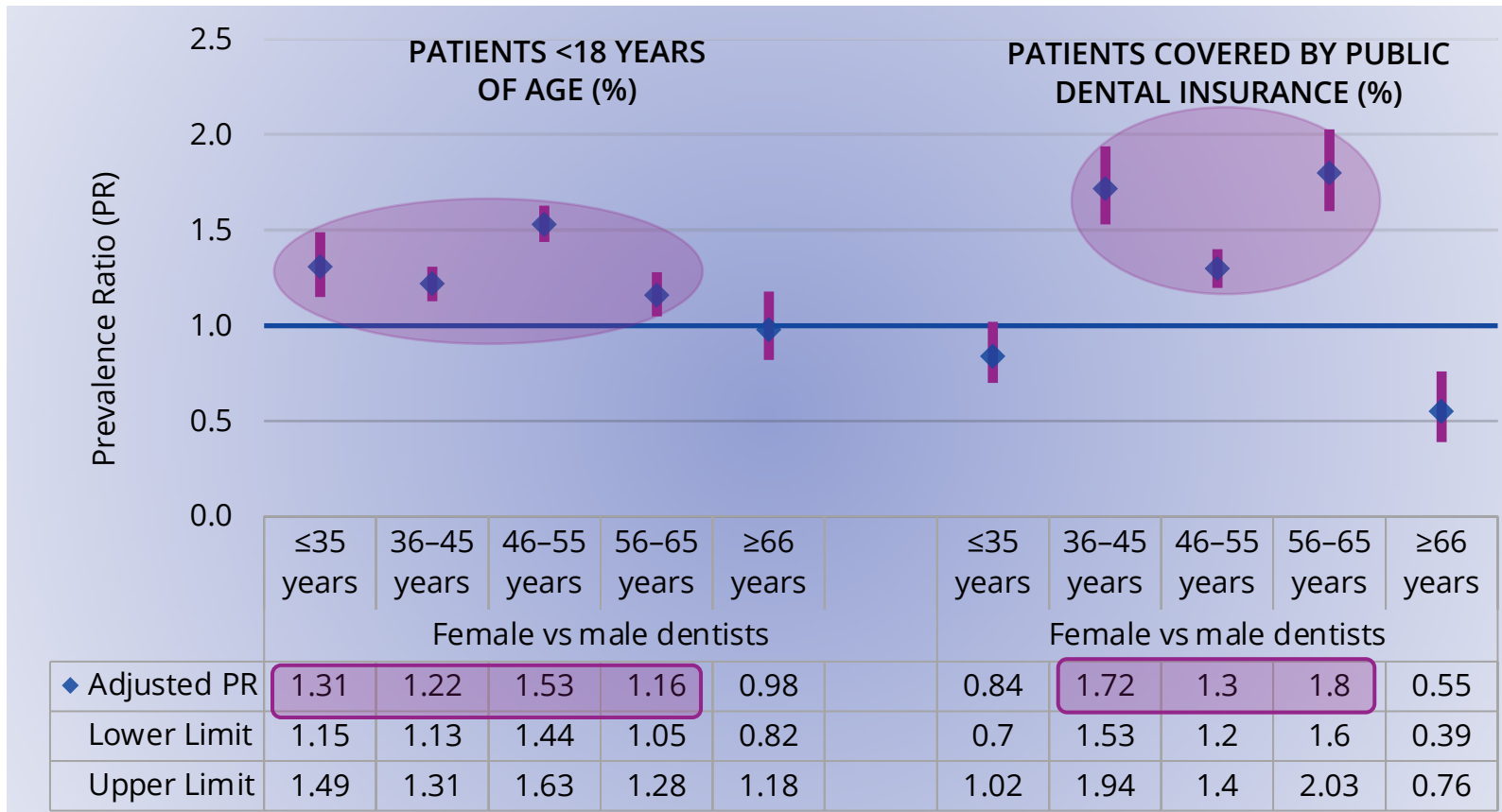
Dental Education and Training Characteristics by Gender, 2016



Proportionally more female dentists were foreign-trained and completed a dental residency in general practice dentistry or pediatric dentistry than male dentists

Source: ADA Health Policy Institute, Masterfile, 2016. Total n=196,468; gender unknown: <1%.

Provision of Dental Care by Dentists' Gender and Age, 2016

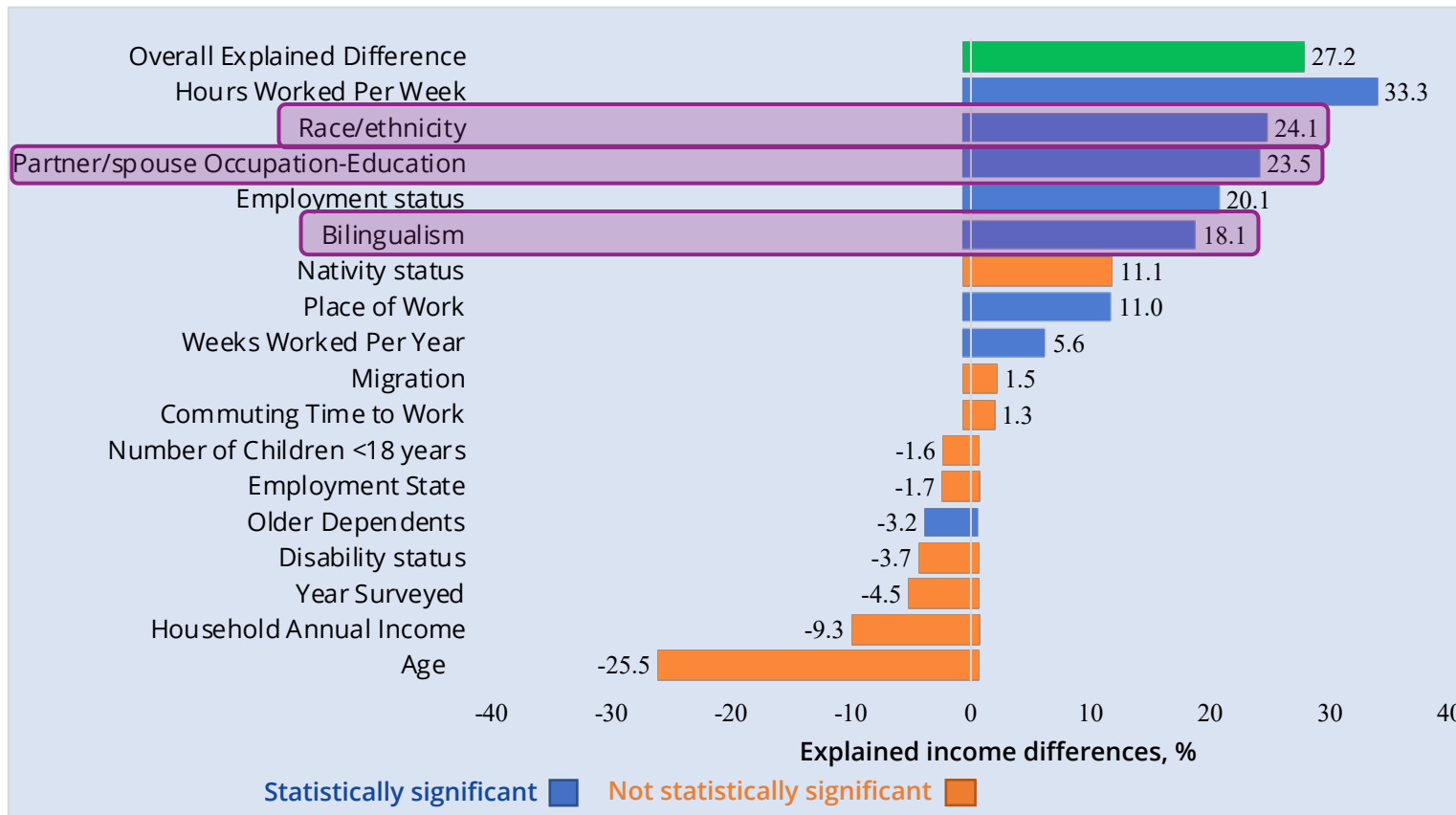


Female dentists were significantly more likely to provide dental services to children and patients covered by public dental insurance than male dentists

The multilevel Poisson regression model estimated the effect of gender by age, adjusting for dentists' race/ethnicity, location of training, residency, and specialty (individual level) and rurality of state in which the primary practice was located (state level). The effect of gender by age was statistically significant at $P < .0001$.

Source: ADA Health Policy Institute, Survey of Dental Practice, 2017 (containing dentists' responses pertaining to 2016).

Income Gap Between Male and Female Dentists Explained by Their Characteristics, 2014-2018



Male dentists earned **22% more** than female dentists, adjusting for personal/work characteristics

Only about **27%** of the gender income gap was explained by differences in personal/work factors

White non-Hispanic race/ethnicity, having a partner/spouse, and not being bilingual were **personal factors associated with higher income for male dentists**

Source: American Community Survey data, 2014-2018.

Note: The percent of the gender income gap explained by dentists' characteristics was estimated using the Oaxaca-Blinder regression decomposition. The first bar shows the overall explained difference while the following bars show the percent of the explained gender income gap that each covariate accounts for.

Conclusions and Implications

- Our research found that the **growing participation of women in the dental workforce** was accompanied by an **increase in racial/ethnic, cultural, and language diversity**
- Study findings indicated that **female dentists** were more likely to **serve pediatric and publicly-insured patients** than male dentists
 - Increasing female dentists may expand the capacity of the delivery system to better meet the needs of the population, particularly the underserved
- **A diverse oral health workforce** will be needed to provide culturally competent care to an increasingly diverse patient population
- **Diversification** of the dental workforce is promising, but it is important that **existing income disparities** are addressed

Acknowledgements and Disclaimer


- **Oral Health Workforce Research Center (OHWRC)** is based at the **Center for Health Workforce Studies (CHWS)**, School of Public Health, UAlbany, State University of New York (SUNY), and is the only research center **uniquely focused on the oral health workforce**
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- **Co-authors:** Jean Moore, DrPH, FAAN and Margaret Langelier, MSHSA
- *The content and conclusions of this presentation are those of OHWRC and do not necessarily represent positions or policies of SUNY, HRSA, or ADA*

Thank You

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