

BACKGROUND

Ensuring access to oral health care services in North Carolina (NC) requires an adequately trained and distributed workforce. In NC, lack of access to oral health care has widened disparities for adults over age 65 and those residing in rural areas have higher oral health disparities. Work remains in NC to effectively increase access to oral health care and address the maldistribution of the oral health workforce.

OBJECTIVES

1. Provide updated data on the oral health workforce in NC from 2000 to 2022
2. Estimate differences in the oral health workforce in NC in practice location, practice setting, and education patterns

METHODS

Dentist and dental hygienist licensure data were collected by the NC State Board of Dental Examiners during initial licensure and subsequent licensure renewal processes. Data include active, in-state dentists and dental hygienists as of October 31, 2022. Licensure data are cleaned and housed in the North Carolina Health Professions Data System (HPDS). NC population data were obtained from the NC Office of State Budget and Management. County estimates are based on primary practice location. Metropolitan and nonmetropolitan county status were defined using US Office of Management and Budget Core Based Statistical Areas. Data analyses for this study used descriptive, bivariate, and general linear modeling statistical methods to estimate differences in demographics, practice location, practice setting, and education patterns among the oral health workforce in NC.



Trends in North Carolina's Oral Health Workforce

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Figure 1. North Carolina added 586 dentists between 2017 and 2021.
Where did they go?

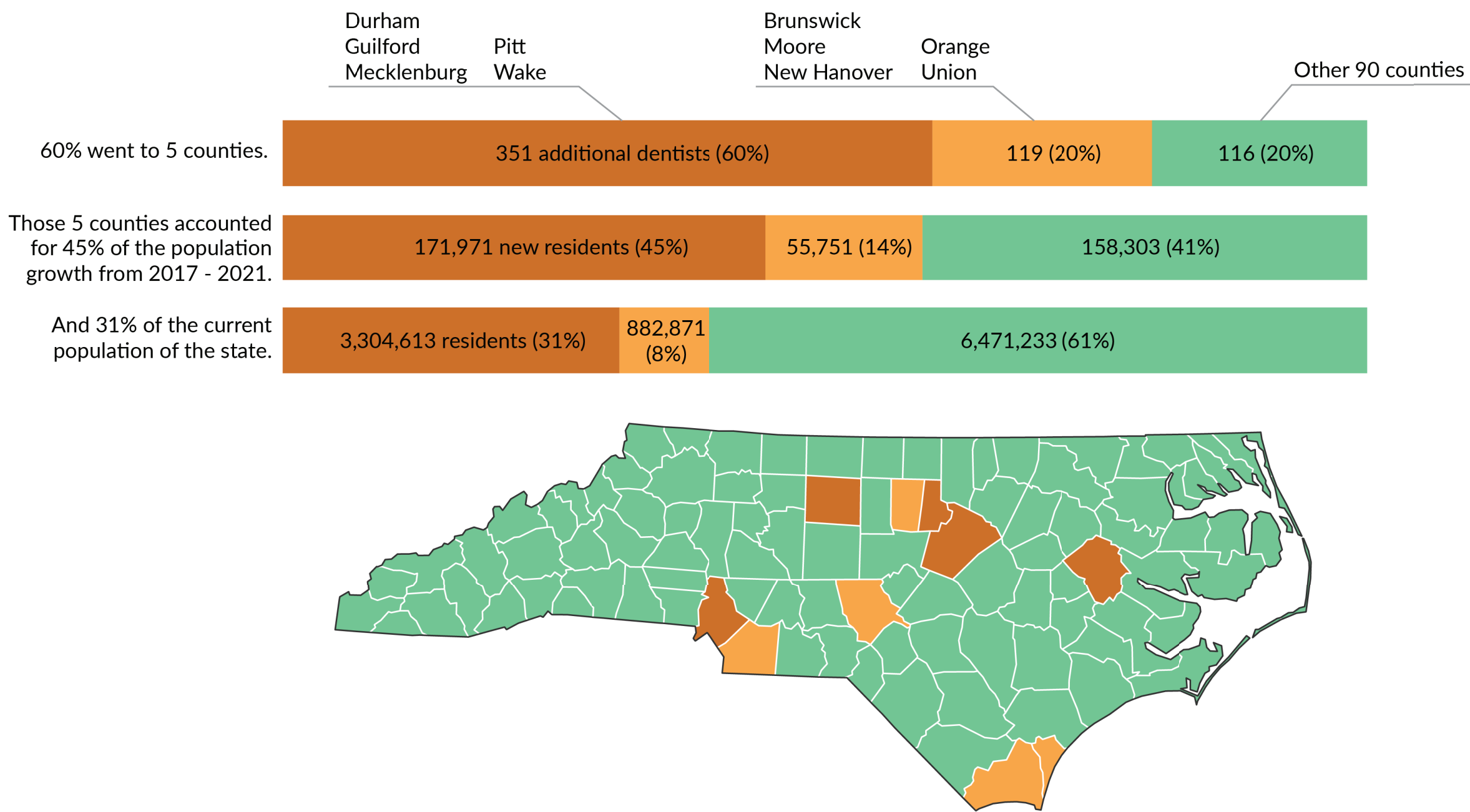


Figure 2. Racial/Ethnic Diversity of NC Dentists and Dental Hygienists Compared to NC Population, 2012 and 2022

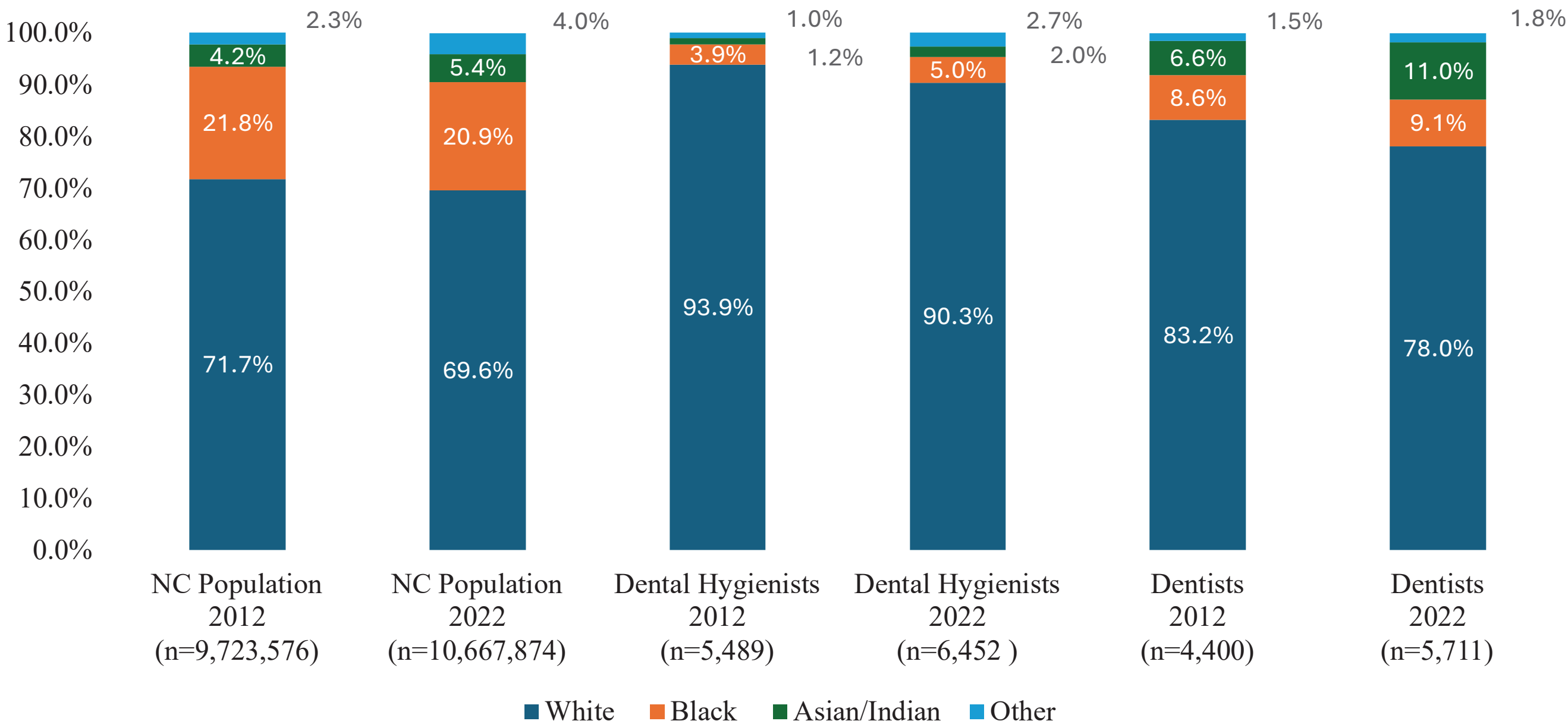
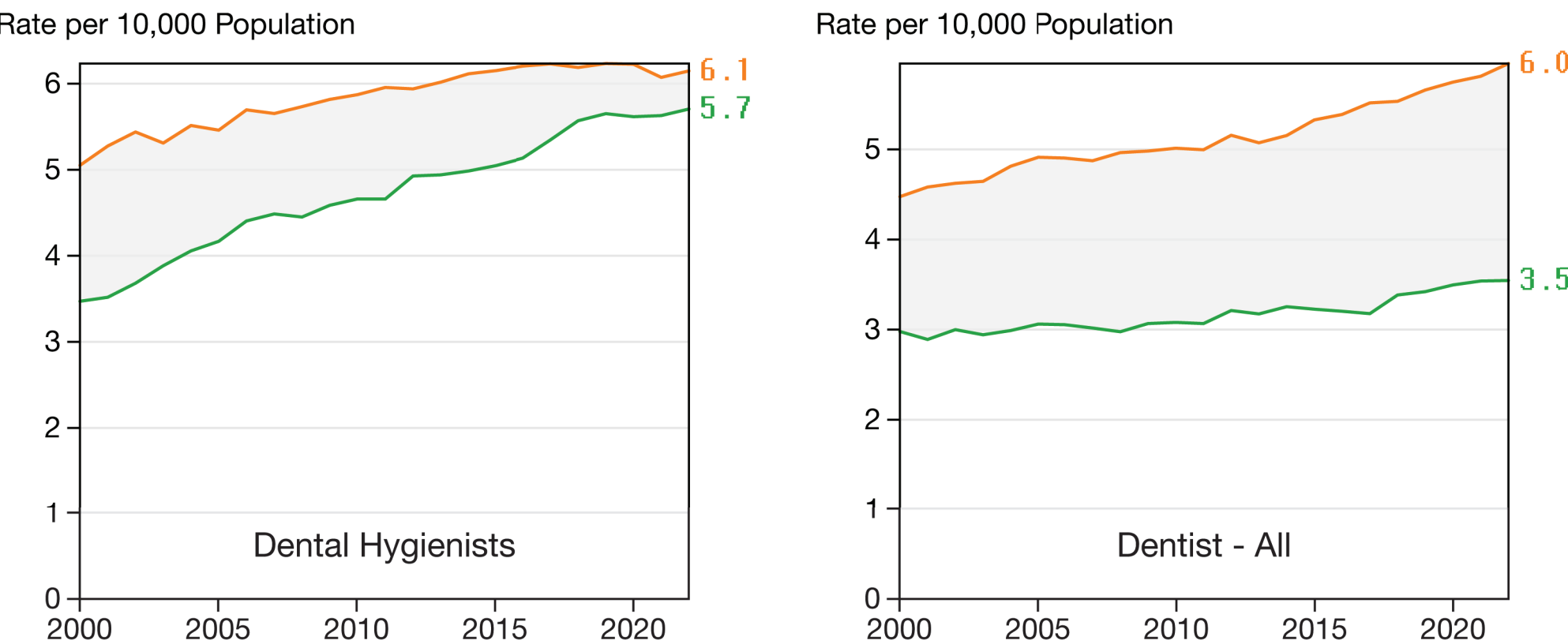


Figure 3. Health Professional Supply, Metro vs. Rural (Non-Metro), North Carolina, 2000-2022



RESULTS

The total number of dentists and dental hygienists in the state increased by 82.5% and 76.5%, respectively, between 2000 and 2022. However, the maldistribution of dentists across the state is increasing—the analysis from this study found from 2000 to 2022 the gap in the ratio of dentists per 10,000 population grew to 3.5 in nonmetropolitan counties compared to 6.0 in metropolitan counties. Between 2017 and 2021, North Carolina added 586 dentists to the workforce. However, 39% of the state's population received the majority of dentists (80%), while 61% of the population living in 90 counties in North Carolina only saw 20% of this growth in new dentists. In relation to race/ethnicity, NC's oral health workforce are discordant to the demographics of the state's population. While Black individuals represented 20.9% of the overall population in 2022, the number of Black dentists only increased from 8.6% to 9.1% from 2012 to 2022. In 2022, only 10% of dentists and only 22% of dental hygienists identified as a racial/ethnic minority.

POLICY IMPLICATIONS

NC is projected to be the 7th most populated state by the early 2030's. As such, there is need to increase access to oral health care, especially in the most underresourced communities. NC-based dental schools could expand rural-focused training programs, diversifying the oral health workforce, balancing payment mechanisms (especially with respect to dental insurance under the Medicaid program), and linking existing data with Medicaid data and patient outcomes.

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