

Impact of COVID-19 on the Provision of Oral Health Services by Federally Qualified Health Centers

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BACKGROUND

- The COVID-19 pandemic significantly affected the oral health care delivery system in the US, particularly its workforce
- Temporary postponement of health services beginning in March 2020 had lasting impacts on all medical and dental providers, but especially on those in the safety-net
- Safety-net organizations were established to meet the health care needs of vulnerable populations such as racial/ethnic minorities, low-income, uninsured, and those enrolled in Medicaid or residing in rural areas
- Federally Qualified Health Centers (FQHCs) are the most prominent provider organizations within the US health care safety-net
 - More than 30 million patients received services in FQHCs in 2021
- This study evaluated challenges experienced by FQHCs that provided oral health services to their patients during the first year of the COVID-19 pandemic compared to the pre-pandemic period



METHODS

Data Sources:

FQHC-Level Data

- Health Resources and Services Administration (HRSA)'s Uniform Data System, 2019-2020 (included more than 1,340 FQHCs with over 12,000 delivery sites)

State-Level Data

- Medicaid coverage of dental benefits for adults, 2019-2020
- Medicaid reimbursement of dental services for adults, 2020
- Information on the scope of practice for dental hygienists, 2016
- Demographic and socioeconomic characteristics of state population

Data Analysis:

- Proportions of FQHCs delivering oral health services in 2019 and 2020 were calculated as the percentage of FQHCs with any full-time equivalent (FTE) dentists and/or dental hygienists providing oral health services to at least 1 patient
- Variations in FQHCs providing dental care, patient utilization of oral health services, quantity and types of services, and staffing levels were estimated by computing the % change between 2019 and 2020
- Logistic regression models with robust standard errors were used to estimate associations between FQHCs providing direct dental services and state-level characteristics
- All data analyses were conducted nationwide and by region using Stata 15SE



RESULTS

- Nationwide, the number of FQHCs decreased from 1,352 in 2019 to 1,342 in 2020
 - Number of patients who accessed care at FQHCs decreased from 26.8 million in 2019 to 25.9 million in 2020
- The proportion of FQHCs providing dental care was similar pre-pandemic in 2019 (87.6%) as during the first year of the pandemic in 2020 (87.8%)
- There were small differences in the in the proportion of FQHCs providing dental care between 2019 and 2020 across regions, ranging from -1.3% change in the West to 1.6% change in the South

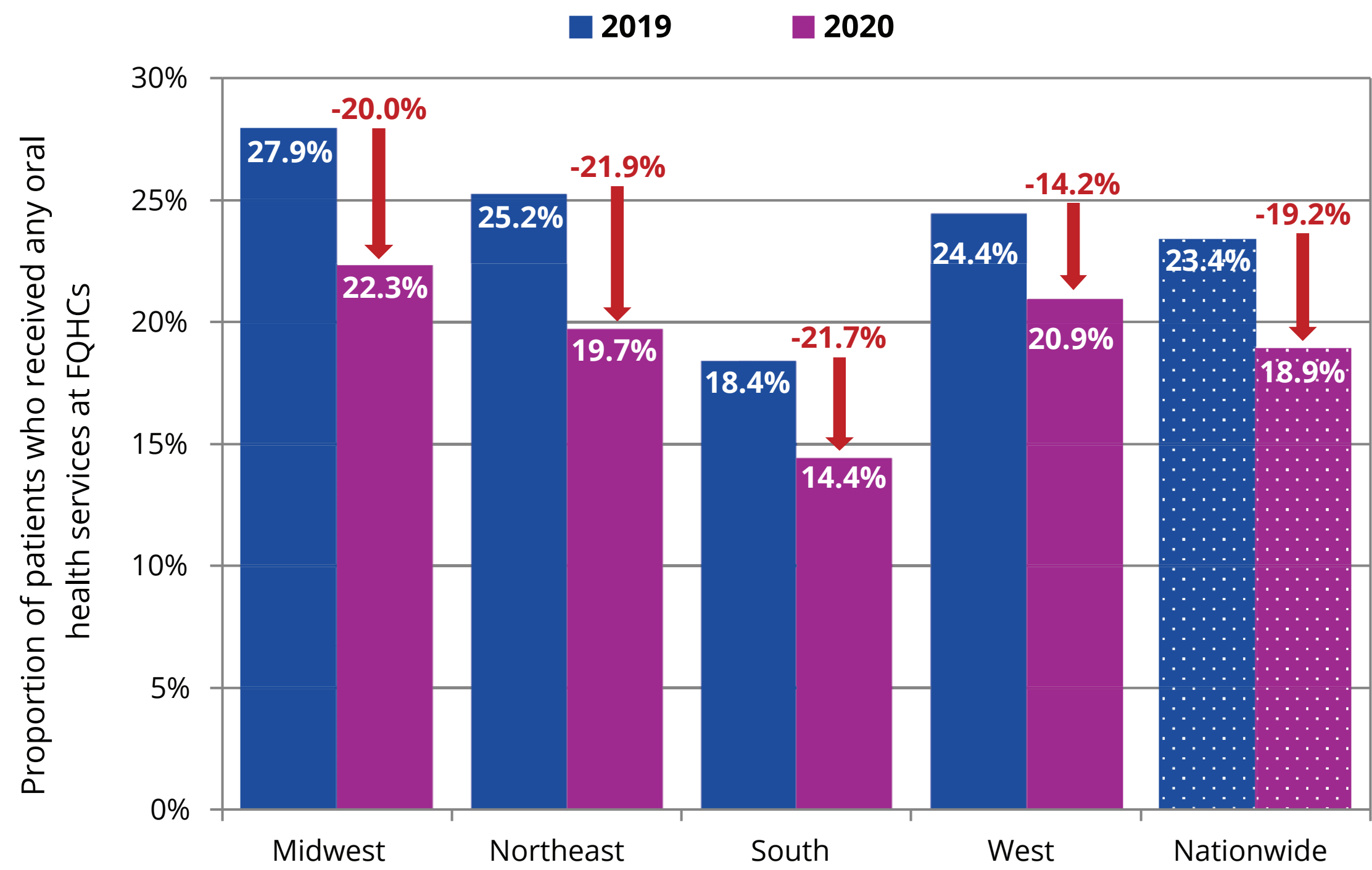
TABLE 1. Proportion of FQHCs Providing Oral Health Services by Region and Nationwide, 2019-2020

Region	2019			2020			% Change 2019-2020
	All FQHCs	FQHCs Providing Oral Health Services		All FQHCs	FQHCs Providing Oral Health Services		
	n	n	%	n	n	%	
Midwest	271	243	89.7%	270	244	90.4%	0.8%
Northeast	231	210	90.9%	228	208	91.2%	0.4%
South	458	380	83.0%	458	386	84.3%	1.6%
West	392	351	89.5%	386	341	88.3%	-1.3%
Nationwide	1,352	1,184	87.6%	1,342	1,179	87.8%	0.3%

Source: Uniform Data System, 2019-2020. Bureau of Primary Health Care, HRSA.

- Nationwide, the proportion of FQHC patients who received any oral health services decreased by 19.2%
 - Largest decline occurred in the Northeast (-21.9% change)
 - Smallest decline occurred in the West (-14.2% change)

FIGURE 1. Proportion of Patients Who Received Any Oral Health Services at FQHCs by Region and Nationwide, 2019-2020



Source: Uniform Data System, 2019-2020. Bureau of Primary Health Care, HRSA.



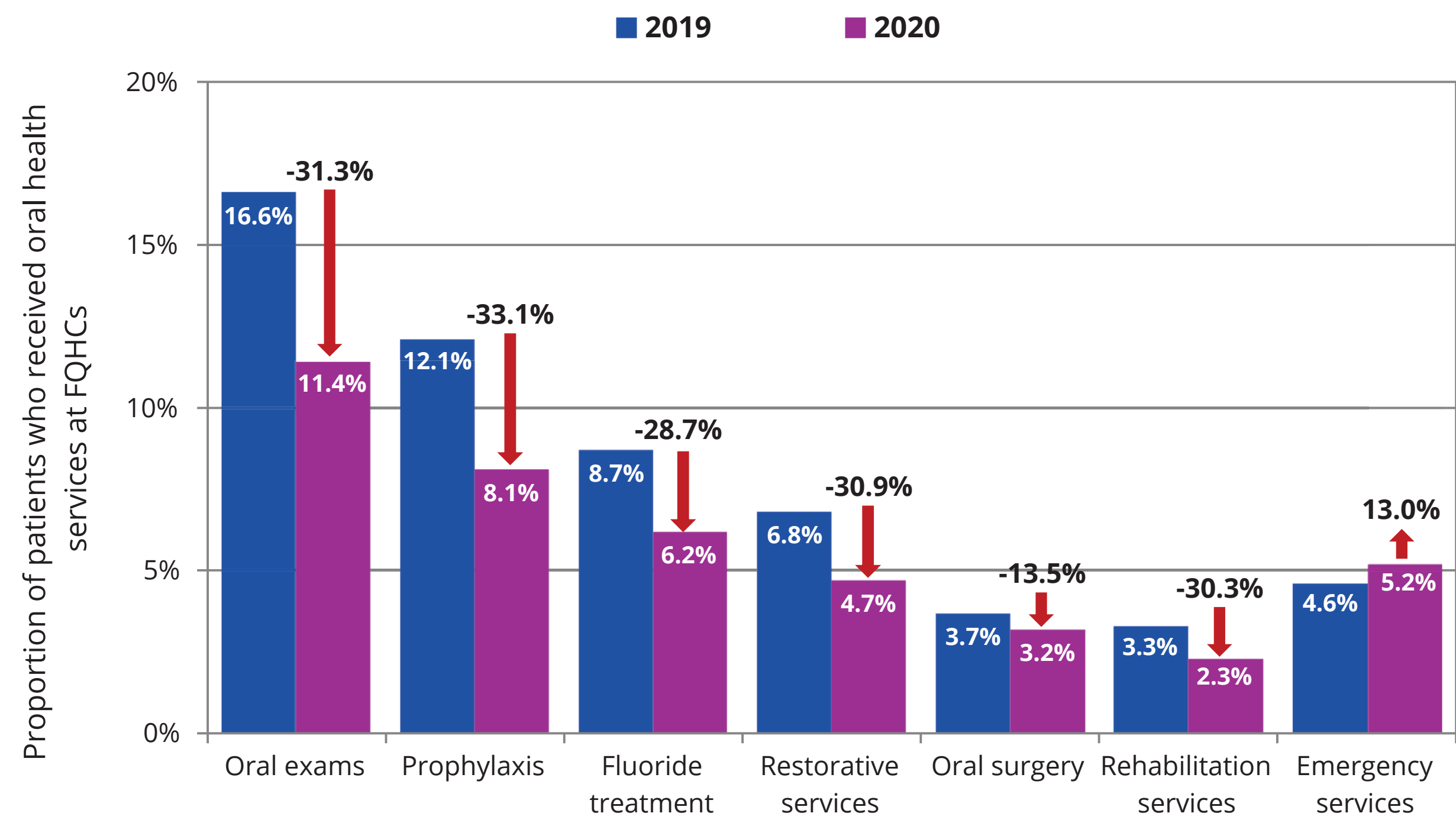
Study findings indicate a concerning reduction in oral health staffing nationwide at FQHCs, particularly among dental hygienists.



RESULTS

- The proportion of FQHC patients receiving any specific oral health services (except for emergency services) decreased from 2019 to 2020
 - Largest declines were for patients receiving oral prophylaxis treatments (-33.1% change)
 - Proportion of patients receiving emergency services increased by 13.0%
 - The Northeast and the West were particularly affected (results not presented)

FIGURE 2. Proportion of Patients Who Received Any Oral Health Services at FQHCs by Category of Service Nationwide, 2019-2020



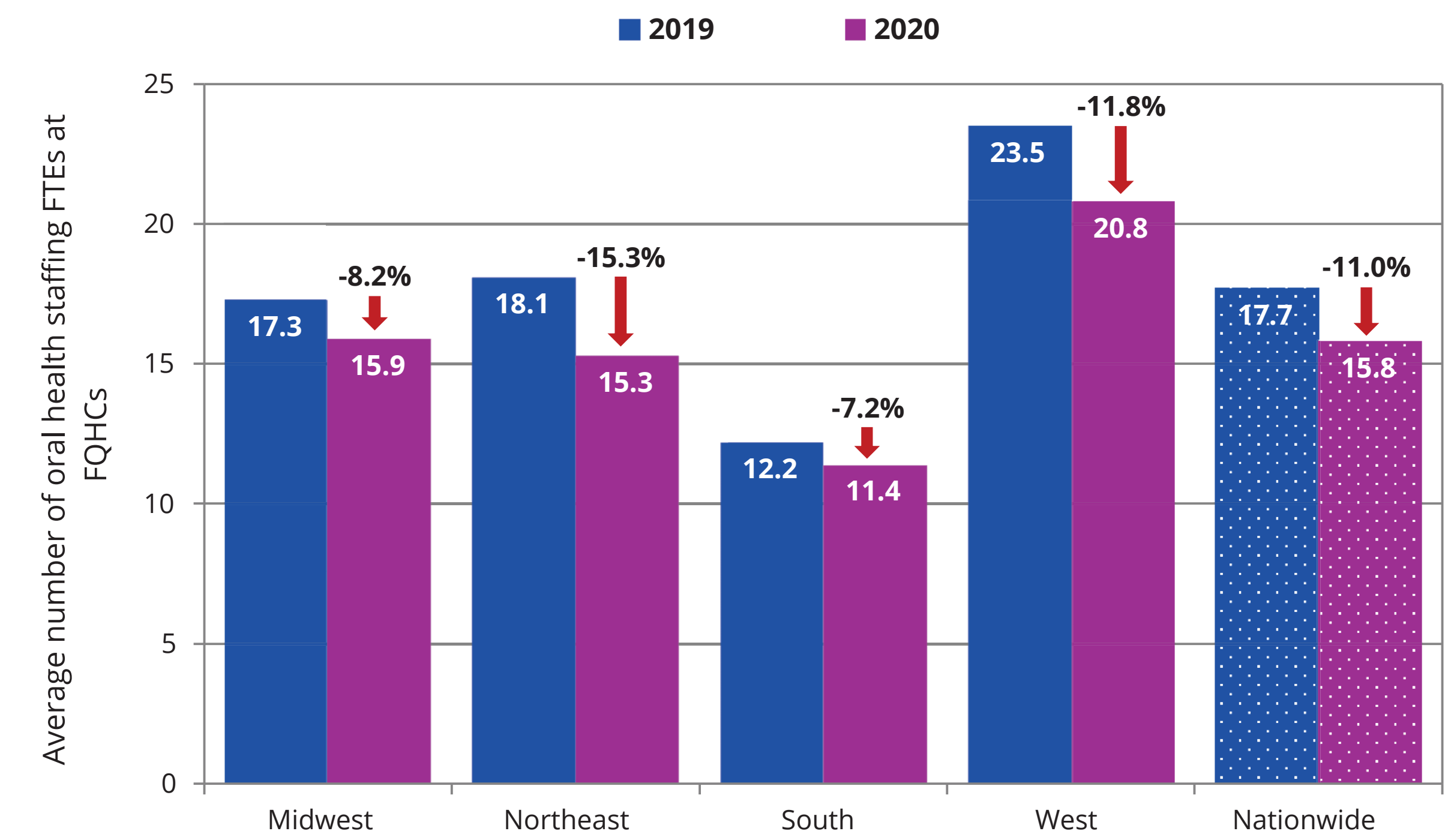
Source: Uniform Data System, 2019-2020. Bureau of Primary Health Care, HRSA.



RESULTS

- Nationwide, the average number of oral health providers at FQHCs decreased from 17.7 FTEs in 2019 to 15.8 FTEs in 2020 (-11.0% change)
- The decrease in oral health providers at FQHCs was highest in the Northeast (-15.3% change) and the West (-11.8% change)
 - Dental hygienists were affected most, especially in the Northeast (-21.8% change; results not presented)

FIGURE 3. Oral Health Staffing at FQHCs by Region and Nationwide, 2019-2020



Source: Uniform Data System, 2019-2020. Bureau of Primary Health Care, HRSA.

- There was a positive and significant association between the provision of direct oral health services by FQHCs and State Medicaid dental benefits for adults, State Medicaid reimbursement of dental services for adults, and State scope of practice for dental hygienists

TABLE 2. Association Between FQHCs Provision of Direct Oral Health Care and State Characteristics Nationwide, 2019-2020^a

State Characteristics	Odds Ratio	95% Confidence Interval		P Value
		Lower Limit	Upper Limit	
Medicaid coverage policy for adults Extensive versus other	8.19	1.33	50.41	0.023
Medicaid fee-for-service reimbursement as a % of private dental benefit plan charges Adult dental services	1.15	1.02	1.29	0.022
Scope of practice for dental hygienists Dental hygiene professional practice index	1.23	1.03	1.47	0.024

Source: Uniform Data System, 2019-2020. Bureau of Primary Health Care, HRSA.

^a A logistic regression model with robust standard errors was used to estimate odds ratios and 95% confidence intervals for associations between FQHCs providing direct oral health services and state-level factors including Medicaid coverage of dental benefits for adults, Medicaid reimbursement for dental services, scope of practice for dental hygienists, and demographic and socioeconomic characteristics of state population (ie, race/ethnicity, years of schooling, per capita personal income, poverty, unemployment, health insurance coverage, population living in rural areas, population on community water systems receiving fluoridated water, and dental care health professional shortage areas).



DISCUSSION

- Study findings show a decline in FQHCs' provision of oral health services to patients nationwide, particularly in the Northeast and West, during the first year of the pandemic in 2020 compared to the pre-pandemic year of 2019
- The study findings also indicate a concerning reduction in oral health staffing nationwide at FQHCs, particularly among dental hygienists
- These results are dramatically different from findings published in our previous report that showed increasing trends in direct provision of oral health services and staffing at FQHCs in 2011-2014¹

Implications for Policy and Practice

- These study results, especially those showing increases in emergency services, suggest the importance of ongoing support for FQHCs as public health resources and essential safety-net providers

REFERENCE

¹ Surdu S, Langelier M. *Trends in the Provision of Oral Health Services by Federally Qualified Health Centers*. Rensselaer, NY: Oral Health Workforce Research Center, Center for Health Workforce Studies, School of Public Health, SUNY Albany; January 2018.

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