

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

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*The Next Normal: How Do We Make It Better for the Health Workforce?*



# Acknowledgements and Disclaimer

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- *The content and conclusions of this presentation are those of OHWRC and do not necessarily represent positions or policies of the HRSA or SUNY*

# Introduction

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- 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

# Purpose of the Study

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- 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

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## 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

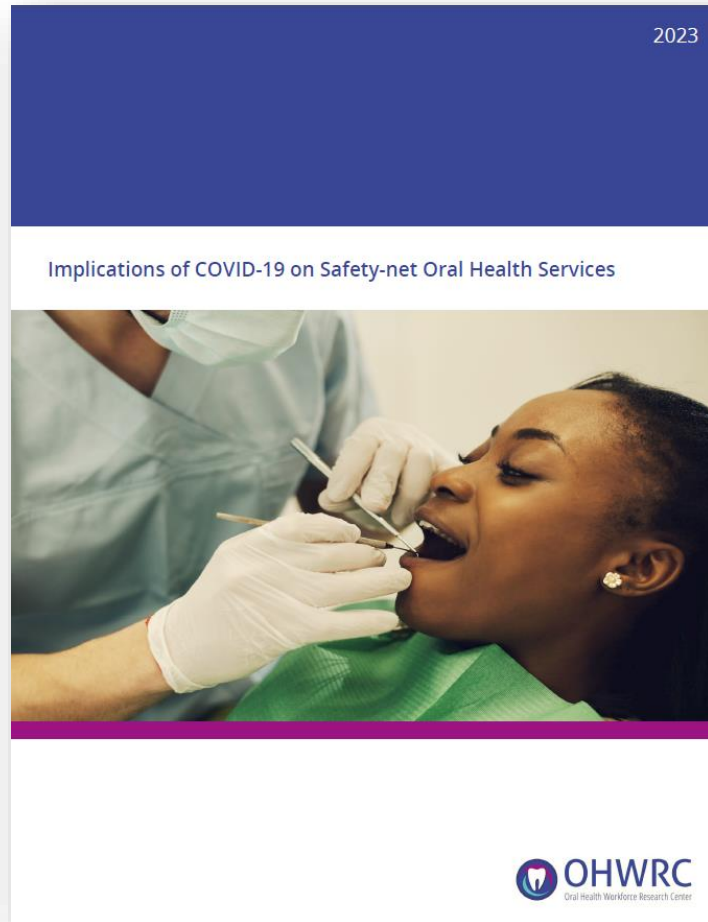
- Medicaid coverage of dental benefits for adults, 2019-2020
- Medicaid reimbursement of dental services for adults, 2020
- Information on the scope of practice for dental hygienists, 2016
- Demographic and socioeconomic characteristics of state population

# Methods: Statistical Analyses

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- **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 model with robust standard errors** was 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

# Key Findings



Langelier M, Surdu S, Fernando T, Gundavarapu SS, Romero A. *Implications of the COVID-19 on Safety-net Oral Health Services*. Rensselaer, NY: Oral Health Workforce Research Center, Center for Health Workforce Studies, School of Public Health, SUNY Albany; 2023.

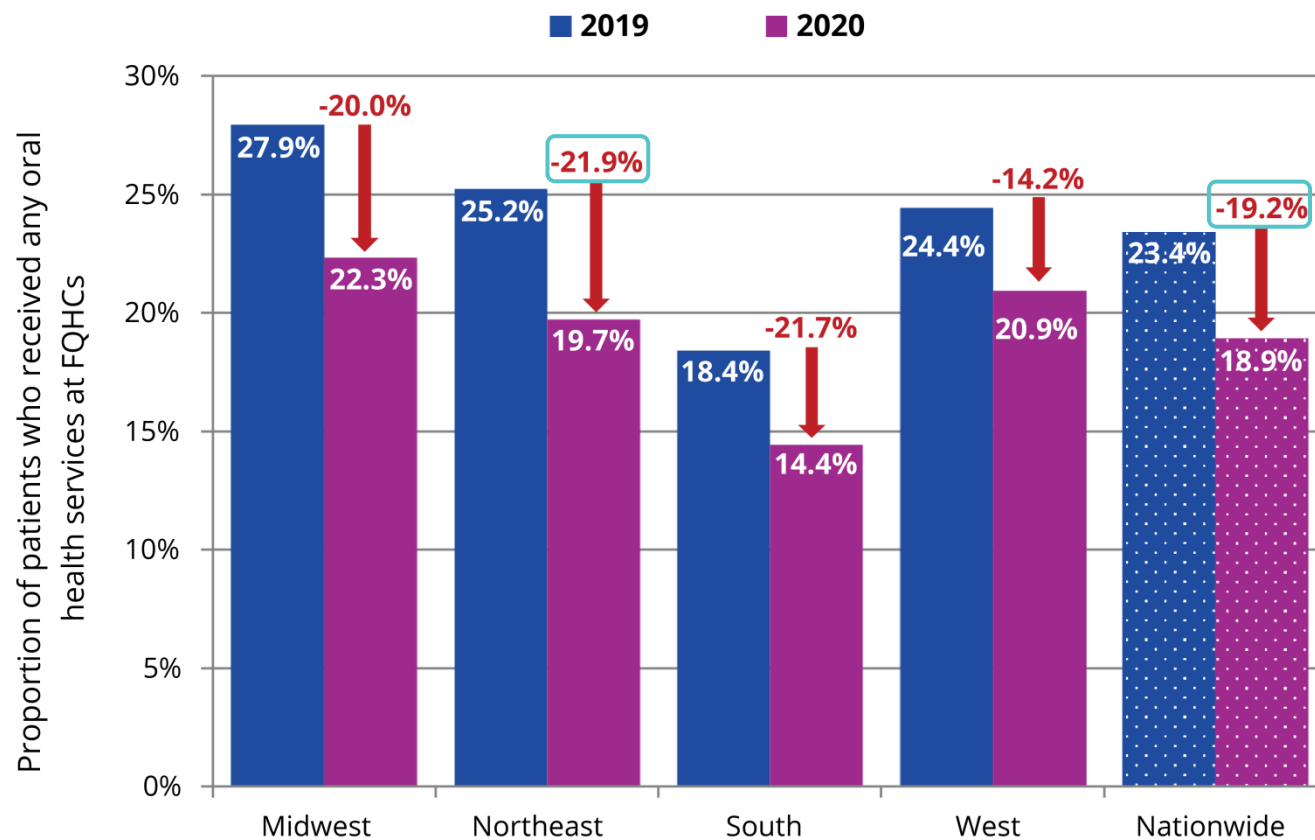
# Proportion of FQHCs Providing Oral Health Services by Region and Nationwide, 2019-2020

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%

- Nationwide, the number of FQHCs decreased from 1,352 in 2019 to 1,342 in 2020
- The proportion of FQHCs providing dental care was similar pre-pandemic (87.6%) and during the first year of the pandemic (87.8%)
- There were small differences in the in the proportion of FQHCs providing dental care between 2019 and 2020 across regions

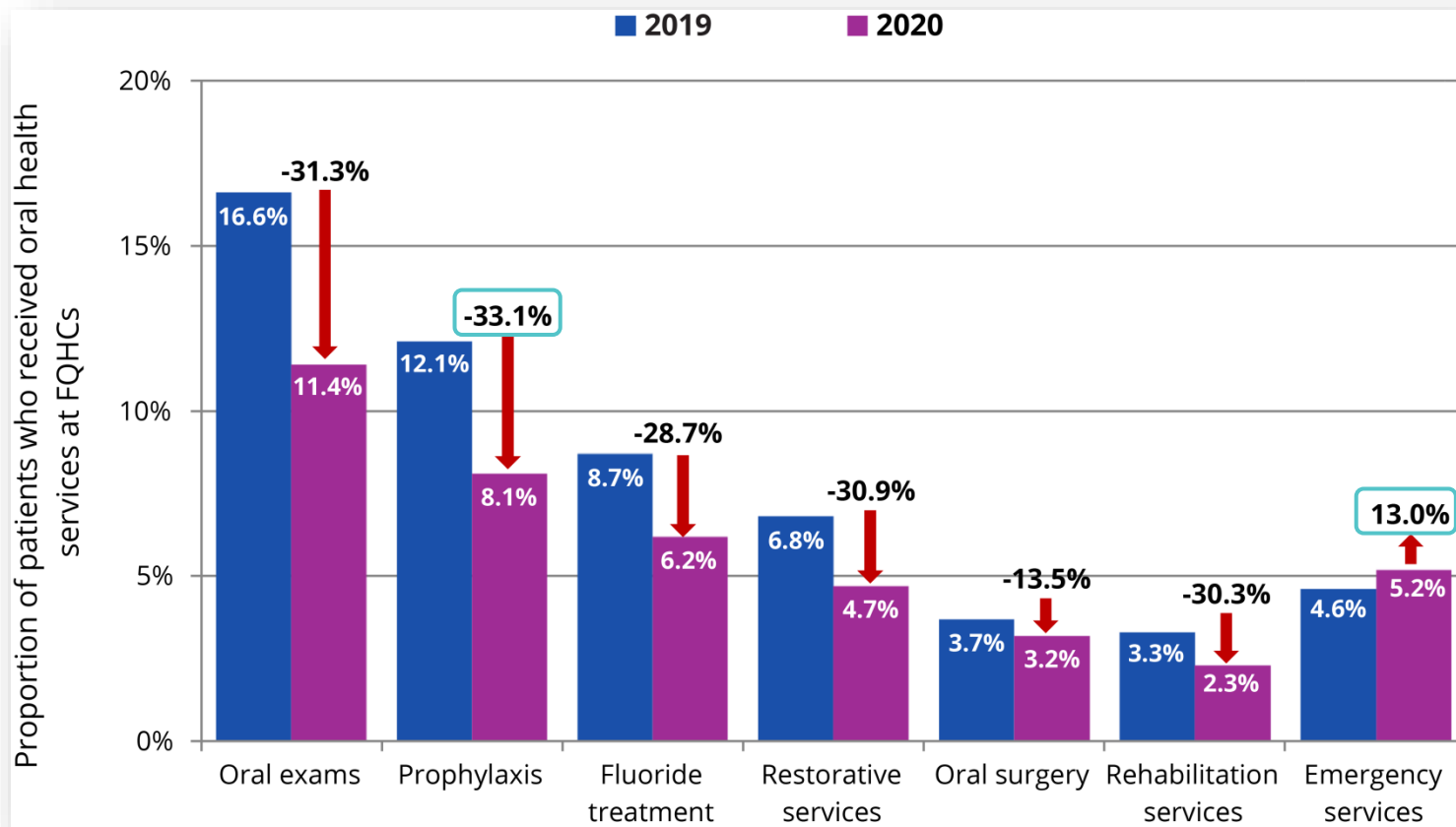


# Proportion of Patients Who Received Any Oral Health Services by Region and Nationwide, 2019-2020



- Nationwide, the number of patients who accessed care at FQHCs decreased from 26.8 million in 2019 to 25.9 million in 2020
- 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)

# Proportion of Patients Who Received Any Oral Health Services at FQHCs by Category of Service, 2019-2020



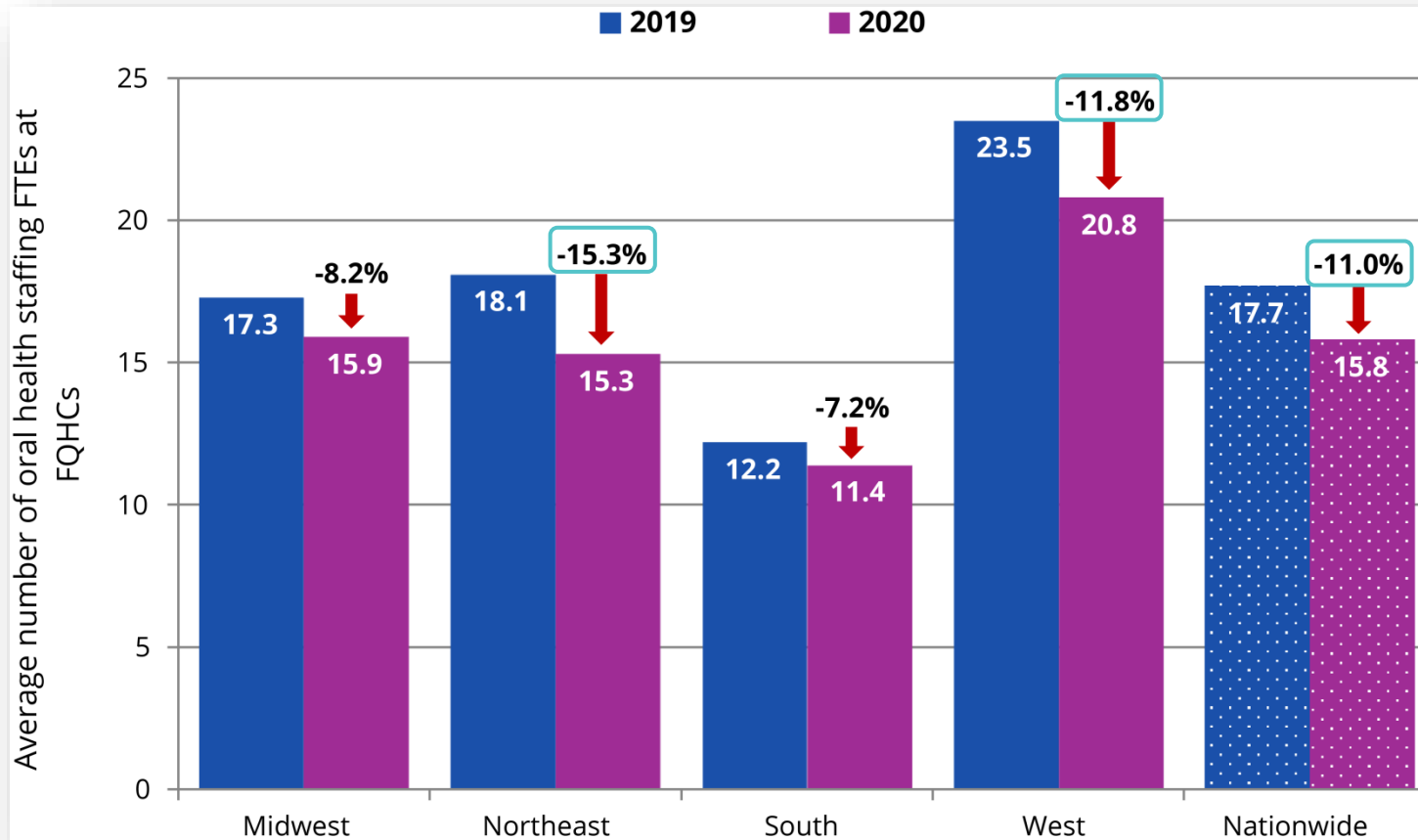
- The proportion of FQHC patients receiving any specific oral health services (except for emergency services) decreased from 2019 to 2020
  - Largest declines were for patients receiving **oral prophylaxis** treatments (-33.1% change)
  - Proportion of patients receiving **emergency services** increased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

# Average Number of Patients and Patient Visits Who Received Any Oral Health Services at FQHCs, 2019-2020

Region	Average # of patients receiving dental care at FQHCs		% Change 2019-2020	Average # of patient visits receiving dental care at FQHCs		% Change 2019-2020
	2019	2020		2020	2020	
Midwest	5,824	4,555	-21.8%	14,740	9,415	-36.1%
Northeast	6,416	4,690	-26.9%	16,566	10,372	-37.4%
South	4,145	3,246	-21.7%	8,735	6,843	-21.7%
West	6,541	5,339	-18.4%	18,402	13,093	-28.9%
Nationwide	5,611	4,387	-21.8%	14,422	9,892	-31.4%

- Nationwide, the **average # of FQHCs' patients** who received any dental care decreased from 5,611 in 2019 to 4,387 in 2020 (-21.8% change)
- There was a large decline in the **average # of patient visits** receiving dental care at FQHCs (-31.4% change)
- The **Northeast** saw the **biggest decrease** in the # of patients (-26.9% change) and patient visits (-37.4% change) on average per FQHC

# Oral Health Staffing at FQHCs Nationwide and by Region, 2019-2020



- Nationwide, the average # of all 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)

# Oral Health Staffing at FQHCs by Provider Type Nationwide and by Region, 2019-2020

Oral Health Provider Type and Region	Average # of oral health staffing FTEs at FQHCs		% Change 2019-2020
	2019	2020	
<b>Dentists</b>	4.7	4.3	-7.7%
Midwest	4.3	4.2	-2.6%
Northeast	5.3	4.7	-11.6%
South	3.3	3.1	-5.4%
West	6.0	5.4	-9.1%
<b>Dental hygienists</b>	2.7	2.4	-12.5%
Midwest	3.3	3.0	-9.1%
Northeast	3.3	2.5	-21.8%
South	2.3	2.0	-9.1%
West	2.5	2.3	-9.5%
<b>Dental assistants, aids, and technologists</b>	10.3	9.3	-9.7%
Midwest	9.8	8.9	-8.4%
Northeast	10.0	8.5	-14.8%
South	7.0	6.5	-6.9%
West	14.3	13.0	-8.9%

- The decline was most evident among FTE dental hygienists (-12.5% change nationwide), particularly in the Northeast (-21.8% change)
- The regions affected the most were the Northeast and the West where declines in oral health staffing occurred among all provider types

# Adjusted Associations Between FQHCs Provision of Direct Oral Health Care and State Characteristics, 2019-2020

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

- There were **positive and significant adjusted associations** 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
  - State scope of practice for dental hygienists

Note: 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, poverty, unemployment, health insurance, rurality).

# Conclusions and Implications

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- 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 2011-2014
- 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**

# Thank You

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