

# Colorectal Cancer Screening Rates at Federally Qualified Health Centers in the United States from 2020 to 2021: Incomplete Rebound and Worsening Disparities

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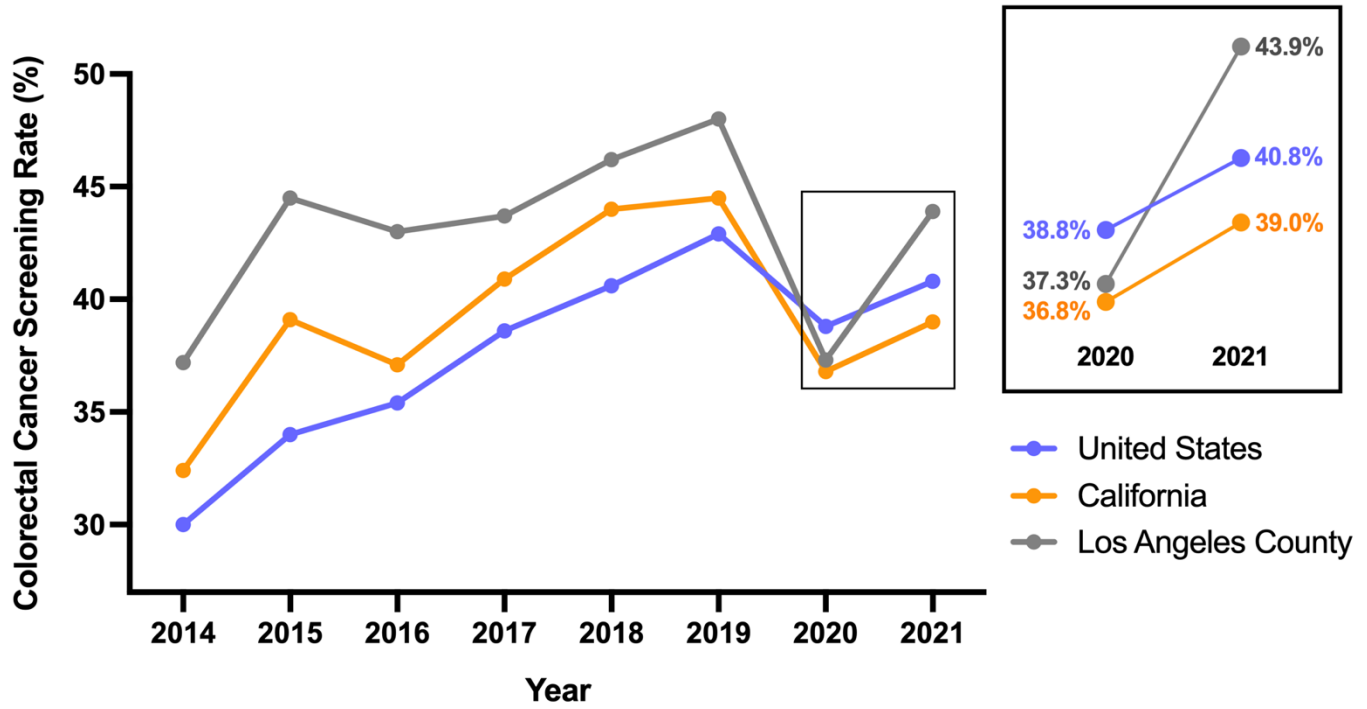
**Introduction:** Federally Qualified Health Centers (FQHCs) offer preventive health services, including colorectal cancer (CRC) screening, for low-income and under-insured individuals in the United States (U.S.). CRC screening rates in FQHCs increased from 2014 to 2019 but declined in 2020, coinciding with the beginning of the COVID-19 pandemic. We assessed changes in CRC screening rates and clinic-level factors associated with changes in screening rates from 2020 to 2021 in U.S. FQHCs.

**Methods:** We performed a series of cross-sectional analyses using data from the Uniform Data System (2014-2021). We abstracted annual CRC screening rates at FQHCs for patients ages 50-74 and determined screening rate trends over time nationally, in California, and in Los Angeles County. We then calculated the change in the CRC screening rate from 2020 to 2021 for each FQHC. Lastly, we used multivariate mixed effects linear regression models to determine characteristics associated with the change in CRC screening rate nationally, in California, and in Los Angeles County, controlling for FQHC characteristics, 2020 screening rates, and number of screening-eligible patients in 2021.

**Results:** Across all FQHCs (n=1,284), 6,940,879 patients were eligible for CRC screening in 2021. Median FQHC national screening rates steadily increased from 30.0% in 2014 to 42.9% in 2019, declined to 38.8% in 2020, and then increased to 40.8% in 2021. Screening rates in California (median 36.8%; n=166) and Los Angeles (median 37.3%; n=58) fell below the national FQHC screening rate for the first time in 2020. The median FQHC screening rate in California increased slightly to 39.0% in 2021 yet remained below the national FQHC median rate (**Figure**). In the national mixed effects linear regression model, FQHCs that served a majority of Black patients saw a significant screening rate decline (Coefficient -1.34; 95%CI -2.66, -0.01). This association was more pronounced in the California model, where FQHCs serving majority Black patients had a 9.73-point decline in CRC screening rate (95%CI -18.04, -1.44). Conversely, in California FQHCs serving majority non-Hispanic Asian/Pacific Islander, American Indian, or other race/ethnicity patients, screening rates increased in 2021 (Coefficient 5.59; 95%CI 0.20, 10.98) (**Table**). Significant clinic-level associations in the national and California models were not statistically significant in the Los Angeles County model.

**Discussion:** CRC screening rates rebounded in U.S. FQHCs in 2021 but did not return to pre-pandemic levels. In addition, recovery did not occur in majority-Black FQHCs where screening rates, on average, continued to decline. Future studies must further characterize disparities in screening rate recovery after the COVID-19 pandemic, as targeted interventions may be essential towards addressing worsening disparities in CRC screening participation.

**Figure.** Annual median colorectal cancer screening rates in Federally Qualified Health Centers in the United States (blue), in California State (orange), and in Los Angeles County (gray) from 2014 to 2021.



**Table.** Clinic-level factors associated with colorectal cancer (CRC) screening rate change from 2020 to 2021 at Federally Qualified Health Centers (FQHCs) in the United States and California, based on mixed effects linear regression.

	FQHCs Nationally (n=1284)			FQHCs in California (n=166)		
	Adjusted Coefficient*	95% Confidence Interval	P Value	Adjusted Coefficient*	95% Confidence Interval	P Value
<b>Majority Race/Ethnicity Served at FQHC</b>						
Non-Hispanic White	1.00	Referent	–	1.00	Referent	–
Hispanic/Latina/Latino/Latinx	-0.16	-1.64, 1.32	0.830	-0.68	-4.49, 3.13	0.730
Non-Hispanic Black	<b>-1.34</b>	<b>-2.66, -0.01</b>	<b>0.049</b>	<b>-9.73</b>	<b>-18.04, -1.43</b>	<b>0.020</b>
Non-Hispanic Other	0.40	-2.23, 3.02	0.770	<b>5.59</b>	<b>0.20, 10.98</b>	<b>0.040</b>
<b>Patients &gt;200% Federal Poverty Level (% , Tertile)</b>	–	–	–	<b>-2.78</b>	<b>-4.48, -1.08</b>	<b>0.001</b>
<b>Uninsured Patients (% , Tertile)</b>	–	–	–	1.47	-0.21, 3.14	0.090
<b>Patients Preferring Language Other than English (% , Tertile)</b>	<b>1.15</b>	<b>0.37, 1.92</b>	<b>0.004</b>	–	–	–
<b>Patients Experiencing Homelessness (% , Tertile)</b>	-0.54	-1.13, 0.05	0.070	–	–	–
<b>2020 CRC Screening Rate (Quartile)</b>	<b>-2.02</b>	<b>-2.46, -1.58</b>	<b>&lt;0.0001</b>	-0.69	-1.87, 0.49	0.250
<b>Number of Patients Ages 50-74 in 2021</b>	<b>0.58</b>	<b>0.14, 1.02</b>	<b>0.010</b>	-0.05	-1.23, 1.14	0.940

\*Bolded values indicate significance at the p<0.05 level