

Colorectal Cancer Screening Rates at Federally Qualified Health Centers in California During the COVID-19 Pandemic: Insights from National Health Resources and Services Administration Data

UCLA Health

Matthew Zhao BS¹, Yvonne Lei BA¹, Megan McLeod MD,MS¹, Jayraan Badiee MPH^{2,3}, Artin Galoosian MD¹, Folasade May MD,PhD,MPhil^{1,2,4,5}

[1] Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, California; [2] The Vatche and Tamar Manoukian Division of Digestive Diseases, Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, California; [4] Division of Gastroenterology, Department of Medicine, VA Greater Los Angeles Healthcare System, Los Angeles, California; [5] Jonsson Comprehensive Cancer Center, Cancer Prevention Control Research, UCLA

BACKGROUND

- Federally Qualified Health Centers (FQHCs) provide preventive health services such as colorectal cancer (CRC) screening to low-income and underinsured individuals.
- California has a racially, ethnically, and socioeconomically diverse population of 39 million people across 58 counties.
- California also has more FQHCs than any other state, serving more than 5 million patients.

OBJECTIVES

 To assess CRC screening rates and factors impacting the screening rate change (SRC) from 2019 to 2020 at California FQHCs during the COVID-19 pandemic.

METHODS

Data sources:

 National Health Resources and Services Administration Uniform Data System (UDS), 2019 and 2020.

Analyses:

- Determined screening rate change (SRC) from 2019 to 2020 at FQHCs in the state of California.
- Stratified FQHCs into quartiles by SRC and assessed clinic-level differences between FQHCs with the largest decrease in CRC screening rates (SRC Q1) and all other FQHCs (SRC Q2-Q4).
- Performed mixed-effects logistic regression to determine FQHC characteristics associated with the largest decline in CRC screening rate from 2019 to 2020 (SRC Q1).

RESULTS

- CRC screening rates at California FQHCs decreased from 44.5% in 2019 to 36.8% in 2020.
- FQHCs with a high proportion of Medicare and Medicaid dual eligibility patients had lower odds of a large decline in CRC screening (aOR 0.46; 95% CI 0.27-0.81; p=0.007).

Figure 1: A) Median CRC screening rate by California region; B) SRC by California region from 2019-2020

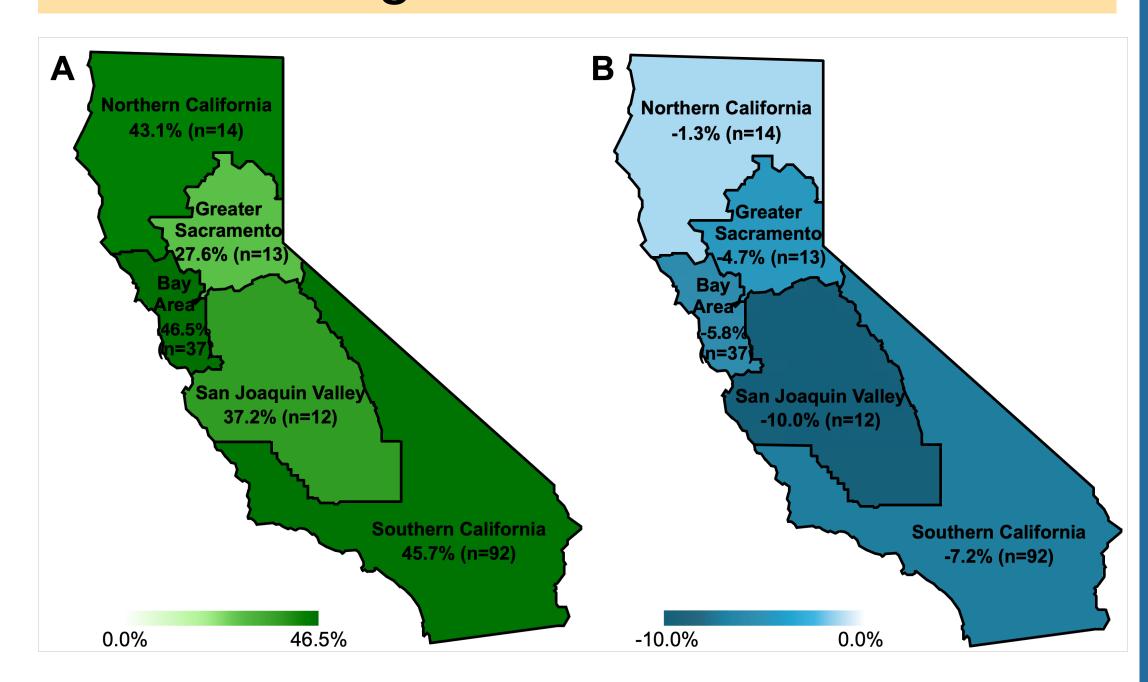
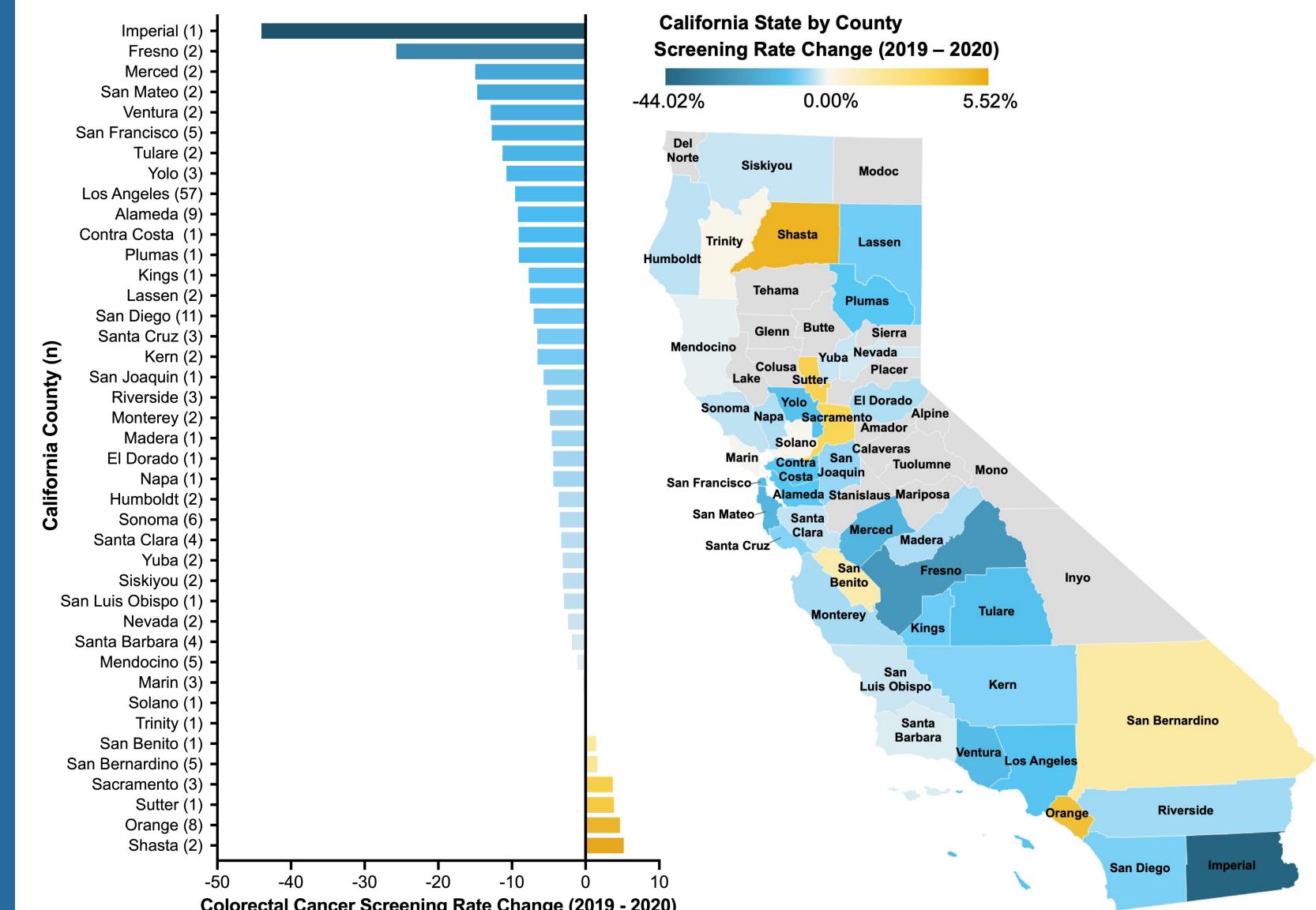


Table 1: California FQHC characteristics and CRC SRC by quartile

Frequency or Median %	Overall (n=168)	SRC Q1 (n=42)	SRC Q2+3+4 (n=126)	p-value*
Total Patients Eligible for CRC Screening (Age 50-74)	1,207,401	346,591	860,810	
CRC Screening Rate 2019 (%)	44.5	53.7	41.6	<0.0001
CRC Screening Rate 2020 (%)	36.8	31.2	37.7	0.030
Change in CRC Screening Uptake between 2020 and 2019				
Median	-5.7	-18.6	-3.1	<0.0001
Interquartile Range	-13.1, -0.6	-28.4, -15.1	-7.5, 1.0	
Male Sex (%)	42.5	41.3	42.9	0.010
Race & Ethnicity (%)				
White Non-Hispanic	17.5	11.5	18.9	0.002
Black Non-Hispanic	3.0	2.8	3.0	0.890
Hispanic/Latinx	55.8	68.2	51.1	0.002
Other Non-Hispanic	3.2	2.9	3.4	0.180
Preference for Non-English (%)	33.1	38.7	30.6	0.009
Experiencing Homelessness (%)	3.2	3.3	3.2	0.890
Income Level >200% FPL (%)	3.3	2.7	3.8	0.480
Uninsured (%)	18.6	18.8	18.5	0.120
Medicaid (%)	39.3	35.9	40.3	0.240
Medicare/Medicaid Dually Eligible (%)	4.2	3.0	4.7	0.002
Private Insurance (%)	8.6	10.2	8.3	0.610
Agricultural Workers (%)	0.9	1.0	0.7	0.790
Urban FQHCs (n [%])	133 [79.2%]	38 [90.5%]	95 [75.4%]	0.040
*p-values were calculated using Wilcoxon rank-sum or Chi-square tests with statistical significance at <0.05.				

Figure 2: SRC by California state county from 2019-2020



CONCLUSIONS

- California FQHCs saw a notable decline in CRC screening in 2020, particularly in the San Joaquin Valley. By individual California counties, SRC ranged from -44.0% to +5.5%.
- Interventions are needed for CRC screening uptake in California FQHCs, especially in clinics with high proportions of underinsured patients, as well as clinics in regions with low screening rates.

ACKNOWLEDGEMENTS

UCLA Melvin and Bren Simon Quality Improvement Program; UCLA Vatche and Tamar Manoukian Divison of Digestive Diseases

CONTACT INFORMATION

Matthew Zhao, BS MYZhao@mednet.ucla.edu

Folasade P. May MD, PhD, MPhil u FMay@mednet.ucla.edu

