

Disparities in Access to Colorectal Cancer Screening among US Immigrants

Jasper Seth Yao MD ¹ | Joseph Alexander Paguio MD ¹ | Edward Christopher Dee MD ^{2,3} | Troy Amen MD ^{2,4} | Gerome Escota MD ⁵

1. Albert Einstein Medical Center, 2. Harvard Medical School, 3. Memorial Sloan Kettering Cancer Center, 4. Hospital for Special Surgery, 5. Washington University in St. Louis School of Medicine

INTRODUCTION

Colorectal cancer (CRC) is the second most deadly cancer in the United States, while CRC screening has been shown to improve mortality outcomes in adults aged 50 and above.⁽¹⁾ Race and socioeconomic status have been shown to be determinants of access to vital healthcare services.^(2,3) Interestingly, there is a dearth of studies on healthcare access in immigrant populations, which make up 13.7% of the US population as of 2018.⁽⁴⁾ Immigrants are a heterogeneous group who may face limited healthcare access because of their citizenship status, English proficiency, and opportunities for authorized employment.⁽⁴⁾

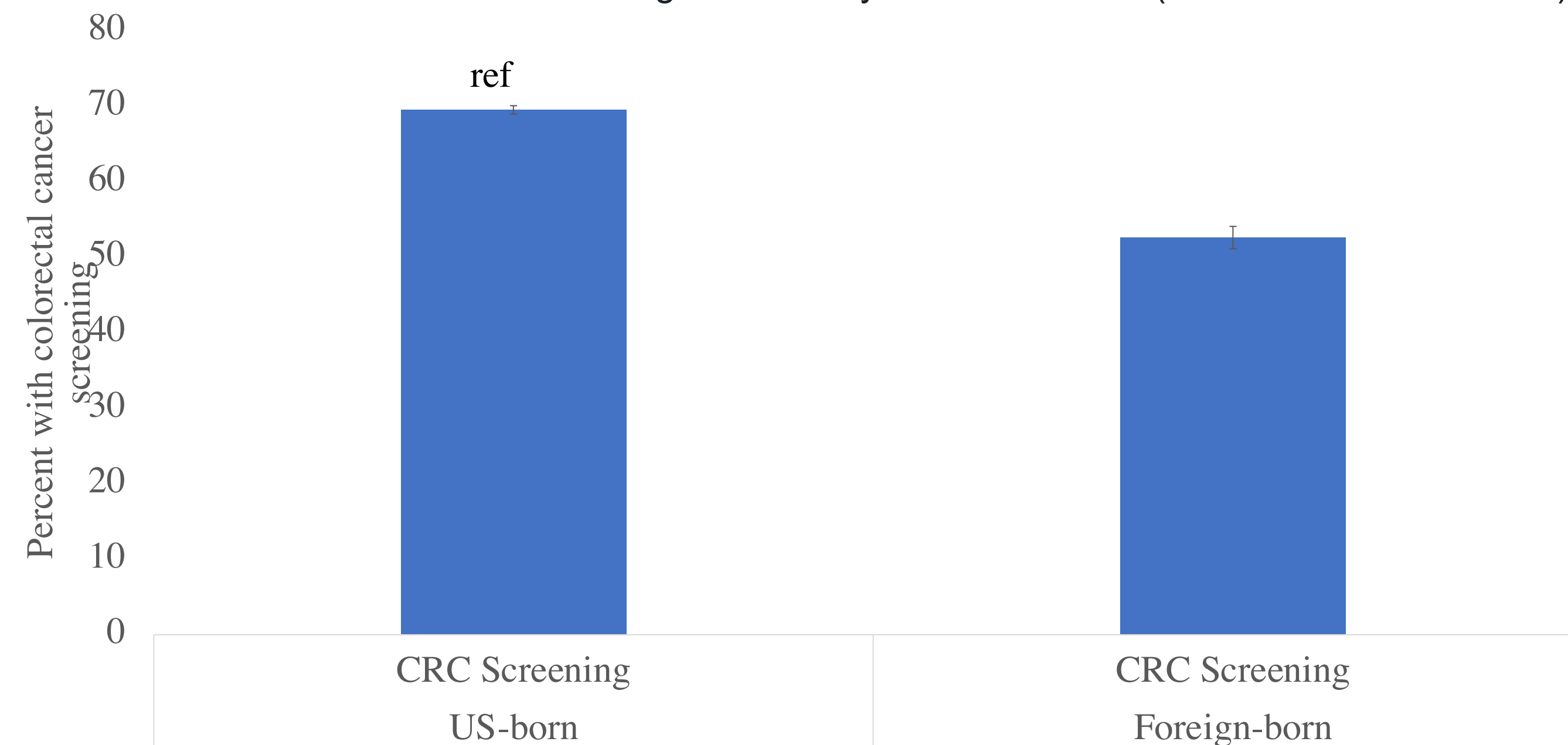
METHODS

The National Health Interview Survey (NHIS) has been previously used to study cancer screening patterns among marginalized groups in the US.^(2,3) The NHIS was queried for patients aged 50 or above in the years in which CRC screening data was available. Respondents answered questions on birth location and CRC screening history among others.⁽⁵⁾

Sample-weight adjusted multivariable logistic regressions defined adjusted odds ratios (AOR) and 95% confidence intervals (CI) were calculated to assess differences in answers to questions of ever having colorectal cancer screening procedures as recommended by the USPSTF.⁽¹⁾ Nativity was the primary independent variable of interest while controlling for patient demographic factors (Table 1).⁽⁴⁾ Statistical analyses were conducted using Stata/IC 16.1 (StataCorp) with $\alpha=0.05$. The Washington University in St. Louis Institutional Review Board granted this study exemption from ethics review (IRB number: 202102111).

FIGURE

Weighted percentage of respondents aged 50 and above from the NHIS (2010-2018) who underwent colorectal cancer screening stratified by location of birth (ref: US-born individuals).



TABLE

Counts (n), crude percentages, weighted percentages, and adjusted odds ratios (aORs) of self-reported colorectal cancer screening of respondents aged ≥ 50 years according to location of birth using data from the NHIS 2010-2018.

	n	Crude percentage (%)	Weighted percentage (%)	aOR	P
US-born	30,232	68.9	70.1%	Ref	Ref
Foreign-born	3,660	51.3	52.7%	0.77	<0.001
US territory-born	329	63.4	69.1%	1.16	0.177

FINDINGS

51,519 respondents aged 50 or above were included, with a median age of 64 (IQR 56-72). In this cohort, 79.4% were white, 55.9% were female, and 13.8% were foreign-born. Foreign-born participants were less likely to have any CRC screening compared to US-born participants (52.7% vs 70.1%, aOR=0.77, 95%CI, 0.70-0.86, $p<0.001$; Figure and Table). In the general cohort, Asian and uninsured participants were also less likely to have CRC screening. These disparities were also found in a subgroup analysis of foreign-born individuals, with Asian (aOR=0.63), non-US Citizen, (aOR=0.65), and uninsured (aOR=0.33) immigrants less likely to have a history of CRC screening.

Participants with a history of cancer, a higher level of education, and those with incomes that are at least two times the poverty threshold were more likely to have undergone CRC screening, both in the general cohort and among the foreign-born participants ($p<.001$ for all).

CONCLUSIONS

Our findings highlight some of the many systemic challenges that immigrants face in accessing healthcare in the US compared to their native counterparts.⁽⁶⁾ Future work investigating disparities in colorectal cancer screening and healthcare access should place a larger emphasis on studying this unique population.

Our study is limited by its retrospective nature, reliance on self-reporting, occasional use of translators, and possible confounders not included in the model. Future efforts to address disparities in CRC screening are warranted regardless of race or origin of birth.

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