

Disparities in cancer screening among women in the United States

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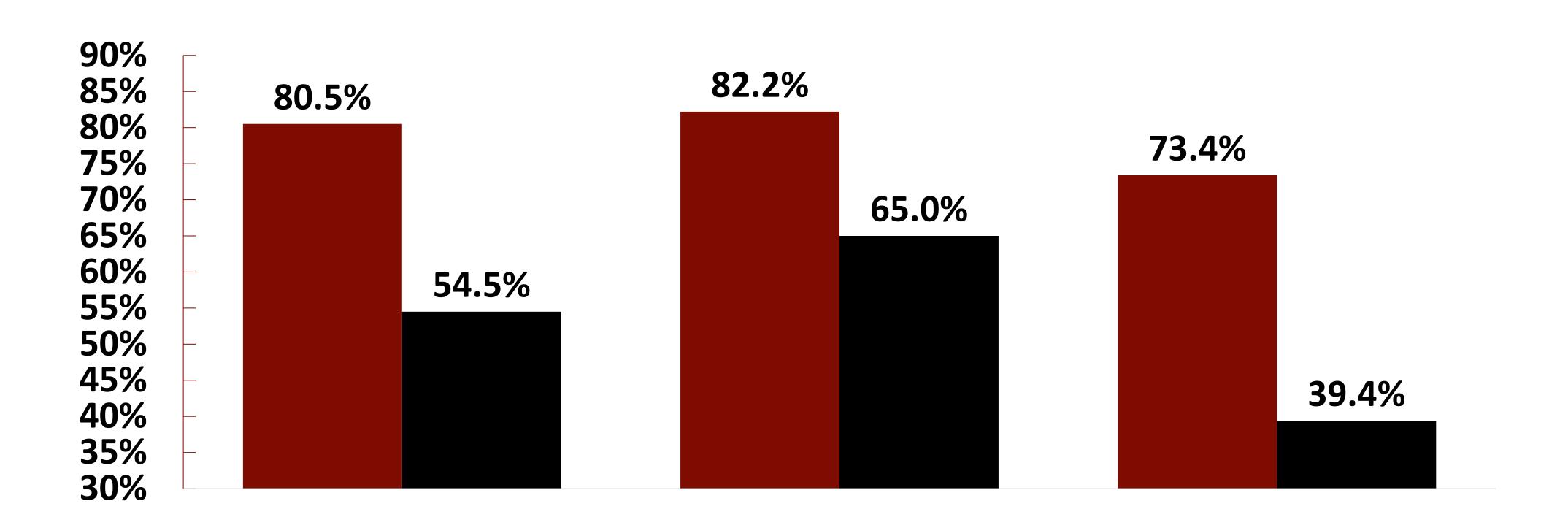
Background & Purpose

- Approximately 25% of cancer deaths among women are attributed to three main cancer types: breast, cervical, and colorectal (CRC)
- Each of these cancers have 5-year survival rates ≥
 90% when detected at a localized stage
- Unfortunately, national data on cancer screening trends among women have shown that from 2000-2015 screening for breast and cervical cancer have reduced by 4.3% and 3.0%, respectively
- In this analysis, we aimed to examine factors typically associated with healthcare utilization to better understand why eligible women may not be up-to-date with cancer screenings for common cancers

Methods

- The 2018 Behavioral Risk Factor Surveillance System (BRFSS), a population-based nationally representative survey on health behaviors was used for this analysis
- Women who had been screened according to United States Preventive Service Task Force (USPSTF) guidelines specific to each cancer were considered up-to-date
- Sociodemographic factors of interest were age, race, county rurality, income, education, employment, insurance coverage, avoiding medical care due to cost
- Each cancer screening type was considered a separate outcome variable (being up-to-date was the outcome of interest)
- Mixed-effects log-binomial regression models were used to examine the association between selected sociodemographic factors and being up to date with each cancer screening type

Results **Proportion Up-to-Date With Screening By County Rurality** 90% 85% **79.5%** 76.9% 75.9% **76.1% 74.6% 75% 70% 65%** 55% 50% **Cervical Cancer Colorectal Cancer Breast Cancer** (Eligible ages 50-74 yrs) (Eligible ages 50-75 yrs) (Eligible ages 21-65 yrs) ■ Metropolitan ■ Micropolitan ■ Rural



Cervical Cancer

(Eligible ages 21-65 yrs)

■ No health insurance

Breast Cancer

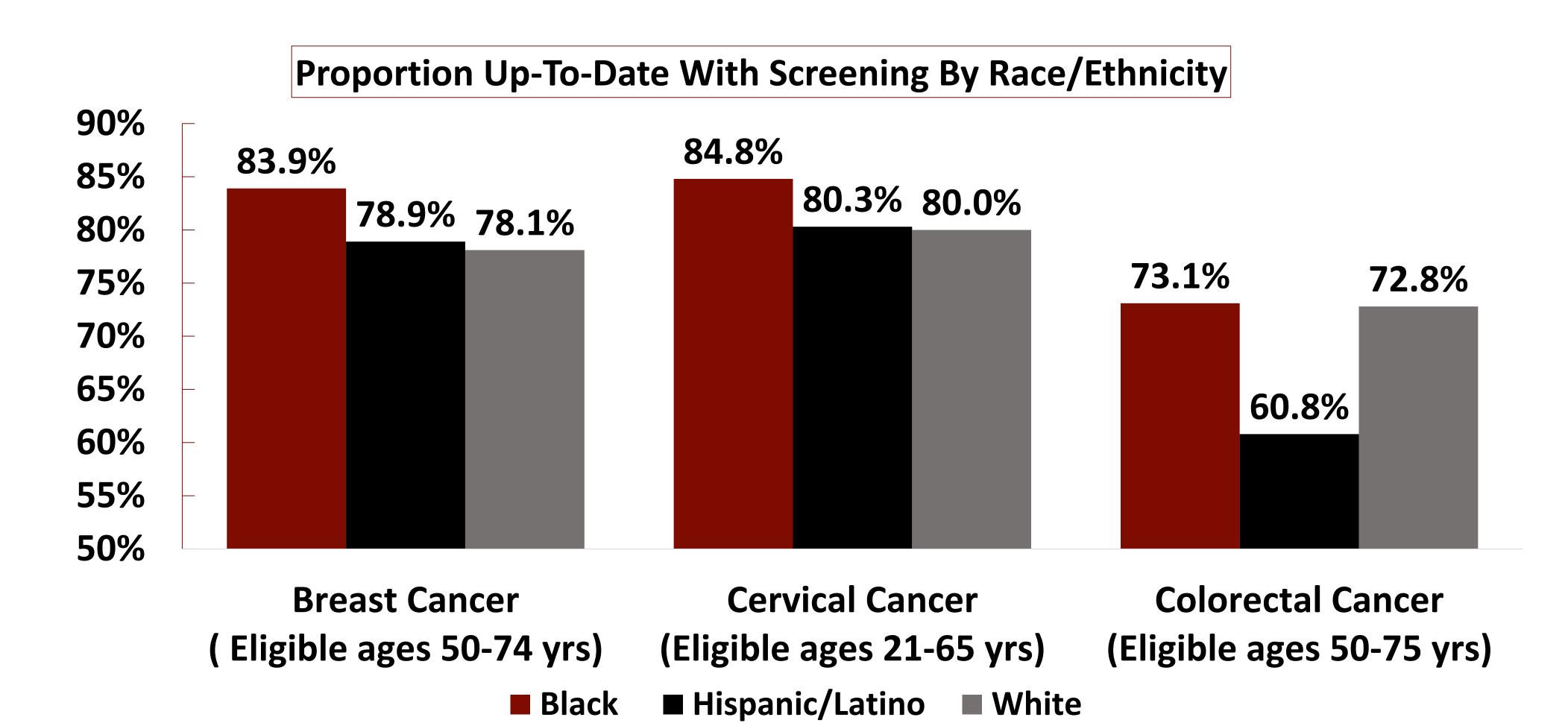
(Eligible ages 50-74 yrs)

Have any health insurance type

Colorectal Cancer

(Eligible ages 50-75 yrs)

Proportion Up-to-Date With Screening By Health Insurance Status



American College of Epidemiology (ACE) Annual Meeting 2020

Results

Bivariate tests

• Significant differences in the proportion of women being up to date with screenings were also observed by income level, education, employment status, and reporting financial barriers to healthcare

Adjusted regression analysis

- Compared to White women, Black women had a significantly higher prevalence of being up to date for breast screening (PR 1.10; CI: 1.07, 1.13), cervical screening (PR 1.06; CI: 1.04, 1.08, and CRC (PR 1.07; CI: 1.03, 1.12)
- Compared to women in the highest income bracket (≥ \$50K) women making <\$25K annually had significantly lower up to date screening prevalence for breast (PR 0.93; CI: 0.90, 0.96), cervical (PR 0.94; CI: 0.91, 0.96), and colorectal (PR 0.92; CI: 0.89, 0.96) cancer.
- Compared to women with health insurance, women with no form of health insurance had a significantly lower prevalence of being up to date with screenings for breast (PR 0.74; CI: 0.68, 0.79), cervical (PR 0.83; CI: 0.79, 0.88), and colorectal cancer (PR 0.61: CI: 0.56, 0.66)
- For CRC screening, compared to women in metropolitan counties, women in rural counties had a significantly lower prevalence of being up-to-date (PR 0.93; CI: 0.88, 0.98)

Discussion

- Efforts to increase cancer screenings among racial/ethnic minority women, especially Black women, appear to be making a positive impact
- Financial factors (income, having health insurance, and avoiding medical care because of cost) are likely consistent barriers for cancer screenings among women in the United States.
- To eliminate disparities in cancer screenings, large scale policy changes are needed to remove financial barriers to healthcare

This study was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement #U1CRH30539