Colorectal Cancer Screening Among Privately Insured Post-ACA by Sex and Race

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Background

- The ACA requires insurers to cover a range of preventive care services without cost-sharing including colorectal cancer testing (CRC). Prior studies found disparities in CRC testing but there is limited research on disparities by sex and/or race/ethnicity for those privately insured post-ACA.

Objective

- To understand the predictors for CRC testing in privately insured subgroups of the study population by sex and race, after the ACA's removal of cost sharing for preventive services.

Methods

- **Study Population:** Privately insured adults (n=142,641) from the 2013 Behavioral Risk Factor Surveillance System Survey.
- **Outcomes:** Testing rates for CRC, defined by the US Preventive Service Task Force recommendations: Annual screening with fecal blood test OR sigmoidoscopy within 5 years and fecal blood testing within 3 yrs OR colonoscopy within 10 yrs.
- **Statistical Analysis :** Chi-squared and weighted multivariable logistic regression models to estimate associations between covariate measures and CRC testing.

Results

Figure 1. Percentages of CRC Testing for Privately Insured Adults Age 50-75 Years By Sex and Race According to the 2013 BRFSS

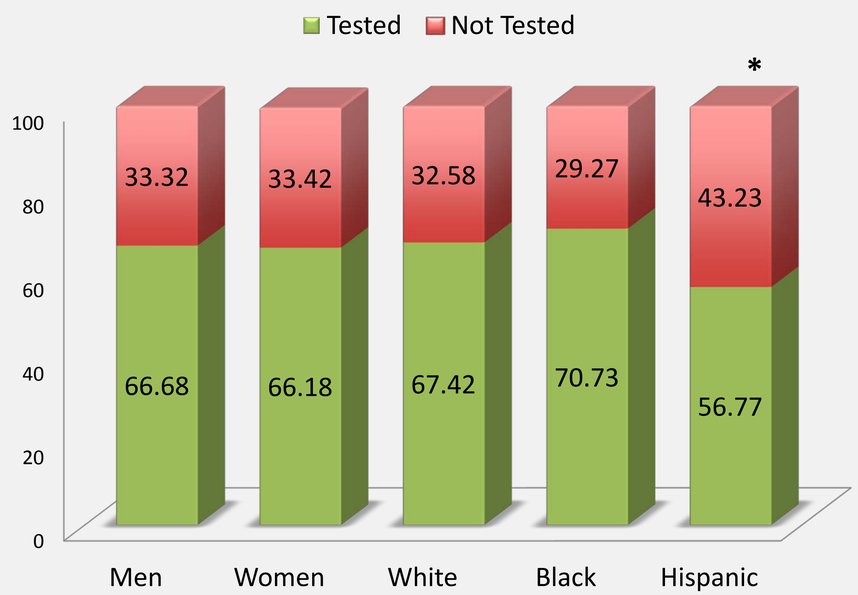

Table 1. Adjusted Odds Ratios for Significant Predictors of CRC Testing By Sex and Race

Covariates	Fully Adjusted Odds Ratios (95% CI)
No Personal doctor	
Men	0.46 (0.34-0.63)
Women	0.66 (0.48-0.91)
White	0.59 (0.47-0.74)
Low Income (<$25,000)	
White	0.58 (0.45-0.75)
Less than High School Education	
White	0.55 (0.36-0.85)
≥5 years since last check up	
White	0.21 (0.15-0.30)
Hispanic	0.01 (0.01-0.09)
Not at all satisfied with care received	
Hispanic	0.07 (0.01-0.44)
Poor self rated health	
Black	3.02 (1.13-8.09)

- When examining sex and race/ethnicity independently, men and women had similar CRC testing rates while Hispanics had the lowest rates of testing ($p<0.05$)* (Figure 1).
- However, further stratification by both sex and race/ethnicity found that **Hispanic women have the lowest rates of testing at 51.8%. Unfortunately, sample sizes are too small** to draw significant conclusions on subgroups, such as Hispanic women.
- **Significant predictors of CRC testing varied by race/ethnicity and sex** (Table 1). For example, poor self rated health was a significant predictor of CRC testing for Blacks, but not for other subgroups. Also, Hispanics who did not have a regular source of care and low satisfaction with care were significantly less likely to get CRC testing.
- Final logistic regression models included nine covariates to predict CRC testing: 1) level of education, 2) income level, 3) employment status, 4) self rated health, 5) satisfaction with care received, 6) time since last check-up, 7) delay in getting medical care, 8) number of doctor visits in past 12 months, and 9) personal doctor.

Conclusions

1. Disparities by socioeconomic status and patterns of care seeking persist post-ACA in privately insured individuals by sex and race/ethnicity.
2. Stratifying predictors of CRC testing by race/ethnicity and sex is **key** in determining factors that can lead to disparities in subgroups. Thus stratification provides an opportunity for targeted interventions to improve CRC testing beyond cost.
3. Oversampling underserved populations in surveys will be **key** to fully understanding predictors of CRC testing and post-ACA outcomes beyond socioeconomic factors.

References

Klabunde, Carrie N., et al. "Colorectal cancer screening in US seniors ages 76–84 Years." *Journal of community health* 40.4 (2015): 769-779.