

# THE EFFECTS OF THE AFFORDABLE CARE ACT ON THE RECEIPT OF COLONOSCOPIES AMONG THE ELDERLY INSURED

by

Min Jee Lee

**Background:** The Affordable Care Act (ACA) waived deductibles and eliminated coinsurance for colonoscopies for Medicare beneficiaries starting on January 1, 2011. This study investigated the effect of the ACA's removing of financial barriers on the receipt of colonoscopies among the elderly insured, who are predominantly covered by Medicare. Moreover, this study examined how income-related disparities in colonoscopy use have changed over the past decade, and it also attempted to quantify various contributions to income-related disparity in the use of colonoscopies among the elderly insured.

**Methods:** Five cycles (2008, 2010, 2012, 2014, and 2016) of the Behavioral Risk Factor Surveillance System (BRFSS) were utilized to examine the receipt of colonoscopies prior to the implementation of ACA and then again afterwards. To examine income-related disparities in the use of colonoscopies, individuals aged 65 to 75 were included, and the Concentration Index (CI) was calculated before and after implementation of the ACA. To identify and quantify the contribution of each factor, decomposition of the CIs was conducted.

**Results:** Of 349,899 eligible elderly insured in the age group 65 to 75 years, 236,275 (67.5%) had received a colonoscopy in the previous 10 years. The receipt of colonoscopies increased from 62.9% in the pre-ACA years to 70.1% in the post-ACA years ( $p < .001$ ). Compared with the pre-ACA period, colonoscopy uptake during post-ACA years shows an odds ratio of 1.15 (95% confidence limit [CI] = 1.08-1.22,  $p < .001$ ) after adjusting for time dependent improvements in

colonoscopies and other relevant factors. CIs indicated that disparities in colonoscopy use were lessened after the implementation of the ACA. Decomposition analyses showed that whereas decreases in disparities derived largely from income and educational levels, higher levels of income and educational attainment continue to be major contributors to the observed disparities in colonoscopy use.

Conclusions: Following the implementation of the ACA, a statistically significant increase in colonoscopy use was observed and may contribute to the observed decrease in the disparity of colonoscopy use. This suggests that eliminating financial barriers to access has improved the CRC screening rate, but achieving the target rate of 80% coverage will require additional interventions to encourage higher levels of screenings.