

Resident: Second Place

"Trends in Colon Cancer Screening"

CATEGORY: Research

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ABSTRACT: Purpose: Colon and rectal cancer is the fourth leading cause of cancer death in both men and women. As a result, the USPSTF recommends screening for all individuals over the age of 50. Despite this, the CDC estimates that almost one third of the population is not up to date with colon cancer screening. Of these, 75% have never been screened in their lifetime. While there are many reasons for low screening rates, including health care provider and system factors, patient factors are also major contributors. These include lack of awareness and negative attitude towards colonoscopies. The purpose of this study is to determine if fecal immunoassay testing (FIT) is associated with changing rates of colon cancer screening. Methods: Utilizing data from the National Health Interview Survey (NHIS), we will conduct a cross sectional study to analyze trends in colon cancer screening from 2000 to 2015. Included in the data analysis are men and women over the age of 50. Excluded from the study were participants under the age of 50, those with a family history of colon cancer, and those with a prior history of colon cancer. Primary outcome compared the percentage of the population that completed colon cancer screening to those who had not. Secondary outcomes will include percentages that completed FIT, colonoscopies, or sigmoidoscopies. Additional analysis will involve stratification by patient demographics (including but not limited to age, gender, race, and insurance status) which will help to uncover colon cancer screening trends regarding completion and type of test used in different subgroups. Proportions will be compared using chi-squared testing. Logistic regression will be used to determine the odds of completing colon cancer screening with FIT vs colonoscopy when controlling for demographic factors. Results: Evaluation of data shows that more people are up to date with colon cancer screening in 2015 as compared to 2005. Further analysis, however, reveals interesting trends. While more people underwent colonoscopies, the number of people using FIT testing went down. Additionally, those groups of people who were less likely to be up to date with their colonoscopies in 2005 (such as those without insurance or primary care site) were the same groups unlikely to be up to date in 2015. Conclusion: Colon cancer screening remains a significant cause of morbidity and mortality and a significant portion of the population remains unscreened. With the advent of FIT, an alternative, less invasive colon cancer screening method has become available. However, our research shows that FIT testing decreased between 2005 and 2015. Research also showed that those groups who did not have up to date screening in 2005 continued to be at risk in 2015. As a result, further research can be conducted to determine barriers to FIT and methods to reach these at risk groups.