## **Bowel Preparation Quality Improvement**

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**Background:** In the United States the incidence of colon cancer continues to increase annually. As of 2020, colon cancer was documented as the second deadliest cancer in both men and women. Colonoscopies, which can detect cancerous polyps and lesions, can increase colorectal cancer survival rates through early detection. The quality of a bowel preparation greatly affects the success rate of colon cancer detection as it increases the effectiveness of the diagnostic colonoscopy. Poor quality bowel preparations can easily lead to missed or undetected cancers, increasing the rate of post-colonoscopy colorectal cancer. Thorough review of the literature has shown that bowel preparation quality can be improved by the format and delivery of preparation instructions. Patients who receive instructions in both oral and written format, utilizing plain language, pictures and/or cartoons, have better preparations than those who do not.

**Local Problem:** At a 238 bed acute care hospital in Virginia, the incidence of poor or inadequate bowel preparation is increasing. Patients have commented that the instructions provided are confusing and hard to follow. The staff scheduling procedures, and providing instructions, lack training in how to communicate the importance of a quality bowel preparation or important diet guidelines.

**Methods:** A pretest posttest design will be used for the rapid cycle quality improvement project. The project was approved by both the hospital's IRB and the James Madison University IRB. Thirty patient charts will be reviewed both pre-intervention and post-intervention. This information will be de-identified. Patients to be included in this project are those scheduled for a screening colonoscopy, between the age of 48 and 65 and list English as their preferred language. During the intervention stage, the gastroenterology staff will be educated on providing bowel preparation instructions, and given the revised instructions and education pamphlet. A chart review will be conducted to determine bowel preparation quality as documented by the physician. The project will identify the number of patients noted to have preparations scored in each category (Excellent, Good, Adequate, Fair or Poor). Data will be collected retroactively during the pre-intervention preparation period and compared to the quality of post-intervention data.

**Interventions:** Introduction to the new enhanced bowel preparation education and instructions will be completed at the Gastroenterology office. Gastroenterology staff will be taught how to educate patients at their scheduling appointment. A teach back method will be utilized to ensure staff understand the concepts and can demonstrate the ability to provide patients with accurate and thorough instruction. The revised bowel preparation instruction sheets will be included in the patient information folder, as well as the additional educational pamphlet. The pamphlet includes pictures, cartoons and plain language to communicate how to properly take a bowel preparation, follow the low residue diet and assess the completeness of your preparation.

**Results:** Results will be determined at project end.

**Conclusion/Implications:** It is likely that this project will enhance knowledge about the usefulness of an evidence based quality improvement intervention aimed at improving colonoscopy bowel preparation.