

## QA/QI

## Quality of Colonoscopy Examination After Availability of Split-Prep Instructions in Multiple Languages as Compared to English-Only Split-Prep Instructions

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## Background

Adequate bowel preparation is a key factor to the success of colonoscopies. However, there remain challenges in achieving this, as several factors including patient health literacy, language barriers, and complicated instructions can influence the quality of bowel preparation. University Hospital has, until recently in September 2019, only had access to English versions of split-prep instructions, and experience has shown that non-English speaking patients often report different instructions than the standard bowel prep instructions available. In September 2019, instructions for colonoscopy bowel preparation in multiple languages were developed and implemented. This study aimed to evaluate the quality of bowel preparation following this intervention.

## Methods

During this retrospective analysis, 1000 patients who underwent outpatient colonoscopy between January 1, 2019 and October 31, 2020 were randomly selected. Among this population, 344 patients were found to have a primary language other than English, of which 320 patients spoke one of the languages for which non-English instructions were devised (Spanish, Portuguese, and French Creole). We collected data on the quality of bowel prep using the Aronchick Bowel Prep Scale in these 320 colonoscopies that occurred before and after the implementation of multiple language instructions. Statistical analyses were used to evaluate the impact of multiple language instructions.

## Results

Preceding the implementation of instructions in multiple languages, 74/140 (52%) non-English speaking patients who underwent outpatient colonoscopy had adequate (excellent/ good on Aronchick Scale) bowel prep during their colonoscopy. Following the intervention, 142/180 (78%) patients had adequate bowel prep. This improvement from 52% to 78% demonstrates a statistically significant difference ( $p = 0.005$ ).

## Conclusion

We found significantly improved bowel preparation with the simple yet effective implementation of instructions in multiple languages. As such, improved bowel preparation reduces the need for short interval colonoscopy and would ultimately reduce costs and utilization of resources.