

# Improving no-show rates and bowel prep quality for GI patients

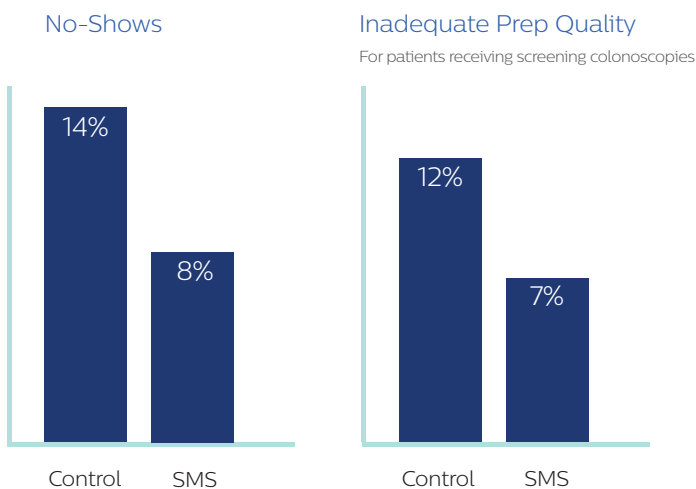
UChicago Medicine  
randomized controlled study\*

## Challenge

One of the top healthcare institutions in the U.S., the University of Chicago Medicine (UCM) is at the cutting edge of innovations in healthcare and healthcare technology. In 2018, UCM made colorectal cancer (CRC) screening a priority quality metric, however, with no-show rates in the endoscopy unit as high as 20% and rates of inadequate bowel preparation as high as 33%, UCM recognized that it was missing opportunities to provide screening to its patients and in turn losing out on revenue. With CRC being the second leading cause of cancer mortality in the U.S., UCM identified a need to implement a digital navigation platform to improve CRC screening rates and improve patient satisfaction.

## Solution

UCM partnered with Patient Navigation Manager (PNM), a leader in patient engagement technology, to implement an SMS-based navigation program to guide patients through their pre-procedure preparation and post-procedure follow up. The digital program provided time-release instructions to assist patients with their diet and bowel preparation prior to their colonoscopies, and then assessed their satisfaction with the program. UCM performed a randomized control trial to study the effect of this intervention in comparison to usual care (paper instructions and nursing pre-calls).



## Results

A total of 1625 patients were randomized into the SMS intervention (n=833) and control groups (n=792). Results highlighted a 45% decrease in no-shows among the SMS group compared to that of the control group. Similar results were demonstrated when same day cancellations and cancellations within 7 days were considered in conjunction with no-show rates (37% and 28% reductions in the SMS group, respectively). Additionally, rates of inadequate bowel preparation for colonoscopies that had been completed for the purposes of screening/surveillance were reduced by 40%. Lastly, patients in the SMS group reported a significantly higher rate of satisfaction in bowel preparation compared with those in the control group (77.8% vs. 74.4%).

## Conclusions

By launching and testing Patient Navigation Manager (PNM), UCM improved the quality and reach of its CRC screening initiatives. It improved core operational, financial, and clinical metrics that are crucial to delivering a patient-centered care experience. UCM and PNM are expanding their partnership by implementing more comprehensive efforts to reach patients who may be due for CRC screening. This novel solution will enable patients to engage in a digital shared decision-making protocol that will guide each patient to the CRC screening modality that is optimal for him or her.

*“Our collaboration with Medumo proved incredibly successful and directly helped us achieve our institutional goal of improving operational and quality metrics in our colonoscopy unit.”*

Dr. Neil Sengupta, MD

# 45%

Reduction in no-shows

# 40%

Reduction in inadequate bowel preparation

For patients receiving screening colonoscopies

# 16x

Return on investment

Estimate based on a retrospective financial analysis

\*Data is based on the following study:  
Solonowicz O, Stier MW, Kim K, Kupfer SS, Sengupta N. 860 Digital Navigation Improves No Show Rates and Bowel Preparation Quality for Patients Undergoing Colonoscopy - A Randomized Controlled Study. *Gastroenterology*. 2020;158(6):S-176.  
[https://doi.org/10.1016/S0016-5085\(20\)31128-8](https://doi.org/10.1016/S0016-5085(20)31128-8)

Results from case studies are not predictive of results in other cases. Results in other cases may vary.