A Good Prep : The No Fret Approach to Better Colonoscopy

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ABSTRACT

Colonoscopy is a pivotal diagnostic procedure essential for the early detection of colorectal malignancies, thereby optimizing treatment efficacy and patient survival. Additionally, it plays a crucial role in identifying and preemptively excising precancerous polyps, thwarting their malignant transformation. The effectiveness and precision of this diagnostic modality hinge upon multiple factors, with pristine visual clarity being an indispensable prerequisite.

Inadequate bowel preparation during colonoscopy impairs visual acuity, risking the oversight of malignant lesions. Furthermore, it can result in protracted procedure durations, unwarranted repeats, and procedural delays. Such outcomes not only diminish patient satisfaction but also engender increased financial costs and potential jeopardy to patient safety. The Boston Bowel Preparation Scale (BBPS) was introduced as an integral component of our organization's endeavor to streamline the colonoscopy process and standardize outcomes as part of the Value-Driven Outcome (VDO) initiative.

In the initial three months following the implementation of BBPS, our data revealed an average of 91% of patients achieved a BBPS score of 6 or higher. Employing a systematic approach, our interdisciplinary team conducted an in-depth survey and process analysis, leading to the implementation of sustainable changes. Remarkably, we surpassed our target ahead of schedule.

The ripple effect of this success resonated throughout our institution's patient care ecosystem. We observed a 30% reduction in daycare admission periods, a decrease in costs associated with procedure repetition, a 20% reduction in overall procedure turnaround time, and a notable enhancement in clinician satisfaction rates (and mood!).

This abstract chronicles our transformative journey, highlighting the far-reaching impact of standardized bowel preparation assessment on both patient outcomes and healthcare efficiency. Our experience underscores the potent synergy of evidence-based quality improvement initiatives, together with patient engagement, in elevating the standards of patient care.

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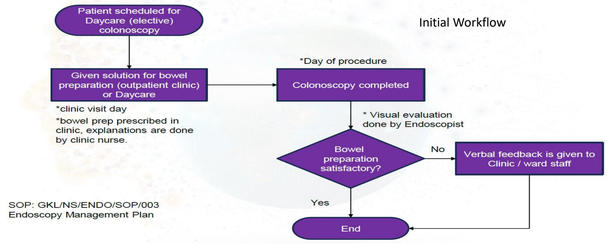
INTRODUCTION

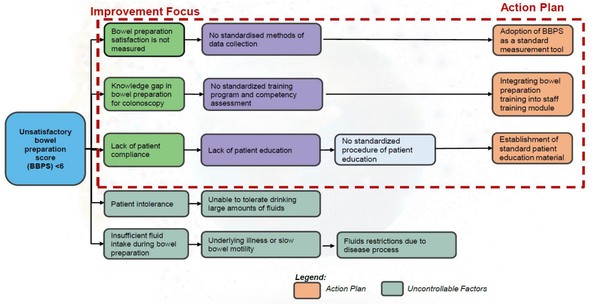
In November 2020, our healthcare organization introduced the Boston Bowel Preparation Scale (BBPS) as a standardized tool to objectively evaluate bowel prep satisfaction. Remarkably, no baseline data were available prior to this initiative. Initial data collection over a three-month period revealed that the percentage of patients achieving a BBPS score greater than 6 fell short of our organization's target of 95% or more. This pivotal discovery prompted our dedicated team to embark on a comprehensive quality improvement project, with the initial focus on mapping out the workflow.





METHODS AND MATERIALS

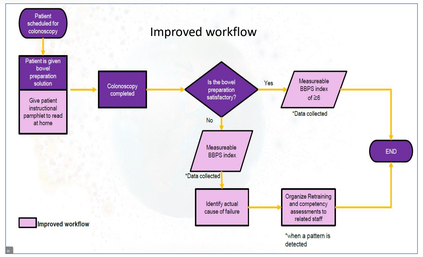
Our primary aim was to enhance the bowel preparation satisfaction rate, as measured by BBPS scores exceeding 6, from its initial rate of 91% to surpass the 95% target by February 2022. To achieve this, we adopted a systematic approach, which included process mapping, identifying key improvement areas by using surveys and mapping cause-effects relationships, to then tailor targeted evidence-based interventions.



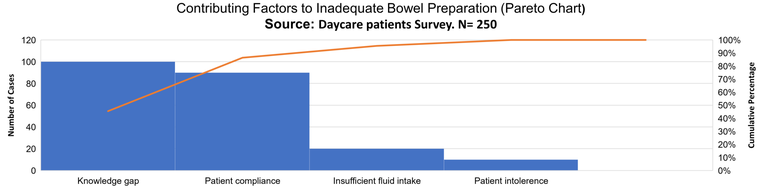
RESULTS

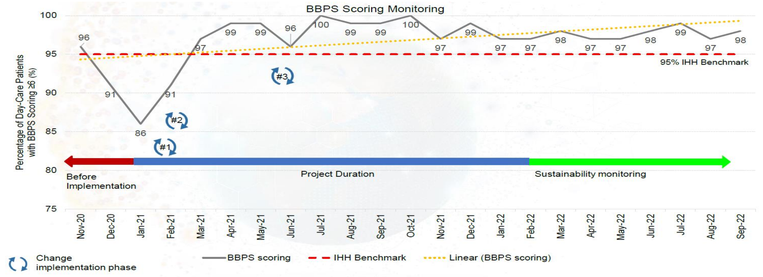
CAUSE:		Bowel preparation satisfaction rate is not measured		Knowledge gap on bowel preparation for colonoscopy		Lack of patient compliance
IMPLEMENTATION PHASE:		PHASE 1: Change #1	PHASE 1: Change #2	PHASE 2: Change #1	PHASE 2: Change #2	PHASE 3: Change #1
PLAN	*Change?*	• Adoption of BBPS for bowel preparation.	• Train consultants to use BBPS in their Colonoscopy reports.	• Integrating bowel preparation training module for Nurses and clinic staff.	• Create new competency checklist to evaluate the nurses' competency in bowel preparations.	• Establishment of standard patient education material.
PLAN	*Predict*	• Enable objective assessments of bowel prep.	• All the consultants will start using the BBPS assessment tool.	• Increase staff knowledge level on bowel preparations	• Will increase competency level of staff.	• Increase compliance on bowel prep by patient.
DO	*Learn*	• Data shows trends and patters that are useful for quality monitoring.	• BBPS value is integrated in the reporting system to achieve compliance.	• Training must done during orientation program, engagements are direct.	• Engagements are more challenging and time consuming.	• It is easier to be done during pre-registration in endoscopy
STUDY	*Compare Prediction*	• Predictions are accurate.	• Predictions are accurate. • BBPS in integrated in the report.	• Predictions are correct, score values increase after training conducted.	• Assessments ensures competencies maintained.	• Patients are more informed. Bowels are prepared adequately.
ACT	*Adopt, Adapt or Abandon Change*	• Adopt BBPS as a standard measurement tool for measuring bowel prep.	• Adopt BBPS as an element in the Colonoscopy report.	• Adopt new training module.	• Adopt new competency evaluation checklist.	• Adopt new standardised education material.

Through the concerted efforts of our interdisciplinary team and a commitment to continuous improvement, we are proud to report that our target was achieved by March 2021, surpassing the expectations well ahead of schedule. Furthermore, this heightened satisfaction rate was sustained through September 2022.



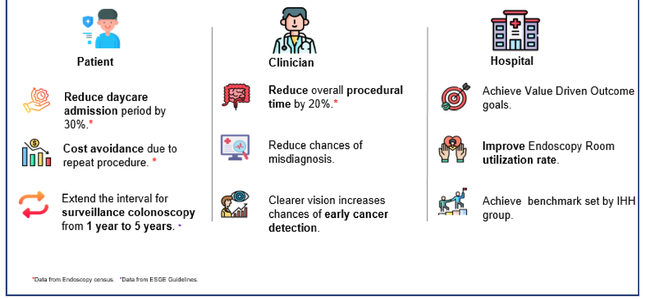
GRAPHS AND TABLES



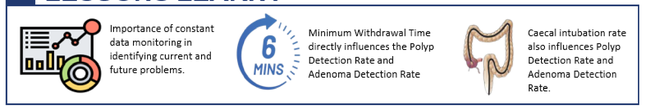


DISCUSSION

COSTS / BENEFITS



LESSONS LEARNT



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CONCLUSIONS

This quality improvement project exemplifies the effectiveness of data-driven interventions and collaborative teamwork in healthcare together with patients. The successful implementation of BBPS and subsequent achievement and maintenance of a BBPS score greater than 6 serves as a testament to the positive impact of our efforts on patient satisfaction and overall colonoscopy outcomes. This poster presentation outlines our journey towards this remarkable improvement, providing insights and lessons learned for others seeking to enhance quality in their healthcare processes.

REFERENCES

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