Improving Bowel Preparation for Inpatient Colonoscopies Using the Model For Continuous Improvement

K. Alazemi[1], A. Almudaires[1], B. Cai[1], V. Iablokov[1], S. Rahman[1], K. Qumosani[1], B. Yan[1], N, Khanna[1], A. Sandhu[1], J. Gregor M. Brahmania[1,2]
Department of Medicine; Division of Gastroenterology[1]
Centre for Quality, Innovation, and Safety, Schulich School of Medicine & Dentistry[2] , Western University

Schulich MEDICINE & DENTISTRY

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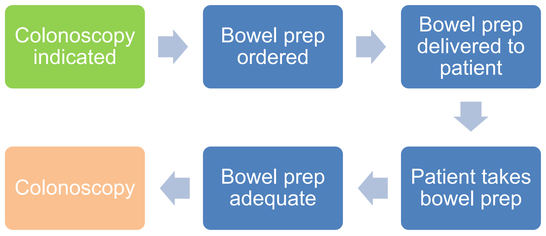
AIM Statement: Increase the percentage of adequate inpatient bowel preparation to above 90% by May 2022

PROBLEM DEFINITION

- Bowel preparation is an important colonoscopy quality indicator
- Poor bowel preparation can result in increased resource utilization, patient inconvenience and missed pathology, ex. Colon cancer
- Adequate bowel preparation rate of 85% should be targeted as per international guidelines

PROCESS MAP



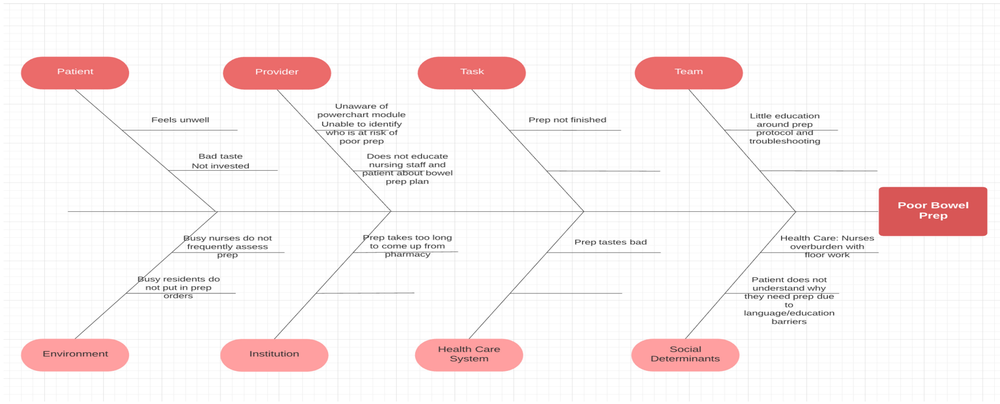
STAKEHOLDER FEEDBACK

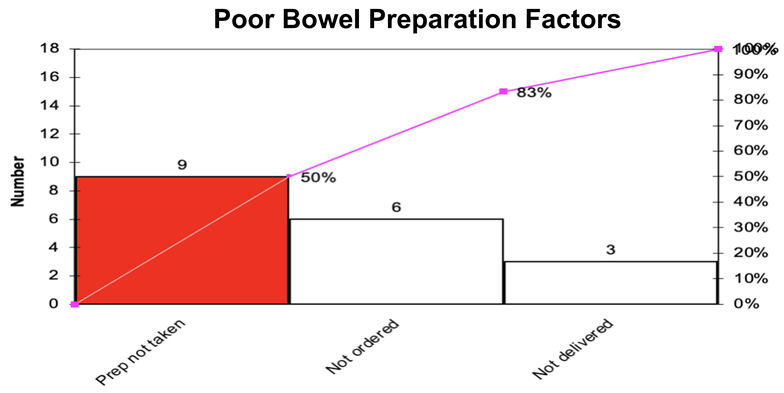
PATIENTS:
- Not aware of the consequences of poor preparation
- Bowel prep does not taste good

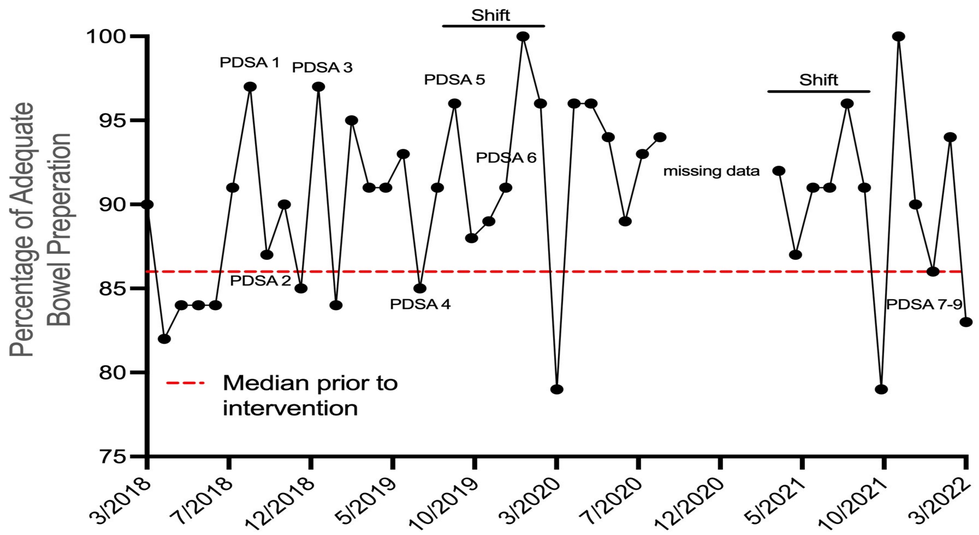
CHARGE NURSE/RN:
- Bowel prep takes too long to get delivered from the pharmacy
- Delay in communicating bowel prep status in am

PHYSICIANS:
- Bowel prep is often not started early enough, or patients drink it too slow
- Rotating trainees have variable understanding of optimal bowel preparation practices
- Despite having a standardized bowel preparation order set there are still variations in prescribing patterns by MRPs
- Late night or early morning routine pages/ bowel prep update can have a negative impact on trainee wellbeing

ROOT CAUSE ANALYSIS







IMPLEMENTATION/PDSA CYCLES

1. Standardized EMR bowel preparation creation
2. Written instructions to junior residents on bowel preparation orders
3. Standardizing poor-prep definition in post-procedure documentation
4. Refining EMR to include preparation administration times
5. Verbal instructions to junior residents at the beginning of rotation about bowel preparation
6. Written instructions about bowel preparation given to patients
7. GI fellows educates patient directly about importance of bowel preparation
8. GI fellows to confirm orders
9. GI fellows to check status of bowel prep in a.m.

MEASUREMENTS

- GI fellows consistently (>70%) providing education to patients during consent
- GI fellows consistently (>70%) check bowel preparation status in the morning
- Bowel preparation order set has been used in 100% of cases
- 100% of surveyed RNs find communicating bowel preparation status in a.m. helpful and feasible
- 60% of RNs found it challenging to assess bowel preparation of patients with cognitive impairment

CONCLUSION & SUSTAINABILITY

- There was 2 positive shifts and 7 runs (too few) after 9 PDSA cycles
- Median post interventions = 91%
- EMR order sets were the most impactful tool to accomplish aim
- Ongoing communication is still needed by all members of the team (patients, nurses, MDs) to ensure ongoing success
- New standard operating procedure to be included in Western Gastroenterology program handbook
- Bowel preparation adequacy will be analyzed every 2 months to ensure satisfactory levels (>95%) are maintained