Introduction

• Constipation is commonly encountered in patients admitted to the hospital, with a variety of possible treatments to choose from.

• Docusate (Colace) is often prescribed to treat constipation, though evidence suggests it has limited efficacy.

• Utilizing an ineffective medication adds to patients’ pill burden, health care costs, and may delay the use of effective medications with downstream consequences.

Research Objective

• To determine if reducing access to docusate decreases the administration of docusate and increases the use of evidence-based bowel regimens in a cost-effective manner.

Methods

• Docusate was removed from >500 admission order sets at 12 hospitals within the Jefferson Health system on April 4th, 2023.

• Docusate was replaced with more evidence-based bowel regimens (polyethylene glycol [PEG], senna, etc).

• We reviewed administration data of the following medications in inpatient locations at 90 days pre- and post-intervention:
  - Docusate
  - Bisacodyl
  - Senna
  - PEG
  - Methylnaltrexone
  - Enemas
  - Suppositories

• We also reviewed pricing data of each of the medications studied in order to extrapolate the cost effects.

Results

Docusate dosing decreased from 65,691 to 34,407 in the post-intervention period (Confidence Interval [CI]: -47.5%-48.5%, p<0.0001) (Figure 1). This corresponds to 126,874 fewer doses per year.

• Cost savings (not including pharmacy or nursing time) of $7,421.55/year (Figure 2).

Conclusions

• Docusate has limited efficacy and adds to the medication burden of patients.

• Removing docusate from admission ordering sets and replacing with evidence-based regimens significantly decreased the amount of docusate administered to patients over the study period and increased the use of evidenced-based medications.

• Limitations
  - 90 day pre- and post-intervention analysis may not have been long enough to reveal true trends in prescribing.

• Implications
  - These results can be used to guide further interventions to improve use of evidence-based treatments.

References