

## 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 from >500 admission order sets at 12 hospitals within the Jefferson Health system on April 4<sup>th</sup>, 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)

- Corresponds to 126,874 fewer doses per year
- Cost savings (not including pharmacy or nursing time) of \$7,421.55/year (Figure 2)

Figure 1: Bowel Medication Doses Ordered

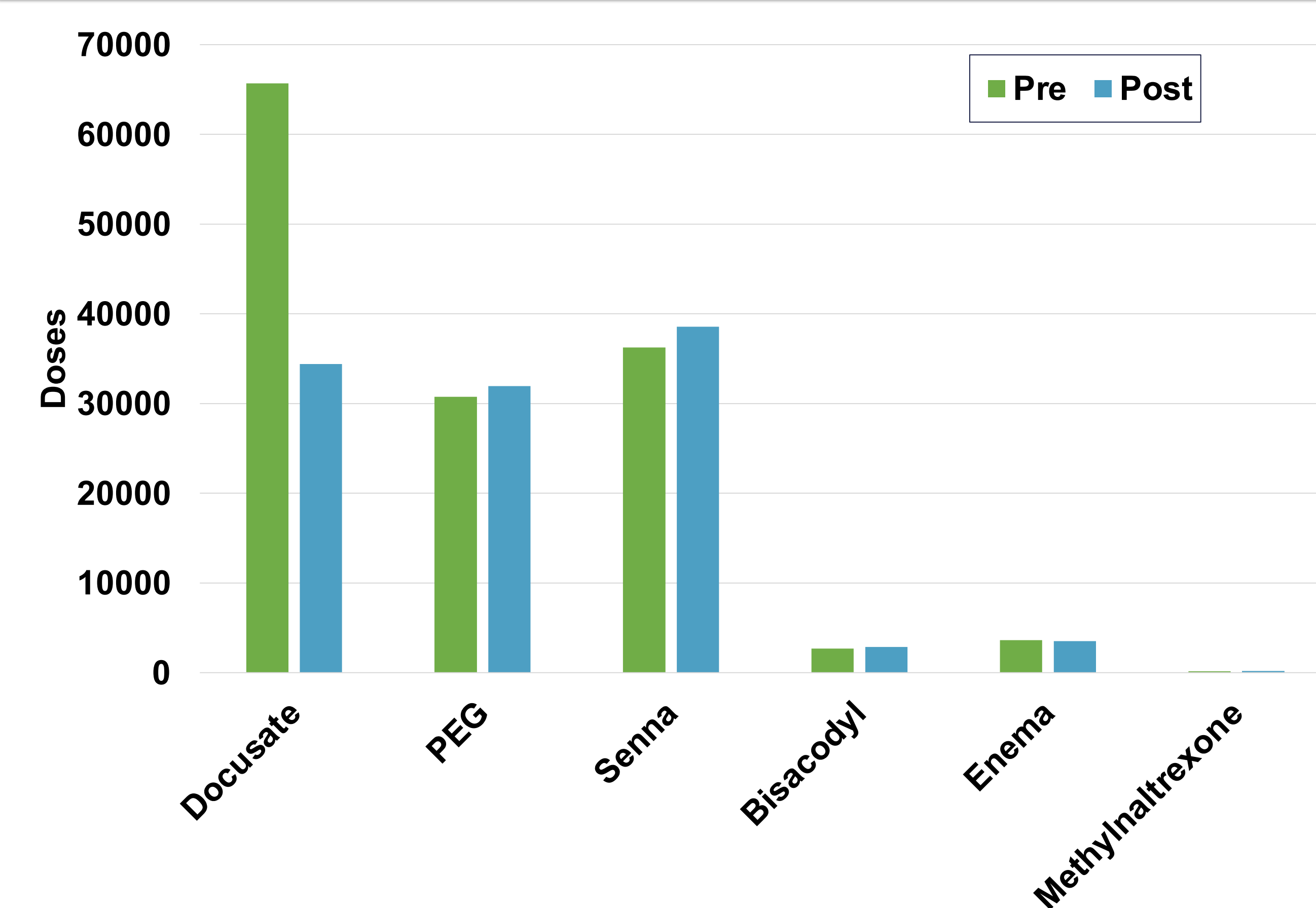
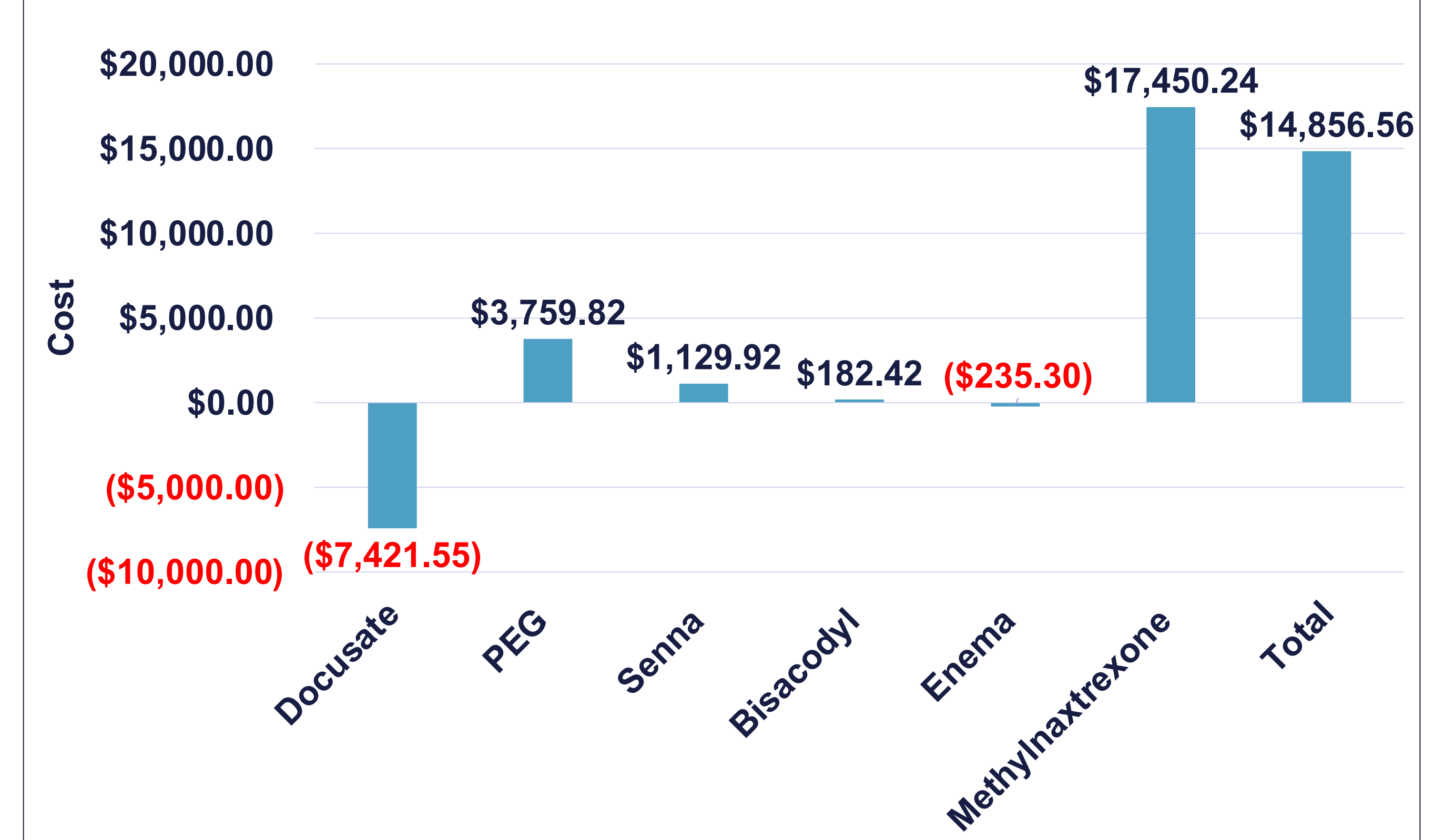


Table: Percentage Change in Doses Administered

Medication	% Change in Administration
Docusate	-48%
PEG	4%
Senna	6%
Bisacodyl	6%
Enemas	-2%
Methylnaltrexone	21%

Figure 2: Change in Cost Per Year



## 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
  - Further study, possibly with a longer analysis period, is required to understand the net increase in annual cost

## References

Fakeri RJ, Volpicelli FM. Things we do for no reason: prescribing docusate for constipation in hospitalized adults. J Hosp Med. 2019;14(2):110-113