

Introduction

- Pain is a common complication of cancer and 90% of patients will require opioids for pain management.¹
- Opioid induced constipation (OIC) is one of the most common side effects of opioids
- OIC occurs irrespective of opioid dose or drug type and persists without tolerance.²

Background & Significance

Complications of unmanaged OIC include:

- Nausea, vomiting, bloating, abdominal pain/cramping, fecal impaction or obstruction, infection.³
- Higher rates of health care utilization, inpatient hospitalizations, and total health care costs.⁴
- Decreased quality of life, unable to adhere to treatment, frustration, dependence, anxiety and worry.⁵

Practice Gap

- Oncology clinical practice guidelines recommend the use of osmotic and stimulant laxatives for the prevention and management of OIC, not stool softeners such as docusate sodium.^{6,7}
- Cancer patients on opioids are not receiving adequate treatment or prevention of OIC.⁸

Aim

- To improve laxative prescribing for the prevention and management of OIC in hospitalized adults with cancer

Methodology

- Design:** Quality improvement project in a large academic cancer center hospital
- Setting:** Cancer center hospital in large metropolitan city
- Sample:** A total of 18 order sets were included
- Intervention:** A revision to the laxative options available in the admitting order set to remove docusate if present, add polyethylene glycol 17g daily as needed, and add senna 2 tabs nightly scheduled
- Survey:** A 5-question survey sent to all advance practice providers and physicians (n=148) using the revised admission order sets
- Data collection:** Retrospective data was collected from the electronic health record (EHR) 6 weeks before and after the intervention

A revision to the laxative options available in the standard admission order set in the EHR led to a significant decrease in use of docusate and docusate-senna orders for the prevention and management of OIC

Secondary outcomes

- The number of patients with a diagnosis of constipation or OIC decreased significantly, $p < 0.001$.
- No significant differences were observed in the frequency of laxative orders placed within 24 hours of an opioid order, number of laxatives prescribed at discharge, admissions related to bowel related complications, or length of stay. Survey responses were insufficient to determine and change in prescribing practice.

Implications

- Interventions utilizing the EHR can facilitate evidence-based management of OIC and align clinical practice with national and international standards on the prevention and management of OIC.
- Tailoring these interventions further has the potential of cost savings, a reduction of nursing hours spent on administering docusate, reduced hospital length of stay, and reduced health care utilization related to OIC.

Future Directions

- Development of a clinical practice guideline and/or OIC order set
- Intervention for safe selection of agents for laxative refractory OIC
- Studies on economical impact of order set revision

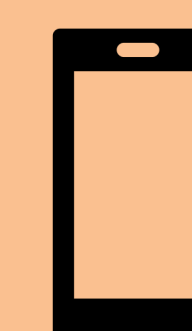
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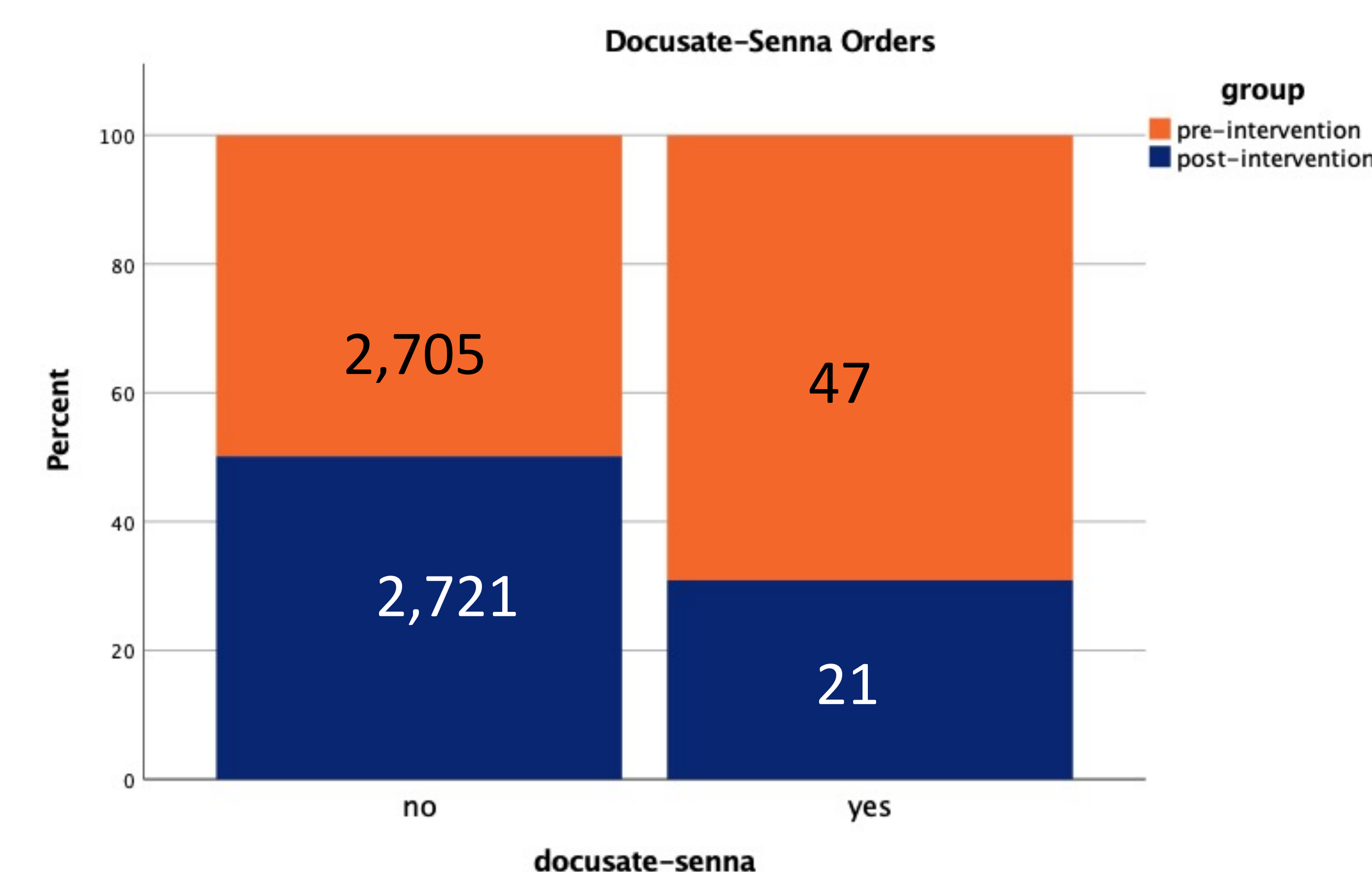
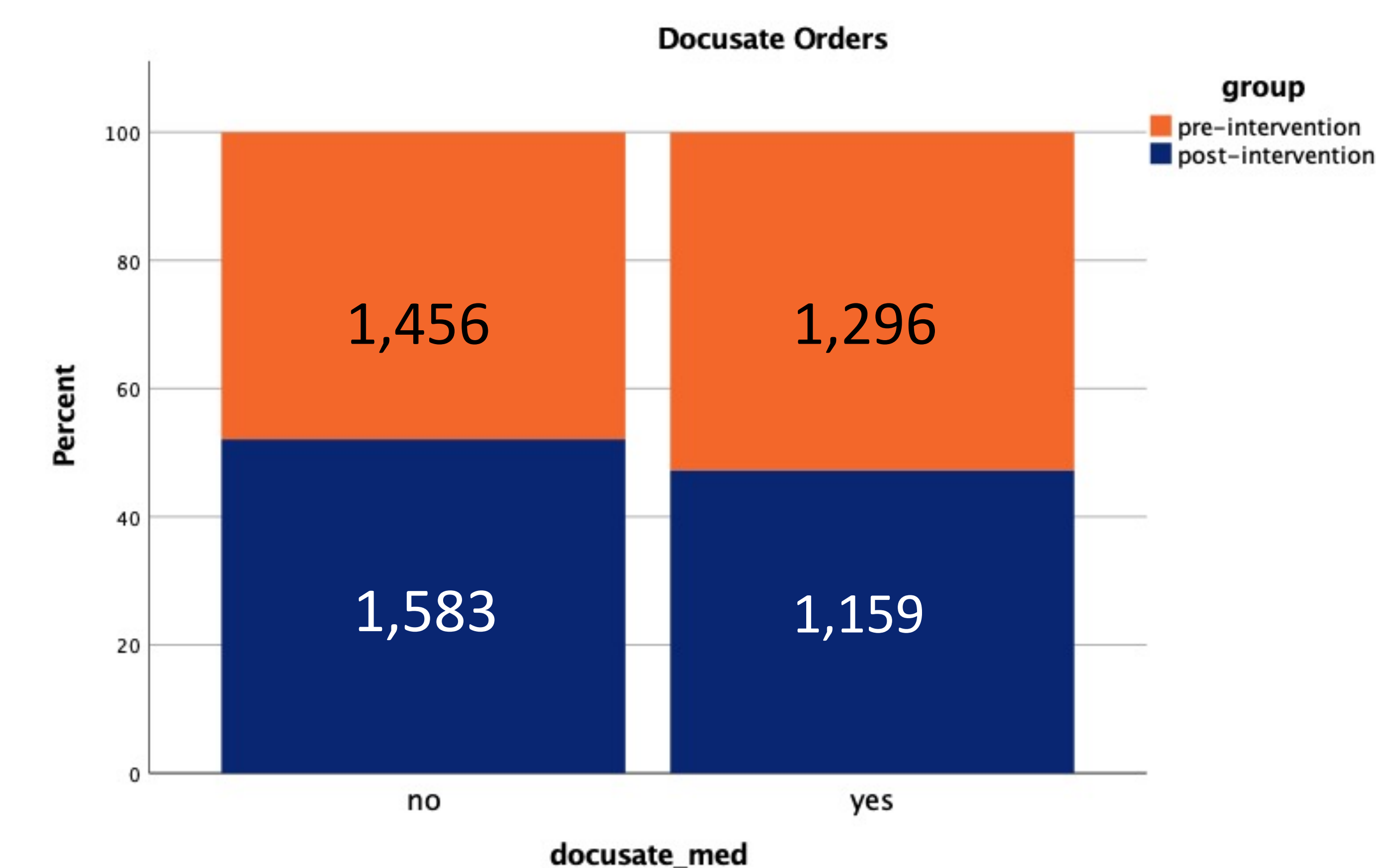
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Results

- A total of 2,742 patient admissions preintervention were compared to 2,752 admissions postintervention
- Average age was 45 years and most (51%) were female

Laxative orders

- The number of orders for docusate (Pearson $\chi^2 = 12.934$; $p < 0.001$) and docusate-senna (Pearson $\chi^2 = 9.970$; $p = 0.002$) decreased significantly after the intervention.



- The number of orders for polyethylene glycol ($p = 0.559$), senna ($p = 0.582$), other laxatives ($p = 0.245$), or functional bowel disorder medications ($p = 0.533$) did not change significantly.