

Characterizing Opportunities for Proton Pump Inhibitor Deprescribing in a Family Medicine Clinic

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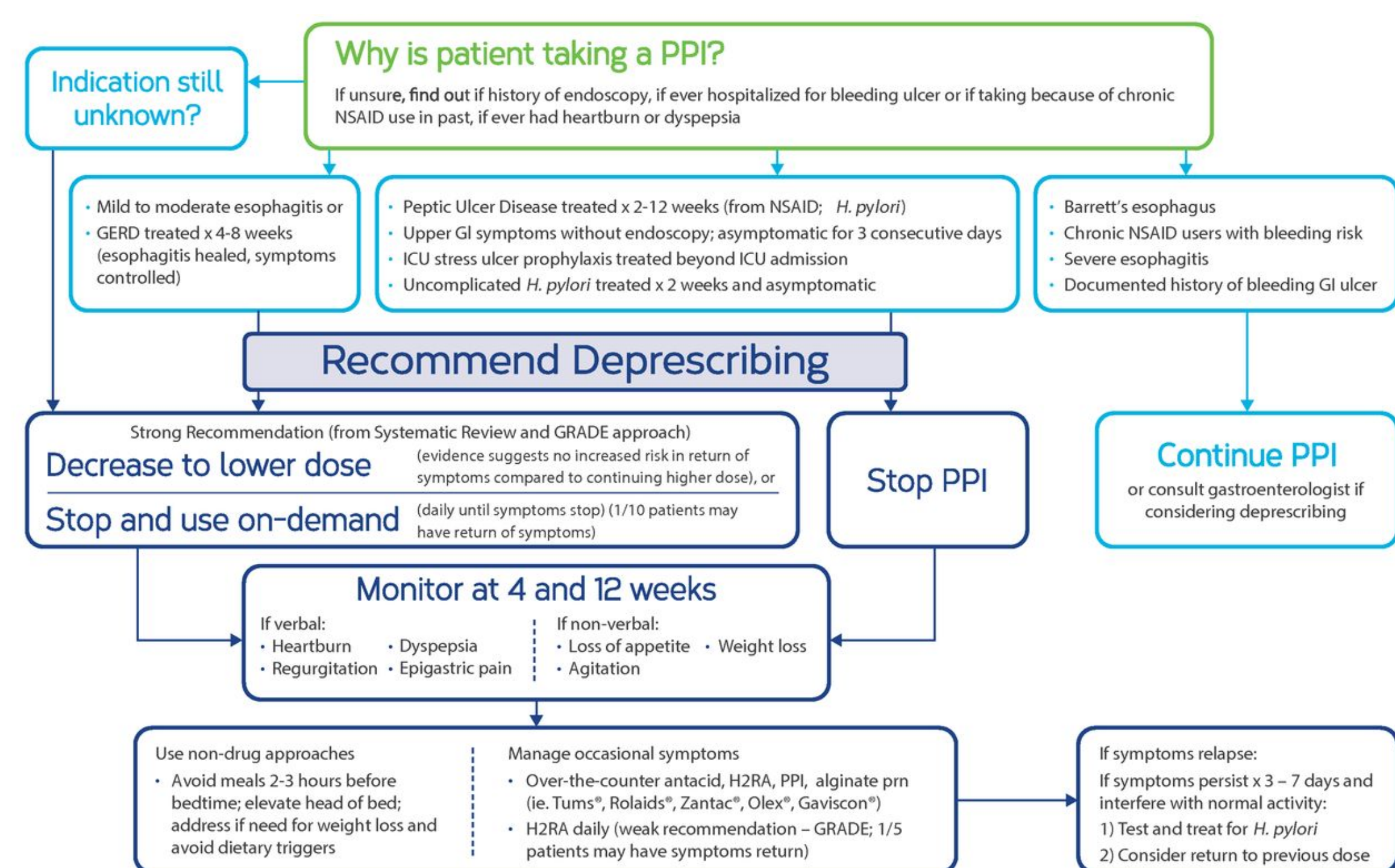
Discussion

Proton Pump Inhibitors (PPIs)

- Considered safe with short-term use, but safety concerns when used long-term.¹⁻⁴
- Often used chronically, despite indications being for short-term therapy.^{1,5}

Deprescribing: Purposeful process of either discontinuing or reducing the dose of medication that may be causing harm or may no longer be indicated.¹

- The College of Family Physicians of Canada published a clinical practice guideline for deprescribing PPIs.¹



Farrell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid FJ, et al. Deprescribing proton pump inhibitors. Evidence-based clinical practice guideline. *Can Fam Physician* 2017;63:354-64 (Eng), e253-65 (Fr).

Objective

This study aimed to characterize the proportion of patients eligible for PPI deprescribing according to the PPI deprescribing guideline.

Methods

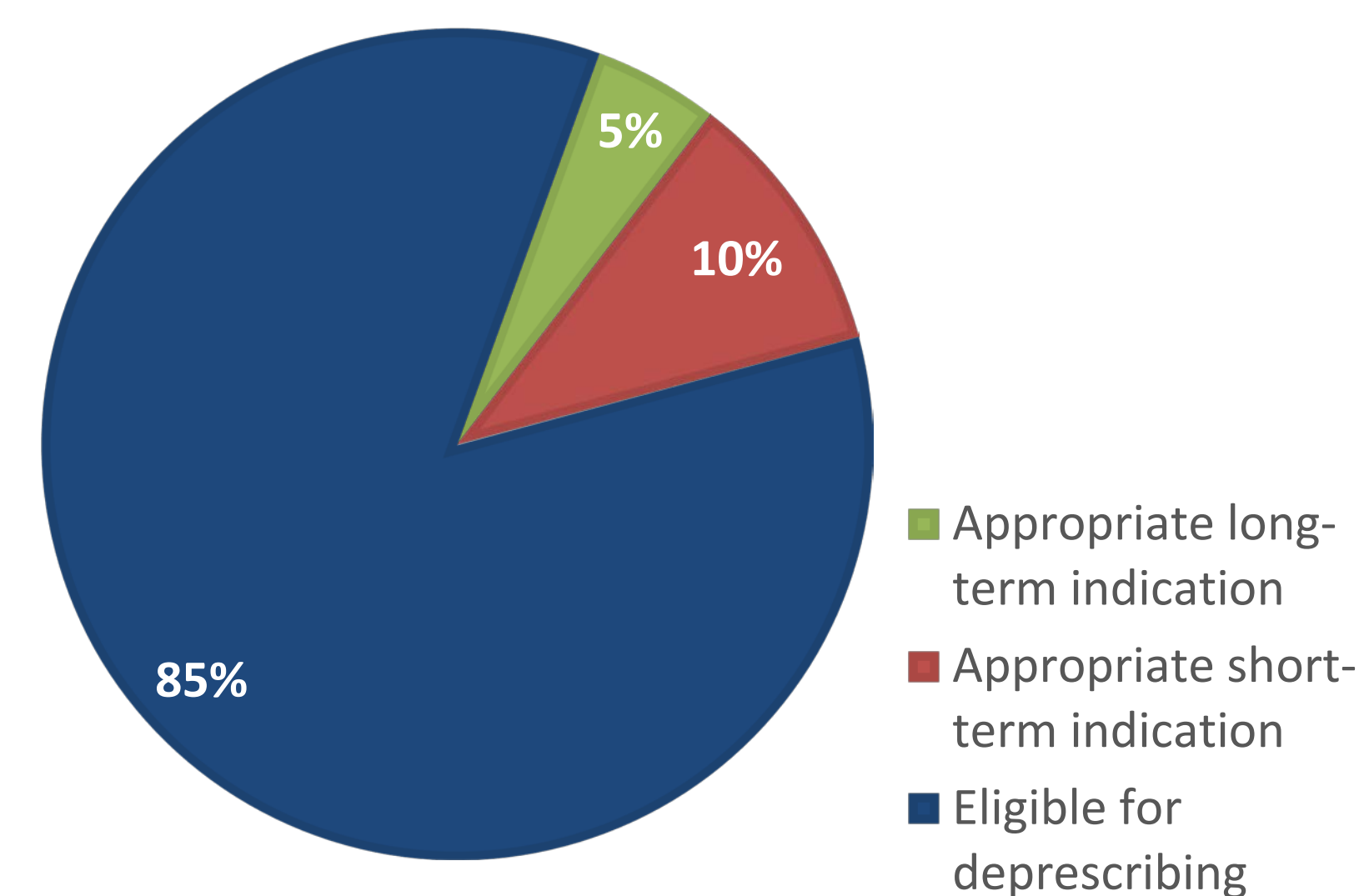
- Retrospective chart review at one family medicine practice between 1/1/2017 – 1/1/2018
- Inclusion: 18+ years old with an active PPI prescription
- Primary Outcome: Percentage of patients eligible for PPI deprescribing
- Secondary Outcomes: Incidence of possible PPI related adverse drug events including *C. difficile* infection, fracture(s), and community-acquired pneumonia
- Data Analysis: Descriptive statistics were used
- A sample size of 308 was obtained to represent the patient population with a 95% confidence interval.

Results

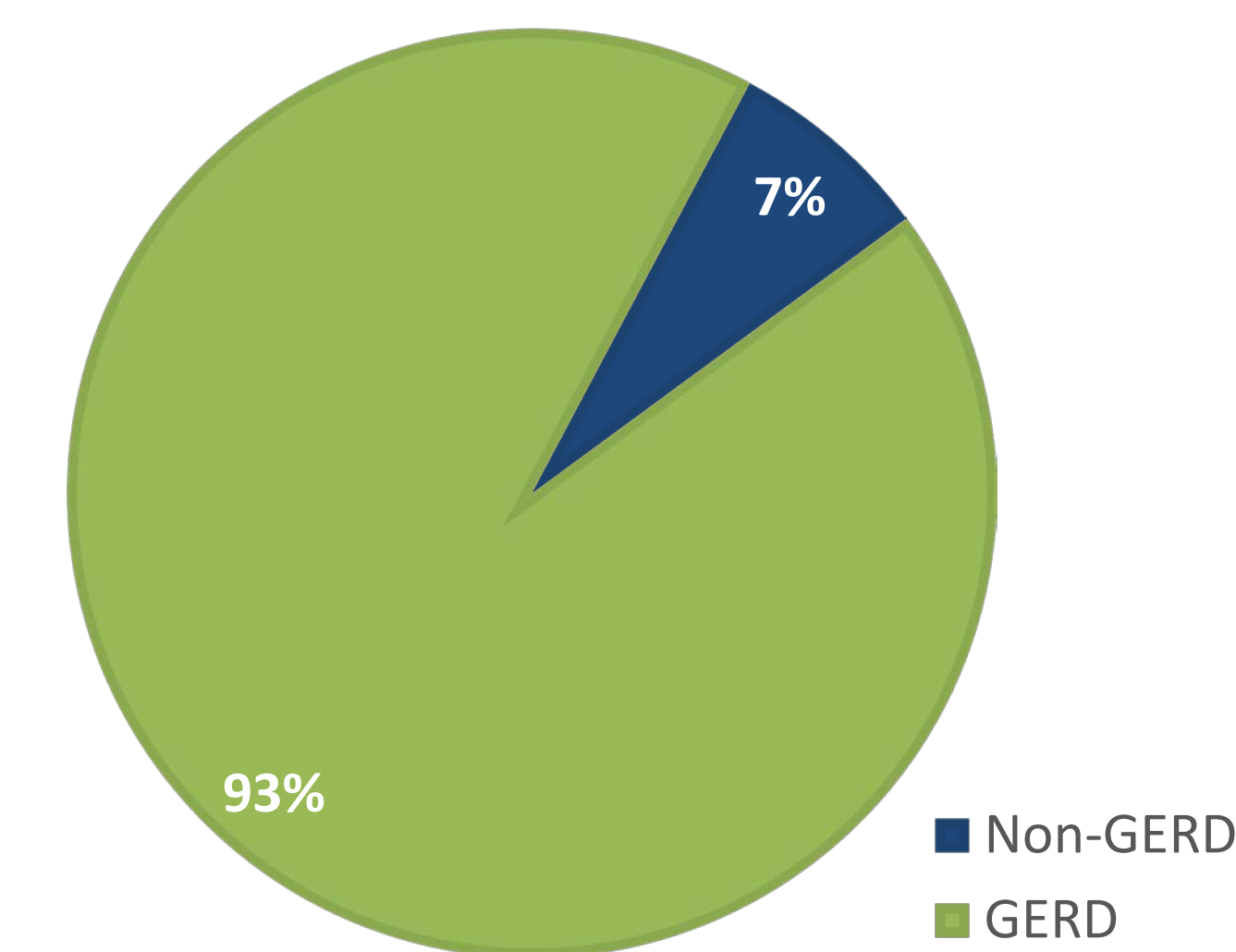
84.7% of patients (n=261) were eligible for deprescribing.

- The most common indication for PPI therapy was GERD (n=286, 92.9%).
- The median duration of PPI therapy of those eligible for deprescribing was 3.1 years.

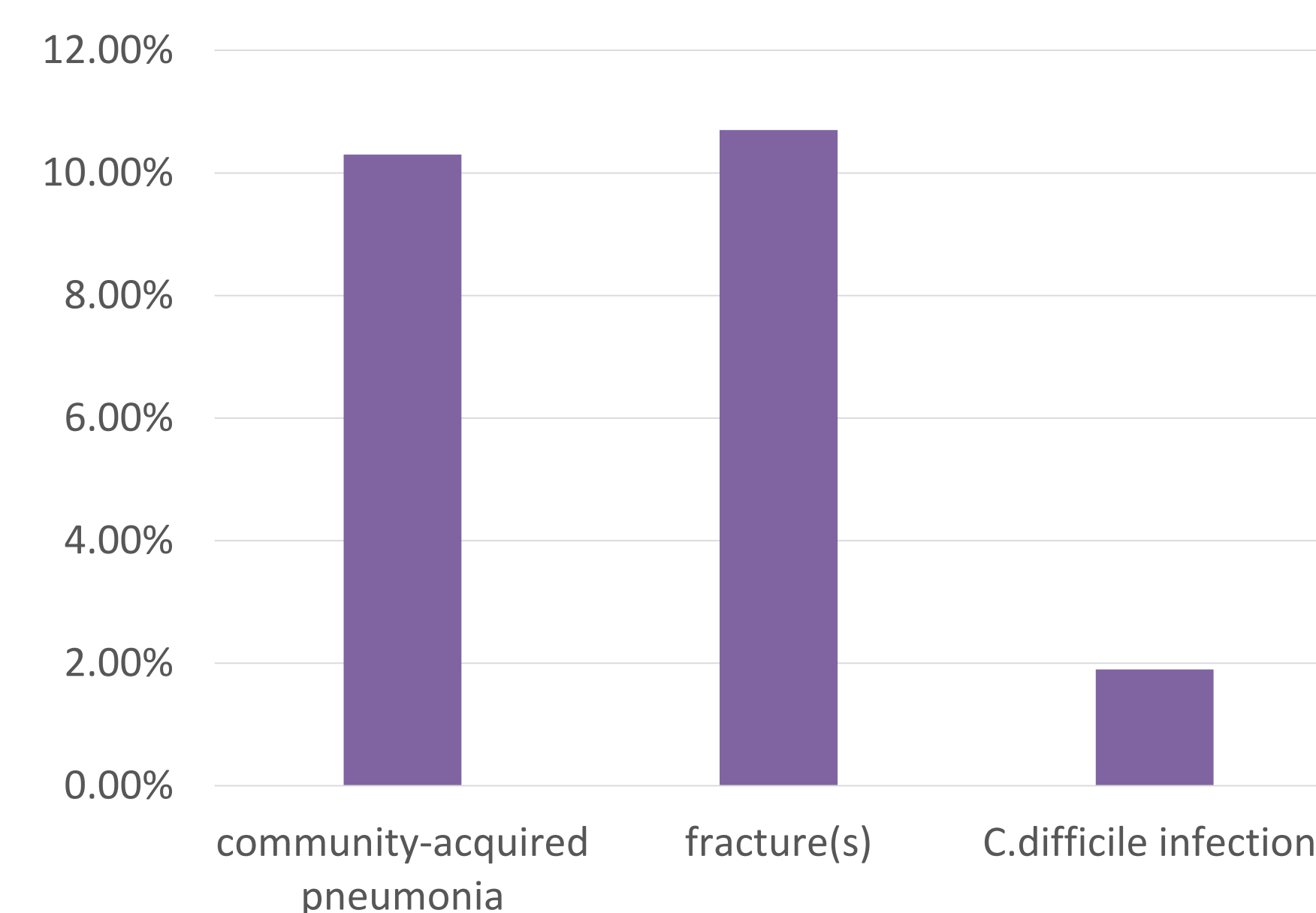
PATIENTS ELIGIBLE FOR DEPRESCRIBING



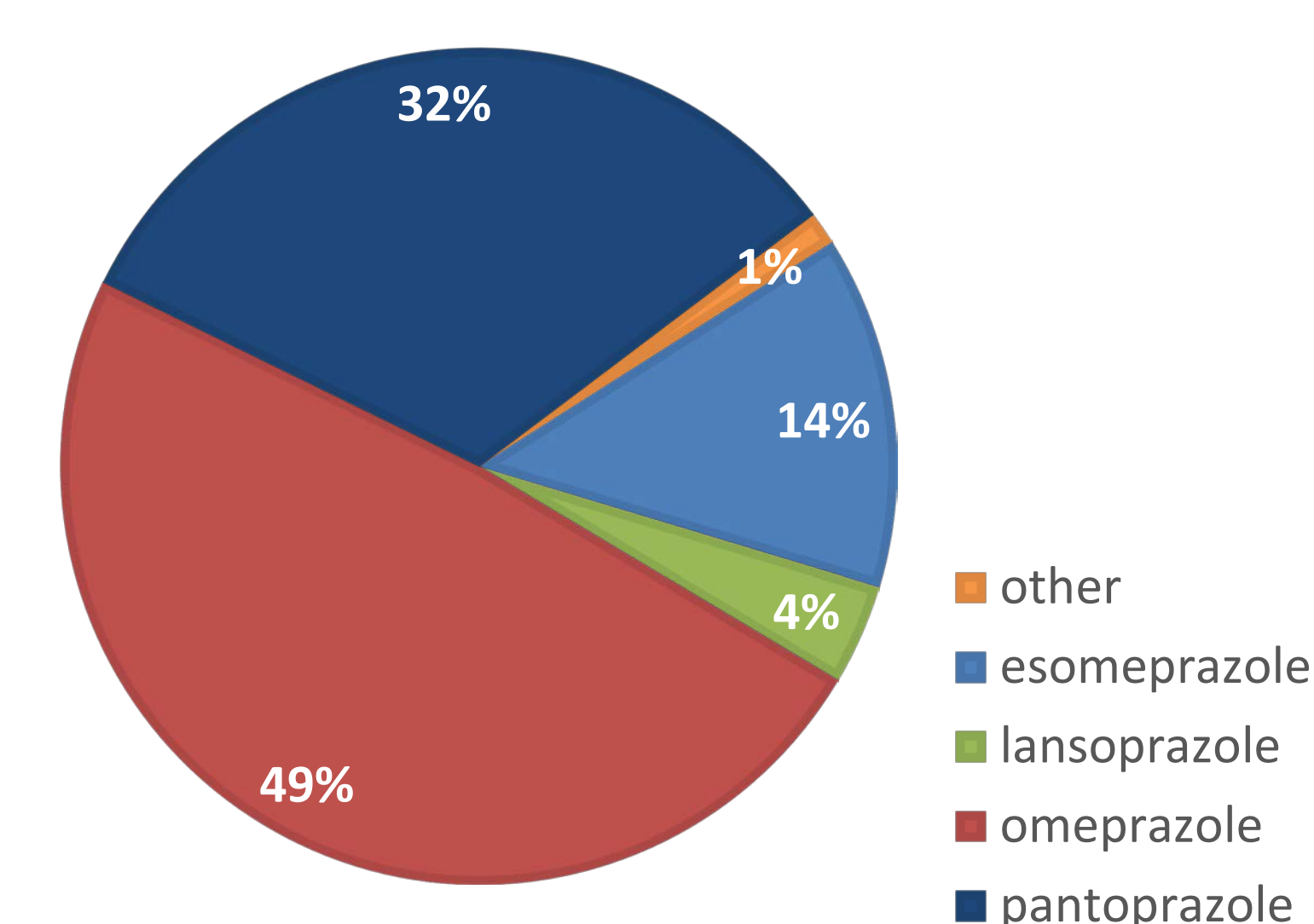
INDICATION FOR PROTON PUMP INHIBITOR



ADVERSE DRUG EVENTS AMONG PATIENTS ELIGIBLE FOR DEPRESCRIBING



PROTON PUMP INHIBITORS USED



- 60 (30%) patients eligible for deprescribing developed an adverse drug event after initiation of PPI therapy
 - 5 (1.9%) developed *C. difficile* infection
 - 27 (10.3%) developed community-acquired pneumonia
 - 28 (10.7%) developed a fracture
- The most common PPIs used in patients eligible for deprescribing was omeprazole (51.0%) followed by pantoprazole (29.1%).

Background

- The majority of patients on extended duration PPI therapy did not have documented indication for chronic use.
- Chronic PPI therapy increases the risk of experiencing adverse side effects and contributes to polypharmacy.
- The results of this study support the implementation of PPI deprescribing education and interventions.
- Further research is needed to determine the optimal strategy to deprescribing PPIs in this setting.

Conclusions

- Most patients on PPI therapy were eligible for deprescribing.
- Pharmacists are well positioned to develop and implement PPI deprescribing education and interventions.

References

1. Farrell B, Pottie K, Thompson W, et al. Deprescribing proton pump inhibitors. *Can Fam Physician*. 2017;63(5):354-364.
2. FDA Drug Safety Communication: Clostridium difficile associated diarrhea can be associated with stomach acid drugs known as proton pump inhibitors (PPIs). Published February 8, 2012. Accessed April 30, 2019.
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4. Sheen, E, Triadafilopoulos, G. Adverse effects of long-term proton pump inhibitor therapy. *Dig Dis Sci*. 2011;56(4):931-950.
5. Katz PO, Gerson LB, Vela MF. Guidelines for the Diagnosis and Management of Gastroesophageal Reflux Disease. *The American Journal of Gastroenterology*. 2013;108(3):308-328.

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