Identifying Inappropriate Prescribing Practices of PPIs in an Inpatient Hospital Setting

Amanda Jacubowsky, DO¹, Jeffrey Wright, DO¹, Kathryn Zaffiri, MPH¹, Matthew Fair, PharmD², Amy Slenker, MD³
Lehigh Valley Health Network, Allentown, PA
¹Department of Medicine, ²Department of Pharmacy, ³Department of Infectious Disease

Introduction

• 15 million patients per year in the United States are prescribed proton pump inhibitors (PPIs)
• Appropriate indications: PUD, GERD, ZES, NSAID or DAPT prophylaxis, stress ulcer prophylaxis
• Side effects: B12 deficiency, malabsorption, C. Difficile infection, osteoporosis

Project Aim

• Evaluate for inappropriate prescription of PPIs during inpatient admissions at a large tertiary referral center
• Identify patterns of discussing PPI therapy as an outpatient after hospital discharge

Methods and Results

Methods:

• Epic query and chart review (Figure 1)
• Inclusion criteria: started on PPI in May 2022
• Exclusion criteria: <18 years old and on PPI or H2 blocker prior to admission

Results:

Epic query to identify patients prescribed a PPI while admitted to large tertiary care center during May 2022
n = 244

Excluded: on PPI or H2 blocker prior to arrival or younger than 18 years old
n = 73

Eligible patients for further chart review who met inclusion criteria
n = 171

Patients without appropriate indication for PPI
n = 52

Appropriate indication for PPI
n = 119

PPI not addressed outpatient
n = 30

PPI continued as an outpatient
n = 12

No outpatient follow-up
n = 7

PPI discontinued as an outpatient
n = 2

PPI dose decreased as an outpatient
n = 1

Figure 1: Flow sheet of data gathered during Epic query and chart review. The most common reasons for inappropriate PPI prescription included iron deficiency anemia without signs of gastrointestinal bleeding, generalized abdominal pain, and lack of documentation for an indication.

Discussion

• 30% of patients in May 2022 were started on PPI without an appropriate indication for medication
• 80% of patients who received PPIs inappropriately had the medication continued as an outpatient, putting them at risk for adverse events
• Future direction: provide education and Epic decision-making to prevent over-prescription of PPI

References