

**Title: Evaluating the Appropriate Use of Proton Pump Inhibitor in an Internal Medicine Residency Clinic****Category:** QA/QI**Authors**

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**Background**

The AGA (American Gastroenterological Association) recommends long-term acid suppression therapy be titrated to the lowest effective dose needed to achieve therapeutic goals<sup>1</sup>. Adverse outcomes have been reported from long-term use of proton pump inhibitors (PPI)<sup>2,3</sup>. However, few patients are reassessed on a regular basis to determine whether the PPIs are still needed, despite the fact that many patients who are receiving long-term therapy are able to have their dose modified or discontinued on the basis of the presence or absence of symptoms.

**Methods**

We performed a retrospective chart review to ascertain the quality of our clinic's pharmacologic practices of the management of gastroesophageal reflux disease (GERD). 60 patients between the ages of 40-75 years who are treated for GERD at the Academic Internal Medicine Clinic at University Hospital with PPI in the years of 2019-2020 were selected with random sampling. We assessed what percentage of patients chronically treated with PPI had their symptoms reassessed in their visit and had their dose changed appropriately. We also studied what percentage of patients had their PPI discontinued if they are no longer symptomatic after treatment.

**Results**

51/60 (85%) patients had their GERD symptoms addressed. Among 51 patients whose GERD symptoms were addressed, 28 (54.9%) patients had their PPI dose adjusted appropriately. GERD symptoms resolved in 28/60 (46.7%) patients, but PPI was discontinued in 8/28 (28.6%) patients.

**Conclusion**

Despite addressing GERD on a majority of randomly selected patients on retrospective chart review, our clinic did not appropriately modify or discontinue PPI therapy in a significant portion of our patient population. Future assessment of PPI therapy of GERD should explore quality improvement measures of enhancing PPI management with respect to patient symptoms.

**Reference**

1. Freedberg DE, Kim LS, Yang YX. The Risks and Benefits of Long-term Use of Proton Pump Inhibitors: Expert Review and Best Practice Advice From the American Gastroenterological Association. *Gastroenterology*. 2017;152(4):706-715.
2. Trifan A, Stanciu C, Girleanu I, et al. Proton pump inhibitors therapy and risk of *Clostridium difficile* infection: Systematic review and meta-analysis. *World J Gastroenterol*. 2017;23(35):6500-6515.
3. Fohl AL, Regal RE. Proton pump inhibitor-associated pneumonia: Not a breath of fresh air after all? *World J Gastrointest Pharmacol Ther*. 2011 Jun 6;2(3):17-26.