

Lahey Clinical Performance Network

Pharmacy Fact Sheet: Proton Pump Inhibitors (PPIs)

Prescribing Considerations

January 2017

Key points

PPIs are one of the most commonly prescribed medications, given their significant efficacy and favorable safety profile.

However, these factors may have contributed to overprescribing of these agents, and a significant **proportion of use may be considered to be inappropriate.**

When considering the **noted increased risks for** *C. difficile* **infection**, and potential yet conflicting evidence of other adverse effects, it is important **to review indications for use regularly** (see box below)

When possible, avoid empiric use for stress-ulcer prophylaxis in the hospital, and avoid concurrent use with antibiotics which may further increase risk for *C. difficile*.

For each patient taking a PPI

- ✓ Evaluate PPI use after hospital discharge and at least annually
- Consider *deprescribing PPIs* when there is no clear indication for ongoing therapy
 - Check out this link for an evidence-based deprescribing algorithm for PPIs, located at www.deprescribing.org.³
- Avoid abrupt discontinuation of PPI Tapering over 2 to 4 weeks will reduce risk for acid rebound
- Remind of importance of lifestyle modifications

If a PPI is required...

- Remind patient to take 30 minutes prior to eating
- ✓ Consider generic and OTC products
- Recommend calcium citrate for patients on calcium supplementation (citrate is absorbed in a non-acidic environment)

Avoid meals 2-3 hours before bedtime Elevate the head of the bed Address need for weight loss Avoid dietary triggers <u>Utilization</u> - Throughout the Lahey Clinical Performance Network, it is estimated* that for CY2016, over 16,000 prescriptions were written for a PPI, with a cost of almost \$440,000 to the Network, or an average of \$27 per written prescription. Though **Brand** PPIs made up only **3% of prescribing**, they accounted

	for almost half of the total cost . Please see table below							
Want to learn more?	<u>Lahey</u>	TOT AITIOST HAIT OF THE TOTAL COST. PIERSE SEE TADIE DEIOW.						
	Andrew Levitsky, PharmD, MEd, BCPS							
Contact your Accountable Care Unit Pharmacist →	Andrew.M.Levitsky@lahey.org Kenneth Noyes, PharmD, BCPS <u>Kenneth.Noyes@lahey.org</u>		Total Estimated PPI Rx's	% of PPI Rx's	Total Estimated Cost	% of Total Cost	Avg Cost / Written Rx	
<u>Author</u> Pam Sherry, PharmD, BCACP Director, Network Pharmacy Management <u>Pamela.S.Sherry@lahey.org</u>	Northeast	Brand	417	3%	\$212,742	48%	\$510	
	Carol Freedman, RPh, MAS, BCGP <u>cfreed@nhs-healthlink.org</u>	Generic	15776	97%	\$227,224	52%	\$14	
	Winchester (ACO Patients Only)		16193		\$439,965		\$27	
	Elizabeth Toabe, PharmD	*Data extrapolated from 2016 Q1-3 prescribing data for BCBS, HPHC and						
	etoabe@winhosp.org		Tufts LCPN patients					

References

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deprescribing proton pump inhibitors. Unpublished manuscript. Accessed 9-28-2016 at http://www.open-pharmacy-research.ca/evidence-based-ppi-deprescribing-algorithm/ • Heidelbaugh JJ, Kim AH, Chang R, Walker PC. Overutilization of proton-pump inhibitors; what the clinician needs to know. *Ther Adv Gastroenterol* (2012) 5(4) 219–232. Accessed 9-28-2016 at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3388523/

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http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm290838.htm. Accessed November 1, 2016.