Introduction & Purpose

Introduction:
The use of PPI in older adults may be contributing to unnecessary personal and economic costs in healthcare, increasing the risk of side effects in older adults, such as diarrhea, including Clostridium difficile infections, (CDI), pneumonia, malabsorption, and interruption of bone metabolism.

Purpose:
To identify current PPI prescription patterns in older adults admitted to Medicare A skilled LTCFs, as they relate to diagnosis and symptoms management

The long term objective is consistent and appropriate PPI prescribing through the development of an evidenced based PPI formulary and selective PPI use parameters

Experimental Design

A retrospective, observational study was conducted, utilizing a secondary data set of prescribing data from a convenience sample of all Medicare A patients admitted within an 18 month period to 22 Midwestern long term care facilities (LTCFs).

Prescribing data and diagnostic information for trends and patterns related to PPI use for all Medicare A patients admitted to these 22 facilities between January 1, 2010 and May 31, 2011 were examined.

Rates of PPI use were determined, and compared to diagnostic codes
Of 1381 total admissions, 1101 (79.7%) were prescribed PPIs. Of these, 996 patients (90.5%) were prescribed PPIs without a proven diagnosis.

Gastroesophageal reflux disease (GERD) tended to be the diagnosis used most frequently for PPIs, but there was usually no follow-up or proof of active GERD.

There was no appropriate diagnosis for PPI use in 716 (65%) of those admitted during the study period.

Concurrent therapy with non-steroidal anti-inflammatory drugs (NSAIDS) (including aspirin) and/or anticoagulant therapy (warfarin) was prescribed in 382 (34.6%) patients.

Total cost of PPIs prescribed from January 2010 to June 2011 was $348,414.00.

Per diem cost of PPI was $45.00 per patient.

### Conclusions

There is significant over-use of PPIs in the study population. Even when use of NSAIDS and anticoagulant therapy were taken into consideration as valid reasons for PPI use, 615 (55.9%) patients were prescribed PPI without appropriate diagnosis. Considering older adults’ underlying medical conditions and frailty, the unnecessary use of PPIs may lead to increased personal and economic cost.

---

**Created**  
23 Mar 2012  
4:36:09 PM  
PUBLIC