

CFMC Quality Improvement Project in Pharmacy

Potentially Inappropriate Medications in Long-Term Care Residents

Published literature suggests that substantial proportions of long-term care (LTC) residents receive potentially inappropriate medications (PIMs) (Aparasu, 2000). Furthermore, the most common inappropriate medication choices involve propoxyphene, diphenhydramine, hydroxyzine, oxybutynin, amitriptyline, and cyproheptadine (Lau, 2004). Many of the medications on the Beers and Lau lists have anticholinergic and sedating properties, which have the potential to lead to falls and fractures, giving rise to additional health issues. The CFMC project intends to identify and reduce the incidence of PIMs among a group of 5-10 LTC facilities. PIMs will be based on the Beers Criteria (Fick, 2003).

In order to reduce the proportion of residents with at least one PIM, CFMC has developed education materials for LTC staff, consultant pharmacists, physicians, and/or LTC residents or family. These materials are specific to the PIMs identified at the participating facilities. The Medication Administration Record (MAR) is the primary data source for this project as it contains the medication, dosage, frequency, diagnoses, resident's date of birth (to calculate age), and discontinuation information. Additionally, CFMC is reviewing the consultant pharmacist monthly reports and any physician responses related to PIMs.

The medications in the Beers Criteria overlap with the Unnecessary Medications under F-tag 329 (revised Dec 2006). Also, many of the medications in the Beers Criteria form the 2006 Health Plan Employer Data and Information Set (HEDIS) measure for Drugs to Avoid in the Elderly.

Facility participation in this project began in July 2006 and is expected to continue until July 2008. Reports identify PIMs and the proportion of residents with at least one PIM. Regularly-scheduled medications are analyzed separately from as-needed medications.

Quarterly Reports:

- [October 2006](#)
- [January 2007](#)
- [April 2007](#)
- [July 2007](#)
- [October 2007](#)
- [January 2008](#)
- [April 2008](#)
- [July 2008](#)

Materials:

- [PIM Poster](#)
- PIM Med Cart Cards (under development)
- Anticholinergic Effects Cards (from the Fleetwood Project, <http://www.ascpfoundation.org/programs/FleetwoodToolkit.htm>)

To order materials, please contact Terrey Currie, tcurrie@cfmc.org.