Medication Use Systems
Case 2: Understanding and Identifying Adverse Drug Therapy Outcomes

Introduction

The objective of this assignment is to provide practice and self-evaluation in recognizing problems that occur in the management of drug therapy and their subsequent adverse outcomes. The following DTPs and their resulting DRM are frequent situations that were discovered in a database of Medicare patients of a large MCO.

Directions

Scrambled below are 10 scenarios where specific DTPs resulted in DRMs. Please sort the list into two columns: on the left you should make a column for all the DTPs and on the right you should make a column for the DRMs. After you have sorted them, please match the DTP to the appropriate DRM. (Suggestions for preparation are at the end of this case.)

Scrambled DTPs and DRMs

1. History of ulcers and NSAID use for at least 1 month
2. Hospitalization due to congestive heart failure and heart block
3. Hospitalization due to congestive heart failure
4. Diagnosis of moderate to severe asthma – patient using a bronchodilator and not using a maintenance corticosteroid such as beclomethasone
5. GI lesion and anemia
6. Use of 2 or more NSAIDS concurrently for at least 2 weeks
7. ER visit due to hypothyroidism
8. History of congestive heart failure and not on an ACE inhibitor
9. Use of levothyroxine and no T4/TSH done at least every 12 months
10. History of COPD and use of propranolol
11. History of congestive heart failure with heart block or advanced bradycardia and use of digoxin
12. History of depression and use of prazepam (Cenex)
13. ER visit for status asthmaticus
14. Diagnosis of myocardial infarction and not prescribed a beta blocker
15. Psychiatric hospitalization
16. History of high blood pressure (over 140/90) and/or congestive heart failure and using NSAIDs for at least 3 months
17. Upper GI bleed
18. COPD exacerbation
19. Hospitalization due to congestive heart failure and fluid overload
20. Second myocardial infarction
Resources and Preparation

Before doing this exercise, you should have completed Case 1, read the sections on drug therapy problems (DTPs) in Ch. 10 and drug-related morbidity (DRM) in Ch. 3 of PME-IDO, especially pp 35-49. You should also review Chapter 3 from Cipolle RJ, et al., *Pharmaceutical care practice*.

What you need to know before coming to lab.

1. Is a DRM part of the *process* of medications use or is it an *outcome* of medications use? (pp. 47, 273)
2. What is the relationship between a DTP and a DRM? (pp. 35-40)
3. What is a latent injury or latent outcome? (p. 39)
4. What is a latent failure (latent condition, latent error)? How does it differ from a latent injury? (p. 39, 62)
5. What are the two main arguments in support of the following statement: *If only one aspect of the medicines use process could be changed, the greatest impact might result from improved monitoring and followup.* (p. 66)
6. What is the World Health Organization's (WHO) definition of an ADR? (p.39)