Risk Management: A Team Approach Medications and Risk Assessment

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Mark Sey, Pharm, CGP, FASCP
ASCP President 2001-2002

Adverse drug events (ADEs) are among the top five greatest and most preventable threats to health of elderly (after CHF, breast cancer, hypertension, and pneumonia)

Medications and Risk Assessment

- Adverse Drug Events (ADEs)
  - "Injuries" resulting from use of a drug
- Preventable ADEs
  - Those resulting from a medication error in prescribing, dispensing, administering, or monitoring
- Non-preventable ADEs
  - Synonymous with adverse drug reactions in which no error is involved

Field, T.S., Gurwitz, J.H., Avorn, J., et al. Risk factors for adverse drug events among nursing home residents. Arch Intern Med. 2001;161:1629-1634.

Adverse Drug Event Types

- Preventable ADEs:
  - Neuropsych   28.8%
  - Falls   19.9%
  - Hemorrhage   14.6%
  - GI   11.1%
  - EPS/TD   7.1%
  - Anorexia/wt ↓   5.8%

- All ADEs:
  - Neuropsych   28.0%
  - Falls   12.7%
  - Allergic   12.0%
  - GI   11.2%
  - Hemorrhage   10.7%
  - EPS/TD   10.5%
  - Infection   5.4%

Risk Factors for Adverse Drug Events

- Risk factors for preventable ADEs:
  - Receiving opioids
  - Antipsychotics
  - Anti-infectives
  - Antiepileptics
  - Antidepressants
  - Significant comorbidity
  - Number of regularly scheduled medications

- Risk factors for non-preventable ADEs:
  - New residents
  - Receiving anti-infectives
  - Antipsychotics
  - Antidepressants
  - Number of regularly scheduled medications

What are the Medications?

- Antipsychotics   25%
- Anti-infectives   20%
- Antidepressants   13%
- Sedative/hypnotics   13%
- Anticoagulants   9%
- Cardiovascular   6%
- Hypoglycemics   5%
- Non-opioid analgesics   4%
- Opioid analgesics   3%
- Anti-Parkinson's   2%

Reducing Preventable ADEs

- A "New Mission" in the drug delivery system: *Patient/Resident Safety*
  - Implementation of Performance Improvement processes/system-based approaches:
    - Communicate the mission
    - Avoid individual punitive action
    - Cooperation among professionals within the system
    - Continuous monitoring

Reducing Preventable ADEs

- Successful use of a consultant pharmacist
  - Through retrospective reviews
  - At the point of prescribing - prospective reviews
  - As a source for drug information
  - Assisting with the identification of residents at greatest risk for ADEs

Identification of Residents at Greatest Risk for ADEs

- Assisting with the identification of residents at greatest risk for ADEs:
  - Identification and selection of risk factors
    - Utilization of varied resources
  - Utilization of resident medication data bases
    - Facility records
    - Pharmacy dispensing records
  - Software tools
    - Integration with resident data bases

THANK YOU!!!