THE GERI-PSYCH FALLS PREVENTION PROJECT: PHARMACY’S ROLE

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FALLS

- An unplanned descent to floor with or without injury is considered a fall.
- In hospitals, 700,000 to 1,000,000 patients suffer a fall according to AHRQ.
- Joint Commission
  - Operation Cost for fall-related injury > $13,000
  - Increases the length of stay by 6.27 days
FALL RATE HIGHER ON GERI-PSYCH UNITS

- Medically complex patients
- Older
- Frail
- Poly-pharmacy
- Increase use of psychoactive medications
GERI PSYCH FALL RATE

[Graph showing fall rate data from J-12 to A-13]
Statement of purpose: Implement a model that enables the development of evidence based practices in the care of our geriatric psychiatric patients.

Goals:

- Increase the skill and knowledge of staff across the disciplines
- Review staffing and possible changes to coverage hours
- RN certification in gerontology and psychiatric nursing
- CAN certification in gerontology
- Provide interventions and or options that are tailored to changing clinical status and particular disorder specific illness of our patients
PHARMACY ACTIONS - 2013

- **May**: Contracted assistance with Dr. Owens
- **June**: Mini-medication review
- **July**: Completion of a 3 week medication review of all patients
- **August**: Data analysis of mini-medication review
- **September**
  - Review of audit results
  - Pharmacist covering the unit and attending interdisciplinary rounds twice per week
- **October thru December**: Continued educational activities, coverage, and interdisciplinary rounds
MULTIPLE DISCIPLINES INVOLVED IN FALL PREVENTION PROJECT

- RNs
- CNAs
- Mental Health Workers
- Pharmacy
- Occupational Therapy
- Social Workers
- Case Managers
BASE PHARMACY SERVICES

- Renal dosing
- Hepatic dosing
- Platelet monitoring
- Therapeutic drug levels
- Urinary culture results
- Antibiotic length of therapy
- Clozaril
EXPANDED PHARMACY ROLE

- Provide education and knowledge
- Presence/Resource on the unit
- Attended rounds twice weekly
- Post Fall Huddle
- Medication review of all patients
  - MTM: full medication profile review
  - Medication reconciliation
  - Routine monitoring
  - Calculating Fall Risk Score
- Provide clinical interventions to provider(s) such as
  - Suggesting alternative dosing
  - Suggesting alternative medications
Treating medication side effect with another medication

Cocktail of meds
  – Using >2 PRN medications at a time

Medical component
  – Infection
  – Diabetes
  – Thyroid

High anticholinergic loads

Lack of parameters

Vitamin D deficient

Electrolyte imbalances

2 types of patients: Dementia vs. Psych
PHARMACY MINI-LECTURES

- Anticholinergics & Falls
- Pharmacokinetic Overview
- Antipsychotic Medication Review
- Orthostatic Hypotensive Medications
- Pain Management in the Elderly
- Medications and Falls
- Do Not Crush List
- QTc medication
Behavioral and Psychological Symptoms of Dementia

Behaviors include:
- Agitation
  - Aggression
  - Combativeness
  - Hypervocalization
  - Disinhibition
  - Hyperactivity
- Psychosis
  - Delusions
  - Hallucination

Approach:
- Determine the cause
- Non-pharm 5 “Rs”
  - Reassess
  - Reconsider
  - Rechannel
  - Redirect
  - Reassure

Antipsychotics to treat BPSD
- Limited efficacy data
- Substantial side effect profile
- Not approved for use for BPSD by the FDA
- Black box warnings include an increase risk of death

Stay Safe When Treating BPSD
If you must use an antipsychotic for patient or staff safety:
- Use the smallest oral dose possible
  - i.e. no more than 2 mg/day of risperidone
  - Avoid “pm” use
- Select an agent with a minimal side effect profile

Medications and Falls

St. Joseph Health Services of Rhode Island
Department of Pharmacy
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About Falls and Medications

Some Facts about Falls
- Each year, almost 1 million people fall in hospitals
- Serious injuries occur such as fractures and head trauma
- About 1/3rd of falls in hospitals can be prevented

Risk Factors for Falls
Falls are complex events with multiple contributing and interrelated factors:
- Advanced age
- Muscle and bone strength
- Cognitive ability
- Vision/sensory loss
- Environment
- Toileting
- Delirium
- Infection
- Metabolic changes in blood pressure, electrolytes

Medications that may Increase Falls
- Benzodiazepines
  - lorazepam
  - diazepam
- Anticholinergics
  - diphenhydramine
  - benztropine
  - Urinary incontinence medications
- All antipsychotics
  - haloperidol
  - quetiapine
  - olanzapine
- Antiseizure medications
  - depakote
  - gabapentin
- CNS medications
- Cardiovascular meds
  - drugs that lower blood pressure
  - diuretics that may cause low sodium levels
  - drugs that may slow heart rate
- Medication for diabetes
  - SS insulin
  - sulfonyleureas
Revised Standard Admission Physician Order Forms
- Include BP Parameters
- Orthostatic Monitoring
- Low Dose trazodone for sleep
- Low Dose quetiapine (Seroquel) for agitation
Pharmacy Department responded to 71 Falls (Post Fall Review of Meds)

Findings:
- 18 deemed unrelated to medications
- 28 out of 53 (52.8%) - pharmacy made recommendation and provider accepted recommendation
  - D/C medications
  - Add medication
  - Change Dose of Medication
  - Order Lab
  - Add Parameters
- 4 out of 53 - provider acknowledged recommendation but did not accept
- 21 out of 53 - provider did not accept/acknowledge pharmacy recommendation

Repeat Falls
- Provider Accepted Pharmacy Recommendations: 1 out of 28 (3.6%)
- Provider did NOT Accept Pharmacy Recommendations: 6 out of 21 (28.9%)
CONCLUSION

- Summary
- Questions