

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

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Martha Roberts, Pharm.D.

Patricia Hoffman, Pharm.D.

Our Lady of Fatima Hospital

Chartercare Healthcare

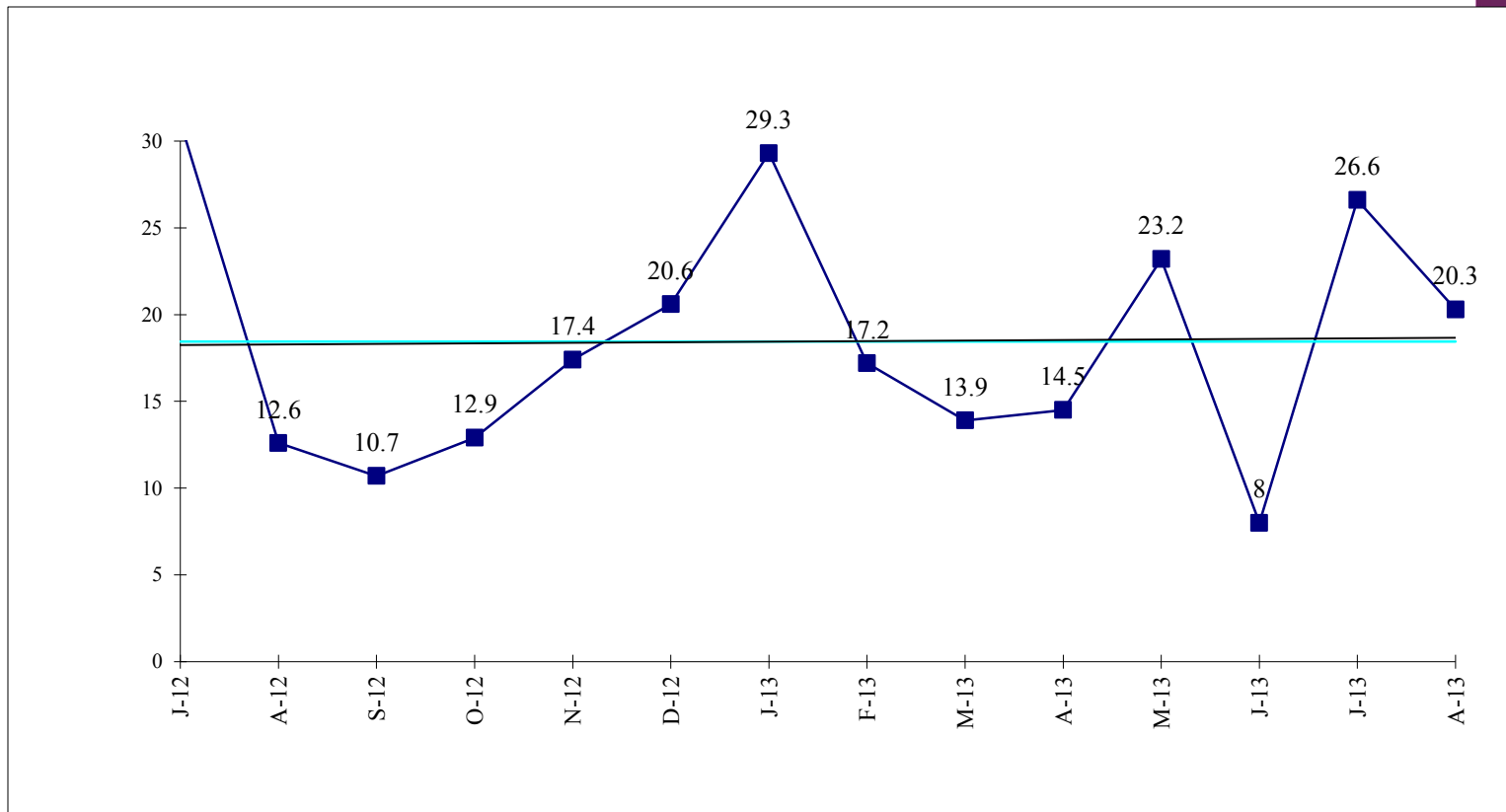
FALLS

- ⦿ 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



NURSING ACTIONS - 2013

- 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

PHARMACY FINDINGS

- Treating medication side effect with another medication
- Cocktailing 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 "prn" use
- Select an agent with a minimal side effect profile

Medications and Falls

 St. Joseph
Health Services
of Rhode Island
Department of Pharmacy

with assistance from
Norma Owens, PharmD, BCPS, FCCP
URI College of Pharmacy

About Falls and Medications

Some Facts about Falls

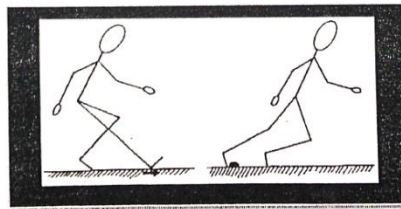
- Each year, almost 1 million people fall in hospitals
- Serious injuries occur such as fractures and head trauma
- About 1/3rd of falls in hospitals can be prevented



Risk Factors for Falls

Falls are complex events with multiple contributing and inter related 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
 - sulfonylureas

PSYCH ORDER SHEETS

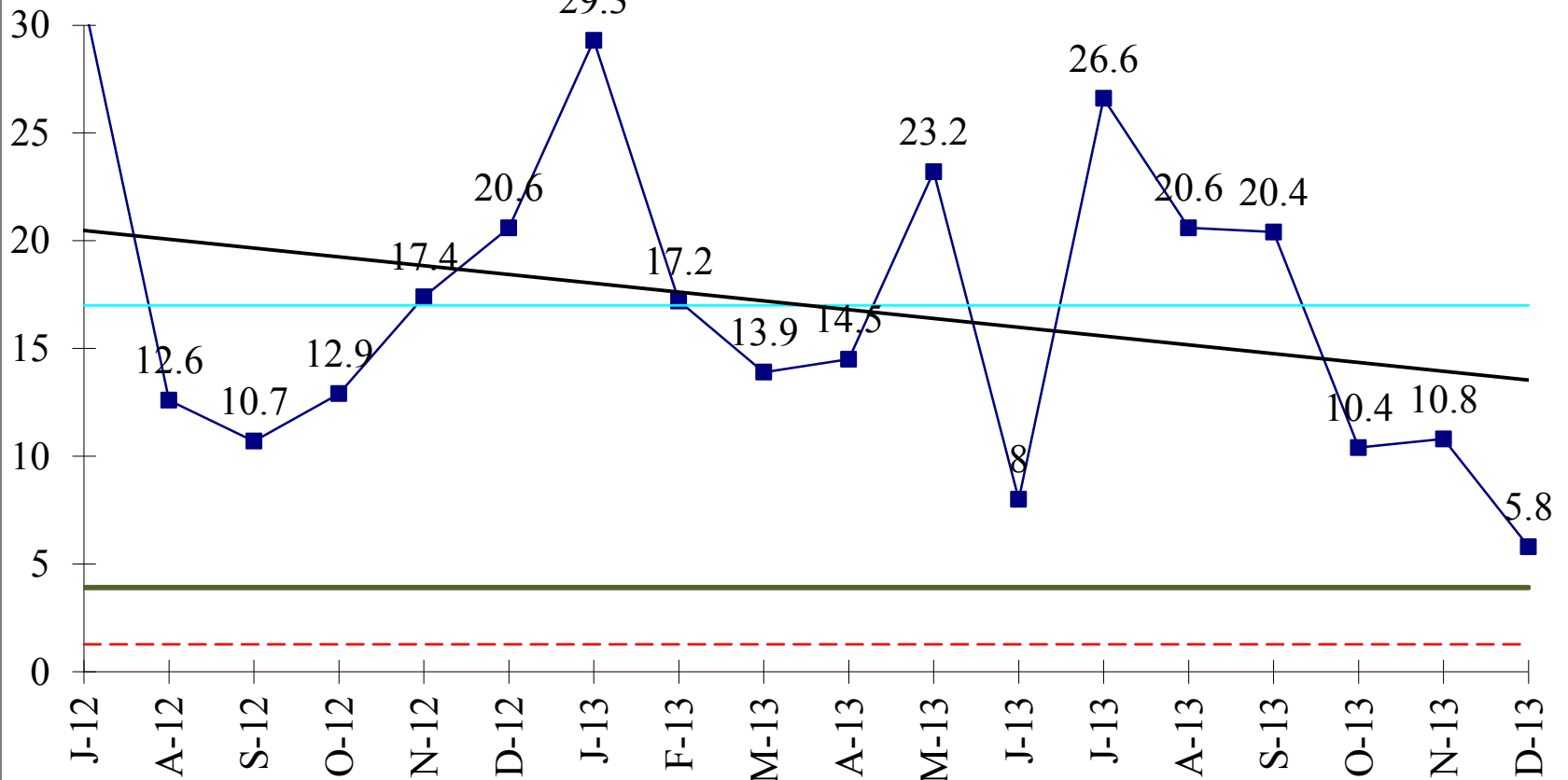
○ Revised Standard Admission Physician Order Forms

- Include BP Parameters
- Orthostatic Monitoring
- Low Dose trazodone for sleep
- Low Dose quetiapine (Seroquel) for agitation

3 South Fall Rate

OLF 2014 Goal Geri BH National Comparative

NDNQI 25%tile 3.91



■ 3 South Fall Rate

— Average

— 2014 Goal

- - - UCL

- - - LCL

— Linear (3 South Fall Rate)

OLF PHARMACY INTERVENTIONS FOR FALLS (6/20/13 THROUGH 12/4/13)

- 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