IMPLEMENTATION OF A GERIATRIC MEDICATION SURVEILLANCE PROGRAM IN A COMMUNITY-TEACHING HOSPITAL

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PROBLEM: Potential for inappropriate medication prescribing for older adults patients.

SOLUTION: Provide a medication review process to identify and resolve pharmacy-related care issues.

Problem Identified
Adverse Drug Reactions (ADRs) occur in older adults due to:
• Age related changes in the predictability of drug response at usual or lower concentrations
• Drug half-life may increase related to disease processes resulting in accumulation of drug levels
• Older patients are more sensitive to medications that affect neurologic and cardiovascular systems

Following are risk medications based on HMC formulary and prescribing trends.
• Warfarin, hydromorphone, morphine, ketorolac, oxycodone/acetaminophen
• Fluoxetine, paroxetine, amitriptyline, nortriptyline, imipramine, citalopram
• Chlordiazepoxide, diazepam, alprazolam, lorazepam
• Clozapine, chlorpromazine, haloperidol
• Zolpidem, diphenhydramine, phenytoin, metoclopramide
Solution Formulated The Geriatric Medication Surveillance Program at Hunterdon Medical Center provides a medication review process that identifies and resolves pharmacy-related issues. Through the Surveillance Program, predefined triggers were built into the computerized-patient record system to identify patients on any risk medications. A clinical intervention documentation and reporting tool assessed cost-savings.

Types of Interventions:

- No indication for PRN order
- Discontinue medication
- Drug recommendation
- Dose adjustment
- Drug order clarification
- Medication reconciliation error

NICHE Role The NICHE Geriatric Resource Nurse (GRN) core curriculum is designed for use by those at NICHE sites who train nurses in best practices for hospitalized older adults. GRNs are the foundation of system-wide improvement to achieve positive outcomes for hospitalized older adults. The NICHE program, available to hospitals internationally, offers evidence-based, interdisciplinary approaches to promote improved care for the hospitalized older adult. GRNs can perform assessments similar to the one described in this Solution story to understand the characteristics of the older adults at their hospitals.

Evaluation/Results The program fostered support and communication across all disciplines, increased staff education on medication management and yielded over $5,000 in cost-savings. The program also decreased the use of the medication. For example, with the FDA warning on zolpidem, education was provided and a lower starting dose was recommended, plus the use is cautioned in older adult patients. During the study, a 100% physician acceptance rate occurred. Next steps include:

- Streamline trigger points in the queue to support pharmacist review and determination of medication-related outcomes
- Continue to identify and report issues in older adult patients by staff nurses

For more information


NICHE-related resources

1. NICHE Geriatric Resource Nurse Core Curriculum 2012. Age-Related Changes and Medications modules. (Available at NICHE Knowledge Center, accessed via www.nicheprogram.org)
5. NICHE Online Connect Webinars. Medication Reconciliation: A Tool for Transitions of Care. (Available at the NICHE website, accessed via www.nicheprogram.org.)

About NICHE

NICHE (Nurses Improving Care for Healthsystem Elders) is an international program designed to help hospitals and healthcare organizations improve care of older adults. The vision of NICHE is for all patients 65-and-over to be given sensitive and exemplary care. The mission of NICHE is to provide principles and tools to stimulate a change in the culture of healthcare facilities to achieve patient-centered care for older adults. NICHE, based at NYU College of Nursing, consists of hospitals and healthcare facilities in the U.S., Canada and Bermuda. For more information visit nicheprogram.org.