

PHARMACY QI

Practical Tips for Quality Improvement

June 2016

FOCUS: "FALLS IN THE LAST 30 DAYS"

Mrs. Lake is an 84-year-old woman who is a resident in your home. She has type 2 diabetes, hypertension, heart failure, atrial fibrillation and mild cognitive impairment. Mrs. Lake is taking multiple medications for diabetes including metformin, canagliflozin, and gliclazide. She is also taking warfarin, digoxin, valsartan and furosemide. Mrs. Lake uses a walker and has not had a documented fall in the past. Currently her medications, medical conditions and functional status may increase her risk of falls. What can you do to prevent Mrs. Lake from falling?



Medications:

- Canagliflozin: Monitor blood pressure, volume status
- Gliclazide: Monitor blood glucose
- Digoxin: Watch for signs of toxicity (due to interaction with canagliflozin)
- Furosemide: Monitor volume status (higher risk of hypovolemia with canagliflozin)
- Warfarin: Monitor INR and watch for signs of bleeding; risk of serious bleeding if resident falls and has elevated INR
- Consider vitamin D supplementation (at least 800IU per day)

Functional Status:

- Mobility: Ensure proper footwear and use of walker
- Orthostatic hypotension: Assist her in getting up or educate her on getting up slowly from sitting or lying down
- Cognitive impairment: May increase risk of falls; monitor and provide assistance when using walker if necessary

Medical Conditions:

- Diabetes: Avoid low blood glucose
- Hypertension: Watch for orthostatic hypotension and take measures to reduce the impact
- Heart failure: Monitor for shortness of breath that can impair mobility
- Atrial fibrillation: Watch for syncope, fatigue, decreased exercise tolerance—may need to take more breaks

References:

Muir SW, Gopaul K, Montero Odasso MM. The role of cognitive impairment in fall risk among older adults: a systematic review and meta-analysis. *Age Ageing* 2012;41(3):299-308.

Panel on prevention of falls in older persons, American Geriatrics Society and British Geriatrics Society. Summary of the updated American Geriatrics Society/British Geriatrics Society clinical practice guideline for prevention of falls in older persons. *J Am Geriatr Soc* 2010. DOI: 10.1111/j.1532-5415.2010.03234.x.