Reducing High-Risk Medication Use in Older Adults: Benzodiazepines and Non-Benzodiazepine Hypnotics

Frank Laughlin, MD, Pai Liu, MD, Suzanne Landis, MD, MPH, Annette Beyea, MD, MPH, Tasha Woodall, Pharm D

Mountain Area Health Education Center, Asheville, NC

*Department of Geriatrics, Division of Family Medicine; *Department of Pharmacology, Division of Family Medicine

Objective: The use of benzodiazepines and non-benzodiazepine hypnotics in older adults is associated with adverse outcomes including heightened risk of falls, fractures, cognitive impairment, and delirium. We aim to reduce the use of these medications utilizing an interdisciplinary approach in the primary care setting.

Method: We identified 533 patients over the age of 65 at Mountain Area Health Education Center (MAHEC) and two continuing care retirement communities (CCRCs) with at least one prescription for a benzodiazepine or a non-benzodiazepine hypnotic; this was 17.2% of the 3,091 patients 65 years or older seen in one year (October 2014 through September 2014).

The following interventions were set in place: 1) education of primary care providers through handouts and lecture; 2) education for patients by way of handouts, displays in waiting rooms, and education from physicians, clinical pharmacists, and the behavioral health team; 3) script for nurses to inform patients about the adverse effects of these medications; and 4) notification of individual providers regarding which of their patients use these medications, to facilitate a more targeted approach.

Our primary outcome was the prevalence of benzodiazepine and non-benzodiazepine use at 3 months after interventions.

Results: Results at three months showed a 29% reduction in number of patients using these medications, from 533 (17.2%) to 378 (12.2%).

Feedback from providers indicates their patients are asking to use different medications thus the educational materials and waiting room displays seemed to be working. Providers also indicated having their patient lists “opened their eyes” and the provided tapering strategies were helpful. Nurses reported their work flow often prohibited taking extra time to address high risk medication use.

Conclusions: Almost three in ten elderly users of benzodiazepines and non-benzodiazepine hypnotics ended their use of these high-risk medications. The intervention was successful in encouraging patients to be more engaged in their medical care. The review of high-risk medication use needs to be revised – perhaps to include use of the clinical pharmacists in order to reach our goal of a 50% reduction.