Warfarin Safety for Residents in Skilled Nursing Facilities

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Background

Warfarin to prevent strokes and other thromboembolic events. Warfarin is among the medications most frequently associated with emergency department visits, hospitalizations and death. Sadly, the quality of warfarin management is suboptimal. Previous research estimates that there may be as many as 34,000 fatal, life-threatening, or serious adverse warfarin-related events annually, and that the quality of the warfarin management is suboptimal. Nursing home residents on warfarin who are not monitored by a pharmacist are at highest risk for warfarin-related ADEs. In addition, a recent study showed that the inpatients considered high risk for warfarin-related ADEs had significantly higher rates of warfarin-related ADEs. The results of this study showed that pharmacist involvement significantly reduces the risk of warfarin-related ADEs.

Methods

The study setting was skilled nursing facilities in New York State. To maximize participation and compliance with the interventions, FQC identified long term care facilities that were affiliated with NYSHFA, its affiliated membership association of more than 270 skilled nursing facilities. Those facilities were part of a larger study that was conducted over a 12-month period. The study was conducted as a multi-site study with five months of baseline data followed by five months of intervention data. The interventions were designed to improve the quality of warfarin management. The interventions were as follows:

1. Policy and Procedure Review
2. Fax Notification
3. Education

Results

Although a significant improvement in the primary outcome measure was achieved, the study did not demonstrate improvement in important secondary outcomes. The slight improvement in the proportion of events that were statistically significant, nor was there a significant reduction in the frequency of laboratory values that may be associated with improved quality of care. Further, may indicate the need for improved processes to guide drug dosing. Further study and refinement of best practices related to dosing and monitoring is needed.