Abstract Title: Clinical Nurses Evaluate Fall Data and Use Evidence Based Findings to Revise Existing Practice and Improve Patient Safety

Author(s): Judy Badia MSN, RNC; Myla Anderson, PharmD; Nitha Allen, PharmD; Loretta Jacobs MSN, RN Education Specialist; Elizabeth Linde, RN, ONC; Paul Loftus, MS,PT; Dr. Stephen Jones, Chief Safety Officer; Sally Scannell RN, ONC; Annie Steele BSN, RN; Sue Brown, MSN, RN, Exec Vice President Operations/CNO

Purpose & Rationale: The Greenwich Hospital Fall Safety Committee identified a trend in fall events specific to inpatient elders. Over a six month period in 2014 the committee recognized that Ambien, a sleep medication had been prescribed and given to elderly patients in eight of the fall events. The team conducted a literature search pertaining to sleep agents and their use in the elderly population and any contributing factors to patient fall events.

Research Questions: Does removal of sleep agents from electronic medical order sets decrease patient fall events in hospitalized inpatients?

Synthesis of Review of Literature: The literature review provided evidence that Ambien specifically is not the preferred sleep agent in the elderly population due to its parasomnic effects. Expert opinion and clinician knowledge was additional evidence that confirmed the effects and risks of using sleep agents such as Ambien can contribute to patient falls. Other evidence revealed that patients taking Ambien at home should not abruptly stop the medication when hospitalized due to potential for withdrawal. As a result the Ambien dose was capped at 5mg (previously 10mg).

Methods/Procedures: The Greenwich Hospital Fall Committee recommended removal of Ambien from electronic medical record (EMR) order sets. The removal of sleeping medication from the order set required staff training to multiple professionals including nurses, physicians and pharmacists. The training included an overview of the effect of sleep agents used in the elderly, capping Ambien dose at 5mg and non-pharmacological interventions to promote sleep. In addition, Ambien or other sleep medications were ordered as a distinct stand-alone order rather than being part of order sets.

Results: During a 4-month period post-training from September 2015 - January 2016 there was a reduction of inpatient Ambien orders. Total Ambien administrations prior to removal from EMR order sets were 362 doses. Post removal of Ambien from EMR order sets were 314 doses. There were no falls related to Ambien use during this time interval.

Discussion/Application to Practice: Sleep medication, specifically Ambien poses significant risk for patients of advanced age. Over 4 months, there was a reduction in Ambien EMR order use and no inpatient falls related to Ambien. Further work and education with all healthcare staff requires ongoing education and data collection. Creating awareness of safe sleep practices and sleep hygiene requires more time and focus across the organization. Education continues to focus on the use and effect of sleep agents in the elderly, reducing fall risk related to sleep agents and non-pharmacological methods for sleep promotion and sleep hygiene.