Background: Delirium is a state of altered level of consciousness often leading to confusion, inattention, and changes to levels of cognition. Delirium increases average length of stay in the hospital and costs the U.S. healthcare system approximately 148 billion dollars each year in associated medical costs. Sleep hygiene is an important factor in delirium prevention for all hospitalized patients.

Objectives: This quality improvement project was designed to increase implementation of an evidence-based sleep hygiene bundle in the neurocritical care population in order to decrease rates of hospital-acquired delirium.

Method: This project followed the Plan-Do-Study-Act (PDSA) framework to facilitate a continuous quality improvement (CQI) intervention at a mid-Atlantic academic medical center in the neurocritical care population. The CQI included the incorporation of "sleep" as a topic into the daily rounding checklist, thus optimizing the ability to improve adherence to a multicomponent sleep hygiene bundle. The intervention includes the pre-post intervention rates of delirium and use of the daily rounding checklist.

Results: Nursing adherence to documentation of delirium assessments was high at approximately 99%. Following the intervention, there was a 41% decrease in the number of patients who screened positive for hospital-acquired delirium.

Discussion: The improvement in cases of hospital-acquired delirium may be attributed to the project intervention. Recommendations for future interventions include analysis of training on sleep plans, focus on nursing education regarding delirium assessment tools, or a measure of staff and/or patient satisfaction related to the intervention.

Key Words: delirium, sleep hygiene, critical care