

### **Abstract**

**Background and Purpose:** In geriatric patients, post-operative delirium is associated with poor pain assessment and management due to decline in visceral pain perception, impaired physiologic reactivity to painful stimuli, and diminished ability to report pain on a numerical scale. Consequently, cognitively impaired patients in the ICU provide unreliable numerical pain responses. The purpose of this quality improvement project is to analyze pain assessment practices and evaluate the effects of a Behavioral Pain Scale (BPS) educational module on pain practices in post-operative, cognitively impaired geriatric patients in the surgical ICU.

**Methods:** This quality improvement project utilized a pre-post intervention design comparing pain assessment practices at current practice and after an intervention. This project occurred at an inpatient Surgical Intensive Care Unit (SICU) in a mid-Atlantic, academic medical center over a 12-week auditing period and then an additional 4-week survey period. The intervention was an educational module and in-service for staff nurses. Pre- and post-intervention chart audits were performed to assess changes in pain assessment and incidents of delirium. Chart audit inclusion criteria consisted of SICU patients who are 65 years and older and have had a surgical procedure. A post-intervention nurse survey was distributed to assess nurse satisfaction and confidence after the intervention.

**Results:** A total of 28 patients qualified for the pre-implementation audit and 11 patients qualified for the post-implementation audit for this project. The incidence of delirium decreased overall. Additionally, post-intervention, there was an increase in appropriate utilization of BPS for cognitively impaired geriatric patients.

**Conclusions:** Findings suggest an educational module intervention to improve pain assessment may have a clinically significant impact on pain assessment practices and positive patient outcomes.

**Implications:** Frequent pain assessment educational in-services for nursing staff may improve pain assessment practices and outcomes in cognitively impaired geriatric surgical patients.

*Keywords:* Pain Assessment, Behavioral Pain Scale, Cognitively Impaired, Surgical Intensive Care Unit, Geriatric