Problem
Post-surgical delirium is a common potential adverse event (AE) for older patients admitted to the hospital for surgical procedures. Estimates in numerous studies show that 10% to 52% of older adults had delirium during their hospitalization.\textsuperscript{1-3} The consequences of post-operative delirium include increased morbidity, mortality, length of stay and earlier nursing home placement.\textsuperscript{4} Though there are numerous potential causes of post-operative delirium in older patients, no one specific cause is clearly demonstrable in all cases.

Eisenhower Medical Center serves an elderly population that is, therefore, at high risk for post-surgical delirium. Patients admitted through the Emergency Department with a hip fracture are among the highest risk patients for delirium.

This initiative sought to proactively identify those patients most at risk for post-surgical delirium using literature-based indicators of risk and intervene where possible to reduce the incidence or minimize the impact of post-surgical delirium. The project team reflects the major professions participating in the care of these patients including the following:

- Gerontology
- Anesthesiology
- Orthopedic surgery
- Nursing
- Pharmacy
- Medical informatics

Process
Study Phase: To assess the extent of the problem at Eisenhower Medical Center and explore possible solutions, the team engaged in the following activities:

- Data collection
  - Data were collected to assess how often post-surgical delirium occurs at Eisenhower Medical Center
- Literature review
  - Each discipline reviewed the literature from their field with the team
- Consultation with Expert
  - James Rudolph, MD, a geriatrician specializing in post-surgical delirium from VA Boston Health Service traveled to Eisenhower Medical Center to consult with team.
- Planning of interventions

Intervention Phase: After reviewing what they had learned during the study phase, the team designed the following interventions:

- Automatic Care Alert to notify team members when a patient is in the Eisenhower Medical Center who meets literature-based indicator of high risk for delirium
- Gerontology follow-up of high risk patients
  - Assessment
  - Review of medications
  - Notify Anesthesia Department of high risk status
- Nursing interventions for high risk patients
  - Early mobility
  - Sleep hygiene
  - Careful pain management

Current Status
This initiative is ongoing. Patients continue to be assessed for risk for delirium and data are being collected. Issues in data collection have been identified and are being resolved.

- 5-7 patients per week are being identified and followed
- Baseline data are problematic because delirium was not clearly identified
- Seeking Institutional Review Board approval for a low-risk retrospective chart review of patients who triggered the Care Alert but were not followed or who met criteria but did not trigger Care Alert as comparison group

Funding
Partial funding for this project came through an educational grant from Pfizer Inc.