As our population ages, so does the risk for hip fractures. It is estimated that by 2040, the number of hip fractures will exceed 500,000. Hip fractures are the leading cause of mortality and disability. Reports indicate 18 to 28 percent of older adults with hip fractures die within one year. Delirium, identified by a sudden change in mental status, is a common complication after hip surgery in the elderly. Also common after hip surgery is dementia and depression. Patients experiencing delirium display a decline in cognitive status and an inability to focus. Delirium increases the risk of falls and interferes with treatment and the rehabilitative process, often resulting in long-term functional impairment.

**RISK FACTORS**
- Age >70 years
- Cognitive and functional impairment
- Alcohol abuse
- Depression
- Polypharmacy
- Abnormal electrolytes, BUN/ Creat, Co-morbid disease
- Trauma/anesthesia
- Dehydration, malnutrition
- Urinary catheters/urinary tract infection
- Procedural pain
- Physical restraints

Many cases of delirium can be reduced or prevented by identifying these risk factors and early recognition of the first clinical signs. Unfortunately, a gap exists in the knowledge and understanding of this serious medical condition. Bridging that gap through the dissemination of information with regard to post-operative delirium will promote better outcomes for the patient and decrease the length of hospital stay.

**PURPOSE**

- Identify risk factors and early signs of delirium post-operatively and disseminate information
- Identify tools for assessing risk factors for developing delirium post-op

**STRATEGIES**
- Know patient’s baseline
- Adequate nutritional intake
- Treatment of severe pain
- Supplemental oxygen during surgery
- Optimization of electrolytes and blood glucose pre-op
- Discontinuation of high risk medications
- Early ambulation post surgery
- Utilize Confusion Assessment Method (CAM)

**OBJECTIVE**

Implement tool on surgical unit and evaluate

- Reorient and reassure patient
- Communicate and explain all activities clearly
- Provide clock, calendar, adequate lighting
- Are glasses on/hearing aids in place?
- Reduce noise level, approach one task at a time
- Engage family if possible
- Educate and reassure

**“DELIRIUM”**

- Dementia
- Electrolytes
- Lungs, liver, heart, kidney, brain
- Rx
- Injury, pain, stress
- Metabolic

RECOMMENDATIONS
- Establish and implement tool to assess and identify patients pre-operatively for risk of delirium
- Incorporate CAM assessment pre-operatively and daily post-operatively
- Continue to monitor for additional risk factors
- Develop and integrate ongoing assessment tool into electronic record
- Evaluate effectiveness of tool

REFERENCES
- McNair, K. et al. (2007). Rehabilitating Patients with Dementia Who Have Had a Hip Fracture. Topics in Geriatric Rehabilitation 23(2), 107-113

CONTACT
- dblauth@princetonhcs.org
- sjafar@princetonhcs.org