westhealth

GEDC THE GERIATRIC EMERGENCY DEPARTMENT COLLABORATIVE
EDUCATE IMPLEMENT EVALUATE

Suggested Process and Outcome Measures to Track for ED-Delirium Program

Domain	Measure and Definition	Rationale
Process Measures		
Delirium Risk Assessment	Percentage of patients age 65 and older screened for delirium risk during triage or clinical evaluation	Assessment for delirium risk is the essential first step to identify older adults at high risk for delirium and for whom the delirium prevention protocol is indicated.
Delirium Prevention Protocol	Percentage of at-risk patients who had a delirium prevention protocol initiated	Providing prompt nonpharmacologic intervention to patients at high risk reduces the likelihood of adverse delirium outcomes, including functional decline, increased ED LOS, hospital costs, falls, and death.[2]
Mobility	Percentage of at-risk patients who walked at least once per shift in ED	Mobility is a key intervention for prevention and management of delirium
Hydration	Percentage of at-risk patients who received adequate hydration (IV or PO) in ED	Dehydration is a leading risk factor for delirium in the ED. Attending to patient's fluid and nutritional status is key to prevention.
Non-Pharmacologic Management of Delirium	Percentage of patients with delirium who were managed with non-pharmacologic approaches for delirium symptoms or agitation	Non-pharmacologic management for delirium has demonstrated effectiveness for reducing agitation and delirium symptoms.
Use of Beers Criteria medications	Percentage of at-risk patients who received Beers Criteria medications	Goal is to reduce the percentage. Beers criteria medications are potentially inappropriate medications for older adults, and may increase the risk of delirium and other adverse outcomes.
Benzodiazepine Use	Percentage of patients with agitated delirium receiving a benzodiazepine (except in those with active benzodiazepine or alcohol use)	Goal is to reduce. Benzodiazepines increase the risk of delirium, functional/ cognitive decline, falls, and other adverse outcomes in older adults.[4]
Antipsychotic Use	Percentage of patients with agitated delirium receiving an antipsychotic	Goal is to reduce. Antipsychotics are ineffective to treat delirium, may prolong delirium, increase the risk of functional/cognitive decline, falls, and other adverse outcomes in older adults.
Use of Physical Restraints and/or Bed-Chair Alarms	Percentage of patients at-risk or with delirium who were physically restrained or alarmed at any time during ED stay	Goal is to reduce. Use of physical restraints (or bed/chair alarms) is a precipitating factor for delirium.[3]
Outcome Measures		
Emergency Department Length of Stay (LOS)	Number of hours/days spent in emergency department or observation unit	Goal is to reduce. Delirium increases ED LOS, and conversely, ED LOS greater than 10 hours is associated with a higher risk of delirium in older adults.[1]
Emergency Department Discharge Disposition	Proportion of patients transferred to observation unit; transferred to floor; discharged home without services; discharged home with services; discharged to post-acute care or other setting	This measure allows for assessment of patient's status following ED visit.

Other measures to consider: % with new delirium; transitional care received; discharge with delirium

1. Bo M, et al. Length of Stay in the Emergency Department and Occurrence of Delirium in Older Medical Patients. J Am Geriatr Soc 2016;64(5):1114-9.
2. Josephson SA, et al. Quality Improvement in Neurology: Inpatient and Emergency Care Quality Measure Set: Executive Summary. Neurology 2017;89.
3. Inouye SK, et al. Precipitating Factors for Delirium in Hospitalized Elderly Persons: Predictive Model and Interrelationship with Baseline Vulnerability. JAMA 1996;275(11):852-7.
4. American Geriatrics Society Beers Criteria Update Expert Panel. 2019 Updated AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. JAGS 2019;[Epub ahead of print]:1-21.