

## Delirium Prevention Strategies

This document was developed by a [panel of delirium topic experts](#) and is intended as a guidance resource only.

Objective	Strategies
Evaluate delirium risk and precipitating factors	<p>Check for the following, using this mnemonic device, <b>MIND SPACES</b>:</p> <ul style="list-style-type: none"> <li>• <b>M</b>-Medications : Polypharmacy, deliriogenic medications and/or anti-cholinergic burden, medication weaning/withdrawal</li> <li>• <b>I</b>-Infection and advanced illness</li> <li>• <b>N</b>-Number of co-occurring conditions/comorbidities (e.g. hypertension, heart failure, COPD, OSA)</li> <li>• <b>D</b>-Substance or alcohol use disorders (including withdrawal)</li>   <li>• <b>S</b>-Surgery and/or invasive procedures</li> <li>• <b>P</b>-Pain (uncontrolled), perfusion problems</li> <li>• <b>A</b>-Age- young children and older adults are most at risk, <b>BUT</b> may occur at any age</li> <li>• <b>C</b>-Cognitive impairment and/or dementia</li> <li>• <b>E</b>-Emotional or mental illness (e.g. depression, anxiety)</li> <li>• <b>S</b>-Sleep disturbances and altered patterns</li> </ul>
<p>Assess for delirium with a validated instrument*</p> <p><i>*(Multiple screening tools are available, many of whose links are provided on ANA's Delirium Resources webpage)</i></p>	<ul style="list-style-type: none"> <li>• Assess upon admission, every shift and with any change</li> <li>• Determine baseline</li> <li>• Consistently administer all elements of a validated instrument for accurate results. Do not modify!</li> </ul>
Assess and treat abnormal diagnostic findings as appropriate	<p>Monitor, as appropriate:</p> <ul style="list-style-type: none"> <li>• Serum chemistries (e.g. electrolytes, BUN, creatinine, BUN/creatinine ratio, liver and thyroid, ammonia, lactic acid)</li> <li>• UA, CBC, ABGs, cultures, drug levels (e.g. digoxin, phenytoin), and CXR</li> <li>• Change in vital signs including pulse oximetry</li> </ul>
Prevent nosocomial infection	<ul style="list-style-type: none"> <li>• Practice infection control precautions, including excellent hand hygiene</li> <li>• Avoid and remove unnecessary invasive lines, tubes and drains</li> <li>• Provide regular oral care paying special attention to patients who are NPO or have tube feedings</li> <li>• Maintain a seated position/elevate head of bed (60°) or encourage OOB to chair during meals to prevent aspiration</li> <li>• Utilize CLABSI, CAUTI, and VAE checklists</li> </ul>
Appropriate medication management	<ul style="list-style-type: none"> <li>• Ensure appropriate medications</li> <li>• Perform a medication reconciliation</li> <li>• Monitor mood altering medication effects</li> </ul>

	<ul style="list-style-type: none"> <li>• Use lowest effective dose</li> <li>• Avoid sudden discontinuation of psychoactive medications</li> <li>• For those on continuous sedation, achieve the appropriate sedation target using a standardized sedation scale</li> <li>• Evaluate number and type of medications</li> <li>• Eliminate all non-essential medications</li> <li>• Identify inappropriate medications that can be eliminated or substituted (e.g. <a href="#">Beers' Criteria for Potentially Inappropriate Medication Use in Older Adults</a> OR consult with pharmacist for an updated list)</li> </ul>
<p>Maintain cognition</p> <p>Orientation</p> <p>Sensory stimulation</p>	<ul style="list-style-type: none"> <li>• Introduce self and role</li> <li>• Use calm, short, concise instructions and explanations</li> <li>• Use patient's name</li> <li>• Address weather outside and time of day when intervening</li> <li>• Continually reorient</li> <li>• Encourage family pictures and familiar objects in room</li> <li>• Validate feelings and perceptions</li> <li>• Encourage family visits and calls</li> <li>• Engage in respectful and developmentally-appropriate communication (e.g. avoid elder speak)</li> <li>• White boards that include personalization and prompts for patient care needs and sensory deficits including family input</li> <li>• Provide morning newspaper</li> <li>• Supply current calendar and clock in room</li> <li>• Maintain normal schedules and routines</li> <li>• Provide adequate and appropriate lighting</li> <li>• Encourage family and friends to visit regularly</li> <li>• Use clean and properly working glasses, hearing aids, amplification devices, and magnifying glasses</li> <li>• Keep window blinds open during the day and closed during night hours</li> <li>• Provide personalized age-appropriate television and radio options</li> <li>• Engage in meaningful conversation to stimulate memory and logic (e.g. children, ages, job)</li> <li>• Offer and use activity boxes: word games, deck of cards, magazines, music, checkers, sorting, crossword puzzles, picture books, coloring pictures and crayons/pencils</li> <li>• Offer mirror if appropriate</li> <li>• Consider consult with OT, recreational therapy, pet therapy, Child Life therapy</li> <li>• Provide a sitter (family if able or trained volunteer) to facilitate</li> </ul>

	orientation, engagement and safety measures
Adequate pain control	<ul style="list-style-type: none"> <li>• Use appropriate pain assessment tool for ongoing pain assessment</li> <li>• Document and treat pain every 2-3 hours, then reassess pain</li> <li>• Individualize a pain management plan consisting of pharmacological and non-pharmacological measures</li> </ul>
Early, aggressive, progressive mobility	<ul style="list-style-type: none"> <li>• Avoid restraints</li> <li>• Mobilize 2-4 times per day progressing from:             <ol style="list-style-type: none"> <li>a.) passive ROM</li> <li>b.) active ROM</li> <li>c.) muscle strengthening</li> <li>d.) sitting balanced at the edge of bed</li> <li>e.) standing</li> <li>f.) transferring</li> <li>g.) walking with assistance</li> <li>h.) independent walking in increasing distances</li> </ol> </li> <li>• Encourage use of prescribed assistive devices</li> <li>• Encourage self-care activity independence</li> <li>• Provide adequate footwear</li> <li>• Consider consult for PT\OT</li> <li>• If family is willing and able, encourage them to walk with the patient when appropriate</li> </ul>
Adequate oxygen saturation	<ul style="list-style-type: none"> <li>• Assess for hypoxia via pulse oximetry</li> <li>• Perform spontaneous breathing trial (SBT) if mechanically ventilated (if appropriate)</li> <li>• Encourage evidence-based sedation cessation and weaning protocols for ventilated patients</li> <li>• Deliver oxygen at appropriate rate of flow as necessary</li> </ul>
Adequate nutrition and hydration	<ul style="list-style-type: none"> <li>• Offer oral fluids often</li> <li>• Administer parenteral fluids as necessary</li> <li>• Perform ongoing nutrition and hydration assessments</li> <li>• Assess ability to order food and feed self</li> <li>• Monitor weight</li> <li>• Consider a dietary consultation</li> <li>• Provide companionship during meals</li> <li>• Supply dentures for meals</li> <li>• Assess for proper fitting dentures</li> <li>• Feed patient as necessary</li> </ul>
Prevent and manage constipation	<ul style="list-style-type: none"> <li>• Increase hydration</li> <li>• Ensure regular toileting</li> <li>• Provide adequate dietary fiber intake</li> <li>• Administer pharmacological treatment as appropriate</li> <li>• Monitor urinary output</li> <li>• Check for bowel impaction</li> </ul>
Sleep promotion	<ul style="list-style-type: none"> <li>• Assess sleep history</li> </ul>

	<ul style="list-style-type: none"> <li>• Consider medical causes of sleep disturbance</li> <li>• Enforce designated sleep period</li> <li>• Dim overhead lighting</li> <li>• Reduce noise to minimum ~levels during sleep hours</li> <li>• Turn off computer, TV, radio, smart phone, and all other electronics for at least one hour prior to sleep time</li> <li>• Evaluate and limit hypnotic use</li> <li>• Evaluate daytime napping</li> <li>• Re-evaluate frequency of vital signs overnight</li> <li>• Delay morning bloodwork/testing to a later time if appropriate</li> <li>• Use non-pharmacologic measures:             <ul style="list-style-type: none"> <li>a. Relaxing music</li> <li>b. Behavioral/relaxation techniques(e.g. guided imagery, Reiki)</li> <li>c. Massage (back, hand/foot)</li> <li>d. Limit caffeine in late day</li> <li>e. Provide warm non-caffeine drink</li> <li>f. Toilet before bedtime</li> <li>g. Cluster activities as much as possible</li> <li>h. Sleep masks and ear plugs</li> <li>i. Sleep kit (lotion, fragrances, warmth)</li> </ul> </li> </ul>
<p><b>Ongoing and extensive education</b></p> <p>Staff</p> <p>Providers</p> <p>Family members, patients, informal care-givers</p>	<ul style="list-style-type: none"> <li>• Provide and require during orientation &amp; annual updates</li> <li>• Interprofessional learning (e.g. simulations)</li> <li>• Partner with educational institutions</li> <li>• Provide and require during orientation &amp; annual updates</li> <li>• Provide comprehensive delirium resources at preoperative clinic through treatment and follow-ups</li> </ul>
<p>Large-scale Implementation</p>	<p>Strategies</p>
<p>Unit Level</p>	<ul style="list-style-type: none"> <li>• Develop or obtain relevant checklists</li> <li>• Recruit champions</li> <li>• Maintain quality assurance</li> </ul>
<p>System Level</p>	<ul style="list-style-type: none"> <li>• Obtain stakeholder/administrator support</li> <li>• Identify a champion in leadership at the executive level</li> <li>• Develop and participate in a quality committee</li> <li>• Encourage national designations and certifications to increase expertise and quality outcomes</li> </ul>