

RESIDENT QI PROJECT 2018-2019

Post-operative delirium (POD) is a complication that can occur in patients of any age and is associated with increased mortality, hospital length of stay, cognitive decline, and discharge to skilled nursing facilities.

Patients at risk for POD can be predicted by the AWOL-S score, which is calculated from

- A: age
- W: inability to spell WORLD backward
- O: not being oriented to city, state, county, hospital
- L: severity of illness (ASA class)
- S: surgery-specific risk

The goal of this project is to identify patients with an AWOL-S predicted risk of delirium $\geq 5\%$ and then order a set of non-pharmacologic PACU nursing care orders for those found to be at high risk.

The specific steps that we're asking providers to follow are:

- 1) Look up the patient's AWOL-S peri-operative delirium risk, which can be found in the Anesthesia Caution tab, or in the Comprehensive flowsheet (under Neuro/Pain/Seda.)

Where do I look in APeX?

Option 1: **Anesthesia Caution** in patient banner

The screenshot shows a patient banner for 'ML 26' with a blue background. The banner contains the following information: 'Repair Of Abdominal Ao...', 'AD: None', 'Allergies: No Known A...', 'Anes Warn: None Found', and 'Start: 0830 AM'. A yellow 'Anes Caution Yes' button is located on the right side of the banner. Below the banner, a yellow warning box states: 'Caution: This patient's AWOL-S Delirium Risk was calculated to be High. See relevant flowsheet data below.' Below this warning, there are two panels. The left panel, titled 'AWOL-S Delirium Risk - Last Filed Value', shows a table with columns for 'Value', 'Time', and 'User'. The 'Value' column contains 'High', which is circled in red. The 'Time' column contains '6/13/2018 7:45 AM' and the 'User' column contains 'Maria C Calvo, RN'. The right panel, titled 'Flowsheet Data By Column (last 720 hours)', shows a table with columns for 'Date/Time' and 'AWOL-S Delirium Risk'. The 'Date/Time' column contains '06/13/18 0745' and the 'AWOL-S Delirium Risk' column contains 'High'. Red arrows point from the 'Anes Caution Yes' button and the 'Value: High' cell to the text 'Option 1: Anesthesia Caution in patient banner'.

Value	Time	User
High	6/13/2018 7:45 AM	Maria C Calvo, RN

Date/Time	AWOL-S Delirium Risk
06/13/18 0745	High

Where do I look in APeX?

Option 2: Summary → **Comprehensive Flowsheet** (Neuro/Pain/Seda.)

The screenshot shows the APeX interface with the 'Summary' tab selected. The 'Comprehensive Flowsheet' is displayed for Wednesday 1501. The 'Anesthesia Vitals' section is expanded, showing vital signs like Pulse Rate, NBP, NBP Mean, SPO2, and Temp. The 'Neuro/Pain/Seda.' section is also expanded, showing various medications and their dosages. A red circle highlights the 'High' risk status in the 'Neuro/Pain/Seda.' section.

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- For patients at **HIGH** risk, the provider should order the **Delirium Prevention Interventions (for Adults)** sub-orderset in the standard PACU orders.

How do I order this?

The screenshot shows the APeX interface with the 'Delirium Prevention Interventions (for Adults)' sub-orderset expanded. The 'Delirium Prevention Interventions (for Adults)' checkbox is checked and circled in red. The sub-orderset includes several items:

- Delirium Prevention Interventions (for Adults)**
- If no foley, bladder scan patient one time. If bladder volume greater than 300 ml, please inform anesthesia physician and/or primary team immediately.
Routine, Once First occurrence Today at 0943
PACU Only, Sign
- Reorient patient to location and date
Routine, Every 4 Hours First occurrence Today at 1300 Until Specified
PACU Only, (As appropriate and while awake), Sign
- Delirium Nursing Care Bundle (see comments)
Routine, Continuous starting Today at 0943 Until Specified
PACU Only, 1. If cleared for PO liquids, encourage fluids/oral intake, fluids within reach of patients at all times 2. Activity and sensory devices: -Walker/commode to bedside -Hearing aids, glasses, and denture to bedside -Use Pocket Talker to all times when communicating with patients who are hard of hearing. 3. Daytime: -Opens blinds and turn on lights -Prevent/minimize daytime napping -No caffeine after 1200 -Turn off TV when not in use 4. Nighttime: -Close blinds and turn off lights -Earplugs/eye masks at bedtime -Turn off TV at night 5. Encourage family to bring in familiar objects from home, visit during daytime hours, discuss current events, and reminisce with patient 6. Provide family member pamphlet about delirium 7. Place in a private room if possible, Sign
- Non-pharmacologic Sleep Protocol (See Comments)
Routine, PRN starting Today at 0942 Until Specified
PACU Only, 1. If difficulty sleeping or requesting sleeping medication, warm drink, relaxing music, eye mask and/or ear plugs if appropriate 2. Cluster care activities to promote sleep, minimize interruptions (2200-0600), when possible 3. No baths 2300 to 0500, Sign

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THAT'S ALL YOU HAVE TO DO for the QI project, but we are also suggesting anesthesia providers try to adopt other recommended best practices for preventing peri-operative delirium, including avoiding

deliriogenic medications (e.g., anticholinergics, benzodiazepines), discussing delirium risk at time-out, and signing out delirium risk to PACU nurses and the surgical team.

At baseline, the department was successfully placing these orders for only ~12% of high-risk patients. Our goal is to increase compliance to **50% of all annual, cumulative cases** for the 2018-2019 academic year. (This is all residents, CRNAs, and faculty cases.)