

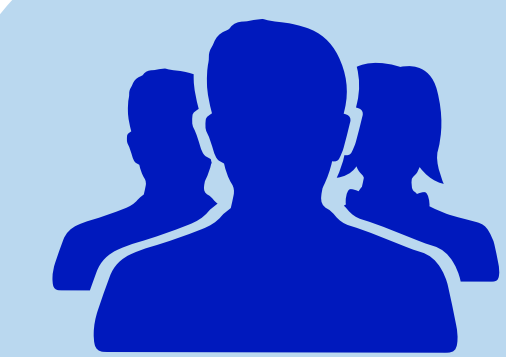
Background

Emergence Delirium (ED): Short-term impairment of consciousness, occurring on emergence from General Anesthesia. Patient is awake, but disoriented. May present as hallucinations, confusion, (Munk et al., 2016)

- ED in the Post Anesthesia Care Unit (PACU) can result in harm to patient or staff, increased length of stay, increased costs, and increased mortality rates.
- Patients with Post Traumatic Stress Disorder (PTSD) are at an increased risk of ED.
- Incidence of PTSD in Veteran populations is up to 30% higher than the civilian population (Hintzsche, 2018).

Aim

- Decrease emergence delirium through improved identification of patients at risk.
- This project originated from Pittsburgh VA and was adapted for Zablocki VAMC.



Population: Adult patients undergoing a surgical procedure.

PDSA Framework



Plan
Do
Study
Act

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Decreasing Post Operative Emergence Delirium

Through Improved Screening & Identification

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VA



U.S. Department of Veterans Affairs
Veterans Health Administration
Zablocki VA Health Care System

QI Intervention

- Use of an approved PTSD screening tool (PC-PTSD-5) implemented for use during pre-operative phone calls prior to surgery.
- Positive screens were communicated to staff through:
 - A daily communication sheet,
 - Golden eagle magnets on all perioperative boards
 - A laminated informational sheet on patient clip board to provide all staff tips and tricks for decreasing delirium.
 - Patients wear golden cap as a visual indicator for the team.
- Medication management by anesthesia, dim lights, quiet environment, centering personnel, removal of lines and tubes as able, pain management, monitoring for urinary retention, and proper rescue treatment.



The patient screened **positive** for a higher risk of experiencing Emergence delirium

Project Golden Eagle improves identification of patients at higher risk of experiencing Emergence Delirium

Emergence Delirium can lead to:

- Increased Veteran and staff injury
- Delays in OR turnover
- Increased length of stay

What this means for the care of Project Golden Eagle Veterans:

All staff: Dim lights, keep noise level low, approach the veteran gently, try verbal stimulation or tapping their feet.

APC staff: Complete risk screening tool over pre-op call. Day of; provide a handout, educate on importance of screening and identifying those at risk, offer Music Program. Place a yellow bouffant to communicate to perioperative staff their risk. Offer resources to decrease anxiety.

Anesthesia staff: Acknowledge Veterans who are screened as high risk. Provide additional education. Consider adjuncts such as ketamine, dexmedetomidine, and/or propofol (TIVA) and avoid benzodiazepines as appropriate. (See additional guidelines on back).

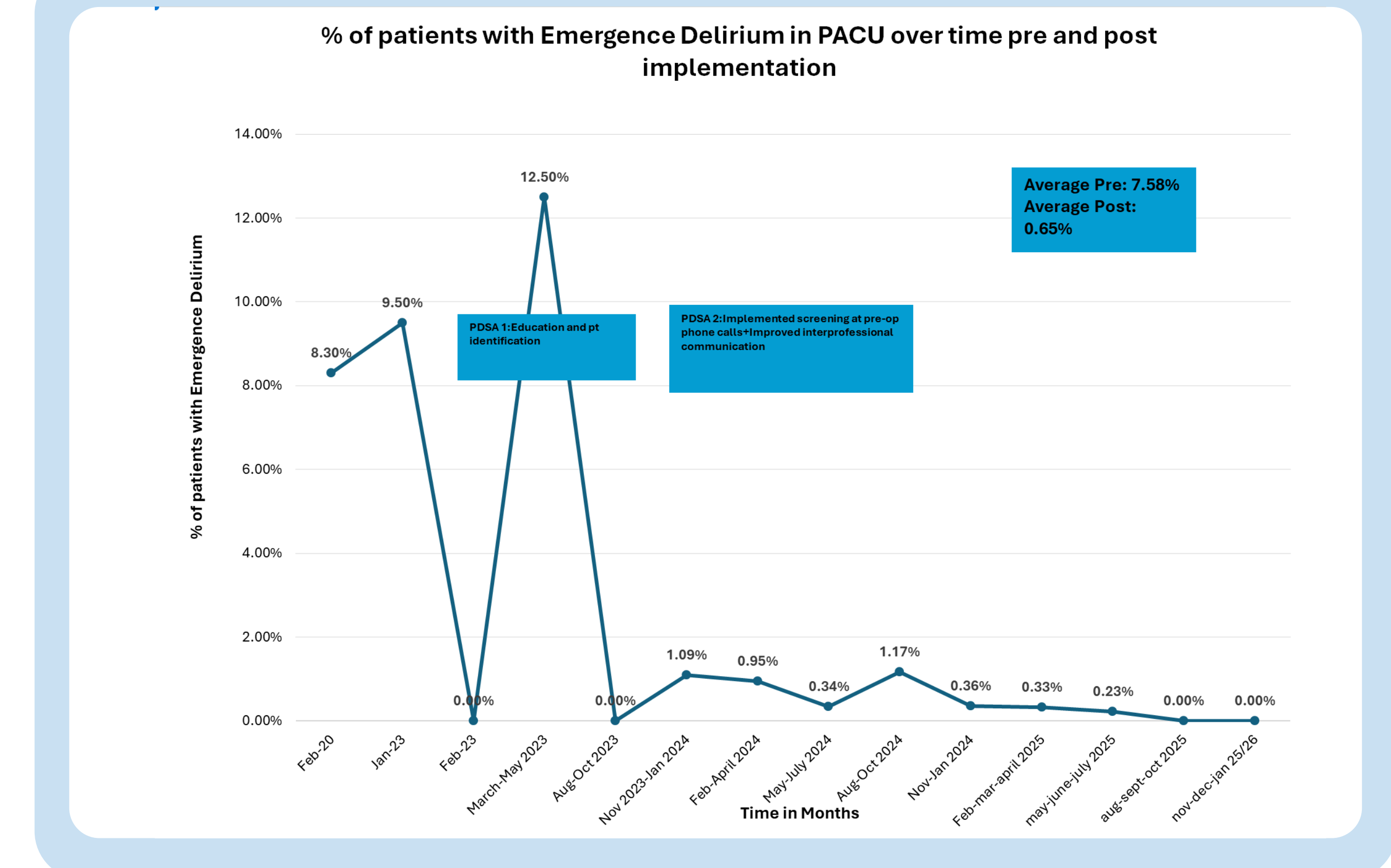
OR staff: Monitor for urinary retention and discuss foley removal prior to emergence as appropriate. Remain at the bedside while patient is waking up. Notify PACU when calling out of surgery.

PACU staff: Reorient patient and bring familiar staff or family members to bedside as appropriate.

Identify any Veteran that experienced emergence delirium on the daily sheet.

Study Outcomes:

- Through improved screening, identification, and treatment of those at risk for ED, the percentage of patients experiencing ED went from 8.33% to 0.36%
- Observed decrease in number of staff injuries.



ACT: Conclusion

Improved identification of patients at higher risk for ED decreased the instances of emergence delirium.

Implications:

- Continue tracking episode of ED
- Continued education with rotation of Anesthesia Residents
- Sustain interventions and open interprofessional communication.
- Widen data collection to include looking at relationship to hospital length of stay, decreased Pacu length of stay, improved surgical outcomes, decreased staff injury.

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