

IMPROVING DELIRIUM OUTCOMES THROUGH EVIDENCE BASED PRACTICE (EBP) IN A SURGICAL TRAUMA INTENSIVE CARE UNIT

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Objectives

Describe delirium and its effect on national healthcare burden

Discuss assessment tools used to identify and assess delirium

Support the significance of interdisciplinary communication and collaboration

Apply delirium prevention and management strategies for the critically ill trauma patient

UH SICU HAD Prevention and Treatment Program

- Multidisciplinary **provider and family education** on delirium and pharmacology
- Increased **screening** for delirium-CAM-ICU
- Non pharmacologic **sleep promotion, massage and music therapy**
- Early **Mobilization** and **Range of motion**
- **Pharmacologic treatment** algorithm

All Older Adults

	Pre-Intervention n=57	Post-Intervention n=66	p-value
Delirium, n (% Incidence)	27 (47%)	38 (58%)	0.26
Delirium free days/30	24 (22, 26)	27 (25, 28)	0.002
SICU LOS	9 (6, 11)	6 (4, 8)	0.04
Vent-free days/30	23 (21, 26)	26 (25, 27)	0.11

Data presented as n (%) or mean (95% Confidence Interval)

All Older Adults

Pain, Sedation, Agitation	Pre-Intervention n=57	Post-Intervention n=66	p-value
Hours of Severe Pain ($\geq 6/10$)	5 (3, 7)	3 (2, 5)	0.01
Cumulative Dose Opioids (mg morphine)	401 (274, 528)	260 (155, 365)	0.01
Benzodiazepines, n(%)	34 (60%)	30 (45%)	0.12
Hours Sedated (RASS ≤ -3)	35 (10, 60)	12 (4, 21)	0.46
Hours Agitated (RASS $>+1$)	1, (0, 2)	2 (0, 3)	0.97
Restraint-free Days/30	28 (27, 29)	27 (26, 29)	0.79

RASS - Richmond Agitation and Sedation Score

Delirium Positive Patients

- Among delirium positive patients, those who received the intervention were:
 - Less likely to be treated with benzodiazepines
 - Lower mean daily doses of benzodiazepines, when prescribed
 - Less time mechanically ventilated

Summary

- The duration of delirium significantly decreased post-intervention, despite the fact that the overall incidence was unchanged
- Shorter SICU LOS
- Less time spent in severe pain
- Required lower doses of opioid analgesics

Questions?????



THANK YOU!



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