

UW Medicine | VALLEY MEDICAL CENTER  
**Delirium Reduction & Recognition: Inpatient Management**

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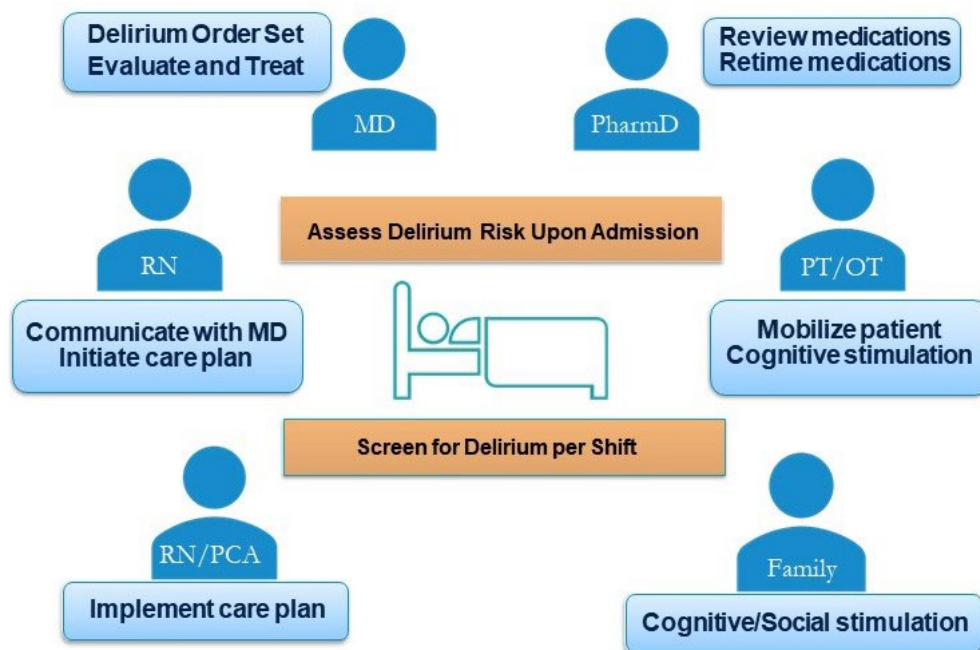
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# Why Create a Pathway?

- Delirium affects 30-70% of hospital admissions
- Associated with increased morbidity and mortality
- Associated with increased hospital length of stay
- Associated with approximately \$60,000 extra cost per delirious patient per year
- *It is estimated that approximately 30% of hospital associated delirium is preventable*

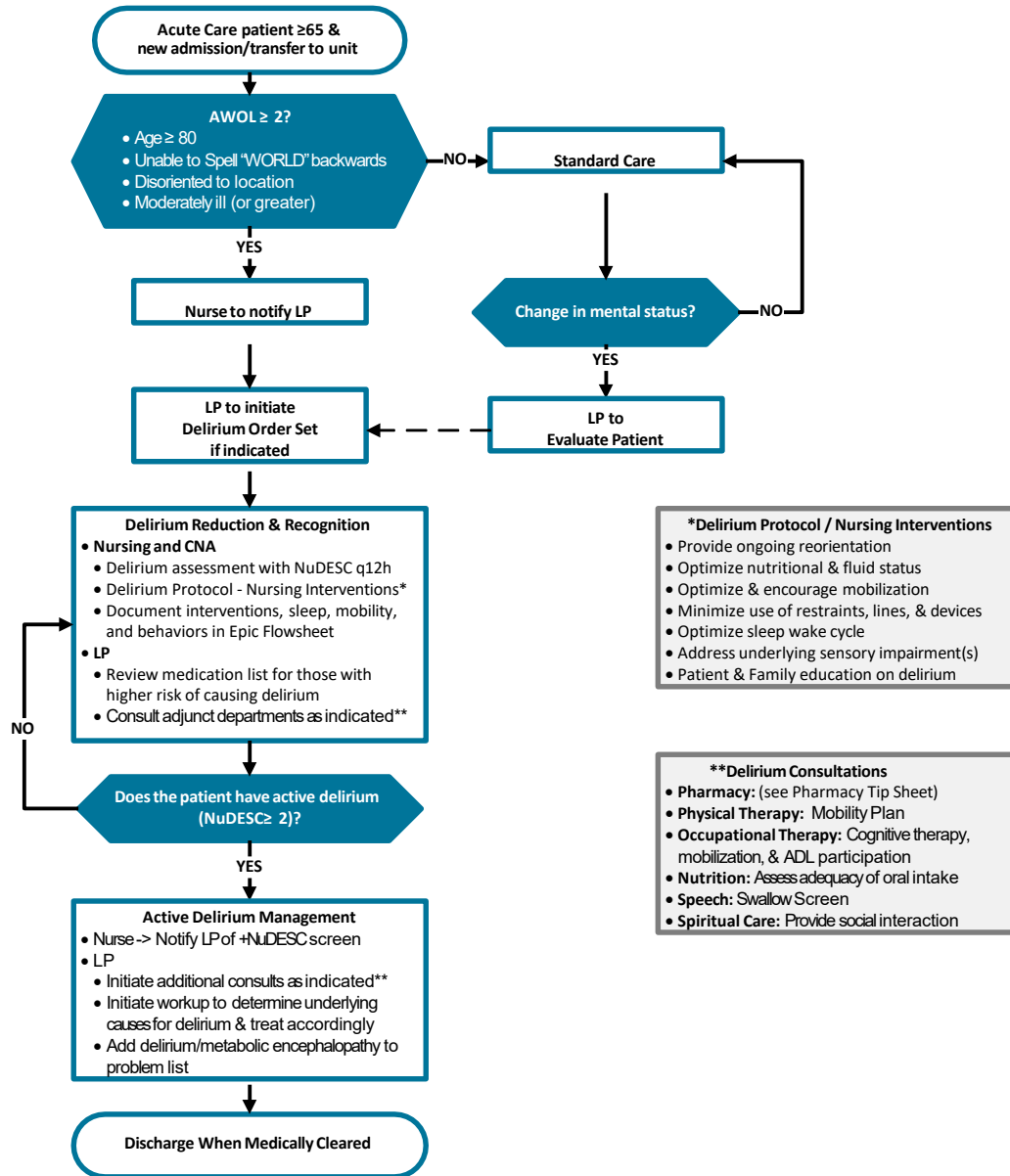
# Delirium Reduction and Recognition (DRR)

- The pathway is:
  - Evidence based
  - Multi-component
  - Multidisciplinary
  - Nursing led
- It utilizes a delirium risk screen (AWOL) on admission for all patients  $\geq 65$
- It utilizes a standard delirium screening (NuDESC) per shift during hospitalization when indicated



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## Delirium Reduction & Recognition: Inpatient Management



# Delirium Screening

## AWOL

*Determines risk of delirium*

Patients  $\geq 65$  get AWOL screening once upon arrival to the floor by their primary RN.



### Scoring

A	W	O	L
Age $\geq 80$ years	Unable to correctly spell 'WORLD' backwards	Not oriented to city, state, county, hospital name and floor	Nursing illness severity assessment of moderately ill, severely ill or moribund
1 point	1 point	1 point	1 point

AWOL Score	Delirium Risk
0	2%
1	4%
2	14%
3	20%
4	64%

$\geq 2$  = High risk for developing delirium

## NuDESC

*(Nursing Delirium Screening Scale) Screens for active delirium*

Patients with + AWOL are screened for active delirium Q shift by primary RN.



### Scoring

If behavior is present at any point during your shift  
0 (no symptoms) | 1 (mild) | 2 (pronounced) for each behavior

BEHAVIORS		
Disorientation	Inappropriate behavior	Inappropriate communication
Illusions/Hallucinations	Psychomotor retardation	

Overall Score  $\geq 2$  = Positive Screen

# AWOL Documentation & Scoring

## Done on Admission for Patients $\geq 65$ Years of Age

Risk determination using the AWOL is based on the following (1 point assigned to each item):

- Patient **age** is  $\geq 80$  years.
- Patient cannot spell **WORLD** backwards..
  - If patient is unable to correctly spell, assign 1 point.
- Patient is not fully **oriented** to (and can name): city, state, county, hospital, floor.
  - If patient cannot name all five correctly, assign 1 point.
- **Level of illness severity** (mild, moderate, severe)
  - Use clinical judgement to assess.
  - Assign 1 point to 'moderate' and 'severe' levels.

A	W	O	L
Age $\geq 80$ years	Unable to spell "WORLD" backwards	Not oriented to city, state, county, hospital name and floor	Nursing illness severity level assessment of moderately ill, severely ill, or moribund
1 point	1 point	1 point	1 point

**A total AWOL score of  $\geq 2$  indicates the patient is at high-risk for developing delirium during their hospital stay.**

# NuDESC Documentation & Scoring

## Done Q Shift When + AWOL or When Concerns for Active Delirium

**Completed toward the end of the shift** to allow sufficient time for observation of any behavior changes in the patient and note frequency and severity of behaviors.

- Recommended to complete the screen along with 4pm/am vitals, to fit with standard workflow.
- EXCEPTION to end of shift documentation: If it is clear the patient is delirious, assess and document the NuDESC right away so that the pathway is initiated.

Presence and severity of delirium is screened for with the NuDESC based on the following guidelines:

- **0** | No alteration in behavior throughout shift
- **1** | Mild alteration in behavior throughout shift
- **2** | Pronounced alteration in behavior

BEHAVIOR	SCORE		
	0	1	2
<b>Disorientation</b>	Fully oriented	Disoriented x1; easily re-oriented	Disoriented x2-4; not easily re-oriented
<b>Inappropriate Behavior</b>	Calm, cooperative	Restless, uncooperative	Agitated, pulling at lines/devices; climbing out of bed
<b>Inappropriate Communication</b>	Appropriate	Unclear or rambling speech	Incoherent, nonsensical or unintelligible speech
<b>Illusions/Hallucinations</b>	None noted	Paranoia	Hallucinations; distortions of visual/auditory objects/stimuli
<b>Psychomotor Retardation</b>	Normal speed of movement and response time to questions	Delayed responses; slow to respond to verbal or physical stimulation	Excessive sleeping; somnolent, lethargic; reaction time is slow when prodded; difficult to motivate

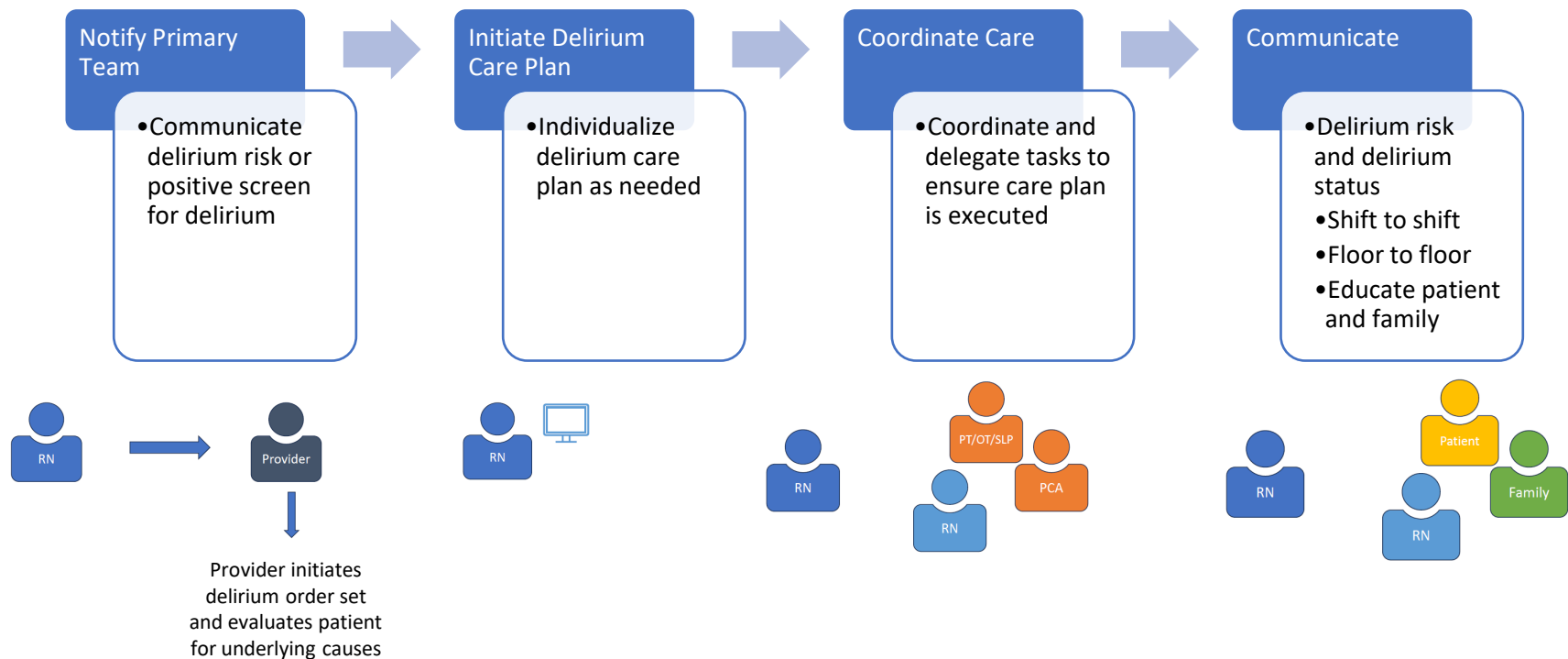
**A total NuDESC score of  $\geq 2$  indicates the patient is positive for active delirium.**

# Positive Screen Triggers

- Epic Best Practice Advisory
  - Prompts nursing to alert provider of finding and to initiate DRR order set
- Nursing
  - Initiation of delirium nursing care orders (if not done already)
  - Working with LP and colleagues on individualizing nursing care plan specific for the patient
- LP (MD, APP)
  - Initiate DRR order set (if not done already)
  - Assessment of patient and underlying causes
  - Any work-up needed (labs, imaging, etc.)
  - Consideration for consultations as appropriate



# Nursing Care Guidelines



# Delirium Nursing Care

## “Sunrise Service”

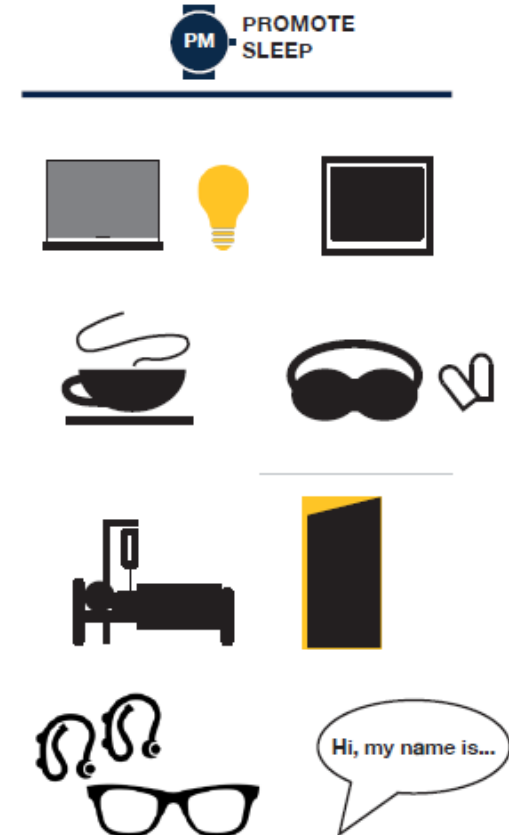
- Lights on in pt room
- Blinds open (>50%) in pt room
- OOB (GOAL: minimum = w meals; amb  $\geq$  3x/day)
- Water w/in reach
- Pt awake – prevent/minimize daytime napping (<1 hr)
- Sensory aids at bedside/in use (e.g., hearing aids, glasses)
- Remove/avoid tethers when possible, ASAP
- Cognitive/social stimulation
- Orientation aids (e.g., (re-)introductions; whiteboard info – date, location, names/contacts)



# Delirium Nursing Care

## “Turndown Service”

- Lights off in pt room
- Blinds closed
- TV off
- Computer monitor off
- Area around pt room quiet
- Pt sleeping by ~2300
- No/minimal caffeine after 1200; liquids after 2000
- Minimal interruptions (bundle care items; no/minimal VSs ~2200-0500 (when safely possible in stable pts))



# LP (MD, APP) Care Guidelines

**AWOL** | Determines risk of delirium

If Score  $\geq 2$ :

**1**

Initiate Delirium Order Set

**2**

Discontinue precipitating medications

**NuDESC** | Screens for active delirium

Score  $\geq 2$ :

**1**

Treat underlying cause

**2**

Discontinue precipitating medications

**3**

Initiate Delirium Order Set

# Delirium Order Panel

- Name of order panel:
  - 'Med IP Delirium Focused'

Med IP Delirium Focused

# Delirium Order Panel

## ▼ General

### ▼ Nursing Assessments

☒ Delirium Screening (NuDesc Assessment)

Routine, VMC Now then every 12 hours, First occurrence today at 0642, Notify LIP for score of 2 or greater. Document assessment and interventions in Flowsheet.

☒ Delirium Vitals Instructions

Routine, Until discontinued, Starting today at 0642, Until Specified, No vitals between 2200 - 0600 unless patient has vitals that fall outside of the normal parameters on the last two vital checks. Contact LIP as needed.

DO NOT USE LP to RN Communication orders for medications, Admin Instructions, or any medication related orders.

### ▼ Nursing Interventions

Please consider discontinuing Foley & Telemetry if no longer indicated.

☒ Delirium Protocol

Routine, Until discontinued, Starting today at 0642, Until Specified

☐ Foley Catheter - Discontinue

Routine, Once

## ▼ Labs

NOTE: Open the Blood Transfusion Order Set if a blood order is needed.

### ▼ Delirium Labs

Consider evaluating for dehydration & UTI.

☐ Basic Metabolic Panel

Routine, Once

☐ Urinalysis. Microscopic if Indicated (\$\$\$)

Routine, Once

## ▼ Medications

### ▼ Medications

Guidance: Please review & consider eliminating delirogenic meds

☒ melatonin tablet 6 mg

6 mg, Oral, Nightly (8pm), First dose today at 0700

☐ Non-Opioid Pain Medications

## ▼ Consults - Ancillary

### ▼ Ancillary Consults

☐ Pharmacy Consult - Delirium Med Review

☐ Psychiatry Consult

☐ PT Eval and Treat

Routine, Once

☐ OT Eval and Treat

Routine, Once

☐ SLP Language/Cognitive/Speech Eval and Treat

Routine, Once

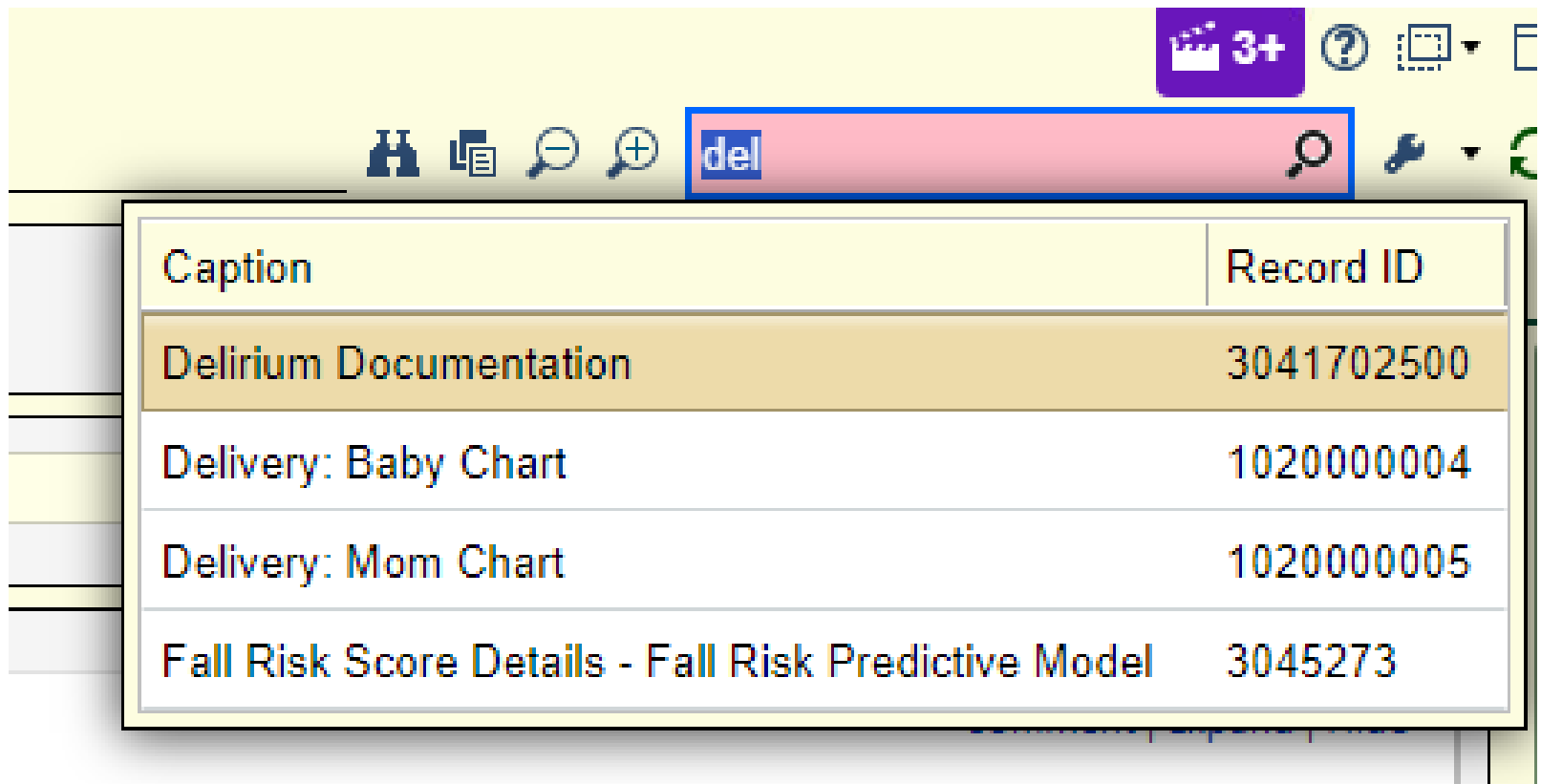
☐ Nutrition Services (LIP Request) Consult

☐ Spiritual Care Consult

☐ Palliative Care Consult

# How to View Delirium Documentation Report in Epic

From the Summary activity, start typing “delirium” and hit Enter or the magnifying glass



The screenshot shows the Epic EHR interface. At the top, there is a search bar with the text "del" entered. To the right of the search bar are icons for a magnifying glass, a wrench, and a refresh button. Below the search bar, a dropdown menu displays a list of results. The first result, "Delirium Documentation", is highlighted in orange. The other results are "Delivery: Baby Chart", "Delivery: Mom Chart", and "Fall Risk Score Details - Fall Risk Predictive Model".

Caption	Record ID
Delirium Documentation	3041702500
Delivery: Baby Chart	1020000004
Delivery: Mom Chart	1020000005
Fall Risk Score Details - Fall Risk Predictive Model	3045273

# Delirium Documentation Report

Summary
Chart Review
Manage Orders
Results Review
Problem List
Notes
History
CDI Query
Rounding
Admission
Transfer
Discharge
Consult
Procedure
NIM-TRA

Summary
Index
Snapshot
Comp
Labs
Vitals
WT
Rad
14-Day Micro
Fever
Intake/Output
Overview
Delirium Documentation

Delirium Documentation
Go to now: 9/30/2023
09/30/23 - Today
Timeline | 24 Hrs 12 Hrs 6 Hrs 4 Hrs 1 Hr 15 Min

	VAC SE 11/15 1200	11/11 0701 - 11/12 0700 0800	11/12 0701 - 11/13 0700 0800	11/13 0701 - 11/14 0700 0800	11/14 0701 - 11/15 0700 0800	11/15 0701 - 11/16 0700 0800
<b>NuDESC Delirium Assessment</b>						
Disorientation	1	1	1	1	1	1
Inappropriate Behavior	1	1	2	0	1	1
Inappropriate Communication	1	1	1	1	1	1
Illusions/Hallucinations	0	0	1	0	1	1
Psychomotor Retardation	1	1	1	1	1	1
Total Score	5	5	6	3	5	5
<b>Delirium Prevention</b>						
Delirium Preventative Nursing Actions	TID verbal...	TID verbal...	TID verbal...	TID verbal...	TID verbal...	TID verbal...
Sleep Pattern	Early awa...	Disurbed...	Difficult...	Difficult...	Difficult...	Difficult...
Patient Behaviors	Calm	Calm	Anxious	Calm/Comp...	Anxious	Anxious &...
Aggressive verbally					Swearing...	Aggressive verbally

**Delirium Screening - AWOL**

Rowsheet Row	First Filed Value
Delirium Risk Screen - AWOL	
Age >= 50	0 filed at 10/05/2023 1212
Correctly Spells "WORLD" Backward	1 filed at 10/05/2023 1212
Oriented to City, State, Country, Hospital Name, and Floor	1 filed at 10/05/2023 1212
Nursing Illness Severity Assessment	0 filed at 10/05/2023 1212
Total Score	2 ! filed at 10/05/2023 1212

**Delirium Assessment (most recent)**

Delirium Assessment (NuDESC) - 11/15/23 2000

Delirium Assessment (NuDESC)

Disorientation	1
Inappropriate Behavior	1
Inappropriate Communication	1
Illusions/Hallucinations	1
Psychomotor Retardation	1
Total Score	5 !

**Delirium Prevention**

Delirium Preventative Nursing Actions	TID verbal orientation to place, time & situation; No vitals between 2200-0600 (contact LIP as needed); No labs drawn between 2200-0600 (contact LIP as needed)
Sleep Pattern	Difficulty falling asleep
Patient Behaviors	Anxious; Aggressive verbally
Aggressive verbally	Swearing and/or yelling at staff

**Scheduled Meds Sorted by Name Last 72 Hours**  
for Delirium, Sort as of 12/07/22 1011

1 Day
5 Days
7 Days
10 Days
Today

	12/05/23	12/06/23
<b>Medications</b> metoprolol tartrate tablet 25 mg Dose: 25 mg Freq: 2 Times Daily Route: Oral Start: 11/16/23 1200 braZOdone (DESIREL) tablet 50 mg	1000 2200	1000 2200



# LP (MD, APP) Care Guidelines

## Assess Underlying Causes\*

**D**rugs/medications/polypharmacy  
**E**lectrolytes (Na, Ca, CO<sub>2</sub>), **E**nvironment change  
**L**ack of drugs (withdrawal), **L**ack of sleep  
**I**nfection, **I**mmobility (catheters, feeding tubes), **I**atrogenic (e.g., major surgery)  
**R**estraints, **R**educed sensory input (vision/hearing)  
**I**ntracranial (stroke, bleed, seizure, meningitis)  
**U**rinary Retention, constipation, **U**ncontrolled pain  
**M**etabolic (hypoxia, uremia, hepatic encephalopathy, thyroid)

### WORKUP

- Physical exam: check surgical wound; check tubes/lines/drains; brief neuro exam
- Vital signs, pulse ox, pain assessment
- Labs: UA, CBC, BMP. Consider TSH, LFTs, UTox, cultures, EKG, Chest X-ray

*\*Patients with more risk factors (old age, cognitive impairment, poor functional status, hearing/vision impairment, depression, alcohol abuse) can develop delirium with minor precipitants.*

**AWOL** | Determines risk of delirium  
If Score  $\geq 2$ :

**1** Initiate Delirium Order Set

**2** Discontinue precipitating medications

**NuDESC** | Screens for active delirium  
Score  $\geq 2$ :

**1** Treat underlying cause

**2** Discontinue precipitating medications

**3** Initiate Delirium Order Set

# LP (MD, APP) Care Guidelines

## Benzodiazepines

Lorazepam  
Midazolam  
Alprazolam  
Clonazepam  
Diazepam

## Anti-nausea

Prochlorperazine  
Promethazine  
Scopolamine

## Antispasmodics

Oxybutynin  
Tolterodine

## Steroids

Prednisone,  
Dexamethasone

## Antihistamines

Benadryl  
Hydroxyzine  
Meclizine

## Hypnotics (sleep aids)

Zolpidem  
Eszopiclone  
(Lunesta)

## Opiates

Morphine  
Hydromorphone  
Meperidine  
Oxycodone

## Muscle Relaxants/Pain

Cyclobenzaprine  
Carisoprodol  
Baclofen  
Pregabalin  
Amitriptyline

**AWOL** | Determines risk of delirium

If Score  $\geq 2$ :

1

Initiate Delirium Order Set

2

Discontinue precipitating medications

**NuDESC** | Screens for active delirium

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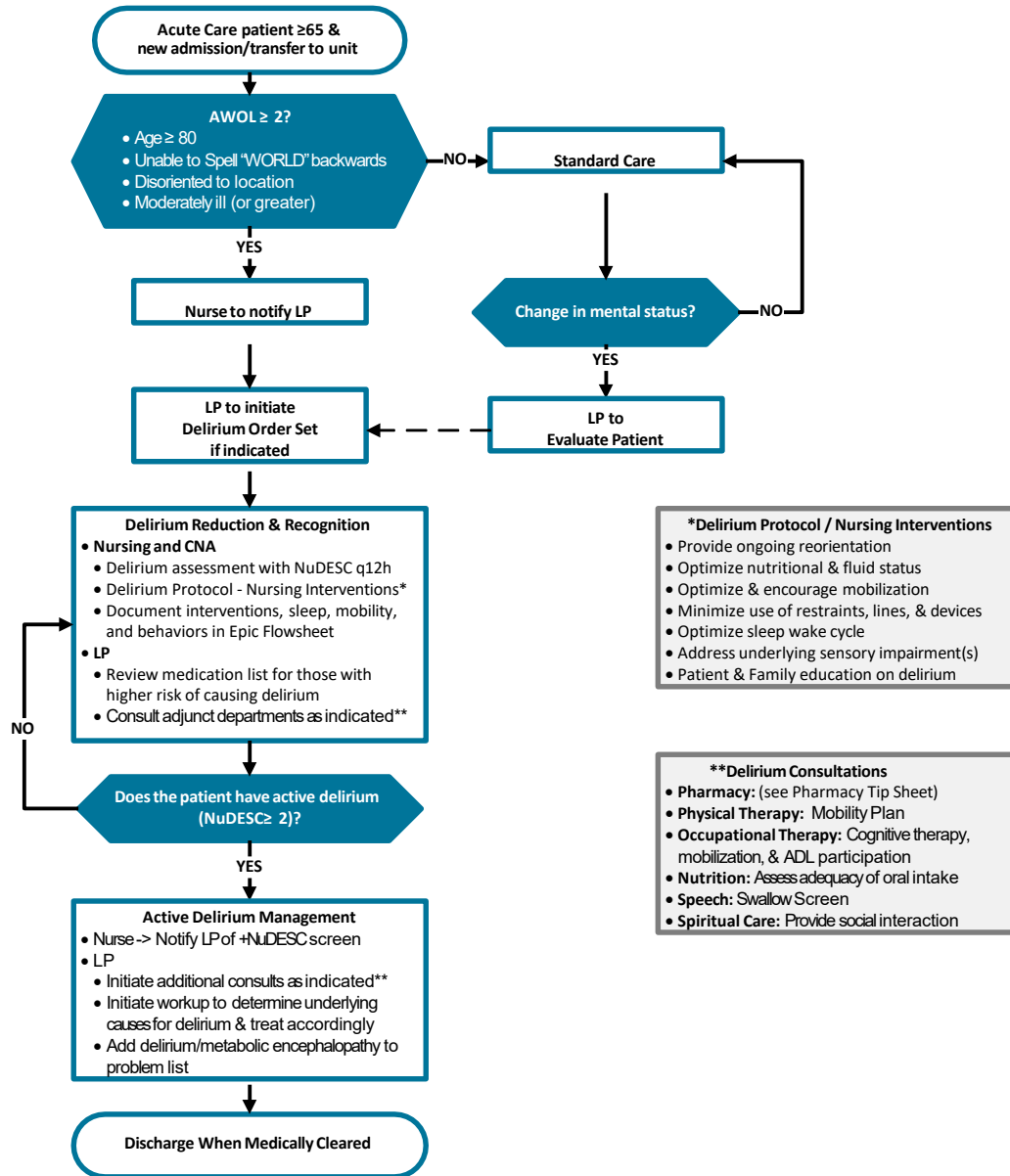
Initiate Delirium Order Set

# LP (MD, APP) Care Guidelines

- Review medication list, esp. those started, dose adjusted, or stopped within last 24 hours
- Assess pain, urinary retention, constipation, electrolytes, vital signs, oxygen saturation, etc
- Consider bladder scan to check for urinary retention
- If no BM in past 48 hours check for fecal impaction
- Foley out as soon as feasible
- Education (patient and family caregiver)

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## Delirium Reduction & Recognition: Inpatient Management



# Delirium Prevention Pathway

- To access the pathway:
  - [https://www.valleymed.org/contentassets/dff2ea0e3f5a4184a89d05049d6098ff/delirium\\_inpatient\\_care\\_pathway.pdf](https://www.valleymed.org/contentassets/dff2ea0e3f5a4184a89d05049d6098ff/delirium_inpatient_care_pathway.pdf)
- To access the policy:
  - <https://valleymed.sharepoint.com/sites/policycentral/PolicyCentral/DELIRIUM%20ASSESSMENT%20AND%20MANAGEMENT%20POLICY.docx>

THANK YOU!