Sedation and Analgesia

Section Editor: seat open
Chief Editor: Maged Tanios, MD

Version 0.1 · Last reviewed 2026-07-19

Disclaimer: This protocol is an educational reference intended to support — not replace — institutional policy, pharmacy and therapeutics review, and individual clinical judgment. Verify current dosing, contraindications, and local formulary/practice constraints before adopting into an EMR or using in patient care.

Overview

Oversedation drives delirium, prolongs mechanical ventilation, and worsens outcomes — the evidence base (PADIS 2018, updated 2025) is consistently in the direction of lighter sedation, analgesia-first management, and routine delirium screening rather than reflexive sedation. The 2025 focused update adds a preference for dexmedetomidine over propofol when light sedation or delirium reduction is the priority, suggests melatonin for sleep, and reinforces enhanced mobilization. The local source PDF behind this topic was image-based and could not be auto-extracted, so this protocol is built directly from the current PADIS guideline series.

Steps

01 Assess and Treat Pain First

- Use a validated tool for non-verbal patients — Critical-Care Pain Observation Tool (CPOT) or Behavioral Pain Scale (BPS).
- Treat pain before adding or increasing sedation (analgesia-first, not reflexive sedation for agitation that may actually be pain).

02 Target Light Sedation with a Validated Scale

Table 1. Richmond Agitation-Sedation Scale (RASS), abbreviated

SCORE	DESCRIPTION
+4 to +1	Combative to restless
0	Alert and calm
−1 to −2	Drowsy to light sedation (usual target range)
−3	Moderate sedation
−4 to −5	Deep sedation to unarousable

- Default target: **RASS −2 to 0** unless a specific indication requires deeper sedation (e.g., neuromuscular blockade, severe ARDS with ventilator dyssynchrony, status epilepticus on continuous infusion, elevated ICP management).
- Document any deeper-than-target sedation with an explicit indication, not as a default.

03 Choose the Sedative Agent

Table 2. Agent comparison

AGENT	WHEN PREFERRED
Dexmedetomidine	Preferred over propofol when light sedation and/or delirium reduction are the highest priorities (2025 update)
Propofol	Reasonable default when rapid titration and fast washout for neuro checks/extubation readiness are priorities
Benzodiazepine	Not first-line for continuous sedation — associated with more delirium and oversedation; insufficient evidence to recommend for anxiety specifically

04 Pair Daily Sedation Interruption with the SBT

- Coordinate a daily sedation awakening trial with the spontaneous breathing trial (see [Weaning from Mechanical Ventilation](mv-weaning.md)) — these are meant to run together, not as separate, disconnected processes.

05 Screen for Delirium Every Shift

- Validated tool: CAM-ICU or ICDSC, at minimum once per shift.
- Nonpharmacologic prevention first: reorientation, minimizing deliriogenic medications, sleep hygiene (Step 7), and mobility (Step 8) — these are the primary prevention strategy, not an adjunct to medication.

06 Treat Delirium Cautiously

- There is currently **insufficient evidence to recommend for or against antipsychotics** for delirium treatment.
- Optimize nonpharmacologic measures and treat underlying contributors (pain, withdrawal, metabolic derangement, infection) before reaching for a pharmacologic agent; reserve antipsychotics for severe agitation posing a safety risk, per local practice, given the lack of outcome-benefit evidence.

07 Support Sleep

- Suggest melatonin over no melatonin — a low-risk intervention (low certainty evidence).
- Pair with environmental sleep hygiene: noise/light reduction overnight, clustering care and vitals checks to protect uninterrupted sleep periods where clinically feasible.

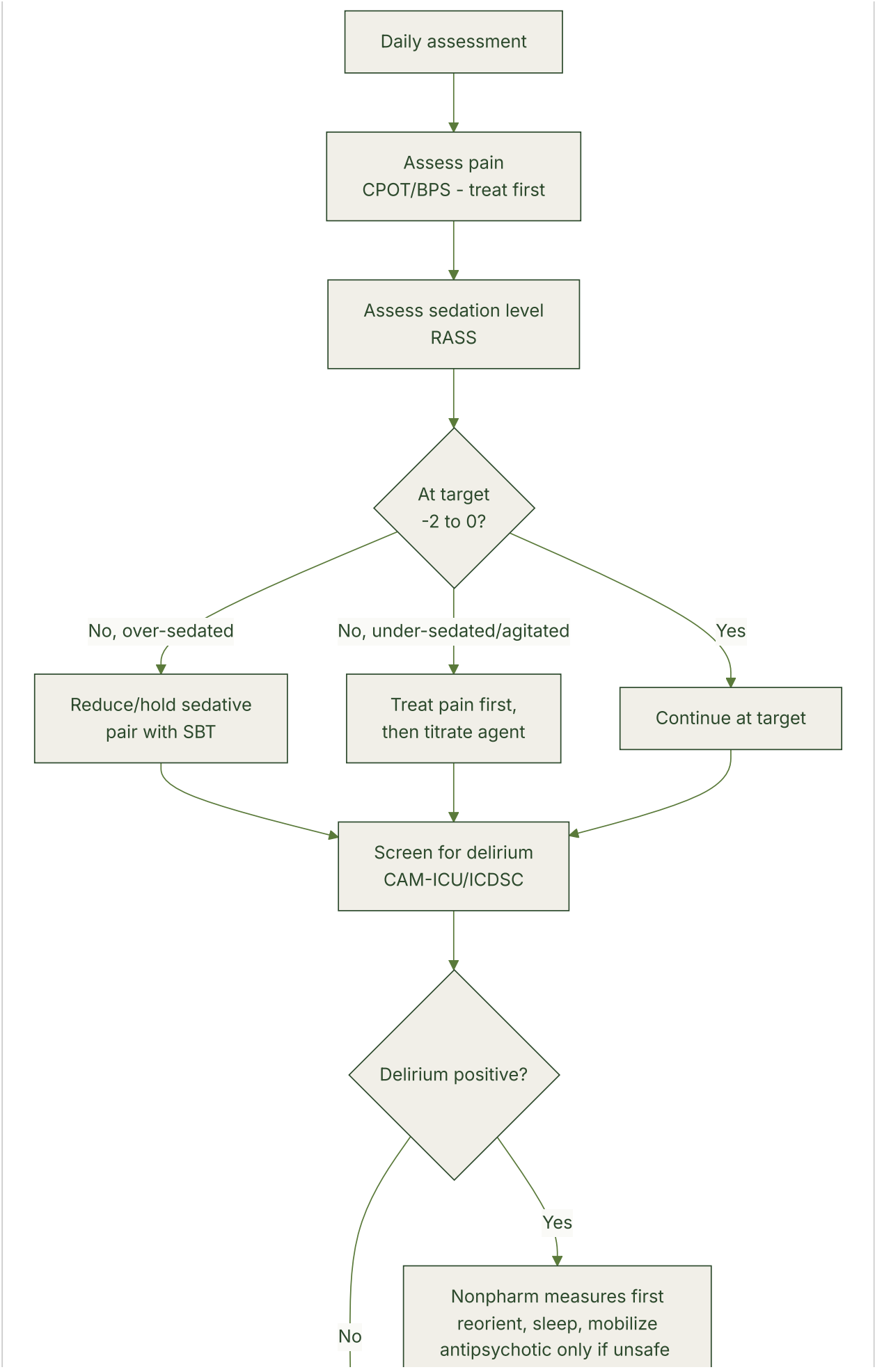
08 Mobilize Early

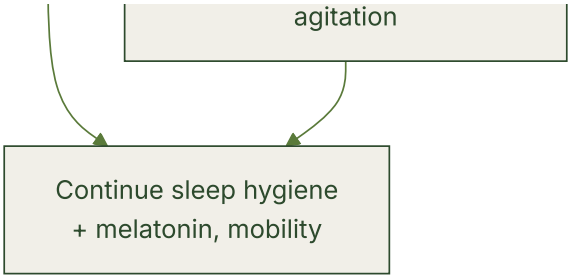
- Enhanced mobilization/rehabilitation is suggested over usual-care mobilization to mitigate ICU-acquired weakness (2025 update, moderate certainty) — see the companion [Early Mobility](early-mobility.md) protocol for the specific program.

09 Run It as a Bundle, Not Separate Checklists

The ABCDEF bundle ties Steps 1–8 together as one daily-rounds workflow: **A**ssess/prevent/manage pain, **B**oth SAT and SBT paired, **C**hoice of sedation, **D**elirium assess/prevent/manage, **E**arly mobility, **F**amily engagement. Round on all of it together — treating these as independent, siloed checklists is where bundle compliance typically breaks down.

Algorithm


Daily assessment
Assess pain
CPOT/BPS - treat first
Assess sedation level
RASS
At target
-2 to 0?
No, over-sedated
No, under-sedated/agitated
Yes
Reduce/hold sedative
pair with SBT
Treat pain first,
then titrate agent
Continue at target
Screen for delirium
CAM-ICU/ICDSC
Delirium positive?
Yes
No
Nonpharm measures first
reorient, sleep, mobilize
antipsychotic only if unsafe



EMR Order Set

PHYSICIAN ORDERS

- Analgesia-first sedation order set with structured RASS target field (default −2 to 0; deeper target requires an indication field).
- Agent selection order: dexmedetomidine default toggle vs. propofol, with benzodiazepine excluded from the default continuous-sedation order set (available only as a distinct, deliberate order).
- Paired SAT/SBT order.
- Melatonin order.

NURSING ORDERS

- RASS documentation every 2–4 hours and PRN, structured field.
- CPOT/BPS pain scale documentation.
- CAM-ICU or ICDSC delirium screen every shift, structured field.
- Sleep-hygiene bundle checklist (lights/noise/care clustering).
- Daily SAT coordination with respiratory therapy for the paired SBT.

PHARMACY ORDERS

- Sedative/analgesic dosing per renal/hepatic function.
- Medication reconciliation flag for deliriogenic agents (e.g., anticholinergics, unnecessary benzodiazepines).

Build notes — RASS and CAM-ICU/ICDSC should be structured flowsheet fields (not free text) so time-at-target and delirium-prevalence metrics can be pulled automatically.

Adoption Notes

- Shifting the default agent toward dexmedetomidine has real hemodynamic-monitoring implications (bradycardia, hypotension) — educate nursing/pharmacy before go-live, and confirm formulary cost/availability.
- RASS target must be individualized; build the "deeper sedation with indication" pathway explicitly rather than leaving it as an undocumented override.
- Roll out together with the [Weaning](mv-weaning.md) and [Early Mobility](early-mobility.md) protocols — the ABCDEF bundle is one integrated daily workflow, not three separate initiatives.

Success Metrics & Monitoring

Percentage of ventilator days with RASS at goal, delirium prevalence (CAM-ICU/ICDSC-positive rate), benzodiazepine utilization rate, ventilator-free days, and ICU length of stay. Track via nursing flowsheet data and the critical care database; review monthly during rollout.

Suggested Reading

1 Lewis K, Balas MC, Stollings JL, et al. A Focused Update to the Clinical Practice Guidelines for the Prevention and Management of Pain, Anxiety, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption in Adult Patients in the ICU. *Crit Care Med*. 2025;53(3):e711–e727. doi:10.1097/CCM.0000000000006574. Primary current update — source of the dexmedetomidine-preferred, melatonin, and enhanced-mobilization recommendations in this protocol.

2 Devlin JW, Skrobik Y, Gélinas C, et al. Clinical Practice Guidelines for the Prevention and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption in Adult Patients in the ICU. *Crit Care Med*. 2018;46(9):e825–e873. doi:10.1097/CCM.0000000000003299. Base guideline this update builds on — source of the CPOT/BPS, RASS, and CAM-ICU/ICDSC framework used throughout this protocol.

Revision History

VERSION	DATE	EDITOR	SUMMARY
0.1	2026-07-19	FunctionalHealth editorial team	Initial version; local sedation.pdf was image-based and could not be auto-extracted, so this version is built from the current PADIS guideline series instead