

CRITICAL CARE LIBERATION BUNDLE

The ABCDEF Bundle

A coordinated daily approach to liberate ICU patients from pain, oversedation, delirium, and immobility. The elements reinforce each other — pain control enables lighter sedation, lighter sedation enables awakening and breathing trials, which enable mobility and engagement. Perform every element, every patient, every day.

EVERY DAY Run the bundle on interprofessional rounds. Treat the elements as one linked process — coordinate **A→F** rather than in isolation, and document each on the daily goals sheet.

A Assess, prevent & manage pain

B Both SAT & SBT

C Choice of analgesia & sedation

D Delirium: assess, prevent, manage

E Early mobility & exercise

F Family engagement & empowerment

A Assess, prevent & manage pain

ROUTINE PAIN ASSESSMENT — VALIDATED TOOL

- ☐ Awake — **0–10 Numeric Rating Scale (NRS)**
- ☐ Nonverbal / ventilated — **CPOT or BPS**, at least **q4h** and with any intervention

ANALGESIA-FIRST STRATEGY

- ☐ Target **NRS** ≤ 3 or **CPOT/BPS** ≤ 2, individualized
- ☐ IV opioids titrated to goal (fentanyl, hydromorphone, morphine) — prefer **continuous + PRN bolus** over intermittent alone in unstable patients

- ☐ **Multimodal adjuncts** when appropriate — acetaminophen, regional techniques, low-dose ketamine, gabapentinoids (if not contraindicated), topical agents

PREVENTION & REASSESSMENT

- ☐ **Preemptive analgesia** before procedures; avoid prolonged untreated pain (reduces delirium and PTSD risk)
- ☐ Reassess after any intervention and at regular intervals; **document score and response**

B Both spontaneous awakening & breathing trials

Daily SAT — spontaneous awakening trial

- ☐ **Screen for exclusions** — active seizures, ongoing neuromuscular blockade / paralysis, status asthmaticus, elevated ICP, active MI, severe agitation with harm risk
- ☐ If no contraindications — **stop sedative infusions** (or decrease by protocol); continue analgesia as needed
- ☐ **Failure** — dangerous agitation, sustained $RR > 35$, $SpO_2 < 88\%$ despite support, arrhythmias, hemodynamic instability → restart at lower dose

Daily SBT — spontaneous breathing trial

- ☐ After / during SAT if awake enough and meets criteria — adequate oxygenation ($FiO_2 \leq 0.4-0.5$, $PEEP \leq 5-8$), hemodynamically stable, no escalating vasopressors
- ☐ Trial on **T-piece, CPAP 5, or PSV 5-7** for **30-120 min**
- ☐ **Failure** — tachypnea, hypoxemia, marked tachycardia, hypotension, mental-status decline, diaphoresis

COORDINATE Nursing, RT, and physician / APC coordinate **paired SAT + SBT each morning** with clear documentation.

C Choice of analgesia & sedation

SEDATION GOALS

- ☐ Use **RASS or SAS**; typical goal **RASS -2 to 0** (light sedation) unless specific indication for deeper sedation

PREFERRED AGENTS

- ☐ First line for ongoing sedation — **propofol or dexmedetomidine**
- ☐ Reserve **benzodiazepines** (midazolam, lorazepam) for specific indications — alcohol / benzo withdrawal, seizures, procedural sedation — because of delirium risk

ANALGESIA-FIRST SEDATION & TITRATION

- ☐ **Treat pain before escalating sedative**
- ☐ **Nurse-driven protocol** to titrate to target RASS — regular documented assessments, minimize continuous deep sedation
- ☐ Daily review of sedative necessity, with attempts to wean



Delirium: assess, prevent & manage

ROUTINE MONITORING

- ☐ **CAM-ICU or ICDSC** at least once per shift and with any change in mental status

IDENTIFY MODIFIABLE CONTRIBUTORS

Medications

Benzodiazepines,
anticholinergics, high-dose
opioids, steroids

Metabolic

Hypoxemia, hypercapnia,
electrolyte disturbance,
sepsis, organ failure

Environment

Sleep disruption, sensory
deprivation / overload

NONPHARMACOLOGIC PREVENTION / MANAGEMENT

- ☐ Normalize sleep–wake cycle (light / dark, noise control, cluster care); early mobilization & PT
- ☐ Frequent reorientation, clocks / calendars, **glasses & hearing aids**; family at bedside, consistent caregivers when possible

Pharmacologic strategies

- ☐ **Avoid routine antipsychotics for prevention**
- ☐ Reserve haloperidol / atypical antipsychotics for **severe agitation with safety risk**, after addressing underlying causes
- ☐ Manage pain, withdrawal, and iatrogenic contributors aggressively

E Early mobility & exercise

SCREENING FOR READINESS

- ☐ No active neuromuscular blockade, unstable fractures, uncontrolled ICP, active MI, unmanageable shock, or severe hypoxemia

PROGRESSIVE MOBILIZATION

LEVEL 1

Passive ROM in bed

LEVEL 2

Active-assisted ROM, bed in chair position

LEVEL 3

Dangle at bedside, sit-to-stand with assistance

LEVEL 4

Transfer to chair, march in place, ambulate (with ventilator) as tolerated

INTERDISCIPLINARY PROTOCOL

- ☐ PT/OT, nursing, and RT coordinate daily goals
- ☐ Use hemodynamic / respiratory **stop criteria** — MAP < 55–60 mmHg, SpO₂ < 88–90%, new arrhythmia

F Family engagement & empowerment

STRUCTURED COMMUNICATION

- ☐ Daily updates with family / caregivers; early goals-of-care discussions; use **teach-back** to ensure understanding

INVOLVEMENT IN CARE

- ☐ Encourage daytime presence, participation in reorientation, provision of glasses / hearing aids, familiar objects

PSYCHOSOCIAL SUPPORT & SHARED DECISIONS

- ☐ Screen family for distress; provide **social work / chaplaincy** as needed
- ☐ Involve surrogate decision-makers for major interventions, code status, and transitions of care

Not a substitute for clinical judgement. Verify doses, allergies, renal/hepatic function, and contraindications. Adapt all tools, targets, and agents to your institutional ICU-liberation protocol and the individual patient.

Spreading knowledge

Improving outcomes