Adult Comfort Care and Withdrawal of Life-Sustaining Treatment

Proposed Trauma/SICU policy with controlled DCD addendum

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DRAFT FOR REVIEW - NOT APPROVED FOR CLINICAL USE. Effective date: not assigned. This document does not activate medication orders or expand nursing privileges. Proposed medication defaults and operational choices require the approval and implementation checks in section 10.

1. Purpose and scope

Provide timely, individualized prevention and relief of suffering during adult comfort-focused care and withdrawal of life-sustaining treatment (WLST). The same symptom-treatment standards apply to patients pursuing controlled donation after circulatory death (DCD) and to non-donors. Standardization governs assessment, communication, prescribing, and reassessment; medication doses remain individualized. [1, 6]

Applies to adults aged 18 years or older in the ICU and designated withdrawal locations. Transfer to another care area requires that area's ability to deliver the ordered treatment. Pediatric withdrawal, death determination by neurologic criteria, organ recovery, and normothermic regional perfusion (NRP) are governed by separate policies.

Comfort-focused care is active treatment. A do-not-resuscitate order alone does not establish comfort-only goals. Medication shall not be prescribed or increased to cause death, meet a recovery deadline, or improve organ eligibility. [5, 6]

2. Responsibilities and authorization

Attending/treating prescriber: confirm and document the treatment decision with the capable patient or legally authorized surrogate; enter code-status and WLST orders; reconcile medication exposure; prescribe explicit rescue and maintenance orders; identify a covering clinician; and remain at bedside or designate an appropriately qualified clinician during withdrawal until symptoms are controlled. Consultation shall not delay immediate treatment within existing orders. [1, 4]

Bedside RN: assess and document symptoms, administer authorized anticipatory and rescue medication, reassess response and adverse effects, check IV delivery, and activate the escalation pathway. This draft does not authorize choosing an unspecified dose or changing a basal rate without an explicit order.

Respiratory therapist: participate in the pre-withdrawal huddle, confirm the individualized airway/ventilator plan, and perform withdrawal with the treating team after comfort is established.

Pharmacist: review exposure, conversion when needed, organ dysfunction, concentrations, administration rates, compatibility, and pump programming. **Palliative care/anesthesia:** assist with complex symptoms or proportionate palliative sedation. **OPO:** coordinate donation evaluation and recovery logistics within the institutional DCD policy; the treating team retains end-of-life care responsibility. [6]

3. Pre-withdrawal huddle and preparation

- Document goals, surrogate authority, informed discussion, DNR/DNI status, specific treatments to stop, family preferences, and expected uncertainty in timing of death.

- Review the prior 24 hours of opioid/sedative use, current infusion rates, allergies, renal/hepatic function, frailty, and evidence of tolerance or toxicity. Do not reset a tolerant patient to an opioid-naive regimen.

- Reconcile non-comfort interventions. Continue seizure treatment and devices that relieve symptoms when appropriate. Address ICD shock therapy separately from pacing, with a device-specific plan; do not order blanket pacemaker deactivation.

- Prepare IV access, prescribed rescue medication, infusion supply if indicated, staff coverage, and family/spiritual support. Record baseline symptom assessment.

- Stop neuromuscular blocking medication and confirm adequate recovery before WLST. If recovery is uncertain, obtain objective assessment with the ICU/anesthesia team; elapsed time alone is insufficient. Paralytics shall not be used to treat or conceal distress. [4]

- Choose immediate extubation or a stepwise reduction of support according to clinical circumstances and goals. Treat anticipated distress before the procedure; pause the next withdrawal step to treat uncontrolled symptoms. [1, 4]

4. Assessment and documentation standard

Use patient self-report whenever reliable. When self-report is unavailable, combine validated observational tools with clinical assessment. Vital signs alone shall not determine an opioid or sedative dose. [7]

Symptom	Assessment	Proposed treatment goal
Pain	Patient-rated 0-10 scale and acceptable comfort goal; otherwise CPOT or the unit's validated behavioral pain scale	Patient reports acceptable comfort; proposed CPOT goal 2 or less, with 3 or more prompting treatment/assessment
Dyspnea	Patient-rated breathing discomfort; otherwise RDOS plus work of breathing, facial expression, and distress	Patient reports relief; RDOS below 3 when interpretable
Anxiety/agitation	Patient report, behavior, and RASS; investigate pain/dyspnea and reversible causes	Calm and comfortable at the individualized depth of sedation ordered by the prescriber
Other symptoms	Secretions, nausea, dry mouth, urinary retention, positioning, fever, seizures, and family observations	Relief of clinically significant distress with proportionate treatment

RDOS 3 or more is supported as a respiratory-distress treatment signal by the cut-point literature. The proposed CPOT operational threshold is a local choice for review; neither threshold has been established as a universal DCD rule. RASS measures arousal/agitation and does not substitute for pain or dyspnea assessment. [7, 8]

Severe TBI, spinal cord injury, profound weakness, deep sedation, and residual paralysis may limit observable behaviors. Document the limitation, use the clinical context and family observations, and obtain clinician review when uncertain. A low score shall not prohibit justified anticipatory analgesia. This is a clinical application of assessment principles, not a validation claim for these subgroups.

Proposed observation schedule: assess before withdrawal; before and after each intervention; every 10 minutes during active IV rescue treatment, timed to the medication's expected effect; then at least every 15 minutes for the first hour after withdrawal. Once stable, assess at least hourly and as needed. Maintain direct observation during withdrawal and acute distress. The prescriber may order closer or drug-specific reassessment. This schedule is a proposed local operating standard informed by [2, 4, 9].

Chart: symptom or anticipated procedural distress; score and relevant observations; drug, route, dose and time; response and adverse effects; clinician notification; and next action. Anticipatory treatment may be documented before symptoms appear. Do not delay urgent rescue treatment solely to complete charting.

5. Medication principles

Choose one primary opioid for pain/dyspnea. Continue an effective existing regimen when clinically appropriate; changing goals to comfort does not itself justify abrupt discontinuation. Suspected accumulation or toxicity requires reassessment. Avoid routine concurrent morphine and fentanyl infusions for the same indication.

An opioid infusion is not obligatory in an opioid-naive patient. An infusion may be appropriate for established ongoing requirements, inability to continue a prior long-acting regimen, or repeated effective rescue doses. Rapid symptom rescue and maintenance infusion adjustment are separate tasks. [3, 9]

Fentanyl is the proposed ICU option when an IV opioid is required, especially with renal impairment. Morphine and hydromorphone remain alternatives; both require caution for metabolite accumulation in renal failure. Fentanyl also requires individualized administration and monitoring. Avoid rapid high-dose IV pushes and follow pharmacy-approved administration rates. [3]

Treat pain and dyspnea before adding medication solely for agitation. Benzodiazepines are for clinically indicated anxiety/agitation or anticipated extubation distress, not a universal second infusion. Evaluate paradoxical agitation and delirium rather than automatically escalating a benzodiazepine. [3, 4]

6. Proposed adult medication order module

Prescriber selection required. These are proposed starting options, not active standing orders. Select one opioid. Lower doses or longer intervals may be needed for frailty or impaired clearance. Tolerant patients require a separately specified dose based on current treatment and response. The ICU prescriber must be available during rapid rescue dosing.

A. Intermittent IV rescue and anticipatory medication

Indication / option	Proposed initial order for a patient without established tolerance	Reassessment and escalation
Pain/dyspnea: fentanyl	25 mcg IV; repeat once after 10 minutes if distress persists	After two ineffective doses, immediate prescriber review and revised dose order. If effective, that prescribed dose may continue every 10 minutes PRN during closely observed withdrawal.
Alternative: morphine	2 mg IV; repeat once after 10 minutes if distress persists	Same response-based process; select another opioid or individualize in substantial renal impairment.
Alternative: hydromorphone	0.4 mg IV; repeat once after 10 minutes if distress persists	Same process; renal impairment does not make this a risk-free substitute.
Anxiety or anticipated withdrawal distress: midazolam	Prescriber selects 1 mg or 2 mg IV before withdrawal; a repeat dose requires an explicit PRN order and interval	Reassess at 10 minutes. Persistent distress requires bedside review; do not substitute sedation for analgesia.
Anticipated troublesome secretions	Glycopyrrolate 0.4 mg IV once, 20-30 minutes before extubation when indicated	Reposition and use gentle oral care/suction for comfort. Subsequent antisecretory dosing requires a separate order.

Initial opioid amounts and 10-minute repeat assessment are adapted from Penn's initiation pathways. The rule to obtain review after two ineffective doses is a local simplification rather than Penn's full escalation ladder. Midazolam and pre-extubation glycopyrrolate examples are drawn from PCNOW 34. [2, 4]

If two rescue doses are ineffective: the RN contacts the responsible prescriber immediately while maintaining observation. The prescriber reassesses delivery, diagnosis, tolerance and toxicity, then selects a new fixed rescue dose/interval or an alternative treatment. The patient shall not be left untreated while awaiting a routine consult. The clinician remains at bedside when rapid escalation is required. [3; local escalation design]

B. Maintenance infusions and opioid tolerance

For an established infusion, the prescriber documents the selected continuation rate and a fixed rescue dose. For a new infusion, the prescriber reviews prior 12-24-hour exposure, clinical response and recent rescue needs; obtains pharmacy help for conversion; and writes the exact basal rate. Do not calculate a permanent basal rate solely from a brief peri-extubation burst of boluses. [3, 9; local application]

Default in this draft: basal-rate changes are prescriber-directed. The RN may give the ordered PRN rescue dose but does not automatically raise the infusion after each bolus. A nurse-titrated basal order, if locally approved, must separately specify the initial rate, exact increment, minimum interval, upper authorized rate, assessment target, and notification criteria. An order saying only "titrate to comfort" is insufficient. [4, 9]

For a routine basal-adjustment plan, this draft proposes no more frequent than every 4 hours for fentanyl and every 8 hours for morphine/hydromorphone, with prompt rescue treatment between adjustments. These are local choices informed by different published protocols, not a single validated combined regimen. More rapid ICU changes require bedside prescriber assessment and a new explicit order. [2, 3, 9]

A standard protocol maximum triggers clinician review; it is not a pharmacologic ceiling or permission to leave distress untreated. Higher individualized doses require documented indication, response, adverse-effect assessment, and revised orders within local practice rules.

7. Withdrawal, refractory symptoms, and continuing care

Begin withdrawal only after the treating clinician confirms that existing symptoms have been addressed and anticipatory treatment is adequate. Keep the responsible clinician, RN, and RT coordinated throughout the procedure. Give prescribed rescue medication for new distress; do not rely on a basal-rate increase for immediate relief. [1, 4]

If symptoms persist despite appropriately delivered treatment, reassess for pain, dyspnea, anxiety, urinary retention, seizures, drug toxicity, myoclonus, and line/pump problems. Consider opioid rotation or another symptom-directed intervention rather than automatic dose escalation. [3, 9]

Proportionate palliative sedation: when suffering remains refractory, the attending documents the refractory symptom, treatments attempted, patient/surrogate discussion, intended sedation depth, agent, dose, reassessment plan, and the responsible clinician. Involve palliative care or anesthesia when available. Propofol, barbiturate, or other advanced sedation is not included as an automatic nursing rescue option in this order module. [3; local governance choice]

Continue symptom assessment and family support whether death occurs in minutes or the patient survives longer. Reconcile the regimen for the new trajectory and care setting. Preserve comfort-promoting medication and access during transfers; arrange hospice or other appropriate continuing care when consistent with goals.

8. Controlled DCD addendum

Living DCD candidates remain patients receiving end-of-life care. The WLST decision is made by the patient/surrogate and treating team independently of organ recovery objectives. A patient already declared dead by neurologic criteria follows the applicable donor-support pathway; medications for recovery-related reflex or physiologic management are not documented as treatment of conscious suffering. [6]

Before withdrawal

- Confirm the applicable donor hospital/OPO policy, donation authorization, family information, and medical-examiner/coroner coordination when needed. Disclose premortem donation interventions and obtain the required consent/authorization.

- Separate donation-facilitating drugs/procedures from comfort orders. Heparin, cannulation, and other donation interventions are not authorized by this comfort protocol. Hemorrhagic trauma requires an explicit risk-benefit decision; do not automatically import another OPO's dosing.

- Name the clinician responsible for withdrawal and the qualified independent clinician responsible for determination of death. Neither role is assigned to the recovery/OPO team.

- Record withdrawal location, family access, monitoring needed to determine death, the approved observation interval, response to return of circulation, and the continuing-care destination if recovery cannot proceed. Do not automatically discontinue the arterial waveform or other monitoring required by the DCD policy. [6, 10, 11]

Treatment continuity and separation of roles

Comfort medication is prescribed and administered by the treating team according to patient need. OPO/recovery personnel shall not direct or administer end-of-life medication or declare death. Clinically indicated anticipatory dosing is permitted. Comfort takes priority when donation objectives conflict with relief of suffering. [6, 10]

The RN and receiving clinician verify medication supply, pumps, battery/transport power, IV access, and responsibility for rescue dosing before departure. Clinically indicated treatment continues without avoidable interruption through transport and at the withdrawal location. Dose reassessment continues; "uninterrupted" does not mean "unchangeable." These are proposed local operational requirements.

If the recovery time window closes, continue comfort care and family support, transfer to the prearranged location if appropriate, and revise orders to the patient's ongoing needs. Staff shall not increase medication to make donation occur. [10, 11]

Safety concern or change in condition

Any patient/family/staff concern about unexpected neurologic improvement, distress, or death determination prompts a pause in donation progression and treating-clinician reassessment. Continue symptom care. The authorized team resolves the concern and documents the plan before resuming donation activity. Exact notification, reporting and resumption procedures follow the current local DCD policy. HRSA guidance and evolving OPTN requirements must be reconciled before approval. NRP requires a separate approved protocol and is not authorized here. [12, 13]

9. Documentation and quality review

Suggested chart template: "Comfort-focused goals confirmed with [patient/surrogate]; responsible clinician [name]. Current opioid/sedative exposure reviewed. Symptoms/anticipated distress [description]; pain tool/score [ ]; dyspnea/RDOS [ ]; RASS and intended comfort goal [ ]. Medication [agent/route/dose/time]; response and adverse effects [ ]; reassessment [time/result]. Persistent symptoms/escalation [ ]. WLST plan and family support [ ]. If DCD: responsible treating team, approved monitoring/declaration process, transport handoff and continuing-care plan verified [ ]."

Review episodes of persistent distress, medication-access delays, undocumented titration, suspected toxicity, unplanned infusion interruption, and care after a DCD stand-down. Proposed initial audit: all cases during the first 90 days, then frequency determined by the quality committee. Review donor and non-donor cases using the same symptom-care measures. Donation success and time to death are not medication performance targets.

Research supports a proportionate, symptom-driven approach, but retrospective studies cannot guarantee that every dose has no effect on survival. Chan's 75-patient Level I trauma-center cohort found no significant association in its main dose/time-to-death analysis. Treece's before-after study found increased medication administration without a significant change in withdrawal-to-death time, but did not show improved nurse-rated quality of dying. Observed doses are not prescribing targets. [14, 15]

10. Approval and implementation requirements

Proposed approvals: Trauma/SICU leadership; Nursing; Pharmacy/P&T; Palliative Care; Anesthesia/Respiratory Therapy; Ethics/Quality; and the hospital's DCD governance pathway with its OPO. The actual approving bodies follow institutional bylaws.

Before activation, document completion of:

- Formulary agents, exact concentrations, IV administration rates, drug-specific reassessment, and pump library limits.

- Patient-specific order fields and nursing authority; separate rescue versus basal orders; escalation coverage at all hours.

- The decision whether to retain prescriber-directed basal changes or adopt a separately approved nurse-titration algorithm. This draft uses prescriber-directed changes by default.

- Staff education and a simulated withdrawal/transport handoff, including rescue medication availability and unresolved distress.

- Local DCD monitoring, qualified pronouncer, observation period, response to autoresuscitation, stand-down plan, and current OPO/OPTN requirements.

- Version owner, effective date, approval record, and review interval. Proposed review: annually and after a material safety event or guideline change.

A group practice policy may standardize the group's prescribing, bedside coverage, and documentation within existing hospital rules. It does not independently expand RN authority or supersede hospital DCD policy.

11. Evidence-to-policy map

Policy element	Principal support	Nature of support
Protocol before, during, and after withdrawal	SCCM 2025 [1]	Conditional recommendation; moderate-certainty evidence
Starting opioid options	Penn 2018 [2]	Historical institutional protocol, adapted rather than reproduced in full
Bolus/infusion separation and individualized exposure review	UW guide and PCNOW 54 [3, 9]	Institutional/expert guidance; intervals differ across sources
Anticipatory medication and bedside rescue	PCNOW 34 [4]	Expert adult ventilator-withdrawal guidance
Pain tools and RDOS endpoint	SCCM PADIS; Campbell [7, 8]	Assessment guidance and cut-point study; limited DCD-specific validation
DCD responsibility and continuing care	ASA, multisociety statement, VHA [6, 10, 11]	Professional and institutional policy models
Local operational details	Sections 4, 6, 8-10	Proposed workflow choices requiring local approval, not proven dose algorithms

References

Accessed September 5, 2026. Historical source dates are retained; online availability does not confirm an institution's current EHR orders. Numbered citations in the PDF and review page link to the sources.

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4. von Gunten CF, Weissman DE. Symptom Control for Ventilator Withdrawal in the Dying Patient. PCNOW Fast Fact 34. February 2025. Open source

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6. American Society of Anesthesiologists. Statement on Controlled Organ Donation After Circulatory Death. Amended October 26, 2022. ASA content host; older timing/NRP passages are not adopted as local requirements. Open source

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