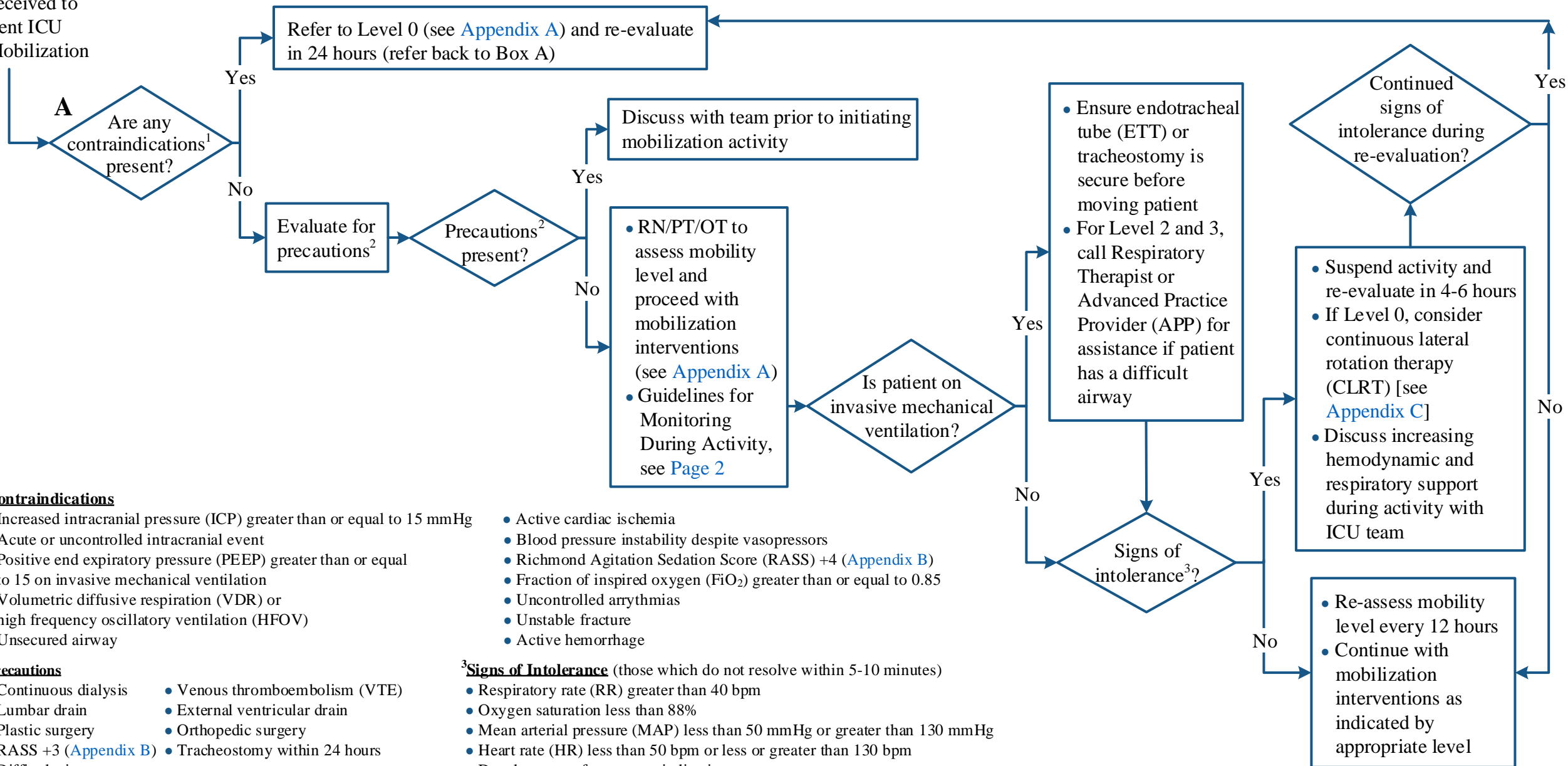


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Order received to implement ICU Early Mobilization



¹Contraindications

- Increased intracranial pressure (ICP) greater than or equal to 15 mmHg
- Acute or uncontrolled intracranial event
- Positive end expiratory pressure (PEEP) greater than or equal to 15 on invasive mechanical ventilation
- Volumetric diffusive respiration (VDR) or high frequency oscillatory ventilation (HFOV)
- Unsecured airway

- Active cardiac ischemia
- Blood pressure instability despite vasopressors
- Richmond Agitation Sedation Score (RASS) +4 (Appendix B)
- Fraction of inspired oxygen (FiO₂) greater than or equal to 0.85
- Uncontrolled arrhythmias
- Unstable fracture
- Active hemorrhage

²Precautions

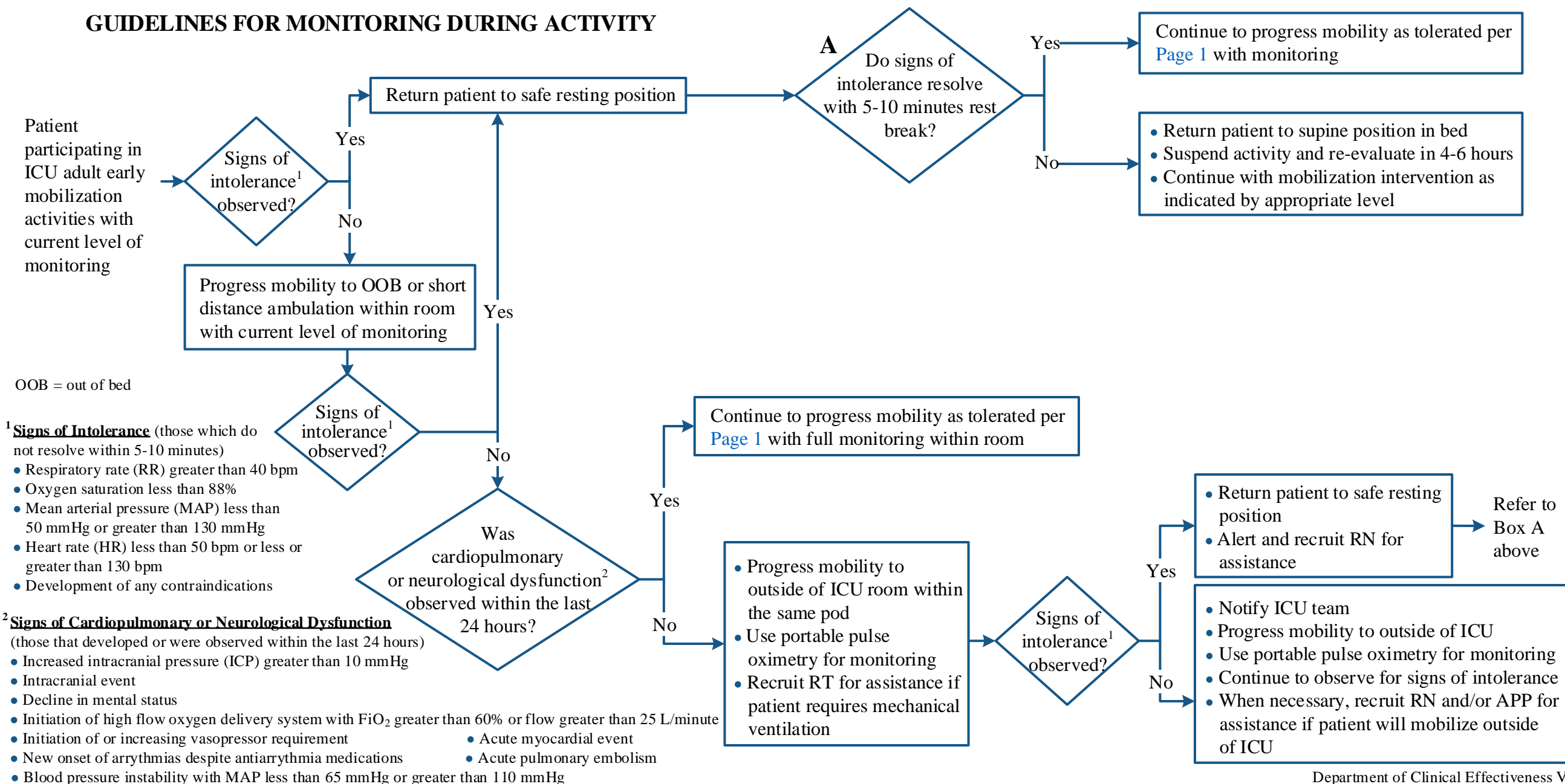
- Continuous dialysis
- Lumbar drain
- Plastic surgery
- RASS +3 (Appendix B)
- Difficult airway
- Venous thromboembolism (VTE)
- External ventricular drain
- Orthopedic surgery
- Tracheostomy within 24 hours

³Signs of Intolerance (those which do not resolve within 5-10 minutes)

- Respiratory rate (RR) greater than 40 bpm
- Oxygen saturation less than 88%
- Mean arterial pressure (MAP) less than 50 mmHg or greater than 130 mmHg
- Heart rate (HR) less than 50 bpm or less or greater than 130 bpm
- Development of any contraindications

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GUIDELINES FOR MONITORING DURING ACTIVITY



OOB = out of bed

- ¹ **Signs of Intolerance** (those which do not resolve within 5-10 minutes)
- Respiratory rate (RR) greater than 40 bpm
 - Oxygen saturation less than 88%
 - Mean arterial pressure (MAP) less than 50 mmHg or greater than 130 mmHg
 - Heart rate (HR) less than 50 bpm or less or greater than 130 bpm
 - Development of any contraindications

- ² **Signs of Cardiopulmonary or Neurological Dysfunction** (those that developed or were observed within the last 24 hours)
- Increased intracranial pressure (ICP) greater than 10 mmHg
 - Intracranial event
 - Decline in mental status
 - Initiation of high flow oxygen delivery system with FiO₂ greater than 60% or flow greater than 25 L/minute
 - Initiation of or increasing vasopressor requirement
 - New onset of arrhythmias despite antiarrhythmia medications
 - Blood pressure instability with MAP less than 65 mmHg or greater than 110 mmHg
 - Acute myocardial event
 - Acute pulmonary embolism

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APPENDIX A: Mobility Levels

Level 0

RASS¹ -5 to +2
Functional Level:
Total Assist²

Interventions

- Attempt manual turn to lateral position
- Pre-oxygenate
- Use slow speed of turn
- Use wedge, start with 15 degree turn, hold for 15 seconds; if tolerance criteria met, increase to 30 degrees for 15 seconds; if tolerated, increase to 45 degrees
- Weight shift patient every hour
- Reposition head, arms and legs every hour with heel elevation
- PROM twice a day x 10 repetitions
- Daily implementation of Morning Bundle³

Level 1

RASS¹ -5 to +2
Functional Level:
Total Assist²

Interventions

- PROM twice daily x 10 repetitions with nursing staff
- Reposition every 2 hours by nursing staff
- Heel elevation
- Bed in chair position twice a day by nursing staff greater than 20 minutes but less than 2 hours
- Skilled therapeutic interventions by PT/OT as indicated
- Daily implementation of Morning Bundle³

Level 2

RASS¹ -2 to +2
Functional Level:
Maximum to Moderate Assist²

Interventions

- ROM exercises twice daily with family/nursing staff x 10 repetitions
- Reposition every 2 hours by nursing staff
- Heel elevation
- Bed in chair position twice a day by nursing staff greater than 20 minutes but less than 2 hours
- OOB to neuro chair greater than 30 minutes but less than 2 hours
- Skilled therapeutic interventions by PT/OT as indicated
- Participate in ADL
- Daily implementation of Morning Bundle³

Level 3

RASS¹ -1 to +2
Functional Level:
Moderate Assist to Supervision²

Interventions

- Home exercise program twice a day
- Reposition every 2 hours while in bed
- Heel elevation
- OOB to bedside chair with nursing three times a day greater than 30 minutes but less than 2 hours
- Ambulate as directed by PT/OT
- Skilled therapeutic interventions by PT/OT as indicated
- Participate in ADL
- Daily implementation of Morning Bundle³

¹ Refer to [Appendix B](#) for scale definition

² Total Assist (patient performs 0-24%)
 Maximum Assist (patient performs 25-49%)
 Moderate Assist (patient performs 50-74%)
 Minimal Assist (patient performs 75-99%)
 Supervision (assist patient with set up and/or cuing)

³ Morning Bundle Components:

- By 8 AM:
- Lights on
 - Window shades up
 - Head of bed (HOB) elevated
 - Sedation holiday
- By 10 AM:
- Up in chair position or OOB to chair

PROM = passive range of motion
 ROM = range of motion
 OOB = out of bed
 ADL = activities of daily living

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APPENDIX B: Richmond Agitation Sedation Scale (RASS)

+4	Combative	Overly combative, violent, immediate danger to staff
+3	Very agitated	Pulls or removes tube(s) or catheter(s); aggressive
+2	Agitated	Frequent, non-purposeful movement, fights ventilator
+1	Restless	Anxious, but movements not aggressive or vigorous
0	Alert and calm	-
-1	Drowsy	Not fully alert, but has sustained awakening (eye-opening/eye contact) to voice (greater than or equal to 10 seconds)
-2	Light sedation	Briefly awakens with eye contact to voice (less than 10 seconds)
-3	Moderate sedation	Movement or eye openings to voice (but no eye contact)
-4	Deep sedation	No response to voice, but movement or eye opening to physical stimulation
-5	Unarousable	Unarousable

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APPENDIX C: Continuous Lateral Rotation Therapy (CLRT)

CLRT for hemodynamically unstable patients

- Maintain head of bed (HOB) greater than or equal to 15 degrees and 15 degrees reverse Trendelenberg position (to achieve 30 degrees)
- CLRT 18 hours per day, minimum of 6 complete rotations (optimally 8-10 rotations)
- Use training mode, or if not tolerated, set rotation at 60% and pause two minutes for right/left/center (minimum settings)
- Monitor that one lung is above the other lung with a turn. If not, increase rotation percentage as tolerated.
- Increase pause to one minute as patient adjusts
- Every 2 hours, check to ensure that the patient is in optimal position to promote effective turn. Shoulders should be aligned with the lung picture on the bed.
- Use custom settings to adjust for body types

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SUGGESTED READINGS

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DEVELOPMENT CREDITS

This practice consensus statement is based on majority expert opinion of the ICU Adult Early Mobilization experts at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

Wendy Garcia, BS[♦]
Bobak Habibi, PT, DPT (Rehab/Physical Therapy)
Rhea Herrington, MSN, RN-BC, CCRN (Nursing Education)
Vi Nguyen, OTR, BSRC, MOT (Rehab/Occupational Therapy)[‡]
Amy Pai, PharmD[♦]
S. Egbert Pravinkumar, MD, FRCP (Critical Care & Respiratory Care)[‡]
Amber Tarvin, MSN, RN, CNL (Nursing ICU)
Mary Lou Warren, DNP, RN, CNS-CC (Critical Care & Respiratory Care)[‡]

[‡] Development Leads

[♦] Clinical Effectiveness Development Team