Early Mobility in the ICU

Early Mobility, while widely accepted as having a positive effect on patient conditions, has had minimal research performed to support it until the last 10-15 years. Recent research has shown that early mobility is critical to a patient’s short term and long term recovery.

Recent research indicates that early mobilization supports the following positive effects on ICU patients.

- Normalization of blood sugar levels
- Preservation of musculoskeletal and neuromuscular integrity
- Improvement in cognition
- Increased functional mobility and strength
- Enhanced cardiovascular function
- Enhanced endothelial function

Research also demonstrates that active mobilization of the ICU patient has been shown to decrease complications such as:

- Chronic Inflammation
- Depression
- Reduced Cognition/Delirium
- Polyneuropathy/Myopathy
- Deep Vein Thromboembolisms
- Pressure Ulcers
- Pneumonia
- Urinary Tract Infections
- Osteoporosis

Attached is a guide based on research findings and recommendations that may assist with the decision making process on identifying the appropriate patients to participate in an Early Mobility Program.

Discussion with the clinical team responsible for care of the patient is an important part of making the actual decisions regarding treatment and timing of interventions. Critical thinking by the therapist is imperative during all steps of intervention to insure patient safety and positive outcomes. Monitoring of the patient is critical during early phases of implementation of a mobility program.
# Critical Care Early Progressive Mobility - Mobilization Criteria Zones

## Red Zone = STOP*

Exceptions require written Physician order

<table>
<thead>
<tr>
<th>Findings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SpO2 &lt;88%</td>
</tr>
<tr>
<td>SysBP&gt;200</td>
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<tr>
<td>Hemoglobin&lt;7</td>
</tr>
<tr>
<td>Glucose &lt;70 or &gt;200</td>
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<tr>
<td>Symptomatic arrhythmia</td>
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<tr>
<td>Escalating vasopressors</td>
</tr>
<tr>
<td>Open abdomen/chest</td>
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<tr>
<td>Unstable spine or fractures</td>
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<tr>
<td>Wound-New Skin Flap</td>
</tr>
<tr>
<td>Acute PE/DVT with sub-therapeutic anticoagulation</td>
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<tr>
<td>Suspicion of dissecting aneurysm</td>
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</tbody>
</table>

## Yellow Zone = Caution*

- Any parameter that is between red and green zones requires a discussion with RN, PT/OT, and Referring Physician

### Examples:
- Fever,
- ventriculostomy,
- lumbar drain, fresh tracheostomy,
- SpO2 88-90%
- ventilator settings with FiO2 >60% or PEEP >10
- Hemoglobin 7-8

## Green Zone = GO*

- Opens eyes, follows simple commands, RASS Score -1 to +2
- PEEP ≤ 10
- FiO2 ≤ 60%
- SpO2 > 90%
- RR < 35
- Resting HR >50, <130
- INR 0.8 to 2.0
- Hemoglobin >8

### Devices:
- Continuous Renal Replacement Therapy (CRRT)
- Extracorporeal Membrane Oxygenation (ECMO)
- Intra-Aortic Ballon Pump (IABP)
- Femoral sheath
- Femoral dialysis catheter
- Temporary pacemaker
- Intracranial monitors
- Traction

### Medication:
- Tissue Plasminogen Activator (TPA)

*Exceptions to be prescribed by Physician Order*
Critical Care Early Progressive Mobility- Mobilization Criteria Zones


*Melnyk & Fineout-Overholt*