


Name of Policy:	<u>Admission and Discharge Criteria for Intensive Care Units</u>					
Policy Number:	3364-100-01-09					
Department:	Hospital Administration Medical Staff					
Approving Officer:	Chief Medical Officer Chief of Staff					
Responsible Agent:	Chief Medical Officer					
Scope:	The University of Toledo Medical Center and its Medical Staff	Effective Date: May 1, 2020 Initial Effective Date: June 25, 1987				
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(A) Policy Statement

The University of Toledo Medical Center (UTMC) establishes criteria for admission to and discharge from the center's intensive care units (ICUs).

(B) Purpose of Policy

Prioritize safe patient care and ensure appropriate and efficient ICU bed utilization by outlining mechanisms for:

- Admitting patients to the intensive care units based on clinically-based criteria.
- Assigning available ICU beds to the most appropriate patients.
- Address overflow placement of ICU patients during times of maximum bed occupancy.
- Coordinate appropriate patient discharge from the ICU.

(C) Procedure

The specific procedures relating to admission and discharge for the intensive care units (ICUs) are outlined below. The outlined admission criteria are not all inclusive and circumstances may arise that necessitate deviation from the below stated criteria.

1. **ICU**

a. Vital Sign Criteria:

- Pulse or Heart Rate <50 or >150 beats per minute
- Systolic Blood Pressure <85 mm Hg or >190 mm Hg
- Diastolic Blood Pressure > 120 mm Hg
- Respiratory Rate > 35 breaths/minute
- Respiratory Rate < 8 breaths/minute
- Temperature < 32 °C or > 40 °C

b. Respiratory Criteria:

- PO2 < 60 mm Hg or FiO2 > 50%
- PCO2 > 50 mm Hg
- pH < 7.3 or > 7.6
- Mechanical ventilation
- Initial Non-invasive positive pressure ventilation (NIPPV) with impending respiratory failure
- Impending respiratory failure

c. Abnormal Lab Criteria:

- Glucose < 40 or > 500 mg/dl
- Sodium < 115 mEq/L or > 160 mEq/L
- Potassium < 2.5 mEq/L or > 6.0 mEq/L with or without ECG changes or arrhythmias
- Calcium < 6 or > 12 mg/dl
- Hemoglobin < 6 g/dL

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d. Clinical and Diagnosis-related Criteria:

- Mechanical ventilation
- Status epilepticus
- Care requiring infusion of vasopressor medicationsCare requiring use of oral vasopressive agents and intravenous vasoactive medications
- Care requiring use of infusion of hypertonic saline
- Treatment of complicated acid-base or electrolyte imbalances
- Large volume resuscitation (e.g., 3 L of fluid, 3 units of blood product within 12 hours)
- Active gastrointestinal bleeding either upper or lower gastrointestinal (GI) bleeding requiring utilization of multiple blood products or balloon tamponade
- Status post cardiac arrest
- Cardiac tamponade
- Acute aorta conditions: dissections, transections, aneurysms
- Hypertensive emergencies
- Acute congestive heart failure
- Imminent respiratory failure
- Acute stroke
- Acute subarachnoid hemorrhage
- Severe head injury
- Hemodynamically unstable after drug overdose
- Diabetic ketoacidosis with hemodynamic instability or severe acidosis (pH<7.2)
- Sepsis with hemodynamic instability
- Delirium tremens, delirium, other acute mental status change issues requiring escalating level of care
- Care requiring continuous renal replacement therapy (CRRT)
- Patients requiring intra-cranial pressure (ICP) monitoring
- Acute stroke without thrombolytic therapy
- Post anaphylaxis
- Vasoactive agents may be used under Cardiology direction.
- Care of patients requiring Impella device
- Care of patients requiring extracorporeal membrane oxygenation (ECMO)
- Care requiring intra-aorta balloon pump
- Care of cardiogenic shock
- Care of unstable arrhythmia
- Care of patients with left ventricular assist device (LVAD)
- Post-thrombolytic therapy both mechanical and chemical for stroke after 24 hours
- Post-EKOS for acute pulmonary embolism after 24 hours
- Tracheostomy tube malfunction with hypoxia
- Care for patients requiring extensive nursing intervention (e.g., multiple times every hour)

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2.—ICU B (3CD)

a.—Vital Sign Criteria (same as above):

- Pulse or Heart Rate <50 or >150 beats per minute
- Systolic Blood Pressure <85 mm Hg or >190 mm Hg
- Diastolic Blood Pressure >120 mm Hg
- Respiratory Rate >35 breaths/minute
- Respiratory Rate <8 breaths/minute

b.—Respiratory Criteria:

- Bi-level positive airway pressure (BiPAP)
- Stable tracheostomy to mechanical ventilation (e.g., awaiting long-term care placement)

c.—Abnormal Lab Criteria:

- Glucose >40 mg/dl <500 mg/dl
- Sodium >115 mEq/L or <160 mEq/L
- Potassium >2.5 mEq/L or <6.0 mEq/L without ECG changes or arrhythmias
- Calcium >6 or <12 mg/dL

- Hemoglobin > 6 g/dL

d. Clinical and Diagnosis-related Criteria:

- No condition requiring titration of vasoactive agents (e.g., epinephrine, norepinephrine, dobutamine, dopamine, vasopressin, phenylephrine)
- Gastrointestinal bleeding (Upper or Lower GI)
- Post-thrombolytic therapy both mechanical and chemical for stroke after 24 hours
- Post-EKOS for acute pulmonary embolism after 24 hours
- Hypertensive emergencies (with Emergent Cardiology consultation)
- Alcohol withdrawal and delirium tremens
- Diabetic ketoacidosis
- Acute stroke without thrombolytic therapy
- Post-anaphylaxis

e. Cardiology primary ICU Criteria:

- Vasoactive agents may be used under Cardiology direction
- Care of patients requiring Impella device
- Care of patients requiring extracorporeal membrane oxygenation (ECMO)
- Care requiring intra-aorta balloon pump
- Care of cardiogenic shock
- Care of unstable arrhythmia

Care of patients with left ventricular assist device (LVAD)

2. Step down unit. The step down unit serves as a place for the monitoring and care of patients with moderate or potentially severe physiologic instability, requiring technical support but not necessarily artificial life support. The step down unit is reserved for those patients requiring less care than standard intensive care, but more than that which is available from ward care

. Respiratory Criteria:

- Bi-level positive airway pressure (BiPAP)
- Patients with new tracheostomy tube (e.g., awaiting long-term care placement)
- Patients with chronic tracheostomy tubes on mechanical ventilation who don't require ICU admission

b. Clinical and Diagnosis-related Criteria:

- Medical conditions not requiring titration of vasoactive agents (e.g., epinephrine, norepinephrine, dobutamine, dopamine, vasopressin, phenylephrine)
- Gastrointestinal bleeding (Upper or Lower GI)
- Hypertensive emergencies
- Alcohol withdrawal and delirium tremens
- Diabetic ketoacidosis without hemodynamic instability and severe acidosis
- Acute pulmonary edema requiring noninvasive positive pressure ventilation (NIPPV)
- Hemodynamically stable Myocardial infarction
- Hemodynamically stable cardiac arrhythmia
- Mild to moderate Congestive heart failure exacerbation
- Hypertensive Urgency without end organ damage
- Pulmonary patients who require frequent vital signs or aggressive pulmonary physiotherapy
- Patients with established, stable stroke
- Hemodynamically stable post-operative patients
- Stable neurosurgical patients who require a lumbar drain
- Sepsis without evidence of shock or secondary organ failure
- Any patient requiring frequent nursing observation (e.g every 1-2 hours)

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~~3-~~ 3.0 Discharge of patients out of ICU: Patients no longer meeting criteria for ICU will be discharged from the ICU after placement on the accepting service's list and communication with accepting service. The ICU service will write transfer orders. The ICU nurse or charge nurse will notify the house supervisor of required bed.

~~4-~~ 4 Census Management: Patients meeting ICU criteria should be admitted directly to the ICU A. In case of emergent intra-hospital transfer, a bed in ICU A should always be available. In the case that ICU beds are not available, attempts to satisfy the request for an ICU bed will be reviewed by the house supervisor and assigned accordingly. Post-anesthesia care unit (PACU) or Emergency Department (ED) may be considered as potential ICU overflow areas.

~~5-2-~~ 5 Conflict Resolution: Each admission and intra hospital transfers to the medical ICU will be discussed with the pulmonary/critical care fellow and attending. No one will refuse ICU admission or intra-hospital transfer.

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Michael W. Ellis, MD		9/11/96	
Chief Medical Officer		7/14/99	
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		7/13/05	
		5/28/08	
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<i>Chairman, Special Care Units Committee</i>			
<i>Chief of Staff</i>			
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Policies Superseded by This Policy: 7-01-09 - Admission and Discharge Criteria for Special Care Units			