Critical Care/MICU/SICU/CCU/Burn/Trauma Guidelines
for 1:1 RN to Patient Staffing

In all "intensive care units" the patient assignment for the registered nurse shall be 1:1 as assessed by the following acuity tool and by the staff nurses in the unit.

Due to high volume and the acute nature of their patient population, the large tertiary care hospitals (i.e. Brigham, Mass General, U-Mass, Bay State) contain multiple specialty ICU's. These specialized ICU's (medical, medical cardiac, surgical cardiac, surgical, burn, trauma, etc.) have nurses and medical staff who specialize in the care of a specific patient population. In contrast because of generally lower acuity and volume the community hospitals often surgical, medical, cardiac patients into a general ICU.

The Critical Environment Factors listed below apply to all acute care hospitals. They are basic workplace factors that affect the ability of nurses to provide patient care efficiently and safely.

The Clinical Criteria listed below indicate patients who require at a minimum, staffing of 1 RN to 1 patient. If any one of these criteria is present for a patient, that patient must be assigned a nurse responsible only for his/her care.

Assessment of acuity will take place upon ICU admission with verification every 4 hours. However the nurse assigned to the patient must be able to signal a change in acuity, with staffing to be adjusted as determined by the nurse, using this acuity staffing tool.

Patients who meet any of the clinical criteria below cannot be discharged from their ICU setting.

Patients who are stable, awaiting transfer or discharge with no foreseeable complications or who do not meet any of the criteria below may require only a 1 RN: 2 patient staffing assignment.

Patients who no longer meet the clinical criteria below may be appropriate for discharge from the ICU setting.

The staffing assignment for a patient who no longer requires a 1:1 or 1:2 ICU assignment according to the ICU nursing assessment shall be determined by the receiving unit.

Nothing in this acuity tool may supersede contractual staffing language, hospital policy or practice which calls for critical care patients to receive the same level of care regardless of their location in the hospital.

Massachusetts Nurses Association Acuity Tool Criteria Recommendations
Critical Care/MICU/SICU/CCU/Burn/Trauma Recommendations
Presented to the Health Policy Commission's Quality Improvement and Patient Protection Committee
October 29, 2014

CRITICAL ENVIRONMENTAL FACTORS	Check relevant box below: Yes	No
NURSE COMPETENCY (based on the hospital's competency assessment and RN familiarity with unit)		
• Float Nurses are 20% or more of ICU staff		
• Per Diem Nurses are 20% or more of ICU staff		
• Travel Agency Nurses are 20% or more of ICU staff		
• Nurses with less than 2 years' experience in ICU nursing are 20% or more of ICU staff		
GEOGRAPHY OF THE UNIT (whether layout allows for clear, rapid visibility of patient/monitor)		
• Patient/monitor cannot be visualized from nursing station		
PATIENT CARE EQUIPMENT		
• Mobility/lifting device and adequate staff are not available to operate equipment needed to care for patient (e.g., bariatric, traction, pronation bed, circular bed, Stryker bed)		
• Required equipment is not available on the unit and functional		
OPTIMAL ELECTRONIC DOCUMENTATION SYSTEM (e.g., no multiple and/or non-interfacing EMR systems)		
• Electronic Records are not fully integrated/compatible		
• Medication orders are not integrated into the medical record		
MEDICATIONS (e.g., availability on the unit and in appropriate doses)		
• Medication doses are not pre-mixed or available in room/unit medication cart/unit medication room		
• Pain medications are not available in multiple dose strengths (which leads to wasting/needing another nurse to waste)		
SUPPORT STAFF IN PLACE (immediate availability on the unit)		
• Pharmacist (24 hour)		
• Unit based MD		
• IV team/respiratory therapist		
• Physician Assistant		
• Unit Secretary		
• Sitters (if needed)		
• Aides /techs		
• Patient transport service		
• Travel team/coverage		
RESPONSIBILITY FOR DUTIES OFF THE ICU UNIT		

• Attendance is required at meetings or for education off the unit		
• Nurse off the unit for 15-30 minutes or more to attend to a patient (e.g., rapid response, stroke evaluation, patient transport, patient support required during transport off unit or for tests/procedures, e.g., interventional radiology)		
FAMILY SUPPORT		
• Parent/family/guardian(s) available		

Clinical Criteria

One or more of the following clinical status indicators may be present in an ICU patient. If any of the boxes below are checked, that means 1:1 RN to patient staffing is required. If more than one category is present, higher intensity staffing may be indicated.

	CATEGORY OF CLINICAL STATUS OF PATIENT	CHECK BOX IF PRESENT	RN: PATIENT
Respiratory			
1.	Status post cardiac or respiratory arrest		1:1
2.	Pulmonary hypertension requiring IV vasoactive agents (e.g., Flolan study patients)		1:1
3.	Ventilator dependent or intubated patients requiring frequent intervention for respiratory compliance/ chemically paralyzed for compliance (positioning, suctioning, trach care, sedation protocols, ABCDE bundle for weaning, frequent positioning, oral care)		1:1
Cardiac			
4.	Septic shock requiring continuous monitoring and multiple intravenous vasopressors with hemodynamic instability		1:1
5.	Hemodynamic instability requiring vasopressor therapy with frequent titration		1:1
6.	Hemodynamic instability requiring frequent infusion,		1:1

	(medication) titration and monitoring		
7.	Active hemorrhage requiring multiple blood transfusions, vasopressor meds, blood warmer, infusion pump		1:1
8.	Acute organ failure (liver, kidney, brain) requiring constant monitoring/intervention		1:1
9.	Unstable cardiac arrhythmias requiring frequent interventions such as defibrillation, transcutaneous pacing		1:1
10.	Unstable hyperglycemic patients on insulin drip requiring frequent titrations and blood sugar determination		1:1
11.	Patient in cardiogenic shock with or without IABP (intra-aortic balloon pump)		1:1
12.	Unstable patient with IABP (intra-aortic balloon pump)		1:1
13	NIH or other stroke protocol patients receiving fibrinolytics for first 24 hours		1:1
14.	Patients on devices, such as CVVH (continuous veno-venous hemofiltration (e.g. awaiting heart transplant)		1:1
15.	Metabolic acidosis or alkalosis (e.g. tricyclic overdoses, frequent ABGs (arterial blood gases), monitoring for bicarbonate administration, measuring urine and blood pH, monitoring for arrhythmias)		1:1
16.	Invasive lines such as pulmonary artery catheter (e.g. Swan Ganz, A-line, CVP catheters) requiring frequent monitoring and intervention (recalibrations, readings)		1:1
17.	Hemodialysis/peritoneal dialysis in unstable patient		1:1
18.	Therapeutic hypo- or hyperthermia treatment		1:1
19.	Op-day open heart surgery patients during first 12 hours post-op unless patient remains hemodynamically unstable		1:1
20.	Direct admission from OR if not going to PACU, until fully		1:1

	recovered from anesthesia and stable		
21.	Multiple trauma (e.g. fractures, large organ damage, large complex wounds, vascular injuries, head injuries, psychosocial support (ex PTSD)		1:1
Surgical			
22.	Unstable op-day major surgical patients such as triple AAA (abdominal aortic aneurysm) repair with hemodynamic instability		1:1
23.	Op-day open heart surgery patients during the first 12 hours postoperatively unless patient remains hemodynamically unstable		1:1
24.	Organ donation/transplant patients		1:1
25.	Direct admission of unstable patient from OR if not going to PACU		1:1
26.	Patients undergoing procedures requiring sedation or paralysis (trach, scoping)		1:1
Neurological			
27.	Active suicidal patients who are medically unstable and/or violent		1:1
28.	Drug overdose with major systems decompensation		1:1
29.	Severe neurological impairment requiring continuous monitoring of intracranial pressure, osmotic therapy, normothermia protocol or in a pentobarbital coma.		1:1
30.	Active substance withdrawal with hemodynamic and neurological impairment and/or severe agitation compromising patient and/or staff safety		1:1
31.	Medically induced coma		1:1
32.	Brain injured patients with severe agitation and restlessness almost continuous observation and more than 2 restraints		1:1

33.	Subarachnoid hemorrhage reversals		1:1
GI (Gastrointestinal)			
34.	Active GI (gastro-intestinal) bleeding requiring multiple blood products		1:1
35.	Balloon tamponade of esophageal varices		1:1
Skin			
36.	Extensive dressing changes (e.g. decubitus ulcer, wounds) if sedation required, wound dehiscence, drains requiring frequent monitoring		1:1
37.	Extensive burns (electrolyte imbalance, fluid replacement, dressing changes, pain management , heavy sedation, airway management, psycho social support		1:1
Reproductive			
38.	Pregnancy (as a complication of other existing issues in an ICU patient)		TBD
39.	Hemorrhage/ Disseminated Intravascular coagulation (DIC)		1:1
General			
40.	Patients requiring treatments or procedures hourly or more frequently		1:1
41.	Post-surgery non closure of wounds or major wound dehiscence		1:1
42.	Isolation precautions (transmission-based)		1:1
43.	Major septic condition		1:1
Admissions/Care Coordination/Education/Discharge Planning			
44.	Two hours or more of patient intake (admission) or family education, coordination of care, psychosocial support, social work, discharge planning intervention required		1:1