

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)
Final 04.06.23

System	Intensive Care Unit	SDU / Sub-ICU
RN Assessment	Every 1 hour	Every 2 hours
Vital Signs	Every 1 hour	Every 2 hours
Neurological	<p><u>Acute Ischemic Stroke</u></p> <ul style="list-style-type: none"> tPA administration and/or interventional thrombectomy. NIHSS >12 with SBP unresponsive to Labetalol x2, requiring frequent titration of Nicardipine infusion. Infratentorial Stroke <p><u>ICH: Non-traumatic Intracranial Hemorrhage</u></p> <ul style="list-style-type: none"> ICH score ≥ 2 ICP/Drains/Post Craniotomy Active BP management Taking anticoagulant (AC/antiplatelet (AP) meds <p><u>Aneurysmal Subarachnoid Hemorrhage</u></p> <ul style="list-style-type: none"> Pre/Post-aneurysm clipping/coiling Hydrocephalus Vasospasm management <p><u>TBI Patients</u></p> <ul style="list-style-type: none"> GCS ≤ 15 with blood on CT Hemorrhage on anticoagulant/antiplatelet requiring reversal GCS > 12 but requiring frequent monitoring for signs of neurological deterioration Small Subarachnoid Hemorrhage Small Subdural Hematoma (rim or 1-2 mm) TPI patients with multisystem injury <p><u>Spinal Cord Injury</u></p>	<p><u>Acute Ischemic Stroke</u></p> <ul style="list-style-type: none"> Transfer out of ICU with SBP requiring control with IV labetalol or IV hydralazine push <p><u>ICH: Non-Traumatic</u></p> <ul style="list-style-type: none"> Transfer out of ICU with respiratory needs (frequent suctioning/Airvo/Bipap/Tracheostomy) Transfer out of ICU: Comfort Care <p><u>Seizures</u></p> <ul style="list-style-type: none"> Patients with occasional breakthrough seizure activity, but no I status epilepticus, requiring frequent neurological monitoring and controlled by medication <p><u>Carotid Endarterectomy/Stents</u></p> <ul style="list-style-type: none"> If hemodynamically STABLE post-op <p><u>IV Drips (Titrations)</u> Note IV Drip Standards document for SDU (Appendix B)</p>

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<ul style="list-style-type: none">• Neuro deficit r/t level of injury i.e., quadriplegia/paraplegia• Compression, fractures, or ligamentous injuries on MRI• Post Op stabilization• Vasopressor treatment to maintain MAP > 85 <p><u>Craniotomy Post op Patients</u></p> <ul style="list-style-type: none">• Immediate post-op 24 hours or until hemodynamically stable/extubated <p><u>Brain Tumor</u></p> <ul style="list-style-type: none">• Major deficits requiring hourly neuro check due to mass effect <p><u>Spine Surgery</u></p> <ul style="list-style-type: none">• Complex, Multi-level• High Risk with no co-morbidities• Cervical level with sleep apnea <p><u>Seizures</u></p> <ul style="list-style-type: none">• Patients with frequent active seizure activity with EEG monitoring• Status Epilepticus <p><u>Meningitis/Encephalitis</u></p> <ul style="list-style-type: none">• ICP/Ventriculostomy/Ventilated• Altered LOC <p><u>Carotid Endarterectomy/Stents</u></p> <ul style="list-style-type: none">• If hemodynamically UNSTABLE post-op <p><u>Progressive neuromuscular dysfunction requiring respiratory support and/or cardiovascular monitoring (Myasthenia Gravis and Guillain-Barre Syndrome)</u></p> <ul style="list-style-type: none">• Requires mechanical ventilation• Ascending motor weakness	
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Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<p>Acutely altered sensorium with the potential for airway compromise</p> <p>Brain-death or potential brain-death patients who are being aggressively managed while determining organ donation status (if not an organ donor, and has severe irreparable brain damage, the ED physician should offer comfort care and not ICU admission. Consultation with neurology or neurosurgery is advised)</p>	
Cardiac	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Vital Signs: (Frequency \leq 1hr) • Pulse < 40 or > 150 beats/minute • Systolic arterial pressure < 80 mmHG or 20 mmHg below the patient's usual pressure • Mean Arterial Pressure > 120 mmHg • Respiratory rate > 35 breaths/minute <p><u>Laboratory Values (newly discovered)</u></p> <ul style="list-style-type: none"> • Serum sodium < 120 mEq/L or > 170 mEq/L (unless dialysis is scheduled to occur within 1 to 2 hours) • Serum potassium < 2.0 mEq/L or > 7.0 mEq/L (unless dialysis is scheduled to occur within 1-2 hours) • PaO₂ < 50 mmHg • pH < 7.1 or > 7.7 • Serum glucose > 800 mg/dl • Serum calcium > 15 mg/dl • Toxic level of drug or other chemical substance in a hemodynamically or neurologically compromised patient 	<p><u>IV Drips (Titrations)</u></p> <p>Note IV Drip Standards document for SDU (Appendix B)</p> <p><u>Clinical Conditions</u></p> <ul style="list-style-type: none"> • Post-cardiac catheterization for 4-6 hours (unless stable) • Patients requiring IV antihypertensive medication administration pushes (Vasotec, Hydralazine, Labetalol, Metoprolol) • Syncope with a dysrhythmia or other cardiac disorder is a suspected etiology • Post-op patient who have had EKG changes during or post-surgery or that may have had a hypotensive or hypertensive episode • Hemodynamically stable MI • Chest pain, R/O MI • Complete heart block with

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<p><u>Clinical Conditions</u></p> <ul style="list-style-type: none">• Patients on vasoactive medications requiring (frequent titration 3 to 15 min) for hemodynamic instability• Post arrest – Hemodynamic unstable/requiring hypothermia• Immediately post cardiac arrest• Cardiogenic shock• ACS/Acute MI, STEMI, NSTEMI with unstable hemodynamics• Complicated PCI• Post Procedure-TAVR (during initial phase of the program)• Unstable Cardiac Dysrhythmias• Immediate post cardiac surgery CABG/Valves/Maze• Malfunctioning pacemaker/ICD or pacemaker dependent• Acute decompensated heart failure• Adult congenital heart disease (decompensated)• Valvular heart disease (with hemodynamic instability)• Aortic dissection• Hypertensive emergency (rapid increase in BP with systolic pressure > 180 mmHg and/or diastolic pressure > 120 mmHg)• Cardiac tamponade• Epicardial pacing with underlying heart rate to maintain systolic BP > 90 (May need to remain in ICU to manage functionality and PM boxes)	<p>hemodynamic stability</p> <ul style="list-style-type: none">• Acute dysrhythmias including significant tachycardia or bradycardia• Pericardial effusion with drain or post pericardial window <p><u>Technology</u></p> <ul style="list-style-type: none">• Clearsight (Non-invasive hemodynamic monitoring)
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Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<u>Advanced Technology</u> <ul style="list-style-type: none"> • Impella • IABP • Swan Ganz catheters • Post procedure with a large bore arterial or venous sheath 	
Respiratory	<u>Clinical Criteria</u> <ul style="list-style-type: none"> • Respiratory rate > 35/min, accessory muscle use or ≤ 8 • Oxygen saturation < 92% on $\geq 50\%$ oxygen • pH level <7.3or >7.5 • Fraction of inspired oxygen 1.0 for >24 hours • Suctioning every hour or more often for > 8 hours • Continuous nebulizer treatment • Bi-level or continuous positive airway pressure (new or long term) *7am-6pm. MUST GO TO ICU IF: MAP < 65 or > 90, HR > 140, EPAP > 10 and FiO2 > 50% • Bi-level or continuous positive airway pressure (new or long term) *6pm-7am (Pulm/CC MD to evaluate morning after admission for transfer to SDU as clinically indicated) • Bi-level or continuous positive airway pressure (new or long term) whose second ABG (30-60 min after Bi-level initiation) is worsened recommend ICU • Mechanical ventilator support 	<u>Clinical Criteria</u> <ul style="list-style-type: none"> • Hemodynamically stable patients with evidence of compromised gas exchange and underlying disease with the potential for worsening respiratory insufficiency who require frequent observation and/or nasal continuous positive airway pressure • Hemodynamically stable pulmonary embolus • PaO2 ≥ 60mmHg or SpO2 $\geq 90\%$ • Suctioning every 2 hours or less often • Nebulizer treatment every 2 hours or less • Bi-level or continuous positive airway pressure (new or long term) *7am-6pm. REQUIREMENTS: MAP 65-90, HR < 140 and > 50. BiPAP not to exceed FiO2 of 50% and EPAP of ≤ 10. Consider PULMONOLOGY consult • Hypercapnic Respiratory Failure: Code Status DNR/DNI requiring Bi-Level or continuous positive airway pressure. Consider PULMONOLOGY consult • Patient > 24 hours from tracheostomy • Patients who require frequent, aggressive pulmonary therapy

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<ul style="list-style-type: none"> • Deterioration in respiratory function requiring immediate endotracheal or advanced respiratory support intubation and mechanical ventilation • Threatened airway • All respiratory arrests • Acute respiratory failure requiring ventilatory support • Pulmonary emboli with hemodynamic instability • Massive hemoptysis • Respiratory failure with imminent intubation (i.e., hypoxemia, pneumonia) <p><u>Advanced Technology</u></p> <ul style="list-style-type: none"> • Rotoprone • VV/VA ECMO 	<ul style="list-style-type: none"> • High-risk post-operative patient who requires close monitoring during the first 24 hours (with potential for BiPAP) • Patient requiring continuous FiO2 \geq 50% • Post-op thoracotomy • Patients with respiratory insufficiency tolerating intermittent noninvasive ventilation • Patients with lower probability of recovery/survival who do not want to be intubated or resuscitated <p><u>IV Drips (Titrations)</u> Note IV Drip Standards document for SDU (Appendix B)</p>
Renal/Metabolic/Endocrine	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Acute renal failure requiring titrated medical and nursing care for hemodynamic instability and life-threatening metabolic derangement • Emergent dialysis with hyperkalemia • Diabetic ketoacidosis complicated by hemodynamic instability, altered mental status, respiratory insufficiency, or severe acidosis • Other Severe metabolic acidosis states • Insulin-Glucose drips • Alcohol intoxication- CIWA >15 with 	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Fluid and electrolyte imbalance with dysrhythmia potential • Treatment of hyperosmolar state and metabolic acidosis • Management of hyperkalemia and other metabolic disturbances requiring frequent monitoring and interventions • Alcohol intoxication – CIWA < 15 • Hemodynamic intolerance of intermittent hemodialysis • Diabetic ketoacidosis (no Insulin-Glucose drips)

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<p>Precedex 0.1-0.7mcg/kg/hr</p> <ul style="list-style-type: none"> • Thyroid storm or myxedema coma with hemodynamic instability • Hyperosmolar state with coma and/or hemodynamic instability • Other endocrine problems such as adrenal crisis with hemodynamic instability • Severe hypercalcemia with altered mental status, requiring hemodynamic monitoring • Hypo or hyponatremia with seizures, altered mental status • Hypo or hypermagnesemia with hemodynamic compromise or dysrhythmias • Hypo or hyperkalemia with dysrhythmias or muscular weakness • Hypophosphatemia with muscular weakness <p><u>Advanced Technology</u></p> <ul style="list-style-type: none"> • NXstage CRRT 	<p><u>IV Drips (Titrations)</u></p> <p>Note IV Drip Standards document for SDU (Appendix B)</p>
Gastrointestinal	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Hemodynamically unstable active GI bleeding with shock. Greater than 10-point decrease in hematocrit • Grade III & IV encephalopathy, hepatic coma • Fulminant hepatic failure • Severe pancreatitis (persistent organ failure > 48 hours) Patient has significant signs of inflammation (SIRS – elevated WBC, fever, tachycardia and tachypnea) and pain 	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Active mild-to-moderate GI bleed responsive to fluid therapy <p><u>IV Drips (Titrations)</u></p> <p>Note IV Drip Standards document for SDU (Appendix B)</p>

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<ul style="list-style-type: none"> and nausea are uncontrolled. • Esophageal perforation 	
Heme/Onc	<ul style="list-style-type: none"> • Severe coagulopathy and/or bleeding diathesis • Severe anemia resulting in hemodynamic and/or respiratory compromise • Severe complications of sickle cell crisis • Hematological malignancies with multi-organ failure 	
Surgical	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Post-operative patients requiring hemodynamic monitoring/ventilator support or extensive nursing care (discernable by critical care nursing) • Post-operative patients with massive volume resuscitation 	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Post-operative patient who requires close monitoring during the first 24 hours <p><u>IV Drips (Titrations)</u> Note IV Drip Standards document for SDU (Appendix B)</p>
Sepsis	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Septic shock – Hemodynamic unstable requiring vasopressors/support • Patient on vasoactive medications requiring (frequent titration 3 to 15 min) for hemodynamic instability • Progressive hypotension and acidosis despite fluid resuscitation and antibiotics; trial of BiPAP • Frequent nursing needs (discernable by critical care nursing), mental status change, progressive 	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> • Early sepsis requiring fluid resuscitation <p><u>IV Drips (Titrations)</u> Note IV Drip Standards document for SDU (Appendix B)</p>

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

	<p>respiratory failure, and pH 7.30</p> <ul style="list-style-type: none"> Septic shock despite aggressive fluid resuscitation; vasopressors 	
Vascular	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> Femoral endarterectomy Acutely ischemic limb *EKOS endovascular thrombus dissolution A-F Bypass AAA (open) repair Endoluminal AAA (unstable) 	<p><u>Clinical Criteria</u></p> <p><u>IV Drips (Titrations)</u> Note IV Drip Standards document for SDU (Appendix B)</p>
Miscellaneous	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> Severe environmental injuries (lightening, near drowning, severe hypo/hyperthermia) New/experimental therapies with potential for complications Patients with confirmed evidence of irreversible brain injury during evaluation for potential organ donation Envenomation (e.g., snake bites, bee stings) patients who are in shock and hemodynamically unstable <p><u>Advanced Technology</u></p> <ul style="list-style-type: none"> Belmont Rapid Infuser (Mass Transfusion Protocol) Swan Ganz catheters 	<p><u>Clinical Criteria</u></p> <ul style="list-style-type: none"> Post-operative patients, not requiring specialized, dedicated ICU care but with increased levels of care due to combination of comorbidities and effects of surgical and anesthetic interventions. If Comfort Care – Transfer to 6S <p><u>IV Drips (Titrations)</u> Note IV Drip Standards document for SDU (Appendix B)</p> <p><u>Lines</u></p> <ul style="list-style-type: none"> Arterial lines Central Venous Pressure (CVP) lines

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

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*Consider re-evaluating for SDU care at later date

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Final 04.06.23

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Final 04.06.23

APPENDIX B: QUICK REFERENCE GUIDE FOR IV DRIPS (updated 11/1/18)

Drip (Dose Range, Special Considerations)	Color	IV Tubing Changes (hours)	Indications	Adverse Response/ Side Effects	Vital Signs	Preferred Patient Care Area®
Abciximab (Reopro) • Mix 7.2mg in 250ml NS	tan	Wednesday (night shift) and Sunday (day shift)	For treatment of acute coronary syndrome - MI, unstable angina, non-Q wave, MI Post PCI (Percutaneous Coronary Intervention)	<ul style="list-style-type: none"> Bleeding Reperfusion Arrhythmias Anaphylaxis 	<u>Bolus</u> : see appropriate order	ICU Step Down Cardiology
					<u>Initiation/Titration</u> : see appropriate order	ICU Step Down Cardiology
					<u>Maintenance</u> : see appropriate order	ICU Step Down Cardiology
Aminophylline • Premade IV piggyback of 500mg in 500ml	grey	Wednesday (night shift) and Sunday (day shift)	For treatment of bronchial asthma, bronchospasm	<ul style="list-style-type: none"> Tachycardia Arrhythmias Hypotension CNS changes GI disturbances Urinary retention 	<u>Bolus</u> : every 15 minutes x 2	Any patient care area
					<u>Initiation/Titration</u> : every 15-30 minutes x 3 hours or until respiratory status is stable	Any patient care area
					<u>Maintenance</u> : every 4 hours	Any patient care area
Amiodarone (Cordarone) • Premade IV piggyback of 360mg in 200ml (1.8 mg/ml) (physician orders exist - they will need to be changed if monitoring parameters change)	navy (dk blue)	Wednesday (night shift) and Sunday (day shift)	To treat VT, SVT and atrial or ventricular dysrhythmia	<ul style="list-style-type: none"> Dysrhythmias Bleeding (liver) Extravasation complications 	<u>Bolus</u> : every 5 minutes until stable	ICU Step Down Cardiology
					<u>Initiation of drip at 33ml/hr</u> : every 15 minutes x 4, every 1 hour x 3, every 2 hours x 2	ICU Step Down Cardiology
					<u>Initiation of drip at 16ml/hr</u> : every 15 minutes x 4, every 1 hour x 1, every 2 hours x 1	ICU Step Down Cardiology
					<u>Maintenance</u> : every 4 hours	ICU Step Down Cardiology
Chemotherapy (all)	green	N/A (new tubing is provided with every dose)	Anti-cancer agents	<ul style="list-style-type: none"> Fatigue Headaches Muscle pain Stomach pain Mouth / throat sores Diarrhea Nausea Vomiting Constipation 	<u>Initiation</u> : prior to administration <u>Maintenance</u> : No specific requirements unless otherwise specified in a protocol	Any patient care area by a chemo certified nurse

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

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Clevidipine Butyrate (Cleviprex) <ul style="list-style-type: none"> 0.5 mg/ml premix Dose adjustment is not necessary with renal or hepatic impairment Infusion through central line is encouraged Infusion should not exceed 72 hours	white	12 hours with vial change	Calcium channel blocker to treat hypertension	<ul style="list-style-type: none"> Hypotension Potential for rebound hypertension after stoppage of prolonged infusion Atrial fibrillation (21%) Nausea (21%) Acute renal failure (9%) Headache (6%) Vomiting (3%) 	<u>Initiation:</u> every 2 minutes with rate changes until goal BP is reached	ICU
Dexmedetomidine (Precedex)	Aqua	Wednesday (night shift) and Sunday (day shift)	Sedative /hypnotic for mechanically ventilated patients.	<ul style="list-style-type: none"> Atrial fibrillation AV block Brady arrhythmias Hypertension Hypotension Vent. arrhythmias Hypoxia Pulmonary edema 	<u>Initiation:</u> every 4 hours until stable <u>Titration/Weaning:</u> every 15 minutes x 4 until stable/off <u>Maintenance:</u> every 1 hour	ICU
Diltiazem (Cardizem) <ul style="list-style-type: none"> Mix 125mg in 125ml D5W or NS (1 mg/ml) Bolus (5-20 mg over 2 minutes) Infusion: 125 mg in 125 ml D5W or NS (1mg per ml mixture) 	purple	Wednesday (night shift) and Sunday (day shift)	To treat SVT; PSVT; and atrial fib. and atrial flutter with a rapid ventricular response.	<ul style="list-style-type: none"> Bradycardia Hypotension Do not give to patients with 2nd degree heart block, 3rd degree heart block or WPW Contraindicated in patients with wide complex tachycardias of ventricular origin. Do not give within 2 to 4 hours of receiving IV Beta Blockers. 	<u>Bolus:</u> before and after bolus	ICU Step Down Cardiology + must be in an ICU or Step Down if rate is greater than 15mg/hr
					<u>Initiation/Titration:</u> every 15 minutes x 4, every 1 hour x 1, every 2 hours x 1	ICU Step Down
					<u>Scheduled Titration:</u> every 2 hours and with rate change <input type="checkbox"/>	ICU Step Down Cardiology + must be in an ICU or Step Down if rate is greater than 15mg/hr
					<u>Maintenance:</u> every 4 hours	ICU Step Down Cardiology + must be in an ICU or Step Down if rate is greater than 15mg/hr
Dobutamine (Dobutrex)	yellow	Wednesday (night shift)	To increase cardiac output (short term)	<ul style="list-style-type: none"> Tachycardia 	<u>Initiation:</u> every 15 minutes x 4, every 1 hour x 1	ICU Step Down Cardiology

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

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<ul style="list-style-type: none"> Mix 1000mg in 250ml D5W or NS 2.5 - 10mcg/kg/min. or 165-750 mcg/min. 		and Sunday (day shift)	treatment)	<ul style="list-style-type: none"> Hypertension Ectopy 	Maintenance: every 2-4 hours	ICU Step Down Cardiology
					Weaning: every 15 minutes x 4, every 1 hour x 1*	ICU Step Down Cardiology
					Scheduled Titration: every 2 - 4 hours	ICU Step Down Cardiology
Dopamine (Intropin) <ul style="list-style-type: none"> Mix 400mg in 250ml D5W or NS (1600mcg/ml) Beta effect: 5-10mcg/kg/min Alpha effect: 20-50mcg/kg/min. Low Dose: less than or equal to 5mcg/kg/min. 	orange	Wednesday (night shift) and Sunday (day shift)	<ul style="list-style-type: none"> To increase urine output (low dose) To treat shock, decreased cardiac output, hypotension To increase perfusion to vital organs 	<ul style="list-style-type: none"> Decreased urine output (higher doses) Tachycardia Decreased capillary refill Ventricular dysrhythmias Chest Pain Extravasation complications 	Initiation/Titration: every 15 minutes until stable, every 1 hour x 2	ICU Step Down
					Maintenance: every 1-2 hours	ICU Step Down
					Weaning: every 15 minutes until discontinued *	ICU Step Down
					Low Dose (maintenance or weaning off: every 1-2 hours)	ICU Step Down Cardiology
Epinephrine (Adrenalin) <ul style="list-style-type: none"> Mix 2mg in 100ml D5W (standard) 1-4mcg/min. (Also available in: 4 mg in 100ml, and 8 mg in 100ml)	purple	Wednesday (night shift) and Sunday (day shift)	To treat: <ul style="list-style-type: none"> Profound bradycardia Hypotension Acute bronchial asthma 	<ul style="list-style-type: none"> Decreased urine output Decreased capillary refill Hyperglycemia 	Initiation/Titration: every 15 minutes until stable	ICU
					Maintenance: every 1-2 hours	ICU
					Weaning: every 15 minutes until stable, every 15 minutes x 4 after discontinued *	ICU
Eptifibatide (Integrilin) <ul style="list-style-type: none"> Mix 75mg in 100ml (750mcg/ml) 	tan	Wednesday (night shift) and Sunday (day shift)	Post PCI (Percutaneous Coronary Intervention) Angioplasty, stents, etc.	<ul style="list-style-type: none"> Bleeding Reperfusion Arrhythmias Anaphylaxis 	Bolus: see appropriate order	ICU Step Down Cardiology
					Initiation/Titration: see appropriate order	ICU Step Down Cardiology
					Maintenance: see appropriate order	ICU Step Down Cardiology
Esmolol (Brevibloc) 2500 mg (2.5 Gm) 250 D5W or NS	navy (dk blue)	Wednesday (night shift) and Sunday	Short acting antiarrhythmic especially for decompensating	<ul style="list-style-type: none"> Bradycardia Hypotension Dizziness 	Initiation: continuously until stable.	ICU
					Titration: every 15 minutes x 4	ICU

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

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		(day shift)	SVT or HPT crisis.	<ul style="list-style-type: none"> Confusion Dyspnea 	<u>Maintenance:</u> every 1 hour during infusion <u>Maintenance:</u> No specific requirements	ICU
Fentanyl (Duragesic)	white	Wednesday (night shift) and Sunday (day shift)	Postoperative pain Analgesia for mechanically ventilated patients Procedural sedation	Constipation Respiratory depression Hypotension	As ordered	Any patient care
Furosemide (Lasix) <ul style="list-style-type: none"> Mix 200 mg in 100ml D5W or NS 	white	Wednesday (night shift) and Sunday (day shift)	To treat: <ul style="list-style-type: none"> Pulmonary edema Heart Failure Hypertension Chronic Renal Failure Hypercalcemia 	<ul style="list-style-type: none"> Hypotension Tachycardia Decreased potassium (signs: muscle cramps, PVC's) Hyperglycemia 	<u>Bolus:</u> every 2 hours x 2 <u>Initiation:</u> every 2 hours x 2 <u>Maintenance:</u> every 2-4 hours	Any patient care area Any patient care area Any patient care area
Heparin <ul style="list-style-type: none"> Mix 25,000 units in 250 ml D5W (100 units/ml) 	pink	Wednesday (night shift) and Sunday (day shift)	Prophylaxis and treatment of DVT, PE, at fib with embolism, etc. Dx and Rx DIC	<ul style="list-style-type: none"> Bleeding White clot syndrome Anaphylaxis 	<u>Initiation/Titration:</u> per floor routine <u>Maintenance:</u> per floor routine <u>Weaning:</u> per floor routine	Any patient care area Any patient care area Any patient care area
Ibutilide (Corvert) <ul style="list-style-type: none"> See DO for mix 	white	after infused	Rapid conversion of atrial fibrillation/flutter	<ul style="list-style-type: none"> Life-threatening arrhythmias Clotting 	<u>Initiation:</u> every 5 minutes <u>After infusion:</u> every 15 minutes x 4 after the infusion	ICU Step Down Cardiology ICU Step Down Cardiology
Immune Globulin G (IgG) <ul style="list-style-type: none"> See DO for mix 	white	Discard after infusion	For treatment of immuno-deficit syndromes	<ul style="list-style-type: none"> Anaphylactic shock Headache Aseptic meningitis syndrome 	<u>Initiation/Titration:</u> every 30 minutes	Any patient care area
Infliximab (Remicade) <ul style="list-style-type: none"> see DO for mix <p>Note: This should be given as an outpatient</p>	white	Discard after infusion	For treatment of Crohn's disease, Rheumatoid arthritis	<ul style="list-style-type: none"> Anaphylactic reactions Hypersensitivity 	<u>Initiation/Titration:</u> every 15 minutes	<ul style="list-style-type: none"> ICU Step Down Medical Specialties Neuro/Oncology Cardiology Orthopedic Specialties

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

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infusion whenever possible. Verify with physician before sending the order to Pharmacy.					<u>After Infusion:</u> every 15 minutes x 2 after discontinued	<ul style="list-style-type: none"> ICU Step Down Medical Specialties Neuro/Oncology Cardiology Orthopedic Specialties
Insulin <ul style="list-style-type: none"> Mix 100 units in 100ml NS (1 unit/ml) 	navy (dk blue)	Wednesday (night shift) and Sunday (day shift)	For treatment of hyperglycemia or hyperkalemia	<ul style="list-style-type: none"> Hypoglycemia Hypovolemia 	<u>Bolus:</u> per floor routine	ICU
					<u>Initiation/Titration:</u> per floor routine	ICU Step Down+ + if ICU bed not available
					<u>Maintenance:</u> per floor routine	ICU Step Down+ + if ICU bed not available
Iron Dextran <ul style="list-style-type: none"> see DO#505 for administration and anaphylaxis orders Patient's receiving dialysis can receive during treatment 	White	Discard after infusion	For treatment of iron deficiency anemia Test dose should always be given; wait one hour before beginning infusion	<ul style="list-style-type: none"> Anaphylactic reactions Hives Hypotension Tachycardia 	<u>Test Dose:</u> every 15 minutes X 4	Any patient care area
					<u>Infusion:</u> every 30 minutes for duration of infusion Note: Test dose and vital signs applicable to both IV and IM administration	
Isoproterenol (Isuprel) <ul style="list-style-type: none"> Mix 1mg in 250ml D5W (4mcg/ml) 1-8mcg/min. DO NOT EXCEED 20mcg/min. 	purple	Wednesday (night shift) and Sunday (day shift)	For treatment of bradycardia, symptomatic heart block and pulmonary embolism	<ul style="list-style-type: none"> Chest pain Hypotension Tachycardia 	<u>Initiation/Titration:</u> every 15 minutes until stable	ICU
					<u>Maintenance:</u> every 2 hours	ICU
					<u>Weaning:</u> every 15 minutes until discontinued	ICU
Labetalol (Normodyne) <ul style="list-style-type: none"> Mix 500mg in 500ml D5W (1mg/ml) 	red	Wednesday (night shift) and Sunday (day shift)	For treatment of severe hypertension and hypertensive emergencies	<ul style="list-style-type: none"> Hypotension Heart failure Dysrhythmias Respiratory distress 	<u>Bolus:</u> before and after bolus	ICU
					<u>Initiation/Titration:</u> every 5-10 minutes for 30 minutes then every 30 minutes x 4	ICU
					<u>Maintenance:</u> every 1 hour	ICU

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

Drip (Dose Range, Special Considerations)	Color	IV Tubing Changes (hours)	Indications	Adverse Response/ Side Effects	Vital Signs	Preferred Patient Care Area®
					<u>Weaning</u> : every 30 minutes until discontinued *	ICU
Lidocaine <ul style="list-style-type: none"> Mix 2gm in 250ml D5W (8mg/ml) 2-4mg/min. 20-50mcg/kg/min. 	red	Wednesday (night shift) and Sunday (day shift)	Acute treatment of ventricular dysrhythmias	<ul style="list-style-type: none"> CNS changes Prolonged PR interval and QRS complex Hypotension 	<u>Bolus</u> : before and after bolus	ICU Step Down
					<u>Initiation/Titration</u> : every 15 minutes until stable, every 30 minutes x 4	ICU Step Down+ Cardiology+ + if over 2mg/min go to ICU
					<u>Maintenance</u> : every 2-4 hours	ICU Step Down+ + if over 2mg/min go to ICU
					<u>Maintenance</u> : every 4 hours	ICU Stepdown Cardiology+ + iff over 2mg/min go to ICU
					<u>Scheduled Titration</u> : every 4 hours until discontinued □	ICU Step Down Cardiology
					<u>Weaning</u> : every 2-4 hours until discontinued	ICU Step Down+ + if over 2mg/min go to ICU
Magnesium	red	Wednesday (night shift) and Sunday (day shift)			Vital signs every 15 minutes while stabilizing; then hourly to include: <ol style="list-style-type: none"> Blood pressure, heart rate, respirations Temperature every 2 hours if membranes have ruptured; every 4 hours if membranes intact. Deep tendon reflexes every 2 hours Continuous pulse oximeter 	Labor and Delivery
Midazolam Hydrochloride (Versed)	green	Wednesday (night shift) and	Sedation for patients requiring mechanical	<ul style="list-style-type: none"> Cardiorespiratory compromise 	<u>Initiation</u> : every 15 minutes until stable for a minimum of 45 minutes.	ICU

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

Drip (Dose Range, Special Considerations)	Color	IV Tubing Changes (hours)	Indications	Adverse Response/ Side Effects	Vital Signs	Preferred Patient Care Area®
		Sunday (day shift)	ventilation	<ul style="list-style-type: none"> Agitation Extravasation 	<u>Maintenance</u> : every 1 hour	ICU
Milrinone (Primacor) <ul style="list-style-type: none"> Mix 20mg in 100ml D5W or NS (200mcg/ml) 	red	Wednesday (night shift) and Sunday (day shift)	For treatment of severe heart failure	<ul style="list-style-type: none"> Dysrhythmias Headache Thrombocytopenia Hypotension 	<u>Bolus</u> : before and after bolus	ICU Step Down
					<u>Initiation/Titration</u> : every 15 minutes until stable	ICU Step Down
					<u>Maintenance</u> : every 2-4 hours	ICU Step Down
					<u>Maintenance</u> : every 4 hours	ICU Step Down Cardiology
					<u>Scheduled Titration</u> : every 15 minutes x 4, every 1 hour x 2 □	ICU Step Down Cardiology
					<u>Weaning</u> : every 15 minutes x 4, every 1 hour x 2 *	ICU Step Down
Nesiritide (Natrecor) <ul style="list-style-type: none"> Mix 1.5mg in 250ml D5W (6mcg/ml) 0.01 - 0.03 mcg/kg/min 	yellow	Wednesday (night shift) and Sunday (day shift)	For treatment of end-stage CHF	<ul style="list-style-type: none"> Hypotension Non-sustained V tach Headache Nausea 	<u>Bolus</u> : before and after bolus	ICU Step Down
					<u>Initiation/Titration</u> : every 15 minutes x 4, every 30 minutes x 2, every 1 hour x 3	ICU Step Down
					<u>Initiation/Titration</u> : (low dose 0.01mcg/min) every 15 minutes x 4, every 30 minutes x 2, every 1 hour x 3	ICU Step Down Cardiology
					<u>Maintenance</u> : every 2-4 hours	ICU Step Down
					<u>Maintenance</u> : every 4 hours	ICU Step Down Cardiology

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

Drip (Dose Range, Special Considerations)	Color	IV Tubing Changes (hours)	Indications	Adverse Response/ Side Effects	Vital Signs	Preferred Patient Care Area®
Nicardipine (Cardene) • Mix 20mg in 200ml NS • 5 - 15 mg/h (Also available in: 25mg in 250ml)	peach	Wednesday (night shift) and Sunday (day shift)	For treatment of hypertension	• Hypotension (less with bolus)	<u>Bolus</u> : before and after bolus	ICU
					<u>Initiation/Titration</u> : every 5 minutes until stable	ICU
					<u>Maintenance</u> : every 1 hour	ICU
					<u>Weaning</u> : every 15 minutes until discontinued	ICU
Nitroglycerin (Tridil) • Mix 50mg in 250 D5W (200mcg/ml) • 5 - 30mcg/min. individualized • Greater than 30 mcg/min should not be on floor	blue (lt)	Wednesday (night shift) and Sunday (day shift)	• Prevention or treatment of angina pectoris • To decrease preload	• Hypotension • Headache • Bradycardia	<u>Initiation/Titration</u> : every 15 minutes until stable	ICU Step Down
					<u>Initiation/Titration</u> : every 15 minutes x 4, every 1 hour x 1	ICU Step Down Cardiology+ + must be in an ICU/Step Down if rate greater than 30mcg/min (9ml/h)
					<u>Maintenance</u> : every 2-4 hours	ICU Step Down
					<u>Scheduled Titration</u> : every 4 hours	ICU Step Down Cardiology+ + must be in an ICU/Step Down if rate greater than 30mcg/min (9ml/h)
					<u>Weaning</u> : every 15 minutes until discontinued	ICU Step Down
Nitroprusside (Nipride) • Mix 50mg in 100ml D5W • 0.5-8mcg/kg/min. • Toxic above 10mcg/kg/min.	green	Wednesday (night shift) and Sunday (day shift)	To treat: • Hypertensive emergencies • Decreased SVR • Decreased preload and afterload in shock	• Rapid decrease in BP • Keep patient supine when initiating or titrating	<u>Initiation/Titration</u> : every 5 minutes until stable	ICU Step Down+ + with an art. Line
					<u>Maintenance</u> : every 1 hour	ICU Step Down+ + with an art. Line
					<u>Weaning</u> : every 15 minutes until discontinued	ICU Step Down+ + with an art. Line
Norepinephrine (Levophed) • Mix 8mg in 250ml D5W • Start at 5ml/hr. or 2-	black	Wednesday (night shift) and Sunday (day shift)	To treat: • Hypotension • Low SVR	• Bradycardia and ventricular arrhythmias • Headache • Increased PVR	<u>Initiation/Titration</u> : every 5 minutes until stable	ICU
					<u>Maintenance</u> : every 1-2 hours	ICU

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

Drip (Dose Range, Special Considerations)	Color	IV Tubing Changes (hours)	Indications	Adverse Response/ Side Effects	Vital Signs	Preferred Patient Care Area®
4mcg/min.				<ul style="list-style-type: none"> Decreased Urine Output Extravasation complications 	<u>Weaning</u> : every 15 minutes until discontinued	ICU
Octreotide Acetate (Sandostatin) <ul style="list-style-type: none"> 500 mcg in 100ml 25 - 50 mcg/hr 	white	Wednesday (night shift) and Sunday (day shift)	For treatment of GI bleed	<ul style="list-style-type: none"> Nausea Vomiting Diarrhea Hyperglycemia Hypoglycemia 	<u>Bolus</u> : before and after bolus	ICU Step Down
					<u>Initiation</u> : every 2 - 4 hours	ICU Step Down
					<u>Maintenance</u> : every 2 - 4 hours	ICU Step Down
Oxytocin (Pitocin) <ul style="list-style-type: none"> 30 units in 500ml NS (concentration 0.06 units/ml) 	green	Wednesday (night shift) and Sunday (day shift)	<ul style="list-style-type: none"> Induction of labor To treat: <ul style="list-style-type: none"> Postpartum hemorrhage 	<ul style="list-style-type: none"> Cardiac dysrhythmia (mother and fetus) Fetal bradycardia Hypertensive episode Ventricular premature beats (mother and fetus) 	<u>Initiation</u> : every hour <u>Titration</u> : with each titration then return to every hour	Labor and Delivery
Phenylephrine (Neosynephrine) <ul style="list-style-type: none"> Mix 25mg in 250ml D5W or NS Individualized 	purple	Wednesday (night shift) and Sunday (day shift)	For treatment of hypotension (usually during anesthesia or due to anesthesia)	<ul style="list-style-type: none"> Headache Reflex bradycardia Extravasation complications 	<u>Bolus</u> : every 5 minutes until stable	ICU Step Down
					<u>Initiation/Titration</u> : every 15 minutes until stable	ICU Step Down
					<u>Maintenance</u> : every 1 hour	ICU Step Down
					<u>Weaning</u> : every 15 minutes until discontinued	ICU Step Down
Potassium Chloride (KCl) <ul style="list-style-type: none"> See DO for mix 	white	Wednesday (night shift) and Sunday (day shift)	For treatment of hypokalemia and DKA	<ul style="list-style-type: none"> Vent arrhythmias Hypotension Extravasation complications 	<u>Initiation</u> : per floor routine	Any patient care area
					<u>Maintenance</u> : per floor routine	Any patient care area
Procainamide (Pronestyl) <ul style="list-style-type: none"> Mix 1000mg in 250ml D5W or NS 2-6mg/min. 	red	Wednesday (night shift) and Sunday (day shift)	Treatment of: <ul style="list-style-type: none"> PVCs or VT Atrial dysrhythmias 	<ul style="list-style-type: none"> Hypotension Check drug level if patient is on Tagamet or Amiodarone 	<u>Bolus</u> : every 5 minutes	ICU Step Down
					<u>Maintenance</u> : every 2-4 hours	ICU Step Down
					<u>Weaning</u> : every 30 minutes x 4	ICU Step Down
					<u>Maintenance</u> : every 4 hours	ICU Step Down Cardiology

Level of Care Admission Criteria: Critical Care & Step-Down (Progressive Care)

Final 04.06.23

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					<u>Scheduled Titration</u> : every 4 hours	ICU Step Down Cardiology
Propofol (Diprivan) - Continuous Infusion - • Mix 1000mg in 100ml (10mg/ml) • 5-50mcg/kg/min.	blue (lt)	12 with drip change	<ul style="list-style-type: none"> To sedate mechanically ventilated patients. To induce and/or maintain anesthesia during surgery 	<ul style="list-style-type: none"> Hypotension Bradycardia Respiratory acidosis Green urine 	<u>Bolus</u> : before and after bolus	ICU
					<u>Initiation/Titration</u> : every 5 - 15 minutes until stable	ICU
					<u>Maintenance</u> : every 2 hours	ICU
					<u>Weaning</u> : every 1-2 hours	ICU
Rocuronium (Zemuron)	white	Wednesday (night shift) and Sunday (day shift)	<ul style="list-style-type: none"> Muscle paralysis during mechanical ventilation Anesthesia adjunct during intubation 	<ul style="list-style-type: none"> Hypertension Hypotension Tachycardia 	<ul style="list-style-type: none"> Initiation/Titration: every 5-15 minutes until stable Maintenance: every 1 hour 	ICU
Tirofiban (Aggrastat)	Tan	Wednesday (night shift) and Sunday (day shift)	<ul style="list-style-type: none"> Acute coronary syndrome - MI, unstable angina, non-Q wave MI. Percutaneous coronary intervention (PCI) - after angioplasty, arthroectomy and/or stent 	<ul style="list-style-type: none"> Bleeding Reperfusion dysrhythmias 	As prescribed by physician	ICU Step Down Cardiology
TPN	white	24	Nutritional supplement	<ul style="list-style-type: none"> Nausea Hypertension Pruritus Hyperglycemia Vomiting Fever 	<u>Initiation</u> : No specific requirements <u>Maintenance</u> : No specific requirements	Any patient care area
Vasopressin	red	Wednesday (night shift) and Sunday	Treatment of septic shock.	•	<u>Initiation</u> : every 15 minutes x 4	ICU
					<u>Maintenance</u> : every 1 hour	ICU

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		(day shift)			<u>Titration:</u> every 1 hour	ICU

The preferred areas are a standard recommendation. The critical care director, patient care supervisor or house supervisor should be involved in any decision to place a patient in an area other than the preferred area.

Weaning /Titrating to physiological parameters refers to titrating the drip according to patient BP, HR, etc.

Scheduled Titration refers to orders to titrate or wean on a certain time schedule (e.g., turn up to 10ml/h if heart rate still greater than 100 in 4 hours, turn down to 7 ml/h in 1 hour, then 4 ml/h in 3 hours).