Medications Requiring Special Monitoring (October 2022)

Intensive Care Units (Critical Care) – The definition of an intensive care unit at Our Lady of the Lake is one that has been designated as having the capability to care for patients that require the highest level of care and who may require mechanical ventilation. The difference between a progressive care unit and intensive care unit is the capability of administering titratable vasoactive medications along with continuous analgesia and sedation. These units have the capability of telemetry monitoring of all patients and maintain a sufficient nurse to patient ratio that allows for proper monitoring of these medications during and post-administration.

- HVCU
- MICA & MICB
- SICA & NCCU
- TNCC
- EMERGENCY DEPARTMENT (OLOL and Ascension)
- HVPU/PACU
- MSCC
- SE ICU

Cardiac Telemetry Units (Monitored) – The definition of a monitored unit at Our Lady of the Lake is one that has been designated as having the capability of telemetry monitoring of all patients, maintains a nursing staff competent to administer medications designated in this document, and has a sufficient nurse to patient ratio that allows for the proper monitoring of these medications post administration

- EAU
- SE TELE
- SE MED 1
- SE MED 2
- SE SURGERY
- HV7A & HV7B
- HV8A & HV8B
- HVAU
- NICVL
- CCDU2

Medical Telemetry Units - The definition of a medical telemetry unit at Our Lady of the Lake is one that has telemetry monitoring capability (not necessarily all beds), maintains a nursing staff competent to administer some blood pressure medications as designated in the document below, and has a sufficient nurse to patient ratio that allows for the proper monitoring of these medications post administration.

- 4MNT
- STU (6-S)
- MED1 (4-E)
- MED5 (4-W)
- MED6
- NEPHROLOGY (5-E)
- NEUROLOGY (5-S)
- SUR1 &SUR2
- ORTHO
- ONCOLOGY (5-W)

Progressive Care Unit – The definition of a Progressive Care Unit at Our Lady of the Lake is one that has been designated as having the capability of telemetry monitoring of all patients, maintains a nursing staff competent to administer medications designated in this document, and has a sufficient nurse to patient ratio that allows for the proper monitoring of these medications post administration. The main difference between a monitored unit and progressive care unit is the capability of mechanical ventilation.

- PCU

*Medications indicated in the ACLS algorithm may be given on any unit during a Code Blue

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Adenosine Adenocard®	Rapid IV Push	Paroxysmal supraventricular tachycardia (PSVT)	Slows conduction time through AV node. May produce first, second, third degree heart block.	Critical Care Units Progressive Care Units Cardiac Telemetry Units (Monitored) – MD must be present for administration
Albuterol Ventolin®	Continuous nebulization	Status asthmaticus	Increased patient monitoring	Critical Care Units Progressive Care Units
Alteplase (TPA) Activase®	IV infusion	Management of AMI, CVA, and PE in adults for the lysis of thrombi.	Needs to be given where diagnostic & monitoring equip are avail due to risk of serious hemorrhage, incl. potentially fatal intracranial bleeding & internal bleeding	Critical Care Units except for doses used for catheter clearance
Amiodarone Cordarone®	IV Bolus, followed by IV Infusion IVPB (PO maintenance dose may be converted to IV if patient NPO and has been receiving for > 1 month. Dose must be reduced by 50%) NOTE: Loading infusion/IV bolus = 150mg IVPB over 10 minutes Maintenance IV infusion = 1 mg/min IV x 6 hours followed by 0.5 mg/min IV x 18 hours, or dose specified by prescriber with no titrations	Treatment of VF and VT (**NOT** to be used in Torsades de pointes)	Constant monitoring of cardiac & blood pressure important because of side effects including hypotension & cardiac arrhythmias.	Loading Infusion and maintenance in Critical Care Units (***exceptions: PCU, HVAU, CCDU, MED2, HV7, & HV8***) Maintenance Infusions may be continued in Cardiac Telemetry Units (Monitored) **ONLY** if the patient has been loaded in above units or has been on PO amiodarone for more than a month.

**Pediatric Meds Requiring Special Monitoring can be found at :
https://fparchives.com/ololrmc/documents/Children's%20Hospital%20Medications%20Requiring%20Special%20Monitoring%2002092017.pdf

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Atracurim Tracrium®	IV Push IV infusion	Adjunct to general anesthesia to facilitate endotracheal intubation and to relax skeletal muscle during surgery or mechanical ventilation.	A neuromuscular blocker which can severely compromise respiratory function and cause respiratory paralysis. Reactions may need to be managed by manual or mechanical ventilation. Dosage must be individualized by response. Monitoring is necessary.	Critical Care Units
Atropine	IV Push (IM and SC routes do not require special monitoring)	Treatment of cardiac arrhythmias	Cardiovascular adverse reactions such as changes in heart rate may increase the frequency and severity of anginal attacks in patients with coronary artery disease.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units 5-W-Oncology Oncology Infusion Centers
Bumetanide Bumex	IV Push IV infusion	Treatment of volume overload	Close monitoring of urinary output is necessary to determine the effectiveness of the continuous infusion. Continuous infusions of bumetanide may significantly augment diuresis which can lead to overdiuresis, hypokalemia, and hypomagnesemia. Close monitoring of volume status and electrolytes is necessary.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units **IV Push may be given on all units, infusion limited to listed units**
Calcium Chloride	IV Push IVPB Central Line Preferred	1. Cardiac resuscitation 2. Hypocalcemic disorders 3. Hyperkalemic ECG disturbances	Dosage may need to be adjusted during cardiac resuscitation by constant ECG monitoring. Drug may precipitate arrhythmias in the digitalized patient. May cause a decrease in blood pressure. Injection is irritating to the vein and must not be injected into tissues due to necrosis and extravasation.	Critical Care Units *Exception: During ACLS/Code Blue*

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Calcium Gluconate	IV Push IVPB	1. Hypocalcemic disorders 2. Hyperkalemic ECG disturbances	Drug may precipitate arrhythmias.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units **IVPB may be given on all units. IV Push may be given on all units for hyperkalemia ONLY. For any other indication, IV Push is restricted to listed units.**
Cisatracurium Nimbex®	IV Push IV infusion	Adjunct to general anesthesia to facilitate endotracheal intubation and to relax skeletal muscle during surgery or mechanical ventilation.	A neuromuscular blocker which can severely compromise respiratory function and cause respiratory paralysis. Reactions may need to be managed by manual or mechanical ventilation. Dosage must be individualized by response. Monitoring is necessary.	Critical Care Units
Clevidipine Cleviprex®	IV Infusion (Large peripheral vein)	Short-term treatment of hypertension	Caution & monitoring because of hypotension, tachycardia, and changes in afterload	Critical Care Units
Dexmedetomidine Precedex®	IV infusion	Sedation of initially intubated patients during treatment in intensive care units.	Hypotension and bradycardia have been associated with patients with high vagal tone or rapid infusions of dexmedetomidine	Critical Care Units Procedural Units including SMA, SMAT & HVAU: Anesthesia MUST administer & remain with patient until is able to breath spontaneously without support and patient responds to verbal stimuli
Digoxin Lanoxin®	IV Push	Control of rapid ventricular response in adults with atrial fibrillation	Monitoring of heart rate and rhythm important because of side effects including cardiac arrhythmias and heart block	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Diltiazem Cardizem®	IV Bolus IV Infusion	1. Atrial fibrillation, atrial flutter 2. Paroxysmal supraventricular tachycardia 3. Reduce blood pressure, increase coronary artery blood flow	Constant monitoring of cardiac & blood pressure important because of side effects including hypotension & cardiac arrhythmias	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units Neurology Unit **Progressive Care, Neurology unit and Cardiac Telemetry Units must use fixed rate, no titrations**
Dobutamine Dobutrex®	IV infusion **(Central Line recommended)** May be given through peripheral if using large bore IV at AC site (Ex: CCDU stress test)	Increase cardiac contractility for treatment of cardiac decompensation	Continuous monitoring in ECG and blood pressure important. Monitor pulmonary wedge pressure and cardiac output. A marked increase in heart rate or blood pressure & precipitation of ventricular ectopic activity may occur.	Critical Care Units Progressive Care Units Cardiac Telemetry Units (Monitored) **Progressive Care and Cardiac Telemetry Units must use fixed rate, no titrations**
Dofetilide Tikosyn®	PO	Maintenance of normal sinus rhythm(NSR) in patients with atrial fibrillation; conversion of atrial fibrillation to NSR	T.I.P.S. REMS program QTc, SCr, and electrolyte monitoring required	Critical Care Units Progressive Care Units Cardiac Telemetry Units (Monitored) Continuation of home medication may occur on any unit. **New initiations on listed units ONLY.**

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Dopamine Intropin®	IV infusion **(Central Line)** May be given through large bore peripheral line for Progressive Care and Cardiac Telemetry Units only if at fixed rate, up to max of 5 mcg/kg/min	1. Increase cardiac contractility 2. Increase organ perfusion 3. Increase urine output in the treatment of shock syndrome & chronic cardiac decompensation	Must monitor urine flow, cardiac output & blood pressure during infusion to its alpha, beta and dopaminergic effects. Infuse into large vein to prevent extravasation	Critical Care Units Progressive Care Cardiac Telemetry Units (Monitored) **Progressive Care and Cardiac Telemetry Units must use fixed rate, no titrations (should not exceed 5 mcg/kg/min)**
Doxapram HCL Dopram®	IV Push IV Infusion	Post anesthesia, to stimulate respiration; Drug induced CNS depression; chronic pulmonary disease associated with acute hypercapnia.	Not a muscle relaxant or narcotic antagonist. Maintain adequate airway and oxygenation. Narcosis may recur. Close observation until patient fully alert for 30 minutes to one hour.	Critical Care Units
Droperidol Inapsine®	IM IV Push	To produce tranquilization and to reduce the incidence of nausea and vomiting in surgical and diagnostic procedures; For premedication, induction, and as an adjunct in the maintenance of general and regional anesthesia; In neuroleptanalgesia in which droperidol is given concurrently with an opioid analgesic, to aid in producing tranquility and decreasing anxiety and pain; Antiemetic.	QT prolongation and/or torsades de pointes reported at doses at or below recommended doses, even in patients with no known risk factors for QT prolongation. Potentially fatal. Baseline 12-lead ECG prior to administration of droperidol to determine if a prolonged QT interval (i.e., QTc greater than 440 msec for males or 450 msec for females) is present. If there is a prolonged QT interval, droperidol should NOT be administered. ECG monitoring should be performed prior to treatment and continued for 2-3 hours after completing treatment to monitor for arrhythmias.	Critical Care Units Progressive Care Units Cardiac Telemetry Units (Monitored) **Patient must remain on above units during administration and for 3 hours post administration**

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Edrophonium Enlon®	IV Push	Diagnosis of myasthenia gravis Differentiation of cholinergic crises from myasthenia crises Reversal of nondepolarizing neuromuscular blockers	Potential for cholinergic crisis and arrhythmias	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units ***Must be given in the presence of a physician on all units***
Epinephrine Adrenaline®	IV infusion **(Central Line)** IV Push Intra cardiac into the left ventricular chamber (IM & SC do not require monitoring)	1. Treatment of ventricular stand still 2. Treatment of cardiac arrest and AV block 3. Hypotension/Shock	Monitoring important because of cardiovascular effects including increase in high blood pressure, aortic rupture, serious cardiac arrhythmias, cerebrovascular hemorrhage, & pulmonary edema necessitate extreme caution.	Critical Care Units *Exception: During ACLS/Code Blue*
Eptifibatide Integrilin®	IV push, followed by infusion	Acute coronary syndrome, including the medically managed and the patient scheduled for PTCA	Constant monitoring of cardiac & blood pressure important because of side effects including excessive bleeding, hypotension and bradycardia.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units
Epoprostenol Flolan®, Veletri®	Continuous Nebulization IV infusion (Central Line)	Pulmonary hypertension Acute respiratory distress syndrome	Constant hemodynamic monitoring due to risk of side effects including hypotension as well as risk of reflex hypertension if infusion abruptly interrupted which can result in sudden cardiac death	Critical Care Units
Esmolol Brevibloc®	IV Infusion (Central Line Preferred)	For rapid control of supraventricular tachycardia	Monitoring heart rate necessary during titration	Critical Care Units
Etomidate Amidate®	IV Push	Induction and maintenance of general anesthesia	Monitoring of cardiac function and blood pressure necessary	Critical Care Units *Exception: During ACLS/Code Blue for RSI*

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Fenoldopam Corlopam®	IV Infusion (Central Line Preferred) May be given through peripheral if using large bore IV at AC site	Hypertensive emergency	Monitor blood pressure (hypotension) and heart rate (tachycardia). May cause hypokalemia. Monitor serum potassium.	Critical Care Units Progressive Care Cardiac Telemetry Units (Monitored) **Progressive Care and Cardiac Telemetry Units may administer fixed doses of 0.1 mcg/kg/min or less (no titration).**
Fentanyl Sublimaze®	IM Slow IV Push IV Infusion (Epidurals can be used on non-Cardiac Telemetry Units (Monitored)) Intranasal	For analgesic action of short duration during anesthesia as needed; for use as a narcotic analgesic supplement in general or regional anesthesia; for administration as a neuroleptic as an induction of anesthesia; for use as an anesthetic agent with oxygen in selected high risk patients.	Vital signs must be routinely monitored.	Critical Care Units Procedural Units (including SMA, SMAT & HVAU): Anesthesia must be present if nursing administers for moderate sedation, May be given on Progressive Care and Cardiac Telemetry Units (Monitored) by a physician only for conscious sedation Comfort Care Patients (any location; no monitoring required)
Fosphenytoin Cerebyx®	IV Push IV Infusion	For control of generalized convulsive status epilepticus and prevention and treatment of seizures occurring during neurosurgery; indicated for short term parenteral administration when other means of phenytoin administration are unavailable	Vital signs must be routinely monitored. Do not exceed 150 mg PE/minute.	No restrictions.

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Furosemide Lasix	IV Push IV Infusion	Treatment of volume overload	Close monitoring of urinary output is necessary to determine the effectiveness of the continuous infusion. Continuous infusions of furosemide may significantly augment diuresis which can lead to overdiuresis, hypokalemia, and hypomagnesemia. Close monitoring of volume status and electrolytes is necessary.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units **IVP may be given on all units, infusion limited to listed units**
Haloperidol Haldol	IV Push IM	Emergency sedation of severely-agitated or delirious patients (unlabeled use)	Higher doses and intravenous administration of haloperidol appear to be associated with a higher risk of QT prolongation and TdP EKG monitoring is required when given IV and it is not acceptable to be administered for the indication of nausea.	Critical Care Units Progressive Care Units Cardiac Telemetry Units (Monitored) Comfort Care Patients (any location; no monitoring required) **IM may be given on all units; IVP limited to listed units**
Hydralazine Apresoline®	IV Push	Hypertensive emergency/urgency and management of moderate to severe hypertension	Blood pressure response may be unpredictable in some patients Blood pressure monitoring required after administration	No restrictions
Ibutilide Corvert®	IV infusion over 10 minutes	Convert atrial fibrillation / flutter of recent onset.	Can cause either sustained or unsustained polymorphic VT (i.e. Torsades de pointes).	Critical Care Units
Insulin Drip	IV Infusion	Treatment of Hyperglycemia	Requires hourly monitoring of blood glucose	Critical Care Units Progressive Care Units

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Isoproterenol Isuprel®	IV Infusion IM SC Intra cardiac in an emergency	1. Management of shock & cardiac arrest 2. Increase cardiac contractility & rate to increase cardiac output.	Produces cardiac effects (tachycardia, seizures, pulmonary edema) which may aggravate existing cardiac problems. ECG monitoring is necessary.	Critical Care Units
Ketamine Ketalar®	IV Push IV Infusion IM PO	Sole anesthetic for short surgical procedures; Bronchodilation. Dissociative anesthetic; induction and maintenance of anesthesia, especially in hypovolemic or high-risk patients.	Cardiovascular hypertension, tachycardia, arrhythmias, bradycardia. Pulmonary: depression, apnea, laryngospasm. CNS: tonic, clonic movement, emergence delirium. GI: nausea, vomiting, hypersalivation. Eye: Diplopia, nystagmus, slight elevation in intraocular tension	**All orders require the provider to have sedation privileges and if ordered outside of the Critical Care Unit or on Non-intubated Patients, must be administered by a provider with sedation privileges ONLY** IV Push, IV infusion, IM, PO Allowed on Critical Care Units RN may administer ONLY in intubated patients <u>Oral Use (PO):</u> • 5-W, PCU • Ordering provider must be palliative care • For intractable pain ONLY <u>Procedural Units including SMA, SMAT & HVAU</u>: Anesthesia MUST administer & remain with patient until is able to breath spontaneously without support and patient responds to verbal stimuli

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Labetolol Trandate®	Slow continuous infusion IV Push	For control of blood pressure in severe hypertension.	Slow continuous infusion necessitates a controlled administration device & continuous hemodynamic monitoring. IV push requires frequent hemodynamic monitoring.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units Medical Telemetry (Monitored) **IV Push on listed units; IV infusion on Critical Care Units only.**
Lidocaine Xylocaine®	Slow continuous infusion IV Push	Treatment cardiac arrhythmias (Exception: Monitor not required for 100mg in 250ml used to decrease the pain of infusion of KCl & other drugs – will be mixed only in the pharmacy)	Slow continuous infusion with controlled admin device. ECG and vital signs routinely monitored.	Critical Care Units Progressive Care Units ***Exceptions: CCDU, MED2, HV7, & HV8***
Lorazepam Ativan®	IV Infusion IV Push IM	Continuous sedation to intubated, mechanically ventilated adult patients to provide continuous sedation and control of stress responses or for acute agitation/anxiety	Requires monitoring of cardiovascular status, blood pressure, and heart rate. Patient must also be mechanically ventilated if on continuous infusion.	IV infusion on Critical Care Units only IM & IV push on all units *Space benzodiazepine administration at least 30 minutes from administration of opiates to avoid respiratory depression*

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Mannitol Osmitrol®	IV Piggyback	Treatment of increased intracranial pressure and cerebral edema Hemodynamic support for intradialytic hypotension	Requiring monitoring of cardiovascular status, intracranial pressure, serum osmolality.	Critical Care Units May be given during hemodialysis procedure on dialysis units for blood pressure support
Metoprolol Lopressor®	IV Push	1. Atrial tachyarrhythmias 2. Myocardial infarction	IV push requires frequent hemodynamic monitoring.	Critical Care Units Progressive Care Units Cardiac Telemetry Units Medical Telemetry (Beta Blocker naïve patients may be initiated on telemetry monitor All Units **without** a Monitor (Metoprolol IV may administered on patients who have been receiving PO beta blockers and is currently NPO) ***Note:*** Patients should not be transferred for the sole purpose of receiving IV metoprolol
Midazolam Versed®	IV Push IV Infusion IM Intranasal	For conscious sedation prior to general anesthesia, before administration of other anesthetic agents; to supplement nitrous oxide and oxygen for short surgical procedures; continuous infusion for sedation in mechanically ventilated-patients	Midazolam IV has been associated with respiratory arrest especially when used for conscious sedation. Requires continuous monitoring of respiratory and cardiac function.	IV infusion: Critical Care Units only IV Push: Critical Care Units Progressive Care Units on mechanical ventilation Comfort Care Patients (any location; no monitoring required) Preop Units (IV Push): May administer 1 mg doses up to a maximum of 2 mg for

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
				anxiety Preop Units (Moderate Sedation): Doses up to 10mg may be given by nursing provided appropriate monitoring available in the presence of Anesthesia IM may be given on all units IM may be given on all units
Milrinone Primacor®	IV bolus, followed by IV infusion	1. Increase heart contractility 2. Treatment of CHF when digitalis is not effective. 3. Congestive heart failure	Monitors heart rate, blood pressure, fluids and electrolytes. Do not admix with furosemide	Critical Care Units Progressive Care Units Cardiac Telemetry Units (Monitored) – must be fixed rate, no titrations
Nesiritide Natrecor®	IV bolus, followed by infusion	Treatment of patients with acutely decompensated congestive heart failure who have dyspnea at rest or with minimal activity.	Caution & monitoring because of hypotension, tachycardia, and bradycardia.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units
Nicardipine Cardene IV®	IV Infusion (Large peripheral vein)	Short-term treatment of hypertension	Caution & monitoring because of hypotension, tachycardia, and changes in afterload	Critical Care Units
Nitroglycerin Tridil®	IV Infusion	1. CHF 2. Angina 3. Hypertension crisis	Caution & monitoring because of hypotension, tachycardia, palpitations, syncope & collapse. Dosage dependent on patient response; monitoring is necessary.	Critical Care Units
Nitroprusside Nipride®	IV Infusion	Hypertension crisis	A potent hypotensive drug which can cause profound hypotension, loss of consciousness. Causes cyanide toxicity. Monitor blood pressure & renal function & output; cyanide levels to regulate dosage & effects.	Critical Care Units

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Norepinephrine Levophed®	IV Infusion **(Central Line)**	Restoration of blood pressure in controlling certain acute hypotensive states & adjunct in treatment of cardiac arrest and profound hypotension.	A powerful peripheral vasoconstrictor and potent inotropic stimulation of the heart. Central venous pressure monitoring may be necessary during dosing titration.	Critical Care Units
Pancuronium Pavulon®	IV Push	Adjunct to anesthesia to induce skeletal muscle relaxation.	Neuromuscular blocker which may cause respiratory insufficiency or apnea. Reactions may need to be managed by manual or mechanical ventilation. Dosage must be individualized by response. MONITOR necessary.	Critical Care Units
Pentobarbital	IV Push IV Infusion	Refractory status epilepticus; barbiturate coma in patients with severe brain injury and increased ICP	May cause hypotension and respiratory depression when administered IV	Critical Care Units
Phenylephrine Neosynephrine®	IV infusion **(Central Line)**	Hypotension/Shock	Potent, direct-acting alpha-adrenergic stimulator with beta-adrenergic activity that produces systemic arterial vasoconstriction that requires close monitoring of blood pressure and pulse	Critical Care Units
Phenobarbital	IV Push IV Infusion	Management of generalized tonic-clonic, status epilepticus and partial seizures	May cause hypotension and respiratory depression when administered IV	Critical Care Units Progressive Care Units Cardiac Telemetry Units Medical Telemetry **(monitored patient only)**

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Phenytoin Dilantin®	IV Push Do Not Add to IV Fluids	Seizures	Adults – IV push slowly less than 50mg/min. No monitor needed on adults.	Adult units not restricted
Procainamide	IV Infusion	Ventricular arrhythmias	Potentially fatal blood dyscrasias (agranulocytosis) and proarrhythmic effects Continued administration leads to development of positive ANA test in 50% of patients, which may result in drug-induced lupus erythematosus-like syndrome ECG and continuous vital signs routinely monitored	Critical Care Units
Propofol Diprivan®	IV Push IV Infusion	Continuous sedation to intubated, mechanically ventilated adult patients to provide continuous sedation and control of stress responses. Also, used for cardioversion and other special procedures.	Significant hypotension and bradycardia.	Critical Care Units Cardiac Telemetry Units (Monitored) and Progressive Care Units (IV Push only and only if administered by physician) Procedural Units (including SMA, SMAT & HVAU: Anesthesia MUST administer & remain with patient until is able to breath spontaneously without support and patient responds to verbal stimuli)
Propranolol Inderal®	Slow IV Push	Life threatening arrhythmias or those occurring under anesthesia	Central venous pressure and ECG monitoring required. Injection should not exceed 1mg/min to avoid lowering blood pressure and causing cardiac standstill.	Critical Care Units Progressive Care Units
Quinidine	IV	Antimalarial schizonticide Antiarrhythmic with a Class 1A activity	Cardiac effects Risk of torsades	Critical Care Units

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Rocuronium Zemuron®	IV Push IV Infusion	Adjunct to general anesthesia; to facilitate endotracheal intubation; skeletal muscle relaxation during surgery or mechanical ventilation.	Respiratory depression or apnea may occur. Manual or mechanical ventilation may be necessary to manage the patient.	Critical Care Units *Exception: During ACLS/Code Blue for RSI*
Sodium Chloride Hypertonic Saline	IV Push IV infusion **(Central Line** – for infusions greater than or equal to 3%) **Exception**: Peripheral line for 3% at discretion of physician in TNCC and NCCU	Hyponatremia Elevated intracranial pressure due to various etiologies (e.g. traumatic brain injury, intracranial hemorrhage, transtentorial herniation)	Risk of central pontine myelinolysis (due to rapid correction of hyponatremia), frequent monitoring of serum sodium and osmolality, hemolysis, transient hypotension (especially with 23.4%).	3% NaCl: Critical Care Units, Progressive Care Units, Cardiac Telemetry Units (monitored), and 5-W oncology >3% NaCl: Critical Care Units only
Succinylcholine Anectine® Quelicin®	IM IV Push IV infusion	1. Adjunct to general anesthesia 2. Induce skeletal muscle relaxation or paralysis during surgery	A neuromuscular blocker which produces muscular paralysis resulting in respiratory depression or apnea. Malignant hyperthermic crisis and cardiac effects may also occur.	Critical Care Units *Exception: During ACLS/Code Blue for RSI*
Tenecteplase TNKase®	IV bolus	Management of AMI.	Needs to be given where diagnostic & monitoring equip are avail due to risk of serious hemorrhage, incl. potentially fatal intracranial bleeding & internal bleeding.	Critical Care Units
Tirofiban Aggrastat®	IV bolus loading dose, followed by infusion	Acute coronary syndrome, including the medically managed and the patient scheduled for PTCA	Constant monitoring of cardiac & blood pressure important because of side effects including excessive bleeding (including thrombocytopenia), coronary artery dissection, and bradycardia.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units

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GENERIC DRUG NAME (TRADE NAME)	ROUTE OF ADMINISTRATION	MAJOR INDICATION	REASON FOR RESTRICTIONS	AREAS WHERE ADMINISTRATION IS PERMITTED
Vasopressin	IV infusion **(Central Line)** IM SC	Vasodilatory Shock/septic shock	Circumoral pallor (with high doses), hypertension, bradycardia, arrhythmias, venous thrombosis, vasoconstriction, distal limb ischemia, requires an increased level of monitoring	Critical Care Units **(IM & SC administration does not require special monitoring)**
Vecuronium Norcuron®	IV Push IV Infusion	Adjunct to general anesthesia; to facilitate endotracheal intubation; skeletal muscle relaxation during surgery or mechanical ventilation.	Respiratory depression or apnea may occur. Manual or mechanical ventilation may be necessary to manage the patient.	Critical Care Units
Verapamil Calan®, Isoptin®	Slow IV Push	1. Temporary control of rapid ventricular rate in atrial flutter or atrial fibrillation. 2. Supraventricular arrhythmias.	Due to some patients experiencing life-threatening adverse reactions (hypotension, asystole), the use of IV Verapamil needs to be monitored.	Critical Care Units Cardiac Telemetry Units (Monitored) Progressive Care Units

Rev. February 11, 2022

** Central line administration restrictions are based on pH (less than 5 or greater than 9), osmolarity (greater than 500 mOsm/L), and extravasation potential*