

DESCRIPTORS THAT HIGHLY SUGGEST CRITICAL CARE

Conditions	Key Indicators Requiring emergency surgery OR patient is admitted *AAA is the reason for admission	
AAA (Abdominal Aortic Aneurysm)		
Acidosis *Any Age	PH < 7.25 (ABG or Venous)	
Airway Compromise	 Epiglottis Angioedema Croup Adult Ludwig's angina Retropharyngeal abscess Airway edema (radiation or abscess) Smoke inhalation- Intubation or ICU admission/transfer 	
Anaphylactic Shock (Allergic Reaction)	Hypotensive requiring fluid boluses OR IM/IV/ Epinephrine (not subQ)	
Anemia (adult) *Hgb<8	 ONE or more of the following: Abnormal Vitals: Heart rate >120, top BP <80 Syncope Chest pain Packed RBC or Platelet transfusion 	
Angina (Unstable)	IV Nitro Drip/ IV Dopamine/ OR other continuous IV medication infusion being adjusted.	
Angioedema of airway	Airway swelling aggressive treatment (IM/IV/racemic epinephrine) Admission	
Aortic Dissection	Requiring immediate surgery, transfer or IV BP meds to control BP.	
Appendicitis	Patient is septic (see sepsis)	
Arterial Occlusion	Requiring immediate surgery, transfer or infusion of blood thinners.	



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Conditions

Key Indicators

Atrial Fibrillation with tachycardia lasting more than 60 minutes OR A Fib, new onset, Vent rate >150	 ONE or more of the following: Continuous IV medications Ventricular rate >150 with treatment Chest pain, Dyspnea or Lightheadedness 	
Asthma (Status Asthmaticus)	 ONE or more of the following: Bi Pap ≥3 respiratory treatments (i.e. DuoNeb, Albuterol, Ventalin, Proventil) and still in distress. 	
*Bradycardia (symptomatic)	 ONE or more of the following: Pulse < 40 or Pacer or Atropine; Consult w/ cardiology for transvenous pacer 	
Cardiac Arrest	CPR/ multiple meds *(Need 30 minutes of CC not counting the CPR procedure)	
Cardiac Tamponade	Hypotension with IV fluid bolus or Pericardiocentesis	
Cervical Spine Fracture	Requiring Admission, Transfer or has a Neurologic deficit (i.e. weakness, parathesia)	
Comatose/Unconscious, Acute *Except for Hypoglycemia	Always Critical Care	
Chest Pain (Unstable Angina or Acute Coronary Syndrome)	 TWO or more of the following: Nitro drip, (being adjusted) Transfer to cardiac center TPA or Integrilin administered New changes on EKG (i.e. ischemia, injury)(ST segment depression or elevation) CT scan (look for other causes of pain) Cath lab Pulmonary edema Positive Troponin (Elevated) Heparin or Lovenox 	



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Conditions	Key Indicators	
CHF severe	BiPAP (elevated pCo2 > than 60) (Respiratory Acidosis)	
	OR one of the following:	
	IV Nitroprusside, nitro, Doputamine, or Dopamine	
Compartment Syndrome	Sent to the OR or fasciotomy in the ED or transfer for such.	
COPD - severe exacerbation	ONE or more of the following:	
	Continuous nebulizers and still in distress	
	• Bi Pap	
	• O2 sats <80%, on usual 02	
	Respirations ≥32	
	• pH 7.25 or lower (CO2 retention)	
*Croup (Adult or Pediatric)	Multiple Racemic Epinephrine nebs with documentation of airway distress after the 1 st nebulizer treatment.	
Dehydration	With BP < than 80 systolic (treated with more than 1 liter of NS)	
DKA (Diabetic Ketoacidosis)*all ages	(pH < than 7.25) (Respirations >see Vital signs)	
Drug Overdose/Poisoning:	Management for each (specific) type of Drug Overdose/Poisoning:	
*Tylenol (Acetaminophen)	Use of IV/PO Mucomyst (NAC)	
*Digoxin	Use of IV Digibind	
*Ethylene Glycol (Anti-Freeze)	Use of Formeprizole (Antizol)	
*Salicylate	Treated with Emergent Dialysis	
*Snake Bite	Use of IV Crofab	



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Dysrhythmia	ONE or more of the following:	
	Ventricular TachycardiaVentricular fibrillation	
	 Ventricular fibriliation 3rd Degree Heart Block 	
	 Pacemaker (inserted in ED or External pacer used in ED) 	
	Use of Atropine/Lidocaine/Amiodarone IV, Procainamide IV	
	Synchronized cardioversion	
Ectopic pregnancy (Rupture)	To OR or Requiring Admission or Transfer or Blood transfusion in ED	
Epidural abscess	Always Critical Care	
Epiglottitis	Always Critical Care	
Esophageal perforation	Always Critical Care	
FB Airway Obstruction	Partial or Complete	
Fractures (OPEN) due to trauma	Femur, tibia, pelvis or humerus	
GI Bleed (acute)	ONE or more of the following:	
	 Patient is hypotensive (systolic BP <80) 	
	• GI consult for scope in ED or ICU that day	
	Blood transfusion, Plasma or platelet transfusion or Fluid boluses	
	 Emergency surgery scheduled w/in next 12 hrs or EGD or 	
	colonoscopy	
	Pressors	
	 Dobutamine Hemoglobin [HGB] < than 7 	
	 Hemoglobin [HGB] < than 7 Abnormal vital signs (pulse > 120) 	
	 Mental status change 	
Glasgow Coma Scale 12 or below	Always Critical Care (except Hypoglycemia)	



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Conditions	Key Indicators	
Head Injury	Glasgow Coma Scale 12 or below	
Hemorrhage intercerebral, subdural, subarachnoid, epidural/subdural	Always Critical Care (not chronic subdural)	
Hemothorax	Chest tube placement	
Hypercalcemia	Requiring Admission	
Hypertensive Emergency	Systolic (top) blood pressure >230 OR Diastolic (bottom) blood pressure >130	
	 With one of the following: Signs or symptoms of end organ involvement (CVA, acute renal failure, non-STEMI) Attempted control w IVP Meds Nitro, Nipride, Cardene Drip Mental Status change CHF Chest pain Pulmonary Edema Pre-eclampsia/eclampsia 	
Hypokalemia (low potassium)	Potassium \leq 2 WITH IV potassium ordered in ED	
Hypoglycemia	 ONE or more of the following: Frequent finger sticks (3 or more) and intervention D50: 3 or more doses 	
Hypothermia	Temperature < than 91.4 F or 33 C	
Hypotension (adult only)	 ONE or more of the following: Blood pressure < than 80 Multiple Fluid bolus 3L or greater Dopamine or other pressors Central line Respiration > than 32 	
Hypoxia/Hypoxemia	0 ₂ SAT < 80% on usual 02	



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Conditions	Key Indicators	
Hyperkalemia	Key indicators are treated with (calcium, bicarb and/or insulin and D50W)	
Hyponatremia	Requiring admission or transfer or seizure	
Meningitis (Bacterial)	Always Critical Care	
Meningitis (Viral)	With Encephalopathy	
Mesenteric Ischemia	Always Critical Care	
MI (Myocardial Infarction)	 ONE of the following: (STEMI) ST segment elevation NSTEMI (non ST segment elevation) Elevated Troponin (not chronic) Emergent to cath lab/TPA 	
MVA	ONE or more of the following: Altered mental status (Glasgow Coma Scale \leq 12) Abnormal vital signs: (O ₂ <85, HR >120, systolic BP <80) AND any one of the following:	
	 Transfer to trauma center Multiple fluid bolus Blood transfusion Platelet transfusion Central line Immediately to OR Spine, pelvis, or femur fracture Flail chest Pneumothorax chest tube Intracranial bleed Intubation Solid organ injury 	
*Myxedema Coma	Treated with IV Thyroxine (Levothyroxine)	
*Neonatal Fever	30 days or younger w∕ Fever ≥100 & Full Septic Workup including (LP)	
*Ovarian/ Testicular Torsion	Always Critical Care	



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Conditions	Key Indicators	
Perforated Viscus	Always Critical Care	
Pneumonia (Adult) *Pneumonia (Pediatrics)	$\begin{array}{l} \textbf{ONE or more of the following:}\\ \bullet O_2 \mbox{ sats < than 80\% on usual 02}\\ \bullet \mbox{Pulse > than 120 (in adult)}\\ \bullet \mbox{BP (top) < 80}\\ \bullet \mbox{ Respiration > than 32 (adult)}\\ \textbf{ONE or more of the following:}\\ \bullet \mbox{ O}_2 \mbox{ sats < than 80\% on usual 02}\\ \bullet \mbox{Pulse > than 150}\\ \bullet \mbox{BP (top) < 60}\\ \bullet \mbox{ Respiration > than 40} \end{array}$	
Pneumothorax	Requiring urgent chest tube inserted by ED physician	
Pre-eclampsia/eclampsia	Patient Admitted	
Pulmonary Edema	When treated with IV NTG , BIPAP or Intubation *Always Critical Care	
Pulmonary Emboli	Treated with Heparin or Lovenox	
RPA (Retropharyngeal abscess)	Always Critical Care	
Rapid heart Rate (Vent rate > 150)	IV fluids/ Adenosine/ continuous meds	
Renal Failure (Renal Insufficiency)	 ONE or more of the following: Immediate dialysis needed today Abnormal vital signs: HR >120, BP <80 Bicarb, Calcium or IV Insulin/D50W Pulmonary Edema EKG changes [Peaked T Waves or widened QRS] 	
Respiratory Distress/Failure/Arrest	BiPAP, CPAP or Intubation	



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Conditions	Key Indicators Continuous seizure or repeated seizures without returning to an alert baseline of over 20 minutes. *Always Critical Care	
Status Epilepticus		
Sepsis (septic shock)	BP < than 80 *Always Critical Care Or need at least TWO of the following:	
	 Multiple fluid bolus 2 or more IV antibiotics Altered mental status (i.e. confused) Top BP <80 HR > than 120 Temp > than 104° or < than 91.4 Elevate Lactates - see critical labs 	
Shock	BP < than 80 *Always Critical Care	
Stroke, Hemorrhagic Sub arachnoid hemorrhage New Intra-cranial mass	Always Critical Care	
Stroke, Thrombotic/Embolic	TPA considered or given/ Transfer/ Intubation	
Suicide attempt	ONE of more of the following:	
Drug/Alcohol overdose *See drug overdose	 Abnormal VS (medically ill) Serious attempt to harm (near hanging, neck wounds, gsw etc.) 	
*Thyrotoxicosis/Thyroid Storm	Treated with IV B-blockers (Propranolol)	
Trauma	Altered consciousness, life or limb, threatened or transfer	
Urosepsis	See sepsis	
Ventricular Fibrillation	Always Critical Care	
Ventricular Tachycardia	Requiring IV meds, Cardioversion	
3 Rd Degree Heart Block	Always Critical Care	



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Key Indicators

EYES

Acute Glaucoma

Retinal Artery Occlusion

Immediate Ophthalmology Consult

Visual changes and treated aggressively (eye drops)

Central Vein Occlusion

Immediate Ophthalmology Consult

Signs of Aggressive Management

- IV anti-arrhythmics: Adenosine, Atropine, Cardizem (Diltiazem), Inderal, lidocaine, Magnesium, and Sulphate
- Pressors: Dopamine, Epinephrine, and Dobutamine
- Vasodilators: Nitro Drip, Nipride, and Cardene
- Others: Aminophyline, Glucagon, Sodium Bicarb, Dobutamine, Propofol, and Diprivan
- Anti-Coagulants: Heparin, Lovenox, Integrilin, and Fragmin
- Platelet Transfusion
- Fresh Frozen Plasma
- Prothrombin Complex Concentrate (PCC)

Procedures that Highly Suggest Critical Care

- Tube Thoracostomy
- Transfer out via helicopter
- Defibrillation
- Cardioversion
- Intubation /CPR
- Open Cardiac Massage

- BiPAP Ventilation
- Surgical Airway
- TNK, TPA, or Streptokinase Infusion
- Lumbar puncture (i.e. Meningitis, Encephalitis)
- Transfer to a higher level of care
- Central line or I.O. (Excludes routine transfers to Pediatrics, OBS or Psychiatric)
- Ewald or Gastric Lavage



Critical care is defined as the direct delivery by a physician(s) or other qualified health care professional of medical care for a critically ill or critically injured patient.

- A critical illness or injury acutely impairs one or more vital organ systems such that there is a high probability of imminent or life threatening deterioration in the patient's condition.
- Critical care involves high complexity of medical decision making to assess, manipulate, and support vital system function(s) to treat single or multiple vital organ system failure and/or to prevent further life threatening deterioration of the patient's condition.
 - Examples of vital organ system failure include, but are not limited to: Central nervous system failure, circulatory failure, shock, renal, hepatic, metabolic, and/or respiratory failure. Although critical care typically requires interpretation of multiple physiologic parameters and/or application of advanced technology(s), critical care may be provided in life threatening situations when these elements are not present.
- Critical care may be provided on multiple days, even if no changes are made in the treatment rendered to the patient, provided that the patient's condition continues to require the level of attention described above.
- Providing medical care to a critically ill, injured, or post-operative patient qualifies as a critical care service only if both the illness or injury and the treatment being provided meet the above requirements. Critical care is usually, but not always, given in a critical care area, such as the coronary care unit, intensive care unit, pediatric intensive care unit, respiratory care unit, or the emergency department.
- Codes 99291, 99292 are used to report the total duration of time spent in provision of critical care services to a critically ill or critically injured patient, even if the time spent providing care on that date is not continuous. For any given period of time spent providing critical care services, the individual must devote his or her full attention to the patient and, therefore, cannot provide services to any other patient during the same period of time.
- Time spent with the individual patient should be recorded in the patient's record.
 - The time that can be reported as critical care is the time spent engaged in work directly to the individual patient's care whether that time was spent at the immediate bedside or elsewhere on the floor or unit.
 - For example, time spent on the unit or at the nursing station on the floor reviewing test results or imaging studies, discussing the critically ill patient's care with other medical staff or documenting critical care services in the medical record would be recorded as critical care, even though it does not occur at the bedside.
 - Also, when the patient is unable or lacks capacity to participate in discussions, time spent on the floor or unit with family members or surrogate decision makers obtaining a medical history, reviewing the patient's condition or prognosis, or discussing treatment or limitation(s) of treatment may be reported as critical care, provided that the conversation bears directly on the management of the patient.



- Time spent in activities that occur outside of the unit or off the floor (telephone calls whether taken at home or in the office, or elsewhere in the hospital) may not be reported as critical care since the provider is not immediately available to the patient.
- Time spent in activities that do not directly contribute to the treatment of the patient may not be reported as critical care, even if they are performed in the critical care unit (participation in administrative meetings or telephone calls to discuss other patients).
- Time spent performing separately reportable procedures or services should not be included in the time reported as critical care time.
- No individual may report remote real-time interactive video conferenced critical care services for the period in which any other physician or qualified health care professional reports codes 99291, 99292.
- Code 99291 is used to report the first 30-74 minutes of critical care on a given date. It should be used only once per date even if the time spent by the individual is not continuous on that date.
- Critical care of less than 30 minutes total duration on a given date should be reported with the appropriate E/M code.
- Code 99292 is used to report additional block(s) of time, of up to 30 minutes each beyond the first 74 minutes.
- The following examples illustrate the correct reporting of Critical care services:

Less than 30 minutes	Appropriate E/M codes
30-74 Minutes (30 min - 1 hr 14 min)	99291 x 1
75-104 Minutes (1 hr 15 min - 1 hr 44 min)	99291 x 1 AND 99292 x 1
105 - 134 Minutes (1 hr 45 min - 2 hr 14 min)	99291 x 1 AND 99292 x 2
135 - 164 Minutes (2 hr 15 min - 2 hr 44 min)	99291 x 1 AND 99292 x 3
165 - 194 Minutes (2 hr 45 min - 3 hr 14 min)	99291 x 1 AND 99292 x 4
195 minutes or longer (3 hr 15 min - etc)	99291 and 99292 as appropriate

Total Duration of Critical Care Codes



- 99291 Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes.
 - 99292 Each additional 30 minutes (list separately in addition to code for primary service).
- According to CMS (effective 7/1/08), routine daily updates or reports to family members are considered bundled with critical care service. CMS states "For family discussions the physician should document:
 - The patient is unable or incompetent to participate in giving history and/or making treatment decisions.
 - The necessity to have the discussion (e.g. "no other source was available to obtain a history" or "because the patient was deteriorating so rapidly I needed to immediately discuss treatment options with the family").
 - Medically necessary treatment decisions for which the discussion was needed and a summary in the medical record that supports the medical necessity of the discussion.

Documentation Requirements

- The physician must document the time of Critical care of 30 minutes or greater clearly visible on the chart, this does not include time to perform procedures.
- Document that patient is critically ill or injured and why.
- May not qualify for Critical care: Admission to critical care services secondary to no other bed in the hospital.
- Patients admitted to a critical care unit for close observation and/or frequent monitoring of vital signs.

Clinical Examples in the AMA/CPT Manual

Emergency Department visit for the first hour of Critical Care of a:

- 65-year-old male with septic shock following relief of ureteral obstruction caused by a stone
- 15-year-old with acute respiratory failure from asthma
- 45-year-old who sustained a liver laceration, cerebral hematoma, flailed chest, and pulmonary contusion after being struck by an automobile
- 65-year-old female who, following a hysterectomy, suffered a cardiac arrest associated with pulmonary embolus.
- 6-month-old with hypovolemic shock secondary to diarrhea and dehydration
- 3-year-old with respiratory failure secondary to pneumocystis carinii pneumonia
- 13-year-old with hypovolemic shock secondary to diarrhea and dehydration.
- 13-year-old with respiratory failure secondary to pneumocystis carinii pneumonia



Critical Care: Subsequently greater than 74 Minutes and in 30-minutes increment

- Critical care for each additional 30 minutes of treatment provided by the physician after 74 minutes of Critical care has been provided.
- It is imperative that clear documentation of this extended period of Critical care is readily visible on the chart. It is a recommended practice to document reasons **why** the provider spent over 74 minutes of Critical care.

CRITICAL CARE: VITAL SIGNS

Unstable VITAL SIGNS consistent with organ system failure:

	Adult/Teen	Child 1-12 years	Infant 0-12 months
O2 sat	<90% on O2	<90% on O2	<90% on O2
Respirations	<6 or >30	<6 or >40	<6 or >60
Temperature	<95 F or >105 F	<95 F or >105 F	<95 F or >105 F
Heart rate	<40 or >150	<60 or >150	<60 or >200
Systolic BP	<80 >230	<70	<60
Diastolic BP	<40 or >130	NA	NA
Glasgow Comas Scale GCS	≤12	≤12	≤12

CRITICAL CARE: TRAUMA SCENARIOS (1)

- Unstable vital signs or preventing further deterioration
- Immediately to surgical suite:
 - Ruptured liver, spleen, or esophagus
 - Perforated viscous
 - Free air or excessive blood in abdomen
 - o Torn thoracic or abdominal aorta, pulmonary vasculature, or bronchus

CRITICAL CARE: TRAUMA SCENARIOS (2)

- Long bone or pelvic fractures with hypotension or tachycardia
- Quadriplegia, paraplegia, or cord hematoma
- Cervical fracture with subluxation or dislocation or neurologic deficit
- Stab or gunshot wounds of chest, abdomen, neck



CRITICAL CARE: TRAUMA SCENARIOS (3)

- Burn care requiring burn center transfer
- Tension pneumothorax, large pneumothorax (> ~ 25%) or a hemothorax with chest tube placement
- Angulated fracture/dislocation with skin tenting or lose of pulses
- Fracture requiring fasciotomy or burn with escharotomy

CRITICAL CARE: TRAUMA SCENARIOS (4)

- Traumatic subdural or epidural hematoma and/or depressed skull fracture
- Universal (O-) blood or other blood products given to a trauma victim
- Significant trauma secondary to suicide attempt e.g. hanging or CO poisoning not simple lac repair.

CRITICAL CARE: MEDICAL SCENARIOS (1)

- Time before and after successful CPR > or = 30 minutes
- Significant mental status change secondary to trauma or medical reason

(GCS < ~ 12)

CRITICAL CARE: MEDICAL SCENARIOS (2)

- Respiratory Failure BiPap, CPAP, 100% non-rebreather, intubation and/or ventilator management
- Upper airway obstruction with stridor (severe croup or epiglottitis)

CRITICAL CARE: MEDICAL SCENARIOS (3)

- Head trauma, drug or ETOH overdoses, status epilepticus, allergic reaction, croup angioedema, or foreign body requiring very close observation for airway control
- Pulmonary embolus with therapy

CRITICAL CARE: MEDICAL SCENARIOS (4)

- Acute STEMI or non-STEMI MI to cath lab
- Acute STEMI or non-STEMI MI with thrombolytic
- Acute coronary syndrome (ACS) requiring Heparin, Integrillin[™], or ReoPro[™]

CRITICAL CARE: MEDICAL SCENARIOS (5)

- Chemical cardioversion if CP, SOB, diaphoresis
- Electrical cardioversion on all patients
- Bradyarrhythmia requiring external or internal pacemaker (heart rate < 40)
- Accelerated hypertension requiring multiple IV vasoactive drugs

CRITICAL CARE SERVICES



CRITICAL CARE: MEDICAL SCENARIOS (6)

- Acute thrombotic CVA with thrombolytic or consideration of thrombolytic (if the patient is back to normal not CC) in ED
- Hemorrhagic CVA or subarachnoid bleed
- Significant dehydration, sepsis, DKA, rhabdomyolysis, or other conditions requiring IV fluid boluses: 2L IV bolus in adult or 20cc/kg in child x2

CRITICAL CARE: MEDICAL SCENARIOS (7)

- Sepsis (Urosepsis, Septicemia)
- Meningitis or other severe infection with IV antibiotics
- Warming blanket for hypothermia (Bear Hugger)
- Extremity or Fournier's Gangrene

CRITICAL CARE: PROCEDURES (1)

- Non-tunneled catheters Central lines (usually with unstable vital signs)
- Endotracheal intubations and/or ventilator management
- Thoracostomy tube (usually with unstable vital signs)
- Pericardiocentesis

CRITICAL CARE: PROCEDURES (2)

- Pacemaker insertion
- Cardioversion
- Cricothyrotomy
- Intraosseous IV

CRITICAL CARE: LAB VALUES (1)

Electrolytes

- Sodium (Na) < 120 or > 150
- Potassium (K) < 2 or > 6.5
- Calcium (Ca) < 6 or > 13 mg/dl
- Magnesium < 1.5 or > 5 meq/L
- Bicarbonate (CO2) < 10 or > 40 meq/L
- Glucose > 600

CBC

- Platelet count
 < 20,000
- Hgb < 7 or Hct < 21

ABGs

- pH <7.25 or >7.6
- pO2 < 60mmHg on O2
- pCO2 <20 or >60
- O2 sat <90% on O2
- Other
- Lactate > 4 mmol/L
- Troponin any elevation



CRITICAL CARE: IV MEDS

(LIST IS NOT ALL INCLUSIVE)		
Abciximab (ReoPro™)	Lorazepam (for actively seizing pt)	
Adenosine/Adenocard™ (> 1 dose)	Lovenox™ SQ for PE, ACS, admitted Chest pain or R/O MI	
Acetadote™ (N-Acetyl Cysteine), IV	Magnesium (severe pre-eclapsia, eclampsia, and Torsades de Pointes)	
Aggrastat™	Mannitol (Hexan™)	
Amiodarone	Metoprolol (3 doses)	
Apresoline™	Mucomyst (N-Acetyl Cysteine), PO	
Atropine	Nalaxone	
Ativan™ IM or IV (for actively seizing pt, status epilepticus or significant	Narcan™	
agitation with > one dose)		
Brethine	Natrecor™	
Calcium Chloride or Calcium Gluconate 32	Neosynephrine	
Cardene™	Neseritide	
Cardizem™ (> 1 dose or drip)	Nicardipine	
Corlopam™	Nipride™	
CroFab™	Nitroglycerine	
D50W (> 1 dose)	Nitroprusside	
Diazepam for status epilepticus	Norepinephrine	
Diazoxide	Normodyne™	
Diltiazem (> 1 dose or drip)	Octreotide	
Digibind™	Oxytocin	
Dobutamine	Phenobarbitol for status epilepticus	
Dopamine	Phenylephrine	
Enalapril (> 1 dose)	Pitocin	
Epinephrine or Adrenalin	Potassium (for K<2.5)	
Epinehprine SQ for anaphylaxis or severe allergic reaction	Procainamide	
Fenoldopan	Pronestyl	
Furosemide (>1 dose)	Propanolol	
Eptifibatide (Integrillin™)	ReoPro™	
Esmolol	Sodium Bicarbonate	
Glucagon	Streptokinase	
Haldol™ IV or IM (significant agitation with > one dose)	Terbutaline	
Haldol™ IV or IM one dose and additional anti-psychotics IV or IM	Theophylline	
including Abilify™, Geodon™, Risperdal™ and/or Zyprexa™)		
Heparin for PE, ACS, R/O MI or admitted chest pain	Thrombolytics (Retavase™,TNKase™)	
Hydralazine	Tirofiban	
Hyperstat™	Trandate (3 doses)	
Insulin drip with or w/out initial bolus	Tridil	
Isuprel	Valium (for actively seizing pt, status epilepticus or significant agitation with > one dose)	
Kayexalate oral combined with IV D50/IV insulin and/or IV calcium(for	Vasotec™ (> 1 dose)	
hyperkalemia)		
Lasix (> 1 dose)	RSI (Rapid Sequence Intubation) Drugs	
Labetalol (> 1 dose) or 1 dose with an additional anti-hypertensive	Succinylcholine (Anectine™)	
Lepirudin (Refludan™)	Vecuronium	
Levophed	Etomidate	
Lidocaine (IV not subcutaneous)	Rocuronium	
Lopressor™ (3 doses)	Norcuron™	