



Medical Directive

Directive Number	<u>10-06</u>
Publish Date	<u>02 December 2010</u>
Effective Date	<u>06 January 2011</u>
Subject	<u>Updated and Additional Documents for COG v01.06.11</u>
Page	<u>1 of 5</u>
Update to Clinical Operating Guidelines v 01.06.11	

Credentialed System Responder	Information
Credentialed EMT-Basic	Action
Credentialed EMT-Intermediate	Action
Credentialed EMT-Paramedic	Action
Credentialed EMD Provider	Action

On September 16, 2010 Medical Directive 10 – 04 was issued to introduce and initiate a new COG revision. The attached documents represent an update to the new COGs prior to their effective date. Since September there has been ongoing System review, education and discussions related to all Protocols and other Reference documents contained in the new COGs. Based on System input, the impact on patient care and safety; two of the attached Protocols (OB – 02 and R – 04) needed modifications prior to the COG implementation date rather than waiting until July for the planned update. The other two documents were not included in the initial version and warranted inclusion in the new COG revision prior to System implementation. If your organization has printed the new COGs we encourage you only to print and insert these 4 pages update your copies. As always, the OMD Web Page will have the System Official Version of the current COGs and related documents.

Attachments:

1. Obstetrical Emergency Protocol OB – 02
2. Respiratory Distress Protocol R – 04
3. Pediatric Wide Complex Tachycardia with a Pulse Protocol PC – 03 (new)
4. Pediatric Calcium Gluconate Infusion Chart 50 mg/kg Clinical Reference CR – 20A (new)

Thanks for all you do. Please let us know if you have any questions.

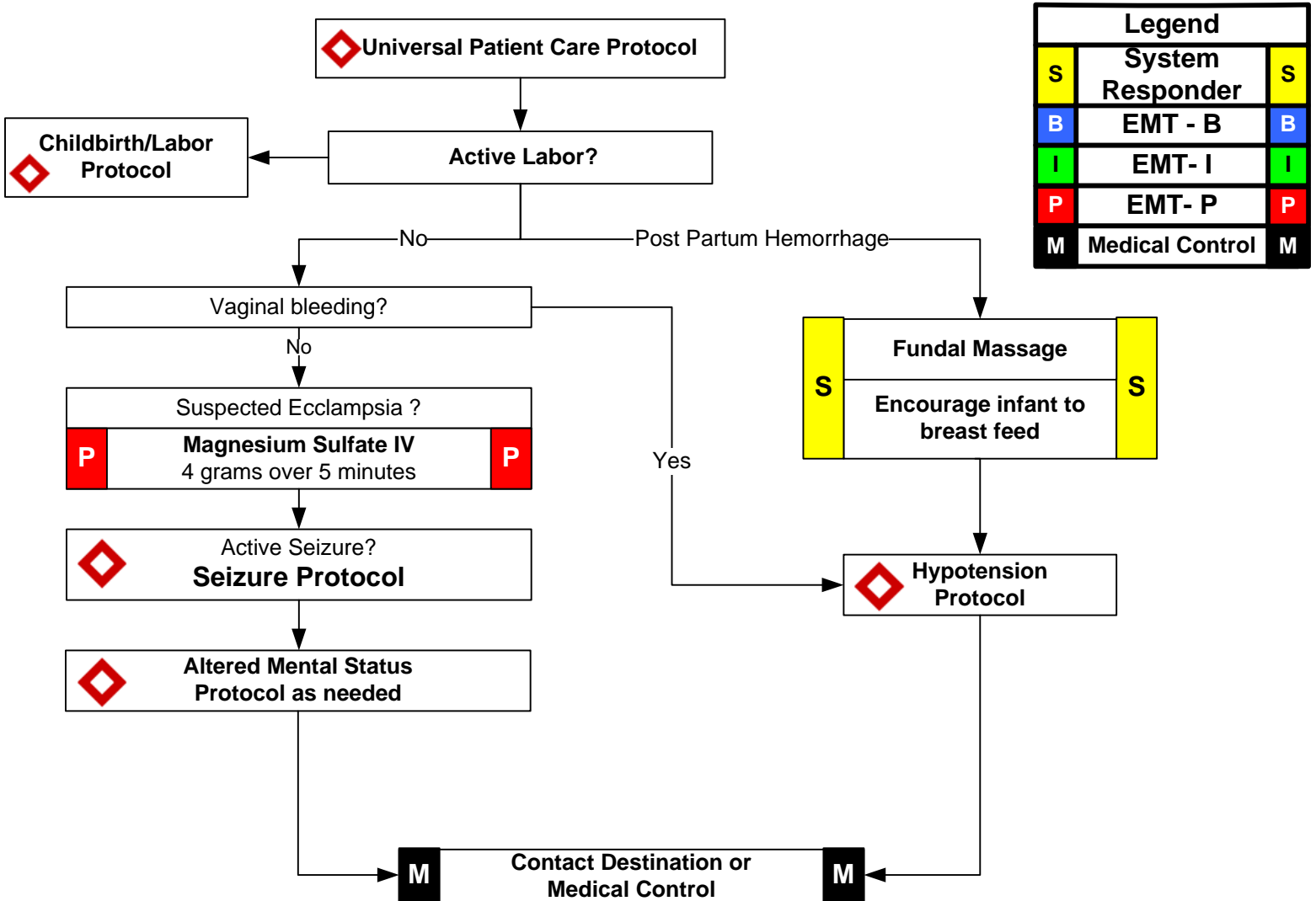
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Obstetrical Emergency

History: <ul style="list-style-type: none"> • Past medical history • Hypertension meds • Prenatal care • Prior pregnancies / births • Gravida / Para 	Signs and Symptoms: <ul style="list-style-type: none"> • Vaginal bleeding • Abdominal pain • Seizures • Hypertension • Severe headache • Visual changes • Edema of hands and face 	Differential: <ul style="list-style-type: none"> • Pre-eclampsia / Eclampsia • Placenta previa • Placenta abruptio • Spontaneous abortion
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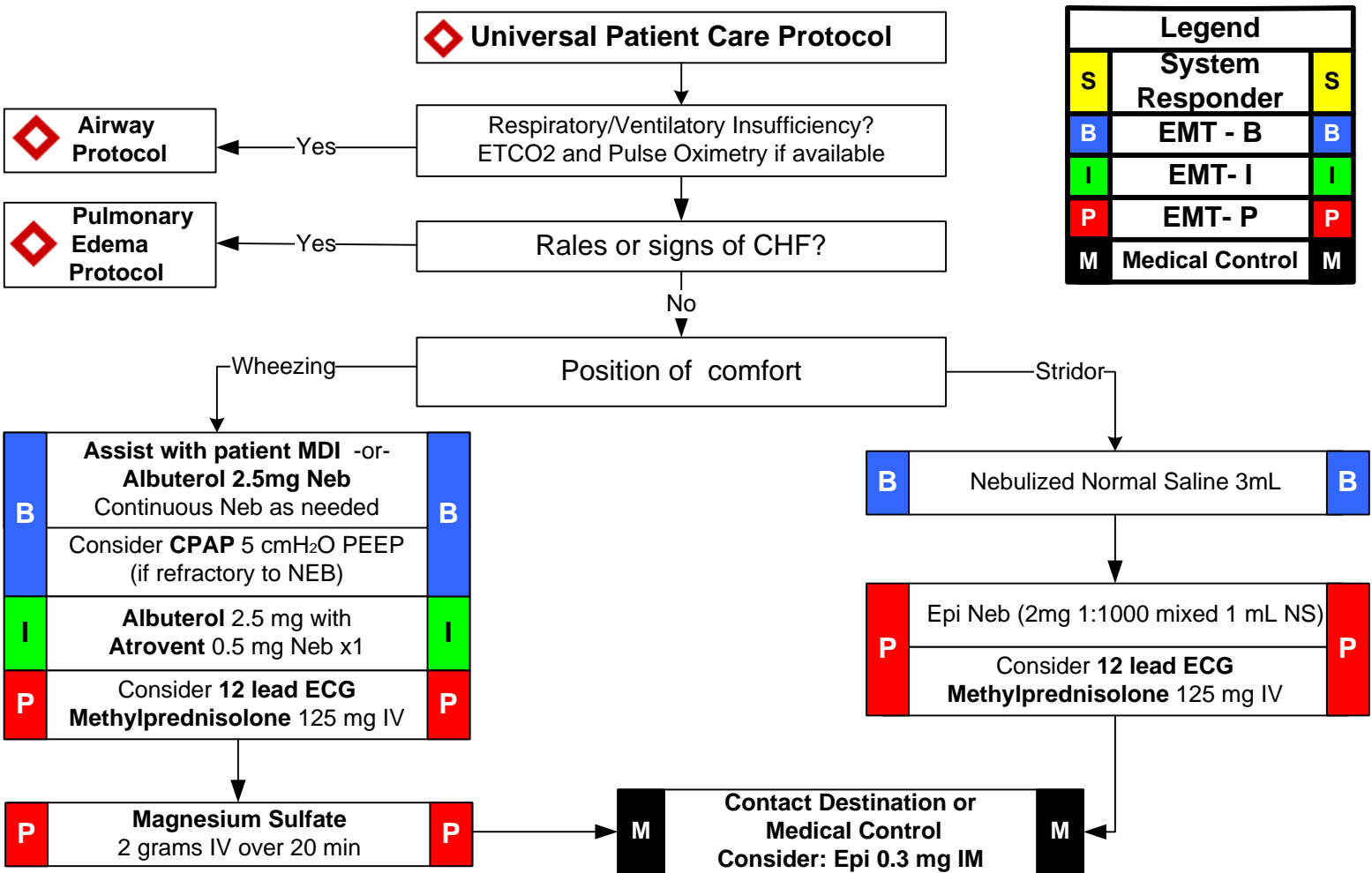


Pearls:

- **Ecclamptic seizures may occur up to 2 months post partum. Always consider in pregnant/recently pregnant seizing patient.**
- Severe headache, vision changes, edema, or RUQ pain may indicate preeclampsia.
- In the setting of pregnancy, hypertension is defined as a SBP greater than >140 or a DBP > 90, or relative increase of 30 systolic and 20 diastolic from the patient's normal (pre-pregnancy) blood pressure.
- Ask patient to quantify bleeding - number of pads used per hour.
- Any pregnant patient involved in a MVC should be seen immediately by a physician for evaluation and fetal monitoring.
- Magnesium may cause hypotension and decreased respiratory drive, monitor closely.
- Post partum hemorrhage defined as blood loss > 1000mL or greater than 500mL with signs/symptoms. 500mL blood loss is commonly seen in uncomplicated vaginal deliveries without signs or symptoms. The perineum should be checked for bleeding from vaginal tears which may be mistaken for uterine bleeding. Bleeding should be controlled by direct pressure over the laceration.
- The most common cause of post partum hemorrhage is uterine atony due to prolonged labor or multiple gestations
- If > 20 weeks, consider left lateral position.

Respiratory Distress

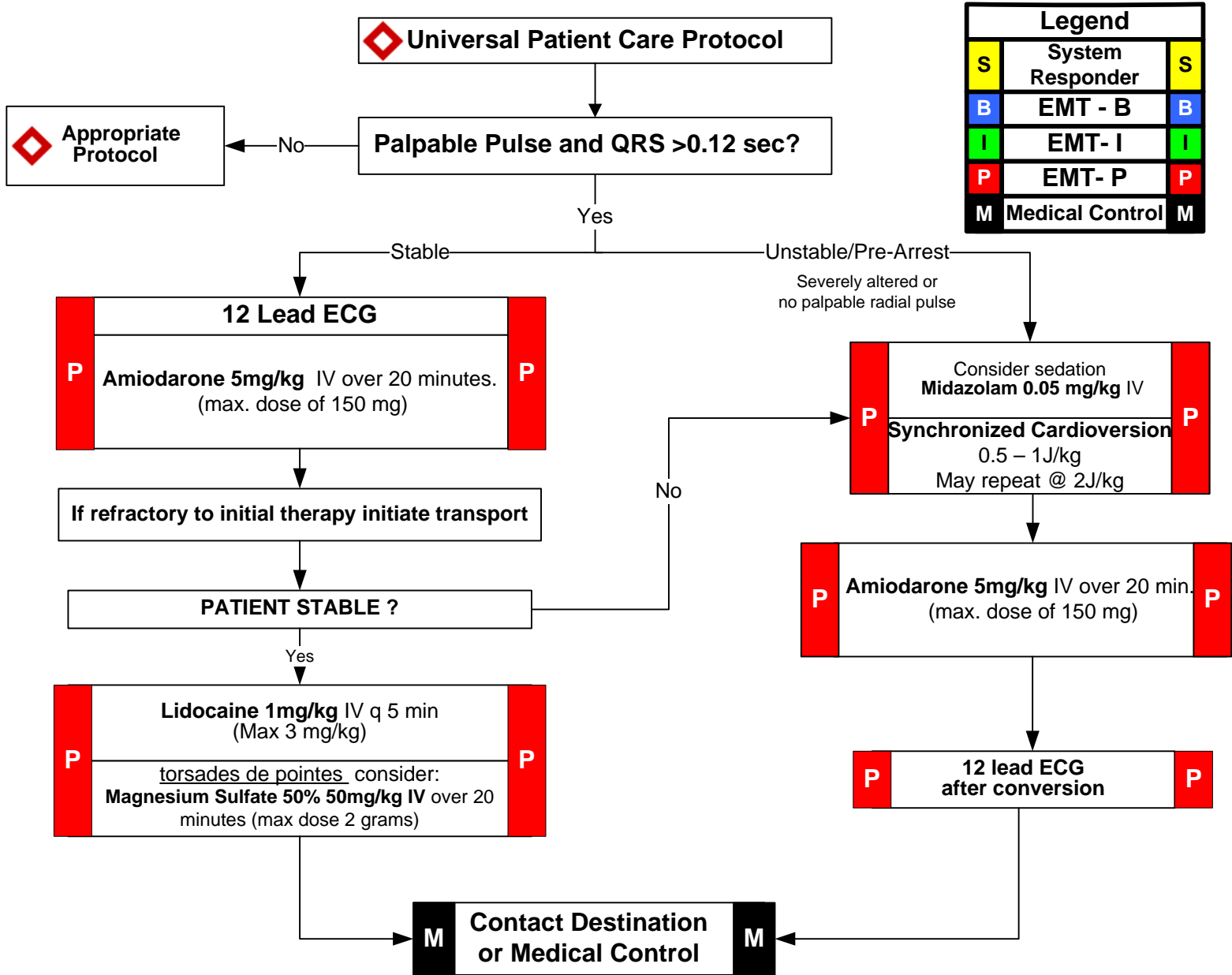
<p>History:</p> <ul style="list-style-type: none"> Asthma; COPD – chronic bronchitis, emphysema, congestive heart failure Home treatment (oxygen, nebulizer) Medications (theophylline, steroids, inhalers) Toxic exposure, smoke inhalation. 	<p>Signs & Symptoms:</p> <ul style="list-style-type: none"> Shortness of breath Pursed lip breathing Decreased ability to speak Increased respiratory rate and effort Wheezing, rhonchi, rales, stridor Use of accessory muscles Fever, cough Tachycardia 	<p>Differential:</p> <ul style="list-style-type: none"> Asthma/COPD (Emphysema, Bronchitis) Anaphylaxis Aspiration Pleural effusion Pneumonia Pulmonary embolus Pneumothorax Cardiac (MI or CHF) Pericardial tamponade Hyperventilation Inhaled toxin (Carbon monoxide, etc.)
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- Pearls:**
- ETCO₂ & Pulse Oximetry** must be monitored continuously if initial saturation is less than 95%, or there is a decline in patient's status despite normal pulse oximetry readings.
 - Epinephrine may precipitate cardiac ischemia. A 12-lead ECG must be performed on these patients.**
 - Consider contacting Medical Control if patient is refractory to therapy.
 - A silent chest in respiratory distress is a pre-respiratory arrest sign.

Wide Complex Tachycardia With A Pulse

History: <ul style="list-style-type: none"> • Past medical history / medications, diet, drugs • Syncope / Near syncope • Palpitations • Pacemaker • Allergies: Lidocaine / Novocaine 	Signs and Symptoms: <ul style="list-style-type: none"> • Ventricular Tachycardia on ECG (Runs or Sustained) • Conscious, rapid pulse • Chest Pain, Shortness of Breath • Dizziness • Rate usually 150-180 bpm for sustained V-Tach • QRS > 0.12 sec 	Differential: <ul style="list-style-type: none"> • Artifact / Device Failure • Cardiac • Endocrine/Electrolyte • Drugs/Toxic exposure • Pulmonary disease
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Legend		
S	System Responder	S
B	EMT - B	B
I	EMT- I	I
P	EMT- P	P
M	Medical Control	M

Pearls:

- For witnessed / monitored ventricular tachycardia, try having patient cough
- **If Lidocaine converts: Infusion of 20 – 50 mcg/kg/min**
- Maximum dose of antiarrhythmic should be given before changing antiarrhythmic.
- If hyperkalemia or tricyclic OD consider **Sodium Bicarbonate 1 mEq/kg early in intervention.**

Pediatric Calcium Gluconate Infusion 50 mg/kg

Dose 50 mg/kg over 5 minutes
Max dose 1 grams

Step 1
Determine Concentration

Concentration: __mg Calcium Gluconate in 50 mL NS
(must use 10 drop set)

Pt Weight	3kg	5kg	7kg	9kg	11kg	13kg	15kg	17kg
mg Calcium	150	250	350	450	550	650	750	850
mL Calcium	1.5mL	2.5mL	3.5mL	4.5mL	5.5mL	6.5mL	7.5mL	8.5mL
mL Calcium using 1 gram/10 mL packaging								
Pt Weight	19kg	21kg	23kg	25kg	27kg	30kg	33kg	36kg
mg Calcium	950	1000	1000	1000	1000	1000	1000	1000
mL Calcium	9.5mL	10mL	10mL	10mL	10mL	10mL	10mL	10mL

Step 2
Determine Rate

Rate is drops/minute with a 10 drop set

Dose in mL/min

50 mL /
5 min
100

Drops/minute