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| **#** | **Protocol or Appendix** | **Change** | **Reason** |
|  1. | All Protocols: All references to the Intermediate EMT have been removed. | The Intermediate section has been removed.  | Intermediate ends 4/1/17 AR 2-205. |
|  2. | Table of Contents. | Title Changes:1.1 Cardio-Cerebral Resuscitation/High Quality CPR-Adult2.12 Resuscitation of the Newly Born3.7 Targeted Temperature Management-Adult3.8 Post Resuscitative Care ( Adult & Pediatric added)6.1 BLS Albuterol (ILS removed). | To reflect Protocol update. |
|  3. | 1.0 Routine Patient Care-Assessment and Treatment Priorities. | Fluid bolus language added to the 6th bullet. Now reads: Within your scope of practice, obtain peripheral access via intravenous (IV) or intraosseous (IO) …Added: “For pediatric patients, a 20mL/kg fluid bolus if applicable”.  also Removed a repetitive bullet later in this section with the same language. | Standardized the pediatric dose. |
|  4. | 1.0 Routine Patient Care-Medication Use and Storage. | 9th bullet- the word withheld was removed The bullet reads: Avoid hyperoxygenation, oxygen administration should be titrated to patient condition, and administered with evidence of hypoxemia, dyspnea, or a SpO2 <94%, especially in the presence of a suspected CVA/TIA or ACS. | Formatting. |
|  5. | 1.0 Routine Patient Care-Medication Use and Storage. | Date requirement and infusion pump criteria has been removed.  | Pump requirement is being reviewed. |
|  6. | 1.1 High Quality CPR-Adult. Formerly protocol 6.2. | Protocol moved to the General Patient Care section. Reformatted. | Reminder to perform HQCPR for Cardiac Arrest patients.  |
|  7. | 2.2A-Allergic Reaction/Anaphylaxis-Adult, 2.2P- Allergic Reaction/Anaphylaxis-Pediatric and 2.6 P Bronchospasm/ Respiratory Distress-Pediatric. | Language change noting Epinephrine administration by auto injector “or IM”.  | Noting the Medical Director Option Protocol 6.6 Check and Inject Epinephrine by BLS Providers. |
|  8. | 2.2P Allergic Reaction/Anaphylaxis-Pediatric and 2.6P Bronchospasm/ Respiratory Distress-Pediatric. | Ratios removed from Epinephrine IM doses. | Technical fix. |
|  9. | 2.9, 2.10, 2.14 MCO, 2.15A, 2.15P, 3.7, 7.6 IFT D3-CVA and D5-Pregnancy. | Diazepam removedExcept the 10mg IM by auto-injector in the Paramedic Standing Order section of Protocol 2.9. | Midazolam is a more effective benzodiazepine. |
| 10. | Adult Med referencePediatric Med reference. | Diazepam **not removed.** | Kept in the med reference in the event of a medication shortage. |
| 11. | 2.4, 2.9, 2.10, 2.14 MCO, 2.15A, 2.15P, 3.7, 7.6 IFT D3-CVA and D5-Pregnancy. | Lorazepam removed. | Midazolam is a more effective benzodiazepine. |
| 12. | Adult Med referencePediatric Med reference. | Lorazepam **not removed**. | Kept in the med reference in the event of a medication shortage. |
| 13. | 2.11 Newly Born Care. | Wording change from newborn and infant to newly born. | Formatting. |
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| 14. | 2.13 Pain & Nausea ManagementAdult & Pediatric. | Added to the AEMT level: Adult: Ondansetron 4 mg PO (Oral Disintegrated Tablet (ODT) is the preferred route/IV/IO/IM.Pediatric: Ondansetron for child under or up to 25 kg, 2mg po by Oral Disintegrating Tablet (ODT). ODT is the preferred route/IV/IM:For a child over 25 kg, 4 mg PO by ODT (the preferred route)/IV/IM. | AEMTs can administer ondansetron. |
| 15. | 2.13 Pain & Nausea ManagementAdult & Pediatric. Released as an emergency change on 9/26/17. | Medications added to the Paramedic section:Adult:* Acetaminophen 650-1000 mg IV or PO
* Ibuprofen 600 mg PO
* Ketorolac 15 mg IV or 30 mg IM

Pediatric:* Acetaminophen 15 mg/kg IV or PO to max 1000 mg.
* Ibuprofen 10 mg/kg PO to max 600 mg.
* Ketorolac 0.5 mg/kg IV or IM to max 15 mg.
 | Non opioid medications added. |
| 16. | 2.13 Pain & Nausea ManagementAdult & Pediatric. | NOTE: All pain medications have contraindications-do not administer medications in such circumstances. These contraindications include but are not limited to: Ketorolac and ibuprofen are contraindicated in head injury, chest pain, abdominal pain, or in any patient with potential for bleeding, ulcer, or renal injury; likely to need surgery Acetaminophen is contraindicated in patients with liver failure. Ketorolac and ibuprofen are contraindicated in pregnancy. | Contraindication summary for non opioid medications. |
| 17. | 2.14 Poisoning/Substance Abuse/Overdose/Toxicology-Adult & Pediatric. | Added NOTE: Naloxone should only be administered in suspected overdose patients with inadequate respirations and respiratory rate. Treatment should progress toward the restoration of adequate respirations. Patients with inadequate respiratory rates may need to be ventilated until their respiratory rate increases. | Reminder to ensure adequate respirations. |
| 18. | 2.16A Shock-Adult. | Added this language to the Advanced box of the adult shock protocol in distributive, hypovolemic and obstructive shock: Consider Normal Saline fluid bolus. | Technical fix. |
| 19. | 2.16P Shock-Pediatric. | Added this language to the Advanced box of the pedi shock protocol in distributive, hypovolemic, obstructive shock: Consider 20 ml/kg Normal Saline fluid bolus. | Technical fix. |
| 20. | 2.18 Stroke. | FAST-ED Stroke scale added in place of the Massachusetts Stroke Scale. Two additional screening items-eye deviation and denial/neglect. Protocol and checklist formatted. | Improve prehospital assessment of the stroke patient.Technical Change. |
| 21. | 3.1 Acute Coronary Syndrome- Adult. | Page 2 Red Flag box language changed to read the same as routine cares, the word withheld has been removed. Now reads: Avoid hyperoxygenation, oxygen administration should be titrated to patient condition, and administered with evidence of hypoxemia, dyspnea, or a SpO2 <94%, especially in the presence of a suspected CVA/TIA or ACS. | Technical fix. |
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| 22. | 3.4A-Cardiac Arrest (Adult):Asystole/Pulseless Electrical Activity. | Added to the Paramedic Standing orders-For suspected hyperkalemia administer calcium chloride 2-4mg/kg slow IV over 5 minutes to maximum 1g.  also-Reformatted language to reflect 1.1 the CCR protocol.  also-wording changed EARLY DEFIBRILLATION was removed. Now reads: “Early AED Use.”3rd bullet reads: If No Shock Advised, Resume HQCPR when appropriate. | Begin hyperkalemia treatment in the field, Dialysis patients are at particular risk. Added indication.Technical fix.Technical fix. |
| 23. | 3.4P-Cardiac Arrest (Pediatric) Asystole/Pulseless Electrical Activity. | Added this language to the Advanced section: Consider 20 ml/kg Normal Saline bolus. also-wording changed EARLY DEFIBRILLATION was removed. 2nd bullet reads: If No Shock Advised resume CPR if appropriate. | Technical fix.Technical fix. |
| 24. | 3.7 Targeted Temperature Management-Adult. (New Name). | Formerly named Induced Therapeutic Hypothermia.-In the Contraindications box the temperature was changed to be <32 degrees. 2nd bullet reads: Hypothermia exists (< 32° C) by core temperature.-1 CAUTION box added that reads:**CAUTION:** Routine prehospital cooling of patients with ROSC with intravenous (IV) rapid infusion is not advised (class III: no benefit; level of evidence A). - 1 NOTE box added that reads: **NOTE:** The end temperature goal is 32-36 degrees C (89.6-96.8 F). | Reflecting the 2015 AHA Guidelines. |
| 25. | 3.8 Post Resuscitative Care/ROSC-Adult & Pediatric.  |  Pediatric added to the Protocol title.Added a line under the Paramedic Standing Orders 2nd bullet: Consider treatable causes such as respiratory arrest. Added a line under the Paramedic Standing Orders as a 3rd bullet to bolus IV fluid at a rate of 20 ml/kg.  Added under the Paramedic Standing Orders Norepinephrine infusion 0.1mcg/kg/min IV/IO via pump. Titrate to goal Systolic Blood Pressure of 90 mm Hg. Added to the Medical Control section:Epinephrine Infusion - Administer 0.1-1mcg/kg/min per minute IV or IO, by pump, with titration to goal SBP of 90 mmHg. * For example, mix 1 mg of 1:1000 Epinephrine in 250 ml Normal Saline, then 15 micro drops/minute = 1 mcg / min.

Please note: No Amiodarone or Lidocaine for Pediatric Patients.  | Managing Post Resuscitative Care in a Pediatric Patient. |
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| 26. | 4.5 Multisystem Trauma-Adult & Pediatric. | Added this language to the Paramedic –Standing Orders:For a patient > 16 years of age, who has SBP< 90 or P>110 or if the provider determines the patient to be at high risk for significant hemorrhage:Tranexamic Acid, 1 gram IV over 10 minutes. (mix 1 gram of TXA in 100ml of Normal Saline).-Note was added that reads: \*\***Note**: Service Medical Director Option for use of TXA only if trained and authorized, see 6.5 Tranexamic Acid. | Prevent blood loss in trauma patients. |
| 27. | 5.1A Upper Airway Obstruction-Adult. | In the AEMT section the word “advanced” has been removed.The AEMT order reads:* “Provide airway management if indicated for mechanical obstruction: If unable to remove obstructing foreign body, continue BLS airway management by providing positive pressure ventilations if needed”.
 | Technical fix. |
| 28. | 5.1A Upper Airway Obstruction-Adult. | The Intermediate section has been removed. This language has been moved to the Paramedic section-* “Perform direct laryngoscopy if foreign body suspected. If foreign body is visible and easily accessible, attempt removal with Magill Forceps”.
 | Technical fix. |
| 29. | 5.1P Upper Airway Obstruction-Pediatric. | The Intermediate section has been removed. This language has been moved to the Paramedic section-* “Provide advanced airway management if indicated for mechanical obstruction: perform direct laryngoscopy if foreign body is suspected. If foreign body is visible and readily accessible, attempt removal with Magill forceps. If unable to remove obstructing foreign body, continue BLS airway management by providing positive pressure ventilations”.
* ”If foreign body is removed, proceed with endotracheal intubation if necessary and perform capnography”.
 | Technical fix. |
| 30. | 5.2 Difficult Airway-Adult. | The Intermediate level was changed to the AEMT level.One line was removed (Provide Rescue Airway Management). The AEMT section reads:After completing your assessment as listed above:-If BVM failure is the result of a manageable cause.-Apply countermeasures if applicable.-If the patient can be ventilated, but the airway is unstable insert the supraglottic device. | Technical fix. |
| 31. | 5.3 Tracheostomy Tube Obstruction Management Adult & Pediatric. | Formatted only-removed repeated language. | Technical fix. |
| 32. | 6.2 Needle CricothyrotomyFormerly 6.3. | Protocol number changed. | Technical fix. |
| 33. | 6.3 Selective Spinal Assessment Formerly 6.4. | Protocol number changed. | Technical fix. |
| 34. | 6.4 Urban Search and Rescue (USAR) Formerly 6.5. | Protocol number changed. | Technical fix. |
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| 35. | 6.5 Tranexamic Acid Protocol. Released as an emergency change 10/26/17. | New Protocol-As a Medical Director Option:For a patient over > 16 years of age, who has SBP< 90 or HR >110 BPM, or if the provider determines the patient to be at high risk for significant hemorrhage:**Tranexamic Acid (TXA)** 1 gram IV over 10 minutes. (mix 1 gram of TXA in 100ml of Normal Saline). | Prevent blood loss in trauma patients. |
| 36. | 6.6 New Protocol-Check and Inject Epinephrine by BLS Providers. | New Protocol-Participants must meet the following criteria to participate:1. Affiliate Hospital Medical Director (AHMD)  approval to participate.2. Check and Inject kits (described above) are available.3. Initial training and AHMD oversight.4. EMT participants complete and pass a competency  exam.5. 100% standard tracking of cases with 100% CQI.6. Quarterly retraining of all EMTs. | Medical Director option for services to administer epinephrine IM by injection. Auto-injector not required.For use in protocols:2.2A-Allergic Reaction/Anaphylaxis-Adult, 2.2P- Allergic Reaction/Anaphylaxis-Pediatric and 2.6 P Bronchospasm/ Respiratory Distress-Pediatric. |
| 37. | 6.7 Acetaminophen IV. | New Protocol- With Affiliate Hospital Medical Director (AHMD) approval, an ambulance service may choose to stock the ALS ambulance(s) with IV acetaminophen, for administration by trained Paramedics as a pain medication option.Adult-**Acetaminophen** 650-1000 mg IV. Pediatric-**Acetaminophen** 15 mg/kg IV or PO to max 1000 mg. | A pain medication option by Paramedics with Medical Director approval. |
| 38. | Appendices AI-Adult Med Reference additions: acetaminophen, ibuprofen and ketorolac. | Added to reflect updates to Protocol 2.13 Pain and Nausea Management.  | Reference consistent with the Protocol. |
| 39. | Appendices AI-Adult Med Reference addition: Tranexamic Acid (TXA). | Added to reflect updates to Protocol 4.5 Multisystem Trauma. | Reference consistent with the Protocol. |
| 40. | Appendices A2-Pediatric Med Reference. | This language was added-NOTE: if you are using an appropriate weight or size based dosing system for an approved medication, use the dose specified in that system. If not, use the dose given in the applicable protocol. | Clarifying Language: The reference is a guide-reminding providers to use doses specified in the protocols. |
| 41. | Appendix A2-Pediatric Med Reference additions:acetaminophen, ibuprofen and ketorolac. | Added to reflect updates to Protocol 2.13 Pain and Nausea Management. | Updated the Appendix to reflect the Protocol. |
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| 42. | IFT–page 7 B1-Pediatric Patients.Released as an emergency change 10/26/17. | Language amended now reads:Neonate/Pediatric Critical CareB1 **–** PEDIATRIC PATIENTS (8 years of age or younger)❑  ***Any neonate (30 days or younger) requiring transfer for evaluation and/or treatment of an UNSTABILIZED acute condition.***❑ Any pediatric patient with critical illness or injury.**NOTE:** On-line **MEDICAL CONTROL** should be involved in determining whether pediatric patients require critical care.❑ Any pathology associated with the potential for imminent upper airway collapse and / orobstruction (including but not limited to airway burns, toxic inhalation, epiglottitis, retropharyngeal abscess, etc.). If any concerns whether patient falls into this category, contact MEDICAL CONTROL.❑ ***Any pediatric patient requiring acute ventilatory support (NIV, high flow NC, ventilator, etc.) who requires an interfacility transfer.***❑ All conditions that apply to adult medical patients also require CCT for the pediatric patient. NOTE: On-line MEDICAL CONTROL should be involved in determining whether pediatric patients require critical care. | This change is a technical correction. The current protocol requires Critical Care Transport for all intubated children. Many chronically-ventilator-dependent children do NOT actually require critical care transport, so the text of the requirement has been rewritten to require CCT only for acutely-intubated patients. Since critical care teams are a very scarce resource, this change allows pediatric patients to be safely and much more rapidly brought to the hospitals they require. |
| 43. | A4 SOP Airway/Respiratory Management. | Orogastric tube added to the Paramedic SOP.Now reads nasogastric/orogastric tube.andVentilator added an \* to ventilator operation. The line “adult only” was removed noting the change in the IFT–Pediatric protocol. | Paramedic skill.Allowed under CCR protocolParamedic skill. |
| 44. | A4 SOP Routes of Access/Medication Administration. | Added IM to the Basic level.  | Basic skill with AHMD approval for IM Epinephrine. |
| 45. | A4 SOP Advanced EMT med list under Cardiac Management section.  | Ondansetron added to AEMT med list. | Reflects Protocol 2.13 Pain & Nausea protocol. |
| 46. | A4 SOP other skills. | Added blood lactate analysis. | Paramedic skill. |
| 47. | A5 Department Approved Point of Entry Plans. | Department Approved POE’s-the title was replaced with Department Approved Point of Entry Plans. | Technical fix. |
| 48. | A5 STEMI POE. | Intermediate removed in #1. Sentence reads …. BLS or Advanced EMT level will go to the closest appropriate health care facility. | Technical fix. |
| 49. | A5 Stroke POE. | under “Determining most appropriate transport” -#1. 2 hours changed to 5.-#4 removed-referenced patient arriving 2 hours after symptom onset…. | Technical Fix reflecting protocol. |