

**Medical Control Guideline: TREATMENT PROTOCOL QUALITY IMPROVEMENT  
FALLOUT DATA DICTIONARY**

**DEFINITION:**

**Fallout:** a deviation from an established standard.

**PRINCIPLES:**

1. An EMS QI program incorporating the Treatment Protocols is essential to effectively evaluate the quality of prehospital care as well as the efficiency in providing emergency medical services.
2. A collaborative relationship between Base Hospitals and EMS Provider Agencies is necessary for a comprehensive and effective quality improvement (QI) program.
3. Base Hospitals and EMS Provider Agencies shall evaluate the appropriate utilization of the Treatment Protocols based on the fallout outlines below.

**GUIDELINES:**

**I. EMS PROVIDER AGENCY**

1. ALL TREATMENT PROTOCOLS
  - a. Provider Impression (PI)
    - Primary PI not documented
    - Primary PI clinically incorrect
    - Secondary PI not documented when appropriate
  - b. Treatment Protocol (TP)
    - Designated TP for PI not used
    - Secondary TP for secondary PI not used when appropriate
  - c. Airway (AW)
    - Adult - Unresponsive requiring Bag-Mask-Ventilation (BMV) and oropharyngeal airway not used
    - Advanced airway (ET tube, supraglottic airway) not used for ineffective BMV
    - Advanced airway used prior to resuscitation goals met for patients in cardiac arrest
    - Capnography not used for any positive pressure ventilation
    - Positive pressure ventilation required and not performed
  - d. Oxygen (O<sub>2</sub>) (O2)
    - Does not receive O<sub>2</sub> and O<sub>2</sub> sat <94% (<88% COPD), unless newborn or pediatric congenital heart disease
    - Meets criteria for high flow O<sub>2</sub> and patient does not receive
    - Receives O<sub>2</sub> and O<sub>2</sub> sat >94% and patient does not meet criteria for high flow O<sub>2</sub>

- Pediatric – Newborn or pediatric congenital heart disease receive inappropriate O<sub>2</sub> as per MCG 1302
  - e. Pain (PN)
    - Pain level not recorded
    - Pain score  $\geq 7$  and pain not addressed
    - Pain treated and not reassessed
    - Incorrect dose of pain medication administered
  - f. Base Contact (BA)
    - Base contact not made when specified by Ref. No. 1200.1 or by specific protocol used
  - g. Receiving Hospital Notification (NT)
    - No notification to receiving hospital as per Ref. No. 1200.1
  - h. Transport (TS)
    - Advanced Life Support (ALS) transport not made when indicated by Ref. No. 1200.1
  - i. Destination (DS)
    - Failure to transport to a specialty center when indicated
    - Transport to the wrong specialty center; includes Trauma Center, STEMI Receiving Center, Perinatal Center, Emergency Department Approved for Pediatrics, Pediatric Medical Center, Primary Stroke Center and Comprehensive Stroke Center.
    - Transport to the incorrect stroke center level based on mLAPSS, LAMS and Last Known Well Time
  - j. Documentation (DO)
    - Erroneous Provider Impression or Treatment Protocol documentation due to data entry error alone
  - k. Color Code Drug Doses (DD)
    - Pediatric – for children  $\leq 14$  years weight (kg) and Color Code not documented
    - Pediatric – for children  $\leq 14$  years weight (kg) or Color Code incorrect
  - l. Fluid Administration (FL)
    - Adult – Normal Saline 1L not administered for poor perfusion or other protocol-specific indication (unless contraindicated because of pulmonary edema or multi-system trauma patient)
    - Pediatric – Normal Saline 20mL/kg not administered for poor perfusion or other protocol-specific indication
    - Patient not reassessed after each Normal Saline 250mL and fluids continued
  - m. Ondansetron (ON)
    - Pediatric – Ondansetron 4mg ODT given to patient  $< 4$  years old
    - Not administered when indicated
2. TP 1202 / 1202-P – GENERAL MEDICAL  
As per “All Treatment Protocols”
3. TP 1203 / 1203-P – DIABETIC EMERGENCIES

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- a. Glucose (GL)
    - Blood glucose not checked
  - b. Low Blood Glucose (LG)
    - Blood glucose < 60 and not treated
  4. TP 1204 / 1204-P – FEVER / SEPSIS  
As per “All Treatment Protocols”
  5. TP 1205 / 1205-P – GI/GU EMERGENCIES  
As per “All Treatment Protocols”
  6. TP 1206 / 1206-P – MEDICAL DEVICE MALFUNCTION  
As per “All Treatment Protocols”
  7. TP 1207 / 1207-P – SHOCK / HYPOTENSION
    - a. Vascular Access (VA)
      - Vascular access not attempted for patient
      - Intraosseous line not attempted when Intravenous Line cannot be established and Intraosseous Line indicated per MCG 1375
      - Intraosseous Line placed without indication as per MCG 1375
    - b. Cardiac Monitoring (CM)
      - Cardiac monitoring not initiated
    - c. Fluid Administration (FL)
      - Any universal fallout as specified above
      - Additional Normal Saline 1L for adults or 20mL/kg for pediatrics not administered for persistent poor perfusion after initial NS infusion (unless contraindicated or withheld by Base order)
    - d. Push-Dose Epinephrine (PD)
      - Base contact not made to discuss or Push-Dose Epinephrine not initiated for persistent poor perfusion or poor perfusion with pulmonary edema
  8. TP 1208 / 1208-P – AGITATED DELIRIUM
    - a. Sedation (SE)
      - Adult – Midazolam not administered in patient requiring restraints or for provider safety
      - Pediatric – Base contact not made to discuss Midazolam administration in patients requiring restraints or for provider safety
      - Pediatric – Midazolam administered without Base order
      - Midazolam administered in patient not meeting criteria (not requiring restraints or not agitated with 2 or more of confusion, diaphoresis, tactile fever, tachycardia)
  9. TP 1209 / 1209-P – BEHAVIORAL / PSYCHIATRIC CRISIS
    - a. Sedation (SE)
      - Midazolam not administered in patient requiring restraints or for provider safety

- Midazolam administered in patient not meeting criteria (not requiring restraints for patient or provider safety)
- Midazolam administered without Base order

10. TP 1210 / 1210-P – CARDIAC ARREST

- Scene (**SD**)
  - Patient transported prior to at least 20 minutes of on-scene resuscitation
- Vascular Access (**VA**)
  - Vascular Access not attempted for patient
  - Intraosseous Line not attempted when intravenous line cannot be established and Intraosseous Line indicated per MCG 1375
- Capnography (**WC**)
  - Waveform capnography is not used throughout resuscitation
- Defibrillation (**DF**)
  - Adult – Defibrillation biphasic at 200J not performed immediately for shockable rhythm
  - Pediatric – Defibrillation at 2J/kg not performed immediately for shockable rhythm
  - Pediatric – Repeat defibrillation at 4J/kg not performed when indicated
  - Defibrillation performed for non-shockable rhythm
- Epinephrine (**EP**)
  - Epinephrine administered prior to defibrillation x 2 for shockable rhythm
  - Epinephrine not administered after defibrillation x 2 for shockable rhythm
  - Epinephrine not administered for PEA/Asystole
- Amiodarone (**AM**)
  - Amiodarone not administered for persistent or recurrent V-Fib/V-Tach without pulses
  - Amiodarone administered for rhythm besides persistent V-Fib/V-Tach without pulses
- 12-Lead ECG (**EC**)
  - 12-Lead ECG not performed after Return of Spontaneous Circulation (ROSC) per MCG 1308
  - 12-Lead ECG paramedic interpretation not documented
  - 12-Lead ECG software interpretation not documented
- Fluid Administration (**FL**)
  - Normal Saline not administered for PEA/Asystole
  - Normal Saline not administered for SBP <90 after ROSC
- Push-Dose Epinephrine (**PD**)
  - Adult – Push-dose epinephrine not administered for SBP <90mmHg after 250mL Normal Saline for ROSC
  - Pediatric – Push-dose epinephrine not administered for SBP <70mmHg after Normal Saline 20mL/kg for ROSC

11. TP 1211 – CARDIAC CHEST PAIN

- a. Cardiac Monitoring (CM)
  - Cardiac Monitoring not initiated
- b. 12-Lead ECG (EC)
  - 12-Lead ECG not performed as per MCG 1308
  - 12-Lead ECG paramedic interpretation not documented
  - 12-Lead ECG software interpretation not documented
- c. Aspirin (AS)
  - Aspirin not administered for alert patient (unless documented that patient is allergic to Aspirin/has contraindication to receiving Aspirin)
  - Aspirin administered to a pediatric patient
- d. Nitroglycerin (NG)
  - Nitroglycerin given for SBP <100mmHg
  - Nitroglycerin given when patient has taken sexually enhancing drugs within 48 hours
  - Nitroglycerin given without assessing for sexually enhancing drugs
  - Nitroglycerin not given despite chest pain and no documentation as to why withheld
  - Nitroglycerin given to a pediatric patient

12. TP 1212 / 1212P – CARDIAC DYSRHYTHMIA – BRADYCARDIA

- a. Cardiac Monitoring (CM)
  - Cardiac Monitoring not initiated
- b. 12-Lead ECG (EC)
  - 12-Lead ECG not performed as per MCG 1308
  - 12-Lead ECG paramedic interpretation not documented
  - 12-Lead ECG software interpretation not documented
- c. Chest Compressions (CC)
  - Pediatric - Chest compressions not performed for pulse <60bpm with persistent poor perfusion after O<sub>2</sub> and BMV
  - Pediatric - Chest compressions continued after pulse >60bpm
- d. Epinephrine (EP)
  - Pediatric – Epinephrine administered without O<sub>2</sub> and BMV/airway management for poor perfusion
  - Pediatric – Epinephrine not administered for persistent poor perfusion after O<sub>2</sub> and BMV
  - Pediatric – Epinephrine not administered at correct dose
- e. Atropine (AT)
  - Adult – Atropine not administered for poor perfusion (unless immediate Transcutaneous Pacing (TCP) is indicated and initiated)
  - Pediatric – Atropine not administered for suspected AV Block or increased vagal tone (unless immediate TCP indicated and initiated)
- f. Transcutaneous Pacing (TCP) (TC)
  - TCP not initiated for HR ≤ 40 with continued poor perfusion as per MCG 1365

13. TP 1213 / 1213-P – CARDIAC DYSRHYTHMIA – TACHYCARDIA

- a. Cardiac Monitoring (CM)
  - Cardiac Monitoring not initiated
- b. 12-Lead ECG (EC)
  - 12-Lead ECG not performed as per MCG 1308
  - 12-Lead ECG paramedic interpretation not documented
  - 12-Lead ECG software interpretation not documented
- c. Valsalva (VL)
  - Valsalva not attempted for supraventricular tachycardia (SVT)/narrow complex with adequate perfusion
- d. Adenosine (AD)
  - Adenosine not administered for SVT/narrow complex with adequate perfusion when Valsalva fails
  - Adenosine not administered for SVT/narrow complex in alert patient with poor perfusion
  - Adenosine not administered for Wide-Complex Regular Monomorphic Tachycardia with adequate perfusion
  - Adenosine dosing incorrect for poor perfusion
  - Adenosine given for Wide-Complex Irregular tachycardia
- e. Synchronized Cardioversion (SC)
  - Synchronized Cardioversion not performed for SVT/narrow complex with persistent poor perfusion
  - Synchronized Cardioversion not performed for SVT/narrow complex with ALOC
  - Synchronized Cardioversion not performed for Wide-Complex Regular Monomorphic Tachycardia with poor perfusion if adenosine fails and IV not immediately available
  - Synchronized Cardioversion not performed for Wide-Complex Irregular Tachycardia with poor perfusion

14. TP 1214 – PULMONARY EDEMA / CHF

- a. Continuous Positive Airway Pressure (CPAP) (CP)
  - CPAP not administered for moderate to severe respiratory distress (SBP  $\geq$  90mmHg and no contraindications)
  - CPAP administered to patient with contraindications
- b. Cardiac Monitoring (CM)
  - Cardiac monitoring not initiated
- c. Vascular Access (VA)
  - Vascular Access not attempted for patient
  - Intraosseous Line not attempted when intravenous line cannot be established and Intraosseous Line indicated per MCG 1375
  - Intraosseous Line placed without indication as per MCG 1375
- d. Nitroglycerin (NG)
  - Nitroglycerin not administered
  - Nitroglycerin given for SBP <100mmHG

- Nitroglycerin given when patient has taken sexually enhancing drugs within 48 hours
- Nitroglycerin given without assessing for sexually enhancing drugs
- Nitroglycerin dose incorrect for SBP
- e. Albuterol (AL)
  - Albuterol not given for patient with wheezing despite CPAP

15. TP 1215 / 1215-P – CHILDBIRTH MOTHER

- a. Vascular Access (VA)
  - Vascular Access attempt delays transport
- b. Amniotic Sac (AN)
  - Amniotic sac showing with presenting crown and sac rupture not performed and/or documented
- c. Fundal Massage (FM)
  - Fundal massage not performed after placenta delivery
- d. Destination (DS)
  - Incorrect transport destination based on gestational age

16. TP 1216-P – NEWBORN / NEONATAL RESUSCITATION

- a. Amniotic Sac (AN)
  - Amniotic sac showing with presenting crown and sac rupture not performed and/or documented
- b. Vascular Access (VA)
  - Vascular Access not attempted for a child who does not respond to initial resuscitation and BMV
  - Vascular Access attempt delays transport
- c. Chest Compressions (CC)
  - Chest compressions not performed for pulse <60bpm after BMV for 30 seconds
  - Chest compressions continued after pulse >60bpm
- d. Epinephrine (EP)
  - Epinephrine not administered for <60bpm once chest compressions begun
  - Epinephrine not administered at correct dose

17. TP 1217 / 1217-P – PREGNANCY COMPLICATION

- a. Vascular Access (VA)
  - Vascular Access not attempted
  - Vascular Access attempt delays transport
- b. Amniotic Sac (AN)
  - Amniotic sac showing with presenting crown and sac rupture not performed and/or documented
- c. Abnormal Delivery (AB)

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- Abnormal delivery not managed per protocol
- d. Tranexamic Acid (TX)
- TXA administered when not indicated or contraindicated
  - TXA not administered when indicated
  - Improper administration of TXA (rate/dose/route)
18. TP 1218 / 1218-P – PREGNANCY LABOR  
As per “All Protocols”
19. TP 1219 / 1219-P – ALLERGY
- a. Epinephrine (EP)
- Epinephrine not administered for anaphylaxis
  - Epinephrine not administered at correct dose
  - Epinephrine not administered every 10min x 2 for persistent symptoms
  - Epinephrine administered by incorrect route
  - More than 3 doses of epinephrine administered
- b. Vascular Access (VA)
- Vascular Access not attempted for patient with anaphylaxis
  - Intraosseous Line not attempted when Intravenous Line cannot be established in patients in anaphylactic shock
  - Intraosseous Line placed without indication as per MCG 1375
- c. Albuterol (AL)
- Albuterol not given for patient with wheezing
20. TP 1220 / 1220-P – BURNS
- a. Clothing (CL)
- Clothing (jewelry) not removed from affected area
- b. Burn Management (BM)
- Burn type not identified
  - Burn not managed by protocol for type
- c. Warming Measures (WM)
- Measures not taken to keep patient warm
21. TP 1221 / 1221-P – ELECTROCUTION
- a. Cardiac Monitoring (CM)
- Cardiac Monitoring not initiated
- b. Clothing (CL)
- Clothing (jewelry) not removed from affected area
22. TP 1222 / 1222-P – HYPERTHERMIA (ENVIRONMENTAL)
- a. Cardiac Monitoring (CM)
- Cardiac Monitoring not initiated



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- b. Cooling Measures (CO)
    - Cooling measures not initiated
  - 23. TP 1223 / 1223-P – HYPOTHERMIA / COLD INJURY
    - a. Cardiac Monitoring (CM)
      - Cardiac Monitoring not initiated
    - b. Warming Measures (WM)
      - Warming measure not initiated
  - 24. TP 1224 / 1224-P – STINGS / VENOMOUS BITES
    - a. Venomous Bite (VB)
      - Bite not managed by protocol for type
  - 25. TP 1225 / 1225-P – SUBMERSION
    - a. Cardiac Monitoring (CM)
      - Cardiac Monitoring not initiated
    - b. Warming Measures (WM)
      - Warming measures not initiated
  - 26. TP 1226 / 1226-P – ENT / DENTAL EMERGENCIES
    - a. Control Bleeding (CB)
      - Bleeding control with direct pressure not attempted when indicated
    - b. Tooth Avulsion (TA)
      - Avulsed tooth not placed in Normal Saline
  - 27. TP 1227 – Omitted
  - 28. TP 1228 / 1228-P – EYE PROBLEM
    - a. Shield Eye (SH)
      - Globe rupture suspected and eye not shielded
    - b. Burn Management (BM)
      - Burn type not identified
      - Chemical burn not irrigated with Normal Saline 1L
      - Thermal burn not covered with dry dressing
    - c. Ondansetron (ON)
      - Ondansetron not administered to nauseated patient with suspected globe rupture
  - 29. TP 1229 / 1229-P – ALOC
    - a. Cardiac Monitoring (CM)
      - Cardiac monitoring not initiated

- b. Vascular Access (VA)
  - Vascular Access not attempted for patient
  - Intraosseous Line not attempted when Intravenous Line cannot be established and Intraosseous Line indicated as per MCG 1375
  - Intraosseous Line placed without indication as per MCG 1375
- c. Glucose (GL)
  - Blood Glucose not checked
- d. Modified Los Angeles Prehospital Stroke Screen (mLAPSS) (ML)
  - Adult – mLAPSS not performed when GCS is adequate for patient cooperation
  - Pediatric – Neurological exam not performed/documented

30. TP 1230 / 1230-P – DIZZINESS / VERTIGO

- a. Glucose (GL)
  - Blood Glucose not checked
- b. Modified Los Angeles Prehospital Stroke Screen (mLAPSS) (ML)
  - Adult – mLAPSS not performed for vertigo
  - Pediatric – Neurological exam not performed/documented

31. TP 1231 / 1231-P – SEIZURE

- a. Midazolam (MD)
  - Midazolam not administered for active seizure
  - Midazolam dose incorrect
  - Midazolam frequency incorrect
- b. Glucose (GL)
  - Blood Glucose not checked for persistent ALOC

32. TP 1232 / 1232-P – STROKE / CVA / TIA

- a. Cardiac Monitoring (CM)
  - Cardiac Monitoring not initiated
- b. Vascular Access (VA)
  - Vascular Access not attempted for patients with Los Angeles Motor Score (LAMS) 4 or 5
- c. Glucose (GL)
  - Blood Glucose not checked
- d. Modified Los Angeles Prehospital Stroke Screen (mLAPSS) (ML)
  - mLAPSS not performed if GCS  $\geq$  8
  - mLAPSS not documented
- e. Los Angeles Motor Score (LAMS) (LA)
  - LAMS not performed for positive mLAPSS
  - LAMS not documented for positive mLAPSS

- f. Last Known Well Time (LK)
  - Last Known Well Time not documented

33. TP 1233 / 1233-P – SYNCOPE / NEAR SYNCOPE

- a. Cardiac Monitoring (CM)
  - Cardiac monitoring not initiated
- b. 12-Lead ECG (EC)
  - 12-Lead ECG not performed as per MCG 1308
  - 12-Lead ECG paramedic interpretation not documented
  - 12-Lead ECG software interpretation not documented

34. TP 1234 / 1234-P – AIRWAY OBSTRUCTION

- a. Obstructed Airway (OA)
  - > 1 year old - abdominal thrusts not performed in conscious patient who is unable to speak
  - < 1 year old – back blows/chest thrusts not performed in conscious patient
  - Chest compressions not initiated on patient that loses consciousness
  - Laryngoscopy not performed to visualize potential obstruction if chest compressions fail to dislodge foreign body
  - Visible foreign body removal not attempted with McGill forceps if laryngoscopy performed
- b. Unmanageable Airway (UA)
  - Immediate MAR transport not initiated
- c. Cardiac Monitoring (CM)
  - Cardiac Monitoring not initiated
- d. Epinephrine (EP)
  - Epinephrine neb not administered for stridor with respiratory distress
  - Epinephrine IM not administered for visible airway/tongue swelling
  - Epinephrine not administered at correct dose
  - Epinephrine not administered by correct route for indication
  - Epinephrine not administered at correct frequency
  - Epinephrine neb administered more than 2 times
- e. Tracheostomy Management (TM)
  - Suctioning not attempted
  - Inner cannula not removed and cleaned if present
  - Tracheostomy not removed and replaced when indicated

35. TP 1235-P – BRUE

- Cardiac Monitoring (CM)
  - Cardiac monitoring not initiated

36. TP 1236 / 1236-P – INHALATION INJURY

- a. Remove from Environment (RE)
  - Patient not removed from environment for ongoing exposure

- b. Epinephrine (EP)
  - Epinephrine neb not administered for stridor with respiratory distress
  - Epinephrine not administered at correct dose
  - Epinephrine not administered at correct frequency
  - Epinephrine neb administered more than 2 times
- c. Albuterol (AL)
  - Albuterol not given for patient with wheezing/bronchospasm
- d. Continuous Positive Airway Pressure (CPAP) (CP)
  - CPAP not administered for moderate to severe respiratory distress (SBP  $\geq$  90mmHg, no contraindications, and patient size > length-based resuscitation tape)
  - CPAP administered to patient with contraindications

37. TP 1237 / 1237-P – RESPIRATORY DISTRESS

- a. Continuous Positive Airway Pressure (CPAP) (CP)
  - CPAP not administered for moderate to severe respiratory distress (SBP  $\geq$  90mmHg, no contraindications, and patient size > length-based resuscitation tape)
  - CPAP administered to patient with contraindications
- b. Albuterol (AL)
  - Albuterol not given for patient with wheezing
- c. Epinephrine (EP)
  - Epinephrine IM not administered for deteriorating respiratory status despite albuterol
  - Epinephrine not administered at correct dose
- d. Needle Thoracostomy (NE)
  - Needle Thoracostomy not performed when indicated as per MCG 1335
  - Needle Thoracostomy performed when not indicated as per MCG 1335

38. TP 1238 / 1238-P – CARBON MONOXIDE EXPOSURE

- a. Remove from Environment (RE)
  - Patient not removed from environment for ongoing exposure

39. TP 1239 / 1239-P – DYSTONIC REACTION

- a. Diphenhydramine (DP)
  - Dystonic reaction not recognized
  - Diphenhydramine not administered

40. TP 1240 / 1240-P – HAZMAT

- a. Clothing (CL)
  - Clothing not removed
- b. Decontaminate (DC)

- Decontamination not performed as indicated
- c. Irrigation (IR)
  - Eyes not flushed when indicated
  - Eye not irrigated with at least 1L Normal Saline
- d. Cardiac Monitoring (CM)
  - Cardiac Monitoring not initiated
- e. Nerve Agent Exposure (NA)
  - DuoDote not administered per protocol
- f. Organophosphate Exposure (OG)
  - Atropine not administered as indicated per protocol
- g. Radiologic Exposure (RA)
  - Detection device not utilized for suspected contamination
  - Cause of contamination not determined (if contamination confirmed)
  - Treatment not initiated for life threatening conditions in conjunction with decontamination (treatment delayed for decontamination)

41. TP 1241 / 1241-P – OVERDOSE / POISONING / INGESTION

- a. Naloxone (NL)
  - Naloxone not administered for hypoventilation/apnea in suspected opiate overdose
  - Incorrect dose used for administration route
- b. Glucose (GL)
  - Blood Glucose not checked
- c. Antidote (AE)
  - Correct antidote not administered when available for suspected exposure

42. TP 1242 / 1242-P – CRUSH INJURY / SYNDROME

- e. Hospital Emergency Response Team (HERT) (HT)
  - HERT not activated for anticipated prolonged entrapment (>30 minutes) or when otherwise indicated
- f. Vascular Access (VA)
  - Vascular Access not attempted
  - No discussion with base for Intraosseous Line if unable to establish Intravenous Line
  - Intraosseous Line placed without indication as per MCG 1375
- g. Fluid Administration (FL)
  - Adult – Normal Saline not administered as soon as possible prior to release
  - Adult – Less than 2L Normal Saline administered (unless contraindicated or hospital arrival prior to completion)
  - Pediatric – Normal Saline 20mL/kg not administered as soon as possible and prior to release
  - Pediatric – greater than 40mL/kg Normal Saline administered without base order

- Patient not assessed after each Normal Saline 250mL and fluids continued unless contraindicated
- h. Cardiac Monitoring (CM)
  - Cardiac monitoring not initiated
- i. Warming Measures (WM)
  - Measures not taken to keep patient warm
- j. Hyperkalemia (HK)
  - Calcium Chloride not administered when evidence of hyperkalemia
  - Sodium Bicarbonate not administered when evidence of hyperkalemia
  - Albuterol not administered when evidence of hyperkalemia
  - Medications administered at wrong dose and/or route
- k. Crush Syndrome (CS)
  - Potential for Crush Syndrome not identified
  - Calcium Chloride not administered when risk for crush syndrome
  - Sodium Bicarbonate not administered when risk for crush syndrome
  - Albuterol not administered when risk for crush syndrome
  - Medications administered at wrong dose and/or route
  - Medications administered at wrong time (not administered just prior to release of entrapment)
- l. Tranexamic Acid (TX)
  - TXA administered when not indicated or contraindicated
  - TXA not administered when indicated
  - Improper administration of TXA (rate/dose/route)

43. TP 1243 / 1243-P – TRAUMATIC ARREST

- a. Scene (SD)
  - Patient transport delay
- b. Control Bleeding (CB)
  - Bleeding control not attempted when indicated
  - Tourniquet not applied when indicated as per MCG 1370
- c. Needle Thoracostomy (NE)
  - Needle Thoracostomy not performed when indicated as per MCG 1335
  - Needle Thoracostomy performed when not indicated as per MCG 1335
- d. Defibrillation (DF)
  - Adult - Defibrillation biphasic at 200J not performed immediately for shockable rhythm
  - Pediatric – Defibrillation not performed immediately for shockable rhythm as per MCG 1309
  - Defibrillation performed for non-shockable rhythm
- e. Spinal Motion Restriction (SMR) (SR)
  - Backboard used solely for purpose of SMR
  - Transport delayed for SMR

- f. Vascular Access (VA)
  - Vascular Access not attempted
  - Intraosseous Line not attempted when Intravenous Line cannot be established as per MCG 1375
  - Transport delayed for vascular access
- g. Fluid Administration (FL)
  - Normal Saline not administered by rapid infusion
  - Less than 2L Normal Saline initiated

44. TP 1244 / 1244-P – TRAUMATIC INJURY

- m. Scene (SD)
  - Patient transport delayed
- n. Control Bleeding (CB)
  - Bleeding control not attempted when indicated
  - Tourniquet not applied when indicated as per MCG 1370
- o. Needle Thoracostomy (NE)
  - Needle Thoracostomy not performed when indicated as per MCG 1335
  - Needle Thoracostomy performed when not indicated as per MCG 1335
- p. Spinal Motion Restriction (SMR) (SR)
  - Backboard used solely for the purpose of SMR
  - Transport delayed for SMR
  - SMR not performed when indicated as per MCG 1360
  - SMR performed when not indicated and potentially harmful as per MCG 1360
  - Alert patient not rolled off backboard for transport (unless safety concern)
- q. Ondansetron (ON)
  - Ondansetron not administered to nauseated patient with suspected traumatic brain injury
- r. Fluid Administration (FL)
  - Inappropriate fluid administration for patient condition
  - Fluids not ordered when indicated or inadequate volume of fluids ordered
- s. Tranexamic Acid (TX)
  - TXA administered when not indicated or contraindicated
  - TXA not administered when indicated
  - Improper administration of TXA (rate/dose/route)

**II. BASE HOSPITAL**

1. ALL BASE CONTACTS

- a. Provider Impression (PI)
  - Primary PI in discussion with paramedics is clinically incorrect and/or not supported with documented data

- 
- Primary PI not documented
  - Secondary PI not documented when appropriate
  
  - b. Treatment Protocol (TP)
    - Designated TP for PI not used
    - Secondary TP for secondary PI not used when appropriate
    - Base hospital orders deviate from treatment protocol standards without documented clinical rationale
  
  - c. Critical Interventions
    - a. Synchronized Cardioversion (SC)
      - Inappropriate cardioversion (indication, energy, timing)
      - Cardioversion not ordered when indicated
  
    - b. Push-Dose Epinephrine (PD)
      - Inappropriate administration of push-dose epinephrine (indication, dose, timing)
      - Push-dose epinephrine not ordered when indicated
  
    - c. Transcutaneous Pacing (TCP) (TC)
      - Inappropriate administration of TCP (indication, settings, timing)
      - TCP not ordered when indicated
  
    - d. Fluid Administration (FL)
      - Inappropriate fluid administration for patient condition
      - Fluids not ordered when indicated or inadequate volume of fluids ordered
  
    - e. Pain (PN)
      - Inappropriate pain management treatment (indication, dose, frequency)
      - Pain management not ordered when indicated
  
  - d. Transport (TS)
    - Advanced Life Support (ALS) transport not made when indicated by Ref. No. 1200.1 (i.e. inappropriate BLS downgrade)
  
  - e. Destination (DS)
    - Not directing transport to a specialty center when indicated
    - Directing transport to the wrong specialty center; includes Trauma Center, Perinatal Center, STEMI Receiving Center, Primary and Comprehensive Stroke Centers, Emergency Department Approved for Pediatrics and Pediatric Medical Center.
    - Directing transport to the incorrect stroke center level based on mLAPSS, LAMS and Last Known Well Time
  
  - f. Termination of Resuscitation (TR)
    - Cardiac Resuscitation terminated without meeting Ref. 814 criteria
    - Cardiac arrest transported when meets Ref. 814 criteria and judgement for transport not described