Tucson Medical Center (TMC) Base Hospital Administrative Orders and Protocols are offline procedures approved by TMC Base Hospital Medical Director. Each set of Administrative/Standing Orders and Protocols will be reviewed by all EMCTs working under TMC Medical Direction. These procedures will be used to provide the care to the best of their education, experience and within their full scope of practice. TMC Base Hospital members will receive the full support of the Medical Director when providing care to this level.

Index

Tucson Medical Center

Base Hospital

Definition of A Patient

1. “Patient” is defined as an individual who is sick, injured, or wounded and who may require medical monitoring, medical treatment and/or transport
2. A patient should meet one or more of the following criteria:
   - An acute chief medical complaint
   - Signs or symptoms of illness or injury
   - Involved in an event with significant mechanism that could cause injury
   - Appears disoriented or to have impaired cognitive function
   - Exhibits or verbalizes suicidal/homicidal intent
   - A person with knowledge of the individual requests treatment and/or transport on the patient’s behalf; on-transport would require a documented informed refusal.
3. A person meeting the definition of a patient will be transported ALS, EMT or treated and released per Standing Orders or Administrative Orders.
4. If the patient or responsible adult declines ambulance transport & requests POV or non-transport, guidelines for determining decision-making capacity and informed refusal will be followed & documented
5. A patient care record will be initiated for each individual meeting the definition of a patient
6. Documentation will accurately reflect the initial evaluation, care rendered and disposition of each patient

06-10; Revised 1-15; 4-15-1/16;12-18
Reviewed 2/21

Tucson Medical Center

Base Hospital

Definition of a Non-Patient

1. “Non-patient” refers to an individual that EMS has responded to who doesn’t meet the definition of a patient
2. Non-patients may still be evaluated, interviewed, screened or assisted by TMC EMS personnel but a provider-patient relationship would not result
3. Non-patient may include but is not limited to:
    - Minor MVC with no injuries requiring treatment, no medical condition or mechanism, and not requesting transport
    - No current or transient sign & symptom of illness or injury
    - Public or invalid assist not resulting in, or caused by, an acute illness or injury
    - 911 response with no person found
4. A detailed patient care record is not required
5. Documentation should include short description of assessment, evaluation and findings
6. EMS providers can recommend transport of any non-patient if deemed in the person’s best interest
7. Reference SAEMS Non Injury Non Patient

Tucson Medical Center

Base Hospital

ALS ASSESSMENT THRESHOLDS AND CARE PROTOCOL

If patient meets one or more ALS assessment thresholds, transport ALS. Any exceptions must be justified & thoroughly documented

- **Sepsis Alert** and ALS Transport for 2 or more of the following
- **PEDS Sepsis:** HR, RR, or SBP outside wt./age-based ranges on Peds field guides.
- **ADULT Sepsis:**
  - ✓ HR ≥ 90bpm
  - ✓ RR ≥ 20 bpm
  - ✓ SBP ≤ 90 mmHg
- **All patients:**
  - ✓ Temperature ≥ 102° or higher
  - ✓ ETCO2 ≤ 32 mmHg
  - ✓ Pulse Ox 90% RA or below; 94% or below on supplemental O2
  - ✓ FSBG 120 or above without history of Diabetes
  - ✓ Absent or diminished bowel sounds
  - ✓ Temperature instability
  - ✓ Suspected infection or significant exposure
  - ✓ New onset or prolonged altered mental status
  - ✓ New onset or worsening jaundice
  - ✓ Recent surgical procedure or injury
- ≤ 3 month-old with any symptoms of illness or injury
- 55-year-old or above with fever 102° or higher
- Delay in return to cognitive baseline within 20 minutes of event leading to call; atypical mentation, acute change in mental status, stroke like symptoms with onset unconfirmed, transient or ≤ 24 hours; only responsive to painful or noxious stimuli
- Patient impaired by hypo/hyper-tension. New onset or worsening signs of cardiovascular compromise, uncontrolled bleeding or signs of shock
- New onset or worsening respiratory distress or anaphylaxis
- New onset or worsening cardiac symptoms and/or ECG changes
- Unstable abdominal pain, highly suspected ingestion, poisoning or OD
- Pregnancy with decreased fetal movement, bleeding or imminent delivery
- New onset/unexplained GI/GU/GYN bleeding ≥ 250 ml
- Symptoms consistent with critically abnormal electrolytes or blood glucose
- Combined hypotension and increased temperature or increased index of suspicion for sepsis
- Any patient requiring active re-warming or cooling

06/10; revised 3/11-2017; 1/19
Reviewed 2/21

- Paramedic care and treatment per TMC Standing/Administrative/Protocols or SAEMS protocols as approved by TMC Medical Direction with in your scope of practice per ADHS
- Advance Training as approved by TMC Medical Direction:
  - ATV
  - Central line maintenance and access
  - CPAP
  - Cricothyrotomy
  - External pacing
  - Intraosseous (tibia/humerus)
  - Intubation, ETDLAD (Esophageal Tracheal Double Lumen Airway Device) Insertion e.g. Combitube, King Air
  - Haz Mat
  - Needle Thoracotomy
  - OTC Medications
  - Push Dose Epi
  - SMR and MIST
- SAEMS SO which are approved for use

  - ✓ Burn
  - ✓ Cardiac Arrest
  - ✓ DOS
  - ✓ Dyspnea
  - ✓ Hazmat Patient
  - ✓ Hypothermia
  - ✓ Peds Cardiac Arrest
  - ✓ Sexual Assault
  - ✓ Snakebite

- SAEMS protocols are approved for use

  - ✓ Abuse or Neglect
  - ✓ Airway Management Protocol
  - ✓ Authority
  - ✓ Communications Procedure
  - ✓ CRC Triage
  - ✓ Cricothyrotomy
  - ✓ Critical Pediatric Triage
  - ✓ Disaster Triage
  - ✓ Disaster Medical Management
  - ✓ Divert/Bypass Protocol
  - ✓ External Pacing
  - ✓ Haz Mat Incident
  - ✓ High Risk OB Triage
  - ✓ Infection Control
  - ✓ Needle Thoracotomy
  - ✓ Non- Patient Non-Injury
  - ✓ Physician on Scene
  - ✓ Prehospital Medical Care Directives
  - ✓ Receiving Facility
  - ✓ Refusal
  - ✓ Restraint
  - ✓ Tourniquet Management
  - ✓ Trauma Triage Decision Scheme

- Vital signs (VS) X2 prior to transfer of care:
  HR, RR, BP, Pulse Ox, Temperature, Pain Assessment (as resources allow)
- 911 initiated calls; repeat VS q 15 minutes for stable and q 5 minutes for unstable patients during transport and/or after treatments. Interfacility transports q 30 minutes for stable and as needed for unstable patient
- Control bleeding, use direct pressure and/or tourniquets as appropriate following TQAO
- $ETCO_2$ monitoring (if available) for intubated patients as time & resources allow

06/10; revised 3/11-2017; 1/19
Reviewed 2/21

Tucson Medical Center

Base Hospital

EMT ASSESSMENT THRESHOLDS AND CARE PROTOCOL

Call for ALS transport (if available); begin transport to closest facility and/or ALS unit if one or more of these thresholds are not met

A-AIRWAY

- Pulse Ox ≥ 94% on RA *or* prescribed O2 *or* at known baseline
- Mucous membranes pink
- Airway patent

B-BREATHING

- Respiratory Rate appropriate for age and diagnosis
  - ✓ Adult 10-24 minute
  - ✓ Child 16-40 minute
- Breath sounds clear and equal bilaterally or at known baseline

C-CIRCULATION

- Heart Rate appropriate for age and diagnosis
  - ✓ Adult 60-130 bpm
  - ✓ Child 80-160 bpm
  - ✓ Infant 90-190 bpm
- Radial pulses palpable and equal bilaterally
- BP appropriate for age and diagnosis
  - ✓ Adult 90-180 SBP
  - ✓ Child SBP >70+ (age x2)
- Orthostatic Negative:
  - After positional change, lasting 2 minutes, pt. must be:
    - ✓ Asymptomatic
    - ✓ Have a decrease in SBP ≤ 20mmHg, and/or
    - ✓ An increase in HR ≤ 20 bpm
    - ✓ Caution if patient is on beta-blockers

D-DISABILITY

- GCS 13 or above
- A&Ox4 or responds to verbal stimuli and becomes A&Ox4
- Adult & Peds FSBG 70 or below 400
- Neonate FSBG 40 or 100 or below
- 6-Item Cognitive Screen (Score 5-6)
- Stroke like symptoms that are chronic or confirmed onset ≥24 hours.

E-ENVIRONMENT

- ≥ 3 months-old- 55-year-old Temperature ≥ 97º and ≤ 102 **and/or**
  - ✓ Skin pink, warm and dry
- If PEDS ≥ 3- month old consider assessment and findings

Follow for all individuals meeting the definition of a patient

- EMT care and treatment per TMC Standing/Administrative/Protocols or SAEMS standing/protocols as approved by TMC medical direction with in your scope of practice per ADHS
- Advance Training as approved by TMC medical direction
  - Patient assisted medication administration
    - ✓ Auto injector medications
    - ✓ Nitroglycerin
    - ✓ Albuterol inhalers
  - ASA administration for cardiac patients
  - Epinephrine auto-injector
  - ETDLAD (Esophageal Tracheal Double Lumen

Airway Device) Insertion e.g. King Air
- Glucose administration
- IV Therapy
- Naloxone administration
- Nebulized albuterol administration
- OTC Medications
- SMR and MIST
- Cardiac EMT acquisition

- SAEMS SO which are approved for use
  - ✓ Burn
  - ✓ Cardiac Arrest
  - ✓ DOS
  - ✓ Dyspnea
  - ✓ Hazmat Patients
  - ✓ Hypothermia
  - ✓ Pediatric Cardiac Arrest
  - ✓ Sexual Assault
  - ✓ Snakebite
- SAEMS protocols are approved for use
  - ✓ Abuse or Neglect
  - ✓ Airway Management Protocol
  - ✓ Assessment
  - ✓ Authority
  - ✓ Communications Procedure
  - ✓ CRC Triage
  - ✓ Critical Pediatric Triage
  - ✓ Disaster Triage
  - ✓ Disaster Medical Management
  - ✓ Divert/Bypass Protocol
  - ✓ Haz Mat Incident
  - ✓ High Risk OB Triage
  - ✓ Infection Control
  - ✓ Physician on Scene
  - ✓ Non-Patient Non-Injury
  - ✓ Prehospital Medical Care Directives
  - ✓ Prehospital Transport Skill
  - ✓ Receiving Facility
  - ✓ Refusal
  - ✓ Restraint
  - ✓ Tourniquet Management
  - ✓ Trauma Triage Decision Scheme

- Vital signs (VS) X2 prior to transfer of care: HR, RR, BP, Pulse Ox, Temperature, Pain Assessment (as resources allow)
- 911 initiated calls; repeat VS q 15 minutes for stable and q 5 minutes for unstable patients during transport and/or after treatments. Interfacility transports q 30 minutes for stable and as needed for unstable patient
- Control bleeding, use direct pressure and/or tourniquets as appropriate following TQ AO
- ALS transport for all patients who have received or been assisted with prehospital medications unless otherwise specified in Standing/Administrative Orders or on-line medical direction

EXCLUSION

- Chest pain meeting **Chest Pain AO**
- Electrocution
- Foreign body aspiration
- Symptomatic overdose/poisoning
- Pregnancy with imminent delivery
- Near Drowning
- Syncope
- Traumatic injury meeting SAEMS Anatomic or Physiologic Trauma Triage Criteria
- EMS Provider concern for serious illness/injury that might require ALS care

Treat and Release

1. EMS providers may respond to calls, assess and provide treatment followed by the patient refusing further BLS or ALS evaluation, treatment and/or ambulance transport
2. This Treat and Release requires that an informed refusal as specified in the administrative/standing orders be followed
3. Individuals requesting Treat and Release must be ≥ 18 years of age or provide documentation of emancipated minor status. In the case of a minor child online consultation needs to occur if unable to follow refusal protocols
4. Online consultation with TMC Medical Direction has to be completed on all patients being treated then refusing transport

Transport of an Impaired Person

1. **Law Enforcement/POV**
   - A person who appears disoriented and/or cognitively impaired under the influence of alcohol who does not meet the definition of a patient who can protect their airway and is ambulatory and will not require a provider/patient relationship and may be transported to a safe haven via law enforcement or POV.

2. **EMT-BLS**
   - An impaired patient under the influence of alcohol that meets the definition of a patient requiring a provider/patient relationship, who is non-ambulatory, can protect their airway and is within the BLS thresholds and may be transferred to BLS for transport to the closest most appropriate facility. Follow ***ETOH AO*** along with any other ***AO-SO*** needed.

3. **Paramedic-ALS**
   - An impaired patient under the influence of alcohol who is unable to protect their airway or does not meet BLS thresholds is to be transported by ALS to the closest most appropriate facility. For those agencies that do not have ALS available, do not delay transport and care of the patient. Call for ALS transport, moving toward that ALS unit treating patient within full scope of practice. Follow ***ETOH AO*** along with any other ***AO-SO*** needed.

Developed 4-15; 01-16;12-17
Reviewed 2/21

Tucson Medical Center

Base Hospital

TRANSPORT DESTINATIONS

Considerations: Patient choice, stable vs unstable, regional triage protocols, certified specialty centers or MCI/MMRS protocols. In addition, follow your administrative/standing orders for destinations

Unstable patient to closest facility (Symptomatic circulatory or respiratory compromised requiring immediate intervention from ED staff)

Patients ≤ 14 years requiring ALS care and/or ALS transport should be taken to a Pediatric Critical Care Facility (Phoenix Children, BUMC-T or TMC). In outlying areas with a transport time greater than 30 minutes, consider closest facility for stabilization and/or air transport.
Exception: Pediatric Pulseless and/or Apneic transport to the closest facility

Frequent User - closest appropriate facility based upon chief complaint

Behavioral/Psychiatric- patients Patient choice or closest facility

Burn- patients meeting SAEMS Burn Criteria- in Tucson area contact BUMC-T for burn consult for patient destination. In outlying areas with a transport time greater than 30 minutes, consider closest facility for stabilization and/or air transport.
May consult with Burn Centers for patient destination in all areas

Injured- patients NOT meeting SAEMS Trauma Triage Criteria-Patient choice or closest facility

Pregnancy- Appropriate level of Perinatal Center
≤ 20 weeks: Patient choice unless unstable, then closest facility
≥ 20 weeks follow SAEMS High Risk OB Triage Protocol

STEMI- patients transport to a 24/7 Interventional Cardiac Cath Lab. In outlying areas with a transport time greater than 30 minutes, consider closest facility for stabilization and/ or air transport.

Stroke- patients transport to a Primary Stroke Center; all Tucson EDs except BUMC-SC. In outlying areas with a transport time greater than 30 minutes, consider transport to the closest facility for stabilization and/or air transport

Trauma -patients meeting SAEMS Trauma Triage Criteria “mechanism only” transport to closest Trauma Center. Patients meeting Anatomic, Physiologic and Mechanism, transport to a Level One Center. In outlying areas with a transport time greater than 30 minutes, consider transport to the closest facility and/or air transport directly to the Level One Trauma Center.
May consult BUMC-T if patient destination is in question

SAEMS PREHOSPITAL PROTOCOLS

CARDIAC RECEIVING CENTER (CRC) TRIAGE PROTOCOL

I. Patients with an unstable airway should be transported to the closest facility

II. Any non-traumatic Out of Hospital Cardiac Arrest (OHCA) patient with a Return Of Spontaneous Circulation (ROSC) should be transported to a Regional Cardiac Receiving Center if all of the following inclusion criteria are met:

Inclusion Criteria

- Adult (age 18 or older) not known to be pregnant
- Palpable pulse or other evidence of spontaneous circulation after non-traumatic OHCA
- GCS less than 8 after ROSC
- Less than 30 minutes of CPR performed prior to EMS arrival
- No uncontrolled hemorrhage
- No persistent unstable arrhythmia
- No evidence of severe hypothermia related arrhythmia
- No Prehospital advance directive for withholding care

III. POST CARDIAC ARREST CARE

A. The following guidelines should be used when transporting to a Cardiac Receiving Center

EMS personnel will notify the CRC as soon as possible

- Maintain ventilation rate of 10 breaths per minute
- Consider antiarrhythmic medication
- Do NOT actively warm patients
- Consider dopamine for persistent hypotension
- Perform 12 lead if available

IV. SPECIAL NOTES

A. Transport to a CRC when feasible, resources available, and less than 15 minutes is added to the transport time when compared to transport to a non-CRC.

B. Cardiac Receiving Centers are designated by the State of Arizona Department of Health Services based upon their ability to deliver therapeutic hypothermia and 24/7 cardiac catheterization. (In Tucson: NMC, OVH, TMC, SJH, SMH, VA, Banner UMC-Tucson and South Campus)

C. In outlying areas with a transport time of greater than 30 minutes to a CRC, transport the patient to the closest facility, or consider air transport directly to a CRC.

Approved: 10/2008 Revised: 11/09, 6/10, 05/12, 12/13, 04/14, 10/16/18

Tucson Medical Center

Base Hospital

Protocol Deviation Statement

Tucson Medical Center (TMC) Base Hospital Protocols are off-line orders as approved by the Administrative Base Hospital Medical Director. These protocols are set forth as guidelines to provide guidance for all medical or traumatic emergencies. It is expected that all EMCT professionals based with TMC or working with an agencies having a Base Hospital Agreement with TMC provide care to the best of their ability and within their full scope of practice.

It is not reasonable to expect any single document to cover all situations where providers may make an assessment that indicates a deviation from these protocols may be necessary. These guidelines are not meant to be absolute treatment doctrines nor are they a substitute for the judgment and experience of the provider. Providers are expected to utilize their best clinical judgment and deliver care and procedures according to what is reasonable and prudent for specific situations. Under rare circumstances deviation may be necessary.

Deviation from protocol should always be done with both the public's and patient's best interest in mind and backed by documented clinical reasoning and judgment. In circumstance where it would not cause further harm and the provider believes a patient may clinically benefit from an intervention, or that following the protocol would be harmful or not in the best interest of the patient, the following procedure should be followed:

1. The EMCT on scene is responsible for performing a complete assessment and determining if a protocol deviation is warranted. Providers must be able to demonstrate they were aware of, and considered the guidance provided with TMC protocols, and understand the risks associated with deviating from protocol.
2. When considering a protocol deviation, a peer with the appropriate level of expertise should be consulted (if available) or call medical direction.
3. ***ONLY*** if a provider is comfortable performing the deviation and treatment is consistent with their level of training, may they proceed with the deviation. Documentation must include the reasons for the deviation, all clinical data validating safety, mitigating risk, and the response/effects. The provide must advise the receiving physician of the deviation and document it clearly on the PCR. In all cases providers are expected to deliver care within the scope of practice for their certification.
4. Any protocol deviations will be reported to their Supervisor, Agency EMS Coordinator and Base Hospital Manager within 24 hours. This serves as a safeguard to remind providers that protocol deviations are considered a rare necessity. All deviations are subject to review to determine whether or not it was appropriate.

Tucson Medical Center

Base Hospital

Determination of Resuscitation

1. **Reversible Conditions-** Unless other signs of irreversible death as present, resuscitative efforts must be initiated when:
   - Hypothermia secondary to submersion
   - Drug OD
   - Exposure
   - Electrocution
   - Return of ROSC
   - A shock was delivered
   - Arrest was witnessed

2. **Irreversible Death (Code 900)** No resuscitative efforts required if:
   - Decapitation
   - Decomposition
   - Extrusion of brain matter
   - Pulseless and apneic with removal of the lower half of the body
   - Full thickness burns over 90% of total BSA and no obvious signs of life

3. **Orange Form/Prehospital Medical Care Directive (PHMCD) DNR**
   No resuscitative efforts required if:
   - patient is pulseless and apneic ***and***, no on-scene request to resuscitate
   - a DNR ***does not*** apply to children and adults with disabilities in public or private schools. *Resuscitative efforts should be initiated. (ARS 36-3251)*

4. ****DNR** does not mean **Do Not Treat******
   - If patient is not in cardiac arrest upon arrival of EMS, refer to the appropriate treatment AO/SO. Palliative care is not withheld.