

Name _____ MRN _____ TN _____ Admit Date _____

Actions: _____ TNC Review	_____ M&M Review	_____ TPG/P&P development
_____ TMD Review	_____ PRC Review	_____ Teaching case (in addition to M&M)
_____ Reviewer initials	_____ Outside Peer	_____ Forward to another department: _____

Indicators for committee review:

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| <ul style="list-style-type: none"> <input type="checkbox"/> All deaths <input type="checkbox"/> Variations from Trauma Practice Guidelines <input type="checkbox"/> All failed non-operative management cases <input type="checkbox"/> All re-admissions related to trauma | <ul style="list-style-type: none"> <input type="checkbox"/> Within 30 days <input type="checkbox"/> Within 72 hours <input type="checkbox"/> Open FX to OR > 8 hours after injury (except type I) <input type="checkbox"/> All sentinel events |
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Indicators for review by Trauma Coordinator for tracking and trending: Any indicator may require further review at the discretion of the TNC or TMD.

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| <p>1. EMS filters: Agency _____</p> <ul style="list-style-type: none"> a) Immobilization—inadequate/misplaced b) Airway issue—unrecognized/complication c) Other _____ <p>2. ED filters</p> <ul style="list-style-type: none"> a) Nursing documentation <ul style="list-style-type: none"> i) Incomplete full set of VS on any trauma patient (BP, P, R, GCS, T) ii) Serial VS not recorded on TTA patient iii) Appropriate monitoring/supervision for transport out of ED not recorded on TTA patient iv) No documentation of c-spine clearance v) EMS VS not documented vi) DC VS not done b) Procedure issues c) Variation from TPG d) Airway issues (i.e. delayed definitive or repositioning of pre-hospital tube) e) Delayed intervention for positive finding f) Inappropriate admission g) Nursing Care Issues h) Other _____ <p>3. TTA specific filters</p> <ul style="list-style-type: none"> a) TTA b) Undertriage c) Overtriage d) Delay in TTA _____ min e) Flow sheet missing/ incomplete f) Trauma Team ED LOS > 6 hours g) TTA d/c'd from ED h) ED MD not present on arrival _____ min <p>4. Pediatric filters</p> <ul style="list-style-type: none"> a) Pediatric resuscitations/arrests b) Pediatric trauma patient requiring intubation c) Deviation from pediatric admission/transfer TPG <p>5. Radiology filters</p> <ul style="list-style-type: none"> a) Reported delays to CT scan or other modality b) Interpretation discrepancy or misread c) Other _____ | <p>6. Spine/Neurosurgical filters</p> <ul style="list-style-type: none"> a) Deviation from c-spine TPG b) Spinal cord injury or deficit c) Other _____ <p>7. OR filters</p> <ul style="list-style-type: none"> a) Direct to OR from ED b) Reported delay to OR c) Complication d) Other _____ <p>8. ICU/floor filters</p> <ul style="list-style-type: none"> a) Reported chest tube issue b) DVT prophylaxis not initiated c) Nursing care issues d) Unplanned transfer to ICU e) CIWA Protocol issues f) Other _____ <p>9. Orthopedic filters</p> <ul style="list-style-type: none"> a) Open fracture >6 hours to OR b) Compartment syndrome evaluation/intervention c) Unplanned return to OR d) Other _____ <p>10. Transport/Transfer filters</p> <ul style="list-style-type: none"> a) Patient arrived via helicopter b) Transfer into RMC for trauma from: _____ c) Transfer out of RMC for trauma to: _____ d) Other _____ <p>11. Index Case filters</p> <ul style="list-style-type: none"> a) Bilateral pulmonary contusion requiring non-traditional ventilation b) Multi-system trauma with pre-existing or life-threatening coagulopathy c) Pelvic fractures with unrelenting hemorrhage d) Torn aorta e) Liver injuries with vena cava injury or requiring emergency surgery with liver packing f) No documentation of required call to Level I TC |
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TRAUMA GUIDELINES

Diagnoses requiring a **MANDATORY** trauma surgeon **CONSULT**:

- Any Traumatic ICH, including chronic ICH-especially if Anticoagulated
- Traumatic Skull Fractures
- Any head trauma with AMS or GCS < 12
- Spinal trauma with cord injury
- Three or more rib fractures
- Traumatic Hemothorax
- Traumatic Pneumothorax
- Ortho fxs requiring the ICU 2/2 orthopedic injury (blood loss, unstable VS)
- OMF trauma
- All GSWs
- All stab wounds
- Significant amputations
- Traumatic solid organ injury 2/2 trauma
- Traumatic hollow organ injury 2/2 trauma
- All drowning
- Greater than 20% BSA burn (Call UCH since that is where they need to be transferred)
- All traumatic arrests
- Multi-system trauma
- Anticoagulated trauma patients with supratherapeutic INR and/or significant blood loss
- Orbital blow out fractures

Diagnoses requiring a **MANDATORY TRANSFER** to a level I trauma center:

- Traumatic ICH, Including chronic ICH-especially if anticoagulated
- Traumatic Skull Fractures of any kind
- Head trauma with GCS < 12 or neurological deficit
- Spinal trauma with cord injury
- Ortho fractures requiring the ICU 2/2 orthopedic injury (blood loss, unstable VS)
- Multi-system trauma (i.e. hip fracture and traumatic pneumothorax)
- Solid organ injury (i.e. Grade III renal laceration/hematoma)
- Hollow organ injury (i.e perforated bowel 2/2 trauma)
- Greater than 20% BSA burn
- Orbital blow out fracture with entrapment
- Amputations (i.e. limbs, fingers and toes)

Appropriate Admissions to RMC

- Single isolated orthopedic fractures which are hemodynamically stable requiring pain control, surgical repair and/or PT
- Single system trauma **NOT** requiring the ICU admission
- Uncomplicated rib fractures (<3) **WITHOUT** hemothorax , pneumothorax or pulmonary contusion
- Pneumothorax/Hemothorax **NOT** requiring ICU
- Head trauma
 - **WITHOUT** focal neurologic deficit
 - GSC greater than **12** or without documented history of baseline altered GCS (i.e. dementia, cognitive delay)
- Pregnant patients with minor trauma requiring fetal heart monitoring
- < 20% BSA burns not requiring burn center management

TRAUMA TEAM ACTIVATION

Trauma Team Meets Patient

Physiologic Indicators

- Pulse > 120
- SBP < 90 or < 100 if over 65yo
- RR < 10 or > 20 **WITH** distress
- O₂ < 90% on RA
- Traumatic hemo or pneumo
- GCS < 13
- Traumatic Paralysis (**NOT** numbness/tingling)

Pediatric Parameters

Tachycardia for age **PLUS** poor perfusion
BP not appropriate for age (70 + 2x age)
RR not appropriate for age

Anatomic Indicators

Penetrating Injuries:

- Head – Neck – Torso
- Extremities proximal to elbow and knee
- Anything with neurovascular deficit, arterial bleeding, or high energy (i.e. GSW)

Amputation:

- Proximal to wrist or ankle

Fractures:

- Unstable pelvis
- 2 or more proximal long bones: any combination of femur, tibia, humerus

Head Injuries:

- Neuro deficits that are trauma related
- Pediatric LOC > 3 min, skull fx, GCS ≤ 13

Consider Alert or Consultation for Co-Morbid Factors including:

- Age < 5 yrs or > 55 yrs
- Medical Illness (COPD, renal failure, anticoag hx, etc.)
- Pregnancy
- Extreme heat or cold
- Presence of intoxicants
- Clinical suspicion of occult injury

Motor Vehicle Crash (MVC) with any of the following:

- With ejection
- High speed (≥ 40 mph)
- Unrestrained (≥ 20 mph)
- Death in same car
- Rollover
- Major vehicle damage (windshield starred, broken steering wheel, intrusion > 1 ft into passenger compartment, prolonged extrication)

Falls

- ≥ 15 ft
 - 2x height if child ≤ 6 yrs
- (Falls down stairs are **NOT** considered a fall from height)

MCC/Bike/ATV/Large Animal

- Crash speed ≥ 20 mph
OR
- Separation of rider ≥ 10 mph

Skier/Snowboarder/etc.

- Skier vs. tree
- Skier vs. skier
- High energy fall or jump

Burns

- ≥ 20% TBSA
- Circumferential extremity burns
- Partial/Full thickness burns of head or neck with risk of airway compromise
- Significant smoke inhalation

Pediatric Burn Parameters

> 10% **IF** < 6yrs

Other

- Non-Accidental Trauma
- Auto/Pedestrian (any speed **WITH** injury)

Description of Services for Trauma Med Director

A. Director of Service

Adam Barkin, MD shall serve as Director of the Trauma Service and perform the following undertakings:

1. Participate in the administrative functions by planning, directing, supervising and coordinating responsibility as necessary to ensure the effective and efficient management of the Trauma Service.
2. Monitor the quality and appropriateness of the Trauma Service.
3. Participate in Rose Medical Center's plans and programs adopted to assess and improve the quality and efficiency of the facility's services, including, but not limited to, quality assessment and performance improvement, utilization review, risk management, and infection control. Participate in development and approve applicable Trauma Service policies and procedures.
4. Provide such supervision, management and oversight to the Trauma Service to assure that the professional services rendered meet or exceed accepted standards of care.
5. Participate in the long range planning of Rose Medical Center's Trauma Service, including, but not limited to, equipment selection, budgeting, and staffing.
6. Support Rose Medical Center's medical education and employee in-service programs, and develop such educational programs for said programs as the facility shall reasonably request.
7. Cooperate with Rose Medical Center regarding administrative, operational or personnel problems in the Trauma Service and promptly inform Rose Medical Center and appropriate Medical Staff committees of professional problems in the Trauma Service in accordance with Medical Staff bylaws, rules and regulations and facility policies.
8. Assist Rose Medical Center in obtaining and maintaining accreditation and all licenses, permits and other authorizations, plus achieving all accreditation standards which are dependent upon, or applicable to, in whole or in part, the manner in which the Trauma Service is conducted.
9. Assure the maintenance of accurate, complete and timely patient and other records regarding the Trauma Service in order to facilitate the delivery of quality patient care and provide the information required for Rose Medical Center to obtain payment for its Trauma Services.
10. With the assistance of Rose Medical Center's staff, provide the facility's Chief Executive Officer or his designee with all requested written reports, including reports that may be addressed in performance review standards or other documents.
11. Demonstrate through education, experience and specialized training that Adam Barkin, MD has the qualifications to supervise and administer the Trauma Service properly, appropriate to the scope and complexity of the Trauma Services offered.

B. Description of Duties

1. Accreditation Efforts

A. The Director shall:

1. Provide consultation to Rose Medical Center on Trauma care and Trauma center development.

2. Oversee Trauma and Emergency Department (“ED”) staff ing, organizing, directing and maintaining the Trauma Program to meet criteria for a verified Level IV Trauma designation as outlined by the American College of Surgeons Committee on Trauma (“ACS COT”) and the State of Colorado;
3. Lead and participate in any and all measures reasonably required by Facility to achieve and maintain a verified Level IV Trauma designation for Facility's ED. The Director will:
 - Assist in the preparation of the application for the Trauma designation process.
 - Participate in the preparation for, and the actual on-site visit of, consultants or site inspectors reviewing Rose Medical Center’s capability in trauma and the care of patients.
 - Participate in any ACS COT Consultation, including but not limited to, pre-review meetings and the on-site review.

2. Liaison

- A. The Director will report to Rose Medical Center’s CEO and work closely with the Chief Medical Officer and other service/department Medical Directors at Rose Medical Center and within the HealthONE system.
- B. The Director will collaborate with Rose Medical Center, Medical Staff and other medical directors as needed to provide appropriate care for trauma patients and improve patient care processes for these patients.
- C. The Director will coordinate with appropriate heads of nursing and ancillary departments in defining the necessary nursing and support services required for the trauma program, and work with administration and medical/nursing staff to implement these services.
- D. The Director will serve as a liaison with local EMS agencies, other trauma centers and medical directors through appropriate committee participation.

3. Management

- A. The Director is responsible for the medical management of the trauma program at Rose Medical Center, and shall be responsible for overall development, implementation and evaluation of the program at Rose Medical Center.
- B. The Director will supervise the trauma services provided at Rose Medical Center, including services performed in the OR, ICU, ED, and Radiology. Such supervision will include:
 - Participating in planning, developing, implementing, monitoring and evaluating programs and services, defining quality improvement activities, and establishing clinical practice guidelines for the trauma service; and
 - Participating in the evaluation of patient clinical outcomes and reviewing clinical pathways/variances, including taking follow-up action if indicated;
 - Identifying new technologies and treatment modalities for the trauma program.
- C. The Director shall make recommendations for trauma privileges, enforce Rose Medical Center’s trauma policies and procedures, and participate in trauma case peer review.

- D. The Director will work cooperatively with the Trauma Nurse Coordinator to develop trauma protocols, policies and procedures that incorporate a comprehensive team approach to the care of the trauma patient. The Director will thereafter annually review Rose Medical Center's trauma protocols, policies and procedures.
- E. The Director will assist the Trauma Nurse Coordinator in complying with, and maintaining trauma registry reporting requirements.

4. Quality

- A. The Director shall be responsible for peer review of the quality of care provided in Rose Medical Center to all trauma patients. The Director will review medical records as necessary to evaluate the performance of the trauma team and quality of service.
- B. The Director will consult with the Chief Medical Officer, Medical Staff President, and/or the CEO regarding any quality of care issues, adverse outcomes and identified areas to improve patient care.
- C. The Director will respond and assist physicians in the ED or elsewhere in the Facility when additional information and expertise is needed for the care of any Facility patient.
- D. The Director must maintain current certification in Advance Trauma Life Support ("ATLS") and keep up to date with new and proven trauma care.
- E. The Director will assist the Trauma Nurse Coordinator in conducting quality activities to ensure the proper functioning of the trauma program. The Director will participate in initial PI processes and Trauma Review Committees as requested by the Trauma Nurse Coordinator.

5. Education

- A. As reasonably requested by Rose Medical Center, the Director will hold and/or participate in trauma educational in-service training activities associated with Rose Medical Center's medical staff, nursing staff and emergency medical services staff.

6. Committee Participation

- A. The Director agrees to attend and participate in meetings requested by Rose Medical Center that involve quality improvement, risk management, compliance, accreditations, or any meeting involving ED or Trauma strategy for Rose Medical Center. Such meetings may include, but not be limited to the following:
 - 1. Trauma Service department meetings - co-chair with the Trauma Nurse Coordinator
 - 2. Trauma Peer Review Committee - co-chair with the Trauma Nurse Coordinator
 - 3. Critical Care Committee
 - 4. Facility Peer Review Committee
 - 5. Medical Executive Committee
 - 6. HealthONE System EMS and Trauma Meetings
 - 7. Trauma Quality Improvement Committee - co-chair with the Trauma Nurse Coordinator
 - 8. Other applicable and ad hoc meetings as requested by Facility