SANFORD HEALTH

SANFORD ABERDEEN TRAUMA PROGRAM INFORMATION

SANFORD ABERDEEN MEDICAL CENTER (SAMC) opened in July 2012. The facility has 46 inpatient beds and a 9 bed Emergency Department. SAMC is currently a Level IV state designated trauma center. We will be seeking a renewal of that state designation in October 2019.

The population of Aberdeen is approximately 27,000 and the area population for the facility is 75,000-100,000. There is another hospital in the city that is also a verified Level III trauma center by the ACS. Current EMS protocols have trauma patients with life threatening injuries brought to the nearest facility; more minor injuries transported to patient's choice of facility. There is also another specialty hospital in town that does not have an emergency room.

The main economy and injury risks stem from the farming and the aging population especially with regard to same level falls.

EMERGENCY DEPT (1st floor)

- All emergency department physicians are emergency medicine trained and have taken ATLS
- The ED is also staffed with an ATLS trained APP from 10a-10p daily
- The entire emergency department nursing staff is TNCC, ACLS, & PALS trained
- 7 exam rooms
- 2 larger trauma rooms
- Telemedicine capable trauma room with connection to SMC (Sioux Falls, SD) or Regions Burn Center (St. Paul MN)
- Equipment is well labeled with all of the necessary equipment for the resuscitation of the trauma patient in a procedure cart in each trauma room
- Additional equipment includes Sonosite for bedside FAST exam, Rapid Infuser, Ambu ascope, GlideScope & GlideScope GO portable unit
- There is an emergency airway cart, an RSI kit and pediatric Broselow Cart.
- The rooms can be separately heated. There are also Bair Huggers and fluid warmers available.

TRAUMA TEAM ACTIVATIONS: SAMC has 3 levels of activation:
Please see the last page for trauma team activation criteria and note the absolute criteria for activation. *When in doubt, activate!* The team is activated by staff calling 6-4444 and stating which Level is being activated with a location of Emergency Department. Switchboard will then page out the appropriate team and call the trauma activation overhead. When possible, ED will make a separate call to surgeon and anesthesia staff to let them know patient/clinical information as the switchboard operator does not have that information.

- Level I Activation
  - 30 min surgeon response time from the time of patient arrival
  - Anesthesia is also called
- Level II Activation
  - 60 min surgeon response time from the time of patient arrival
  - Anesthesia is **not** called
- Trauma Consult (this is not called overhead or paged out; notify by calling surgeon directly)
  - For patients who do not fall within the criteria for Level I or Level II trauma team activation but are recommended by the ED physician to need the care & evaluation of a trauma surgeon.
  - Must be seen by Trauma Surgeon $\leq$ 8 hrs

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There is TXA & KCentra available through the pharmacy. The time for a type and screen takes approximately 45 minutes. O-Neg is available as immediate release and FFP can be ready in 15 minutes. There is both an adult & pediatric massive transfusion policy.

OPERATING ROOM/PACU/CATH LAB (2nd floor)

- The operating room has 4 surgical suites available.
- There is a full complement of personnel during daytime hours with an on-call crew with a 20-minute response time requirement during the off hours.
- There are five CRNAs and one FT anesthesiologist.
- The CRNAs respond to all trauma activations and if the operating room is required, the anesthesiologist also comes in to assist.
- The OR team is not automatically called with Trauma Activations, they are only called in if requested by the Trauma Surgeon
- The operating room is well equipped.
- The 8 bed PACU is well staffed and equipped.
- There are PACU nurses present during the day and then an on-call crew available off hours with a 20-minute response time expectation.
- Patients that will remain ventilated are recovered in the CCU.
- There is a Cardiac Cath Lab on 2nd floor which is available Mon-Fri 0700-1700

OUTPATIENTS/PATIENT CENTER (2nd floor)

- There is a 21-room pre-op/phase II recovery area attached to PACU.
- This is fully staffed during the day for outpatients infusions and same day surgery
- There is on call staff available at night & on weekends.

WOMEN'S CENTER/NURSERY (2nd floor)

- There are 8 LDRPs and 1 Triage/testing room
- Dedicated ultrasound in the department
- Family centered care with sleeping accommodations for family in each room
- Newborn nursery with special care nursery

CCU/MED/SURG/PEDS/ (3rd floor)

- 30 patient suites on this mixed acuity medical/surgical/pediatric/critical care floor
- One wing can be closed to create a 5 bed pediatric unit
- On unit Physical Therapy & Occupational Therapy
- Coordinated team care with Case Management, Clinical Pharmacist & Social Work.
- 8 of the 28 beds on the 3rd floor are Critical Care capable.
- These 8 ICU rooms are telemedicine equipped with intensivist services from aICU in St Louis.
- All Critical Care status patients have an aICU consult.
- The Trauma Surgeon remains in control of the trauma patients while in the CCU and are informed of all changes in the patient's condition
- Centralized telemetry monitoring done from CCU for other units

SANFORD HEALTH

Level 1 Trauma Activation Criteria

Trauma Team Arrival Time ≤30 min

PRIMARY SURVEY: PHYSIOLOGICAL Absolute Criteria

Airway	Unable to adequately ventilate, intubated or assisted ventilation		
Breathing	Respiratory Rate (per min)	<10 >29	Signs of respiratory insufficiency: hypoxia, accessory muscle use, grunting
Circulation	SBP <90 mm Hg		Signs of abnormal perfusion: capillary refill >2 sec, BP low for age Age / SBP (mm Hg) <1 y / <60 1-10 y / <70 + 2x age >10 y / <90
Deficit	GCS ≤10		Mechanism attributed to trauma

- Penetrating injuries/GSW to the head, neck, torso, or extremities proximal to the elbow/knee
- Transfer patient requiring blood to maintain VS
- Emergency Physician's discretion

SECONDARY SURVEY: Anatomic Considerations For Level 1 Trauma Activation

- Open or depressed skull fracture
- Paralysis or suspected spinal cord injury
- Flail chest
- Unstable pelvic fracture
- Amputation proximal to the wrist or ankle
- Two or more proximal long bone fractures (humerus or femur)
- Crushed, degloved, or mangled extremity

Level 2 Trauma Activation Criteria

Trauma Team Arrival Time ≤60 min

- GCS = 11-14 with mechanism attributed to trauma
- Falls: adult >20 ft, child >10ft or 3x height
- High-risk motorcycle/ auto crash with
  - Ejection (partial or complete)
  - Death in same passenger compartment
- Auto vs. pedestrian/cyclist thrown, run over, or with significant impact
- Burns >10% TBSA (second or third degree) and/or inhalation injury
- High-energy dissipation or rapid decelerating incidents
- High-energy electrical injury
- Suspicion of hypothermia, drowning, hanging
- Suspected non-accidental trauma
- Blunt abdominal injury with firm or distended abdomen or with seatbelt sign
- EMS and/or ED Provider judgment

Trauma Consult

Must be seen by Trauma surgeon ≤8 hrs

Patients who do not fall within the criteria for Level I or Level II trauma team activation, are hemodynamically stable, but are recommended by the ED physician to need the care and evaluation of a trauma surgeon.