Assessing TBI in the Field:
NorthBay Healthcare
Level II Trauma Center
“Hospital to Home”
NorthBay Ambulance Bay

Pre-hospital Delivery

- Pre-hospital report
  - Basic trauma information
  - Vital signs
- Transportation code (2 or 3)
- ETA
- 5-minute “Ring Down”
- Patient unloading
- Nursing Care
Emergency Department Entrance
Emergency Department Entrance

Patient Arrival

- Trauma level
  - Full vs Limited
  - Announcement
- Trauma Bay selection
- Crowd control
- Security
- Resource response
  - Lab / Radiology / Personnel
- Nursing Care
NorthBay Trauma Bay

Initial Patient Contact

- Pre-hospital report
- Detailed trauma information
- Initial evaluation
- Primary & Secondary surveys
- Vital signs
- Oxygen
- Warming
- Lab / Imaging
- FAST exam
- Nursing Care
Trauma Bay Transfusion Equipment
Resuscitation

- Multiple large gauge IV’s
- Rapid fluid infusers
- Fluid warmers
- Blood Refrigerator (O-)
- MTP
  - Massive transfusion protocol
- TXA
  - Tranexamic acid
- “Stop the Bleed”
- Nursing Care
Trauma Bay Supply Carts

Procedures

- Endotracheal tube
- Nasogastric/Orogastric tube
- Central venous catheter
- Intraosseous catheters (IO)
- Foley catheter
- Chest tube(s)
- Thoracotomy tray
- Minor surgical tray
- Splints / Immobilizers
- Nursing Care
Trauma Surgeon Computer
Trauma Surgeon Computer

Patient Care

- Antibiotics
- Pain medications
- Tetanus
- Wound care / dressings
- Trauma admission order set
  - Level of care
  - Nursing care
  - Medications
  - Consultations
CT Scanner
CT Scanner

Diagnostic Tests

- CT scans +/- contrast
  - Head / Maxillofacial
  - Cervical
  - Chest
  - Abdomen / Pelvis
  - Extremities
- CT Angiograms
- Ultrasound
- MRI
- Nursing Care
Surgical Operating Suite
Surgical Operating Suite

Surgical Intervention

- Trauma
- Cardiothoracic
- Abdominal / Pelvic
- Vascular
- Neurosurgery
- Orthopedic
- Maxillofacial / Plastics
- ENT
- Urology
- Nursing Care
Intensive Care Unit Room
Intensive Care Unit Room

Inpatient Care

- Physicians / Consultants
- Multidisciplinary teams
- Physical therapy (PT/OT)
- Respiratory therapy
- Dietary
- Social services
- Case management
- Nursing care
Discharge Transportation
Discharge Transportation

Disposition

- Home
- Skilled Nursing Facility
- Acute Rehab Facility
- Transitional Housing
- Other Healthcare Facilities
  - Tertiary Centers
  - Pre-paid Health Plan
  - Long Term Neuro Care
CASE PRESENTATION
NorthBay Ambulance Bay

Pre-hospital Delivery

- Pre-hospital report
- 31 y/o M: GSW to head and left forearm
- Vitals: P=160, BP=140/p, R=30, GCS=10
- Transportation: Code 3
- ETA: 20 minutes
- 16 minute “Ring Down”
- No change in condition
Emergency Department Entrance

Patient Arrival

- Trauma level: Full
  - Trauma surgeon, emergency physician, anesthesia, ED/OR personnel
  - Overhead announcement
- Trauma Bay #3
- Security: lock down / “RENO”
- Resource response
- Lab / Radiology / Personnel
NorthBay Trauma Bay

Initial Patient Contact

- Pre-hospital report
  - + right sided weakness
- Initial evaluation
  - Open wound to head + blood
  - Vitals: P=112, BP=134/99, R=21, GCS=8
- Oxygen
- Warming
- Lab / Imaging
Trauma Bay Transfusion Equipment

Resuscitation

- Multiple large gauge IV’s
- IV Fluid: NS 1 liter
- No MTP
- TXA given
- “Stop the Bleed”
- Pressure dressings applied to head and arm wounds
Trauma Bay Supply Carts

Procedures

- Endotracheal tube
- Ventilator
- Orogastric tube
- Foley catheter
- Cervical collar
Trauma Surgeon Computer

Patient Care

- Antibiotic: Ancef
- Pain medication: Fentanyl
- Tetanus
- Wound care / dressings
- Trauma admission order set
  - Level of care: ICU
  - Medication: Mannitol
  - Consultations:
    - Neurosurgery / Intensivist
CT Scanner

Diagnostic Tests

- CT scans w/o contrast
  - Head
  - Cervical
- Chest X-Ray
- Left Forearm X-Ray
Surgical Intervention

- Neurosurgery
  - 5/28: right partial craniectomy, evacuation of SDH and duraplasty, ICP monitor placed
  - 5/29: left partial craniectomy, evacuation of SDH and duraplasty
  - 6/3: tracheostomy + PEG
Intensive Care Unit Room

Inpatient Care

- Nursing care
- Physicians / Consultants
- Multidisciplinary teams
- Physical therapy (PT/OT)
- Respiratory therapy
- Dietary
- Social services
- Case management
**Discharge Transportation**

**Disposition**

- Long Term Neuro-Rehab Facility (PTD #25)
- Home
  - Improved motor / sensory function with verbalization
- Injury Severity Score (ISS):
  - “75” (maximum score)
- Probability of Survival:
  - 0.00 %