2018 SD Annual Trauma Symposium:
Never Stop Improving: The Importance of Nurse and Physician Competencies

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Disclosures:

- I have nothing to disclose
OutLine

- Power of Teamwork: Studies
- Bowdle HealthCare Center
- Trauma Performance Improvement
- Maintaining Skills Competencies
Studies on Teamwork

“Trauma patients benefit from resuscitation by a trauma team because of the rapid resuscitation and stabilization and reduction in time to diagnostics and treatment. The team leader must oversee the resuscitation and intervene when necessary. Leadership skills have shown to be of particular importance.”

“Simulation training of teams improves performance but must be repeated on a regular basis if the effect is to be sustained.”
“The rapid development of trauma services has not been universal despite the high mortality rates ... Mortality reduction requires a comprehensive performance improvement program and an effectively performing trauma team is one contributing feature of good system performance...the trauma team has been independently shown to reduce time in the resuscitation room, time to key investigations and to definitive care and reduce the rate of missed injury...If well audited, further reductions in mortality should be anticipated by education and by the introduction of processes to improve the workings of the team.”
Bowdle: Population ~500-600
Bowdle HealthCare Center
Hospital: 2 bay ER, 1 Procedure RM, 12 Beds
Providers: 2
Nursing: Typically 2 Floor Nurses and 1 CNA
Trauma Performance Review

- INCLUDE EVERYONE THAT IS INVOLVED IN THE TRAUMA CODE
- This starts at the scene: EMS and First Responders
- Hospital Staff: RNs, Lab, Radiology, Providers, Support Staff
- Trauma Coordinator, Trauma Medical Director, Administration
Trauma Performance Review

- Monthly meetings to review trauma cases with all team members
- Opportunity for all team members to review what went well and what could be improved
- Considered peer review, confidential, and non-discoverable
Dissecting the provider notes and nursing notes/charting and compiling an easy to read time line for each case with particular reference to filters
Trauma Performance Improvement: EMS Pre-Hospital Filters

- EMS trip ticket in patient’s chart?
- Scene time greater than 20 minutes?
- Appropriate airway maintenance?
Trauma Performance Improvement: EMS Pre-Hospital Filters

- Appropriate Spinal Immobilization (back board/cervical collar)?
- Patient met physiological and/or anatomical absolute criteria?
- Trauma Team requested by EMS?
- If Trauma Team requested by EMS, did EMS document this in trip ticket?
Trauma Performance Improvement: E-Emergency Filters

- Was E-Emergency Used?
- If used, is form present in the chart?
- Is form signed by provider?
- Is form signed by RN?
Trauma Performance Improvement: BHC Filters

- Patient met physiological and/or absolute criteria?
- Was trauma team activated by hospital personnel?
- Did trauma team members arrive within 20 minutes?
  - Provider, Lab, Radiology
Patient transferred with ER length of greater than 2 hours?
GCS less than 8 and airway established?
Compete vital sign documentation including temperature and GCS (minimum of 2 times)?
Trauma Performance Improvement: BHC Filters

- Required and appropriate sized equipment available?
- Warming measures documented?
- Back board removal documented and removed in less than 20 minutes?
- C-Collar application and removal times documented?
Trauma Performance Improvement: BHC Filters

- Large bore IVs used?
- Decision to transfer time documented by provider (less than 15 minutes goal)?
- CT chest ordered without portable chest x-ray?
Trauma Performance Improvement: BHC Filters

- CT chest/abdomen/pelvis ordered without contrast?
- Hemo/Pneumothorax diagnosed and no chest tube placed?
- Greater than 3 liters of crystalloid IV fluids given (including EMS) and blood products not used?
Trauma Performance Improvement: BHC Filters

- CT done on a pediatric patient under age 16?
- If trauma death, was an autopsy requested or performed?
Skills Competency

- All members of the trauma team encouraged to attend
- Teaching environment
  - Comfortable/Informal
  - Hands on practice
  - Questions welcome
Skills Competency

- Lead by trauma coordinator and trauma medical director/providers
- Set up into two stations: each one hour
Skills Competency

- Station 1
- RSI
  - Medications, dosing, administration sequence
- Airway
  - Suction, securing ETT, airway adjuncts
- LUCAS
- Crash Cart Review
- Chest Tubes
  - Location of supplies, drainage/collecting system set up
- Suction set up
Skills Competency

- Station 2
- I/O insertion
- Splinting
  - application of c-collar, back board, limb immobilization, log roll
- Tourniquet and pelvic binder
- Trauma information and documentation
  - Trauma team activation criteria, PI indicators, trauma registry
- Trauma Resource manual
- Use of E-Emergency
- Telemed setup
Skills Competency

- Feedback from participants
- What did they like or would like to see changed

- Feedback was excellent
  - Staff enjoyed the hands on practice
  - Preference for case based scenarios
THANK YOU

- Kirby Kleffman, RN, Trauma Coordinator
- All the staff at Bowdle HealthCare Center

Any Questions?
References:

- Images: CityData.com, AberdeenNews.com, k12.sd.us
