Knox Community Hospital
Sepsis Program

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Knox Community Hospital
A community-owned, 99-bed, not-for-profit hospital located in Mount Vernon, Ohio (approximately 40 miles north east of Columbus). Knox Community Hospital is accredited by The Joint Commission.
OHA Data for KCH

SEVERE SEPSIS & SEPTIC SHOCK MORTALITY, 2013Q4-2014Q3

Lower is better, 15.5 is the statewide mean
Statewide improvement target is 10.86
Small & Rural Hospital Committee mean is 9.71
25 hospitals have a rate of 0

Knox Community Hospital
Other Ohio/OHA Member Hospitals
Slow Challenging Start

- No early recognition
- No ED protocol
- Established sepsis order sets ~ outdated
- Lack of a physician champion
- Nurses needed education on evidence-based practice for care of the patient with sepsis
- First protocol addresses only patients entering through the ED
Full Momentum with a Motivated Team
Sepsis Committee

- ED
- ED physician champion
- ICU
- Hospitalist champion
- Quality
- Pharmacy
- Lab
- Diagnostic Imaging
- Respiratory Therapy
- Information Systems
  ~ CPOE & Data Extraction

Surviving Sepsis Guidelines and SCCM Guidelines for the protocol
The Work Was Swift and Much Was Accomplished

- Order sets for 0-3 hours (ED) & 3-6 hours (ICU)
- ED Protocol
- ICU Protocol
- ED & ICU staff specific education
- Hospital-wide education
- Physician Education
The Work Was Swift and Much Was Accomplished

ED Process

Patient presents to ED
Walk-in or EMS

Chief complaint & Initial assessment
Sepsis Screen

2 of 4 criteria & pcos infection met?

Notify provider of positive screen

Provider in room within 10 min?

Provider orders

Implement orders, bed placement decision

Form: ER 210

BP < 90
HR > 90
Respirations ≥ 20
Temp ≥ 100.4 or ≤ 96.8
Rectal temp needed?

Continue w/ED process

Start Protocol

Requires Physician Order

IV Fluids 30 mL/Kg
ATB
~Zosyn 4.5g
~Vancomycin 20mg/Kg
Vasopressors for BP < 90 and not responsive to fluid resuscitation

Form: ER 209

CBC w/diff
Lactate
CMP
Blood Cultures x2
UA & culture
Fingertip oximeter
Order Chest X-ray
Ct if SPO2 < 92%
Planning and Preparation

- Sepsis drill
  - “Sepsis Alert” to “Code Sepsis”
  - Availability of staff to respond
  - Audibility of overhead pages
- Inconsistency of physicians calling “Code Sepsis”
- Physician consensus/collaboration regarding order sets
- Lactate turn around time
- Early Recognition criteria
Current State

- Weekly team meetings to review and analyze severe septic patient charts and develop process improvement strategies
- Sepsis Quality Review form
  - Utilize Core measure criteria for improvements
- OHA Sepsis Partnership
- In-house abstractor concurrently reviews all severe septic patient charts
Early Successes

- Physician and staff engagement
- Rapid process from development to implementation
  - Team worked well together
- Positive reinforcement as evidenced by successful outcome for patient(s)
- Recognized need for frequent quality review
- Rapid response from Pharmacy, Lab, RT
Moving Forward

- Utilize data to develop performance improvement measures
- Debrief with nursing staff from quality review
- Timely follow up and feedback with staff & physicians
- Collaborate with lab to improved Lactate turn around times
- Develop early recognition protocols for inpatient units
Moving Forward

- Sepsis cases will be reviewed by appropriate Medical Staff Committees
- Continued participation in OHA Sepsis Collaborative
Questions?