Sepsis Core Measure
Communication is the key to success!

Presented By:
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Background

• In 2009, CVMC formed a Sepsis bundle team
• Data was monitored for Patient Safety Collaborative – focused on mortality
• Established order sets
• Created computer screens

• In 2015, New CM led to revamping of committee and monitoring tools in preparation for compliance
Committee Formation

- Committee refocused in May
  - MD Champions
  - Leadership
  - Staff Champions
    - Sepsis simulation education – 12 staff members attended
    - Staff champions completed online certification course
  - PI Department
    - Monitor sepsis cases for trends
    - Content experts
Committee Initiatives

• Identified areas that needed attention prior to October 1, 2015.
  • MST did not have a current Sepsis screen tool
  • Audit tool to review compliance
  • Tool for multidisciplinary communication
Sepsis Screen Tool for Inpatient

---ADULT SEPSIS SCREENING---

1. Suspected Infection (1 or more)
   - Suspected Infection: 
   - Recent Procedure: 
   - Antibiotic Therapy: 

2. Systemic Inflammatory Response Syndrome-SIRS**(2 or more)
   - Temp < 36C (96.8F) or > 38.8C (101F): 
   - WBC > 12,000 or < 4,000 or > 10% bands: 
   - RR > 20: 
   - Lactic Acid > 2.0: 
   - HR > 90: 
   - Blood Cultures Positive: 

3. Organ Dysfunction (1 or more)
   - BP (systolic < 90mmHg or > 40mmHg drop from baseline): 
   - New, acute mental status changes: 

If YES to ALL 3 questions, notify physician ASAP - patient may have sepsis.
Emergency Department and Inpatient

- Dr. Carrillo is MD champion
  - Communicated expectations for Sepsis Measure
  - Emphasis placed on knowledge of measure
  - Sepsis screening completed on everyone
- Dr. Gonzales is MD Champion
  - Education to residents and interns on sepsis management and lactic acid orders
TeamSTEPPS Tools

• CUS tool
  • Provided in staff education by Sepsis champions
  • Empower staff
• SBAR
  • Severe Sepsis/ Septic Shock Checklist
  • Checklist follows patient – everyone knows where we are at in the measure
SEVERE SEPSIS / SEPTIC SHOCK CHECKLIST

1) Is there 2 or more signs of infection according to the Systemic Inflammatory Response Syndrome?

- [□] Heart Rate (pulse) > 90 (value = _____)
- [□] Temperature > 101° or < 96.8° (value = _____)
- [□] Respiration > 20 bpm (value = _____)
- [□] WBC > 12,000 or < 4,000 or > 10% bands (value = _____)

  □ Yes  □ No  Date: _____  Time: _____

2) Is there a suspected infection?  □ Yes  □ No  Date: _____  Time: _____

* If the answer is Yes to both questions 1 & 2, Sepsis is present:

  - [✓] Obtain: Lactic acid, Blood cultures, CBC w/differential, CMP, PT/PTT/INR, UA, Urine c/o, CXR

3) Is there one or more of the following Organ Dysfunction indications?

- [□] Systolic blood pressure < 90 or Mean arterial pressure (MAP) < 55 or Systolic BP decrease of more than 40
- [□] Creatinine > 2.0
- [□] Urine output < 0.5 ml/kg/hr for 2 hours
- [□] Lactate > 2 mmol/L (18.0 mg/dl)
- [□] Platelet count < 100,000
- [□] Bilirubin > 2 mg/dL (34.2 mmol/L)
- [□] INR > 1.5
- [□] PTT > 60

  □ Yes  □ No  Date: _____  Time: _____

* IF YES TO QUESTIONS 1, 2, & 3 WITHIN 6 HOURS OF EACHOTHER SEVERE SEPSIS OR SEPTIC SHOCK IS PRESENT

  * Septic Shock present if initial lactate is > = 4

Presentation Time = Time last criteria was met or Triage Time if ESI = 1 or 2

- □ Completed within 3 hours of Presentation Time

  1) Lactate measured (Y / N)
  2) Blood culture collected before antibiotics (Y / N)
  3) Antibiotics given (Y / N)
  4) Initiate fluid resuscitation for lactate > 2.0 (Y / N)

- □ Completed within 6 hours of Presentation Time

  1) Repeat Lactate (Y / N)
  2) Blood culture collected before antibiotics (Y / N)
  3) Antibiotics given (Y / N)
  4) Fluid resuscitation @ 30 ml/kg crystalloid NS or LR (Y / N)

Septic Shock Review & Evaluation's continued on page 2
Data Collection

- Pre-data (prior to October 1\textsuperscript{st})
  - July – 29% compliance
  - August – 30% compliance
  - September – 63% compliance

The pre-data represents the early management bundle, Severe Sepsis/Septic Shock.
Focused Efforts

• COMMUNICATION

- MD Champions
  - Residents
  - PI Department
- Nursing Leadership
  - Staff
  - PI Department
- Laboratory
  - Staff
Focused Efforts

• Case Reviews and Education
  • Concurrent chart audits by PI to see where fall outs occur
  • Communicate to departments positive and negative areas
  • Help with re-education of staff
  • MD champion Dr. Gonzales in discussions with residents
• MD champion Dr. Carrillo in discussions with ED MDs
• Fallouts with Lactic Acids
  • Compliance for re-measure at 33% July and 60% August
• Implementation of protocol
  • Small focus group teamed up to write the protocol
  • Staff accountability
  • Lab accountability with critical value/ no cancel of ED lactic acid
• Resident/MD accountability
Future Steps

• Additions to Protocol
  • Focus on one section at a time
  • Educate on one section at a time
  • Complicated measure which requires A LOT of constant communication
    • Focus on next highest problematic area
Conclusions

• Communication through education is still needed for the complicated measure
• Need continual education to CUS
• Add to protocol to include more steps to assist with compliance (one area at a time)