

Sepsis Core Measure

Communication is the key to success!

Presented By:
Chino Valley
Medical Center



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===

To View Protocol press shift + F8:

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?

<input type="checkbox"/> Heart Rate (pulse) > 90 (value = _____)	<input type="checkbox"/> Temperature > 101° or < 96.8° (value = _____)
<input type="checkbox"/> Respirations > 20 bpm (value = _____)	<input type="checkbox"/> WBC > 12,000 or < 4,000 or >10% bands (value = _____)
<input type="checkbox"/> Yes <input type="checkbox"/> 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/s, CXR

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

<input type="checkbox"/> Systolic blood pressure < 90 or Mean arterial pressure (MAP) < 65 or Systolic BP decrease of more than 40	<input type="checkbox"/> Lactate > 2 mmol/L (18.0 mg/dl)	<input type="checkbox"/> Platelet count < 100,000
<input type="checkbox"/> Creatinine > 2.0	<input type="checkbox"/> Bilirubin > 2 mg/dl (34.2 mmol/L)	<input type="checkbox"/> INR > 1.5
<input type="checkbox"/> Urine output < 0.5 ml/kg/hr for 2 hours	<input type="checkbox"/> PTT > 60	

Yes No Date: _____ Time: _____

*** IF YES TO QUESTIONS 1, 2, & 3 WITHIN 6 HOURS OF EACH OTHER**

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

Severe Sepsis (Presentation Date: _____ Time: _____)	Septic Shock (Presentation Date: _____ Time: _____)
1) Lactate measured (Y / N)	1) Lactate measured (Y / N)
2) Blood culture collected before antibiotics (Y / N)	2) Blood culture collected before antibiotics (Y / N)
3) Antibiotics given (Y / N)	3) Antibiotics given (Y / N)
4) Initiate fluid resuscitation for lactate > 2.0	4) Fluid resuscitation @ 30 ml/kg crystalloid NS or LR (Y / N)

Completed within 6 hours of Presentation Time

Severe Sepsis (Presentation Date: _____ Time: _____)	Septic Shock (Presentation Date: _____ Time: _____)
If initial Lactate level elevated > 2 : 1) Repeat Lactate (Y / N)	If hypotension persists after fluid resuscitation: (SBP > 90, MAP < 65, decrease in SBP > 40 points) 1) Vasopressors (Y / N)

Septic Shock Review & Evaluation's continued on page 2

PATIENT ID

Sepsis Communication tool



Data Collection

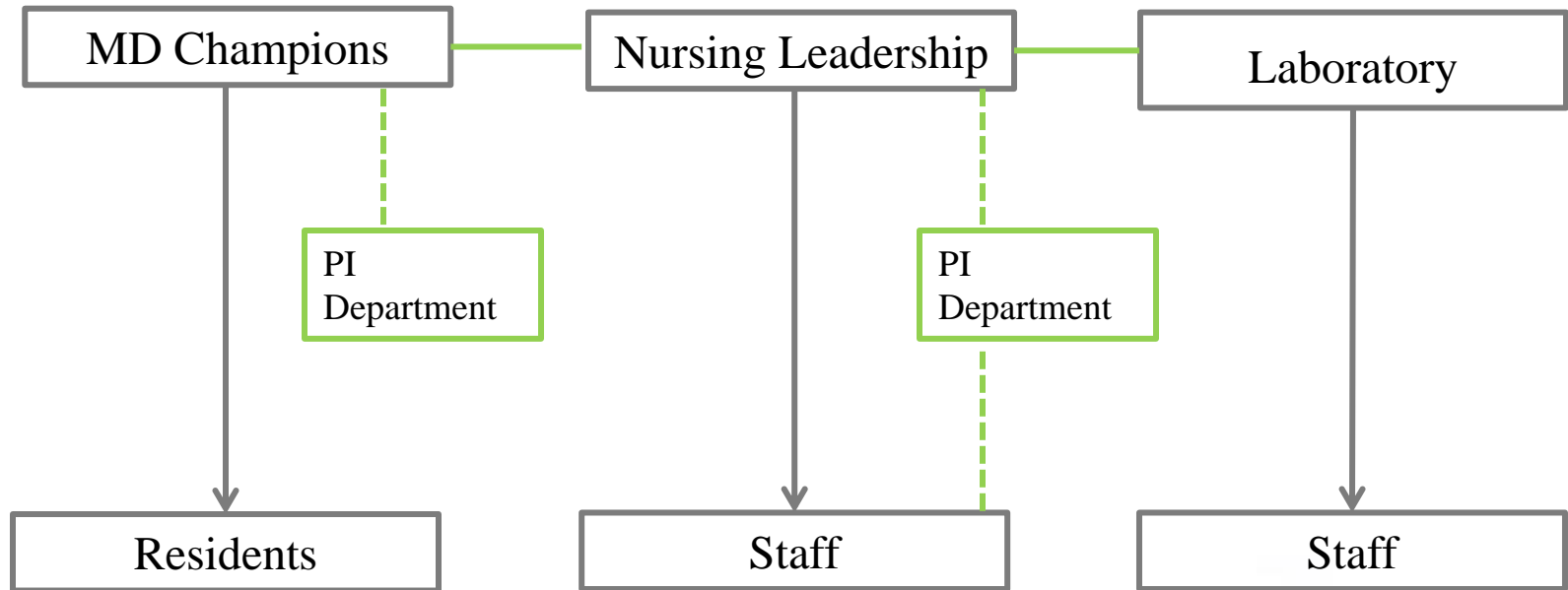
- Pre-data (prior to October 1st)
 - July – 29% compliance
 - August – 30% compliance
 - September – 63% compliance

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



Focused Efforts

- COMMUNICATION



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



Process Changes

- 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)

