CONE HEALTH
The Network for Exceptional Care

Important Definitions:

CMS tracks hospital performance on all admitted Severe Sepsis and Septic Shock patients. CMS defines **Severe Sepsis** as "having a suspected source of clinical infection and two or more manifestations of systemic inflammatory response syndrome (SIRS) criteria **plus one or more variable of "organ dysfunction". Lactate > 2 is an end organ damage."**

SIRS Criteria	Organ Dysfunction Variables
Temp >100.9	SBP < 90
Temp < 96.8	MAP < 65
HR > 90	SBP decrease > 40 from known baseline
RR > 20	Cr > 2.0
WBC > 12,000	UOP < 0.5 ml/kg/hr for > 2 hours
WBC < 4000	Bilirubin > 2.0
> 10% Bandemia	Platelets < 100,000
	INR > 1.5 or PTT > 60 secs
	Lactate > 2

Septic Shock is defined as "Sepsis with 2 or more documented hypotensive reads (SBP < 90 mmhg or MAP < 65 mmhg) or lactic acid > 4."

What does CMS actually measure?

CMS measures how well we take care of septic patients by measuring our compliance to the sepsis bundles. The bundles are as following:

Severe Sepsis Bundle Recommendations

Within three hours of presentation

- An initial lactate level measurement
- Blood cultures BEFORE antibiotic administration
- Broad spectrum antibiotics

Within six hours of presentation

- Repeat lactate if initial lactate was elevated > 2mmol/L).

Septic Shock Bundle:

Within three hours of presentation

- All the severe sepsis interventions listed above AND
- Start resuscitation with 30ml/kg of fluids if the lactate > 4 or there are 2 separate documented hypotensive blood pressures **(CHF/ESRD/DNI patients not excluded).**

Within six hours of presentation

- Initiate vasopressor administration for persistent hypotension despite fluid resuscitation.
- Repeat volume status and tissue perfusion assessment
- Repeat Lactic Acid

What is working well?

- Our data from 2019 indicates 6% absolute reduction in mortality and greater than 20% in improved compliance when sepsis order set and code sepsis are utilized. The Sepsis team regards initiating code sepsis and utilization of the Sepsis order set as one of the most important steps in caring for our patients.
- **2 or more SIRS criteria + Suspected infection + Anticipate admission = Use the Sepsis order and call code Sepsis.**

Where is the best opportunity to improve?

Appropriate fluid resuscitation is the number 1 missed core measure

Timely Lactate measurements is the number 2 missed core measure

While all septic patients who are sick enough to be admitted should get some fluid resuscitation, **30 cc/kg fluid bolus (use ideal body weight for obese patients) is mandated by CMS for patients in septic shock only**. Comorbidities like CHF, ESRD or a DNR/DNI status are not valid exclusion criteria.

If in your clinical judgement 30cc/kg fluid is detrimental to the patient because of any reason, we recommend you have an informed conversation with the patient, ensure they agree with your assessment and **document that conversation**.

If you suspect with a high certainly that the elevated lactate or hypotension in a septic patients are due to other etiology, please document your thought process. **(.notsepsishypotention and .notsepsislactate**)