

Sepsis: also known as Septicemia

- **What is Sepsis?**
 - Sepsis is the body's overwhelming and life-threatening response to infection, which can lead to tissue damage, organ failure, and death.
 - Severe Sepsis is when sepsis causes organs to fail
 - Septic Shock is when sepsis is accompanied by a low blood pressure.

- **What are the symptoms of Sepsis?**
 - S = Shivering, fever or very cold
 - E= Extreme pain or general discomfort
 - P= Pale or discolored skin
 - S= Sleepy, difficult to rouse, confused
 - I= "I feel like I might die"
 - S= Short of breath

- **What is the Cost of Sepsis?**

Sepsis has been named as the expensive in-patient cost in American hospitals in 2011 at over \$20 billion each year.

With more than 258,000 lives being lost per year, sepsis ranks as the third leading cause of death in the U.S. (after heart disease and cancer).

- **What is the treatment for Sepsis?**

Early Recognition, prompt escalation and timely intervention.

In 2006, study showed that the risk of death from sepsis increases by 7.6% with every hour that passes before treatment begins [Crit Care Med. 2006 Jun;34\(6\):1589-96](#).

 - A. Implement a Severe Sepsis Screening Tool
 - B. Implementation of 3-hour Bundle for Patients with Severe Sepsis
 - a. Measure lactate
 - b. Obtain blood cultures prior to the administration of antibiotics
 - c. Administer broad-spectrum antibiotics within in the first hour
 - d. Administer 30mL/kg IV fluid for low blood pressure or lactate levels >4mmol/L
 - C. Implementation of 6-hour Bundle for Patients with Septic Shock
 - a. Administer vasopressors
 - b. Re-assess need for additional IV fluid to ensure adequate blood pressure
 - c. Re-measure lactate

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- **What does the Sepsis Core Measure Mean to Hospitals?**

Sepsis became a core measure in Oct of 2015, meaning it could be one of the 12 chosen by CMS to be measured regarding Value Based Purchasing. Essentially, VBP will result in hospitals receiving incentive payments for providing high-quality care. Identifying sepsis early, treating it, and documenting it appropriately are all part of VBP.

Sepsis could affect VBP in three of its four components:

1. process of care and core measures
2. cost efficiency, and
3. possibly outcomes
4. 30-day mortality rates

- **How can Zipit Help?**

- A. Screening**

Many hospitals have implemented EMR based screening tools – Zipit can integrate with these tools and communicate positive screening to physicians, nurses, rapid response, etc....

- B. Prompt escalation and timely intervention “Code Sepsis”**

Notification simultaneously to the entire Hospital team: pharmacists, respiratory therapists, lab technicians, nursing supervisors and unit secretaries, not to mention doctors and bedside nurses.

Initiation of “code sepsis” beginning with EMS improves patient outcomes. Patients are three times more likely to survive to hospital discharge when EMS personnel identify sepsis in the field and initiate a Sepsis Alert Protocol before arrival in the ED.

Note: Greenville County EMS has a nice Sepsis Protocol Toolkit.

<https://www.scemsportal.org/sites/default/files/GCEMS%20Sepsis.pdf>

References

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