SEPSIS FACTS

1 MILLION+ CASES of Severe Sepsis and Septic Shock Each Year in U.S.  

Severe Sepsis and Septic Shock Kill 1 in 4 Affected Patients

WHO’S AT RISK

Elderly
Immunocompromised
Chronically ill at Highest Risk:
  - Diabetes
  - Cancer
  - Liver or Kidney Disease
  - AIDS

SEPSIS
a potentially life threatening complication of an infection accompanied by two or more of the following: abnormal body temperature, heart rate, respiratory rate or blood gas, and white blood cell count.

SEVERE SEPSIS
sepsis associated with organ dysfunction (oliguria / lactic acidosis), hypoperfusion, or hypotension.

SEPTIC SHOCK
sepsis induced hypotension despite adequate fluid resuscitation with perfusion abnormalities (i.e. oliguria, lactic acidosis).

50% of Patients with Severe Sepsis Admitted to ICU with an average stay of 7 – 14 Days

10th Leading Cause of Death in U.S.

Most Expensive U.S. Inpatient Cost

$20 Billion Each Year

$25,000 – $50,000 Average Cost Per Episode

CMS ACTION

High Frequency and Sepsis Mortality Drive Need to Improve Outcomes

The Centers for Medicare and Medicaid Services (CMS) introduced a new measure to assess the quality of sepsis care in hospitals. This measure is consistent with the guidelines of the Surviving Sepsis Campaign and the National Quality Forum.

The Severe Sepsis and Septic Shock Management Bundle was recently updated to include “dynamic assessment of fluid responsiveness with either a fluid bolus or passive leg raise fluid challenge.”

- Beginning October 1, 2015, 4000+ US hospitals must begin data collection on the sepsis bundle.
- Performance against the bundle is scheduled to impact future CMS reimbursement to hospitals.
THE CLINICAL CHALLENGE

Knowing the **right amount of fluid** to administer to maintain adequate organ perfusion

50% of Patients May Not Respond to Fluid Administration\(^\text{14}\)

**Patients' Fluid Requirements Differ**
*Based on Underlying Health Condition and Other Factors*\(^\text{15}\)

Both **Under-** and **Over-Resuscitation** Can Lead to:
- Sub-Optimal Outcomes
- Complications
- Mortality

CAREGIVERS CHALLENGE

**WHO WILL RESPOND?**

\(^\text{3. http://www.cdc.gov/sepsis/basic/qa.html}\)
\(^\text{4. Had MJ et al. Inpatient Care for Septicemia or Sepsis: A Challenge for Patients and Hospitals. NCHS Data Brief 2011.}\)
\(^\text{7. https://www.atrainceu.com/course-module/1884946-107_sepsis-module-03}\)
\(^\text{9. Kumar A et al. Duration of hypotension before initiation of effective antimicrobial therapy is the critical determinant of survival in human septic shock. Critical Care Med 2006; 34(6) 1589-1596.}\)
\(^\text{11. http://www.survivingsepsis.org/SiteCollectionDocuments/SSC_Bundle.pdf}\)
\(^\text{17. Kalm DJ et al. Fluid overload in patients with severe sepsis and septic shock treated with early goal-directed therapy is associated with increased acute need for fluid-related medical interventions and hospital death. Shock 2015; 43(1):68-73.}\)