# Sepsis at a Glance

Sepsis is "a life-threatening condition that arises when the body's response to an infection injures its own tissues and organs" (Singer et al.). It can afflict anyone.

# IT CAUSES A LOT OF DEATHS

#### **3rd Leading Cause of Death**

3. Sepsis 1. Heart disease 2. Cancer

Sources: Elixhauser et al.; CDC.

Contributes to **1** in every 2 to 3 hospital deaths

Source: Liu et al.



# IT CAN PROGRESS QUICKLY



## **Septic shock:**

**7.6%** drop in chance of survival each hour until antimicrobials are begun

Source: Kumar et al.

#### IT COSTS A LOT

### **Most Expensive Condition Treated in U.S. Hospitals**

- 1. Sepsis
- 2. Osteoarthritis
- 3. Liveborn infants
- 4. Complication of device, implant, or graft
- 5. Heart attack Source: Torio and Moore.

Accounts for

6.2% of hospital

costs, or

S24 billion



# IT IS UNDERRECOGNIZED



44%

U.S. adults who have heard of sepsis

Source: Harris Interactive.

Death usually attributed to underlying infection Often not on death certificates



# WHAT DOES IT TAKE TO BEAT SEPSIS?

Themes from Healthcare Risk Control's Conversation with Sepsis Experts



Vigilance throughout the organization

Clinician familiarity

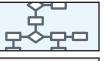


Teams, champions, and specialists

Guidelines and tools



A swift, organized response



Coordination within and across settings





Community outreach and patient education



Quality improvement



Feedback to clinicians

Centers for Disease Control and Prevention (CDC). Leading causes of death. 2016 Apr 27 [cited 2016 Jul 5]. http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm Elixhauser A, Friedman B, Stranges E. Septicemia in U.S. hospitals, 2009. Healthcare Cost and Utilization Project Statistical Brief #122. 2011 Oct [cited 2016 Jul 5]. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb122.pdf

Harris Interactive. Sepsis awareness 2013 [presentation]. 2013 Jun [cited 2016 Jul 5]. http://www.sepsisalliance.org/downloads/sepsisawareness2013.pdf

Kumar A, Roberts D, Wood KE. Duration of hypotension before initiation of effective antimicrobial therapy is the critical determinant of survival in human septic shock. Crit Care Med 2006 Jun;34(6):1589-96.

Liu V, Escobar GJ, Greene JD, et al. Hospital deaths in patients with sepsis from 2 independent cohorts. JAMA 2014 Jul 2;312(1):90-2.

Singer M, Deutschman CS, Seymour CW, et al. The third international consensus definitions for sepsis and septic shock (Sepsis-3). JAMA 2016 Feb 23;315(8):801-10.

Torio CM, Moore BJ. National inpatient hospital costs: the most expensive conditions by payer, 2011. Healthcare Cost and Utilization Project Statistical Brief #204. 2016 May [cited 2016 Jun 24]. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb204-Most-Expensive-Hospital-Conditions.jsp

© 2016 ECRI Institute. May be disseminated for internal educational purposes solely at the subscribing site.

For broader use of these copyrighted materials, please contact ECRI Institute to obtain proper permission.