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OBJECTIVES

1. Identify causes of sepsis in the post-acute setting.
2. Understanding signs and symptoms of sepsis for early recognition and reduction of hospital re-admission.
3. Discuss the Home Care Sepsis Tool & Protocol

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CDC's updated stats are showing

SEPSIS STATS	More than 1.5 MILLION people get sepsis each year in the U.S.	At least 250,000 Americans die from sepsis each year	About 1 IN 3 PATIENTS who die in a hospital have sepsis
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National Statistics

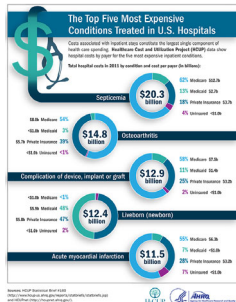
- Sepsis is the leading cause of death in U.S. hospitals.
- 62% of people hospitalized with sepsis are re-hospitalized within 30 days.
- As many as 92% of sepsis cases originate in the community.
- Mortality from sepsis increases 8% for every hour that treatment is delayed.
- As many as 80% of sepsis deaths could be prevented with rapid diagnosis and treatment.

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Top Five Most Expensive Conditions Treated in U.S. Hospitals 2018



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Sepsis...What it isn't

- Sepsis is NOT a disease
- It is NOT contagious

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Sepsis...What it is

- It is the body's overwhelming and life threatening response to an infection.
- The most frequently identified pathogens that cause infections that can develop into sepsis include:
 - Staphylococcus aureus (staph),
 - Escherichia coli (E. coli) and C-difficile
 - Group A Streptococcus and Influenza
- As part of the body's inflammatory response to fight infection, chemicals are released into the bloodstream. These chemicals can cause blood vessels to leak and clot, meaning organs like the kidneys, lung, and heart will not get enough oxygen. The blood clots can also decrease blood flow to the legs and arms leading to gangrene.
- Septic shock is defined as a subset of sepsis that is profound enough to substantially increase mortality over sepsis alone

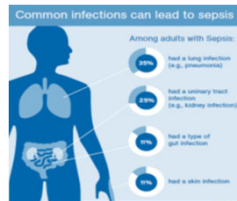
7 4/23/2019 McKesson Proprietary and Confidential Risk Choc, D.D.

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Identify causes of sepsis in the post-acute setting

- Most common types of infections that are often linked with sepsis
 - ❖ Lung (respiratory/pneumonia) secondary complication of flu is pneumonia,
 - ❖ Urinary tract infections UTI
 - ❖ Skin and wound including MRSA
 - ❖ Enteric (GI) diseases
 - ❖ Blood Stream Infections(bacteremia)



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The word "sepsis" was first introduced by Hippocrates (ca. 460-370 BC) and is derived from the Greek word sipsi ("make rotten").

9 02/2019 McKesson Proprietary and Confidential <http://www.sepsis.org/learn/what-is-sepsis>

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Identification of Sepsis

WHAT SHOULD I DO IF I SUSPECT SEPSIS?

- Immediately alert clinician in charge if it is not you.
- Know your facility's existing guidance for diagnosing and managing sepsis.
- Start antibiotics as soon as possible, in addition to other therapies appropriate for that individual patient.
- Check patient progress frequently. Reassess antibiotic therapy 24-48 hours to stop or change therapy as needed. Be sure antibiotic type, dose, and duration are correct.

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Progression of Sepsis



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SIRS (Systemic Inflammatory Response Syndrome)

- Widespread inflammatory response to microbial invasion or cell injury
- May or may not be due to infection
- Signs & Symptoms:
 - ✓ Fever
 - ✓ Tachycardia,
 - ✓ Tachypnea,
 - ✓ Leukocytosis or leukopenia,

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Sepsis Acronym:

- **S:** shivering, fever or cold
- **E:** extreme pain or discomfort
- **P:** pale or discolored skin
- **S:** sleepy, difficult to rouse, confused
- **I:** "I feel like I might die"
- **S:** shortness of breath

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Significance of Home/ Community Role and Response

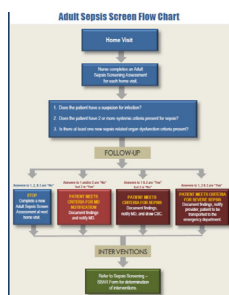
- Commonly misunderstood as a hospital problem, over 80% of sepsis cases originate in home and community.
- Time to treatment is critical – mortality increases 8% every hour that treatment is delayed.
- Early identification and treatment are the key to improved outcomes and reduced costs.
- Biggest next opportunity lies in public awareness and primary care education and training.

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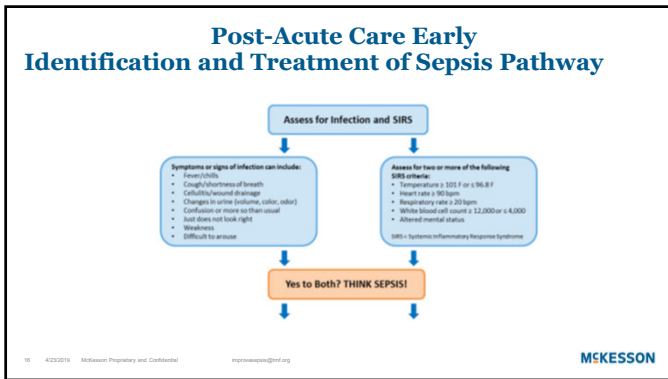
HCA Sepsis Screening Tool



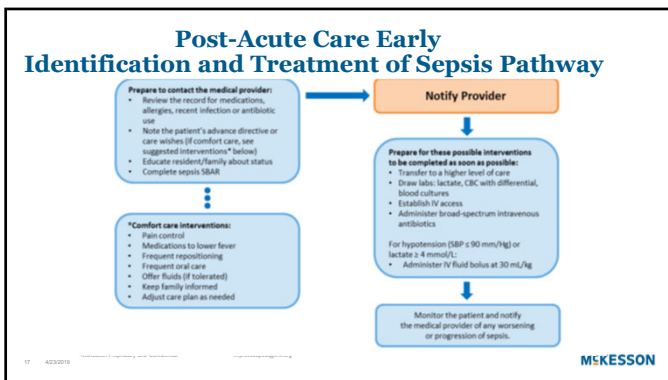
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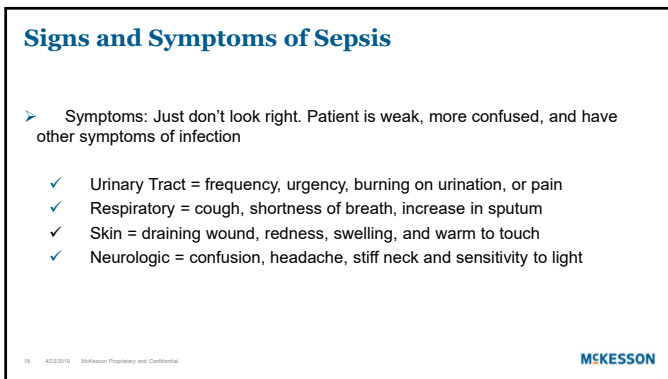
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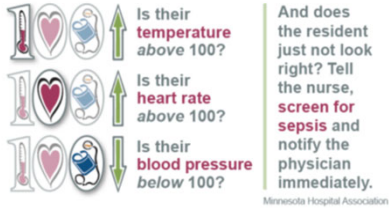
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Early recognition signs:

Initiate the 100, 100, 100 rule staff screen



The graphic illustrates the '100, 100, 100 rule' for early recognition of sepsis. It features three rows of icons: a thermometer, a heart, and a pulse oximeter. The first row shows a red thermometer icon with an upward arrow, asking 'Is their temperature above 100?'. The second row shows a red heart icon with an upward arrow, asking 'Is their heart rate above 100?'. The third row shows a blue pulse oximeter icon with a downward arrow, asking 'Is their blood pressure below 100?'. To the right of these icons, a text box asks: 'And does the resident just not look right? Tell the nurse, screen for sepsis and notify the physician immediately.' The Minnesota Hospital Association logo is at the bottom right of the graphic.

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The Relationship of Infection Prevention to Sepsis and Antimicrobial Stewardship

- To reduce the chances of employing broad spectrum antibiotics for sepsis, prevent infections from occurring in the first place.
- To reduce the chances of acquiring multi-drug resistant pathogens, which makes treatment of sepsis more challenging, emphasize infection control measures.

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Antimicrobial Stewardship

- To promote the appropriate use of antimicrobials and combat antimicrobial resistance, the surviving sepsis campaign recommends that empiric antimicrobial therapy be narrowed once pathogen identification and sensitivities are established and/or adequate clinical improvement is noted.
- The surviving sepsis campaign also recommends that an antimicrobial treatment duration of 7-10 days is adequate for most serious infections associated with sepsis and septic shock.

21 4/23/2019 McKesson Proprietary and Confidential surviving sepsis campaign

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Antimicrobial Therapy

- Start P.O. Antibiotics if infection without sepsis (pre-sepsis)
- Empiric broad-spectrum IV antimicrobial therapy initiated as soon as possible when sepsis or the risk of sepsis is identified

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Educate Patients (and their Families) About Infection Prevention, Antibiotic Stewardship & More

- The informed patient is more likely to be adhere with therapy, and can assist in preventing infection and understand when antibiotics are needed - and when they are not.
- The informed family member can also learn how to prevent infection.

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Infection Prevention = Sepsis Prevention Many infections can be prevented

- Get vaccinations recommended by your healthcare provider
- Care for wounds properly (keep clean and covered until healed)
- Awareness of higher risk for seniors (65+) and the very young (< 1 year)
- Manage chronic conditions (diabetes, lung, kidney, liver disease) • Special care for people that are immunosuppressed

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What else can be done to prevent Sepsis?

- Make sure you, your staff, visitors and resident's WASH THEIR HANDS
- How to engage people to wash their hands:
 - Make hand hygiene a topic of conversation with your residents
 - Address hand hygiene before you begin your care
 - Explain how and why you clean your hands before, after, and sometimes during patient care.
 - THANK THEM FOR BEING ENGAGED IN THEIR CARE



25 4/23/2019 McKesson Proprietary and Confidential CDC.gov/handhygiene

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Get your flu shot- encourage staff, patients and families get vaccinated against the flu

Flu Shots [BY THE NUMBERS]

200,000 Average number of people hospitalized with the flu each year in the U.S.

6
MONTHS

Age at which flu shots should begin

2
WEEKS

Time it takes your body to develop antibodies after vaccination

140-160 MILLION
Number of doses projected to be available in the U.S. this flu season



6
FEET

Distance someone can spread the flu virus

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Public Awareness, Education and Resources

- Sepsis.org – 2.5 million visits a year
- Award winning educational videos
- PSAs (video, radio, all media)
- Sepsis 911 Community Education kit (general, aging population)
- Sepsis Information Guides - 45+
- Tri-fold brochures
- Erin's Campaign for Kids
- Sepsis and Children kit • Posters, infographics, symptoms cards
- Spanish-language materials

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Patient Teaching for prevention



Green Zone

No signs of infection.

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Patient Teaching for prevention



Yellow Zone

Take action today.

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Patient Teaching for prevention



Red Zone

Take action now!

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Recovery:

- Many individuals fully recover from sepsis,
- Many others are left with long-lasting effects, such as missing limbs or organ dysfunction, like kidney failure.
- Other after-effects of sepsis are less obvious, such as memory loss, anxiety, or depression.



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Questions and Thoughts?



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Thank You!

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References

- Dellinger RP, Levy MM, Rhodes A, et al. Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock: 2012. Crit Care Med 2013 Feb;41(2):580-637.
- Minnesota Hospital Association. Seeing sepsis: early identification saves lives [Seeing Sepsis Long Term Care Resources online]. [cited 2016 Feb 10]. Available from Internet: <http://www.mnhospitals.org/patient-safety/current-safety-qualityinitiatives/severe-sepsis-and-septic-shock>
- T Welty. Sepsis history [website]. [cited 2017 Sep 20]. Jena, Germany: German Sepsis Society. Available from Internet: <http://sepsis-gesellschaft.de/DSG/Englisch/Disease+pattern+of+Sepsis/Sepsis+History?lid=2>
- Christine Kilgore, Evolving Sepsis Criteria and New Management Guidelines Hold Lessons for PA/LTC. [cited 2017 Sep 20] DOI: <http://dx.doi.org/10.1016/j.carage.2017.06.007>
- Rick Chou, D.O. Optum Medical Director – Complex Population Management, EARLY Recognition & Treatment of Sepsis in the Skilled Nursing Facility [cited 2017 Sep 20]. Available from Internet: https://www.hanys.org/etta/include/docs/sepsis_slides.pdf

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References

- Angus DC, Linde-Zwirble WT, Lidicker J, et al. Epidemiology of severe sepsis in the United States: analysis of incidence, outcome, and associated costs of care. Crit Care Med 2001;29(7):1303-10.
- Ginde AA, Moss M, Shapiro NI, et al. Impact of older age and nursing home residence on clinical outcomes of U.S. emergency department visits for severe sepsis. J Crit Care 2013 Oct;28(5):606-11.
- Torio C (AHRQ), Moore B (Truven Health Analytics). National Inpatient Hospital Costs: The Most Expensive Conditions by Payer, 2013. HCUP Statistical Brief #204. May 2016. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb204-Most-Expensive-Hospital-Conditions.pdf>

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References

- <http://www.mnhospitals.org/quality-patient-safety/quality-patient-safety-initiatives/sepsis-and-septic-shock/#/videos/view/39> [cited 2017 Sep 21].
- Rick Chou, D.O. Early Recognition & Treatment of Sepsis in the Skilled Nursing Facility. https://www.hanys.org/etta/include/docs/sepsis_slides.pdf [cited Sep 20, 2017]
- <http://stopsepsisathomenv.org/about-us/sepsis-screening-tool/retrieved> 4/23/2019

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