Surviving Sepsis

Are You Prepared to Save a Life?

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Objectives

- Define criteria for SIRS, Sepsis, Severe Sepsis, and Septic Shock
- Recognize patients at high risk for sepsis
- Describe failure to rescue and the role of nurses in sepsis screening in vulnerable populations
- Identify standard treatment for patients with sepsis, severe sepsis, and septic shock

Disclosures

- No financial relationships to disclose
- No off label use of medications will be discussed

Why is Everyone Talking About Sepsis?

- A leading cause of death in ICU nationally
- Mortality rate is 28-45 %
- Treatment costs hospitals $17 billion / yr
- Early sepsis often not recognized
- Many sepsis survivors suffer long term consequences

Total Deaths From Sepsis Increasing

- Death from sepsis has killed more people than AIDS or breast cancer
- Higher population of susceptible people :
  - Aging population
  - Immunosuppression: chemotherapy, transplants, serious co morbidities
  - Invasive medical treatments
  - Drug resistant organisms

Nursing Home Complaint Center Makes Discovering Victims Of Sepsis Septic Shock Broken Bones & Wrongful Death Its Number One Priority For US Nursing Home Patients

The Nursing Home Complaint Center is calling its efforts to identify US nursing home patients, who needlessly get sepsis, septic shock, broken bones, and or victims of wrongful death, their number one priority in 2011. The group is saying, "we believe needless sepsis infections, septic shock, broken bones, wrongful death, and elder abuse in our nation's nursing homes are at epidemic levels, and we want to hear from family members who have proof the sick, or deceased family member was mistreated, or not treated at all-with the result being a wrongful death, or they are now in a ICU at a nearby hospital." The group says, "one of the biggest problems we see in the vast majority of our nation's nursing homes is staffing levels, are not high enough to meet Medicare, or Medicaid standards, with the result being dead patients, or patients suffering from sepsis, or septic shock, due to medical malpractice, or broken bones." If a family member, or loved one has died in a US nursing home from provable wrongful death, or now has sepsis, is in septic shock, or has broken bones, please call the Nursing Home Complaint Center at 866-714-6466, or contact the group via its web site at http://NursingHomeComplaintCenter.Com

Contact
M Thomas Martin
Americas Watchdog
866-714-6466
Email

(Vocus/PRWEB) January 04, 2011

The Nursing Home Complaint Center is the premier US advocate for victims of nursing home abuse, neglect, and wrongful death. The group is beginning the new year with a dramatically enhanced national investigation involving identifying nursing home patients, who now have sepsis, septic shock, broken bones, or are a victim of a wrongful death in any nursing home, in any US State, city, or metro area. The group says, "in most instances, nursing home staffing levels are too low, in order properly treat their patients. As a result senior citizens are prematurely dying, or are now in a hospital ICU." They say, "frequently what

What is Sepsis?

- It is the ***response*** to an infection
- Evolves in 4 phases:
  - Infection
  - Sepsis
  - Severe Sepsis
  - Septic Shock
- Severity determined by specificity and severity of ***host response***, more than causative organism

Systemic Inflammatory Response Syndrome (SIRS)

- Widespread inflammatory response to microbial invasion or cell injury
- May or may not be due to infection
- Signs and Symptoms:
  - Fever or hypothermia, tachycardia, tachypnea, leukocytosis or leukopenia

- *SIRS*
  - typical in trauma, major surgery, burns, pancreatitis, MI, and infections

Sepsis

- When SIRS is caused by infection, the term sepsis is used
- Patient has infection plus systemic signs of infection
- Systemic inflammation in response to infection

Severe Sepsis

- Infection (Sepsis) that leads to:
  - Acute organ dysfunction
  - Tissue hypo perfusion
    - Lactate > 2.0 mmol/L
  - Sepsis induced hypotension:
    - SBP ≤ 90 mmHg or MAP ≤ 65 mmHg
    - Or SBP decrease > 40 mmHg from baseline

Septic Shock

- Severe sepsis with hypotension despite adequate volume resuscitation;
  - Acute circulatory failure
- Patients with sepsis who require vasopressor support despite adequate fluid replacement are in septic shock
- Lactate > 4.0 mmol/L regardless of BP

Untreated septic shock is 100 % fatal

Sepsis is a Perfusion Disorder

3 known processes occurring in the body

* Inflammation

  Increased capillary permeability: "capillary leak"….3rd spacing

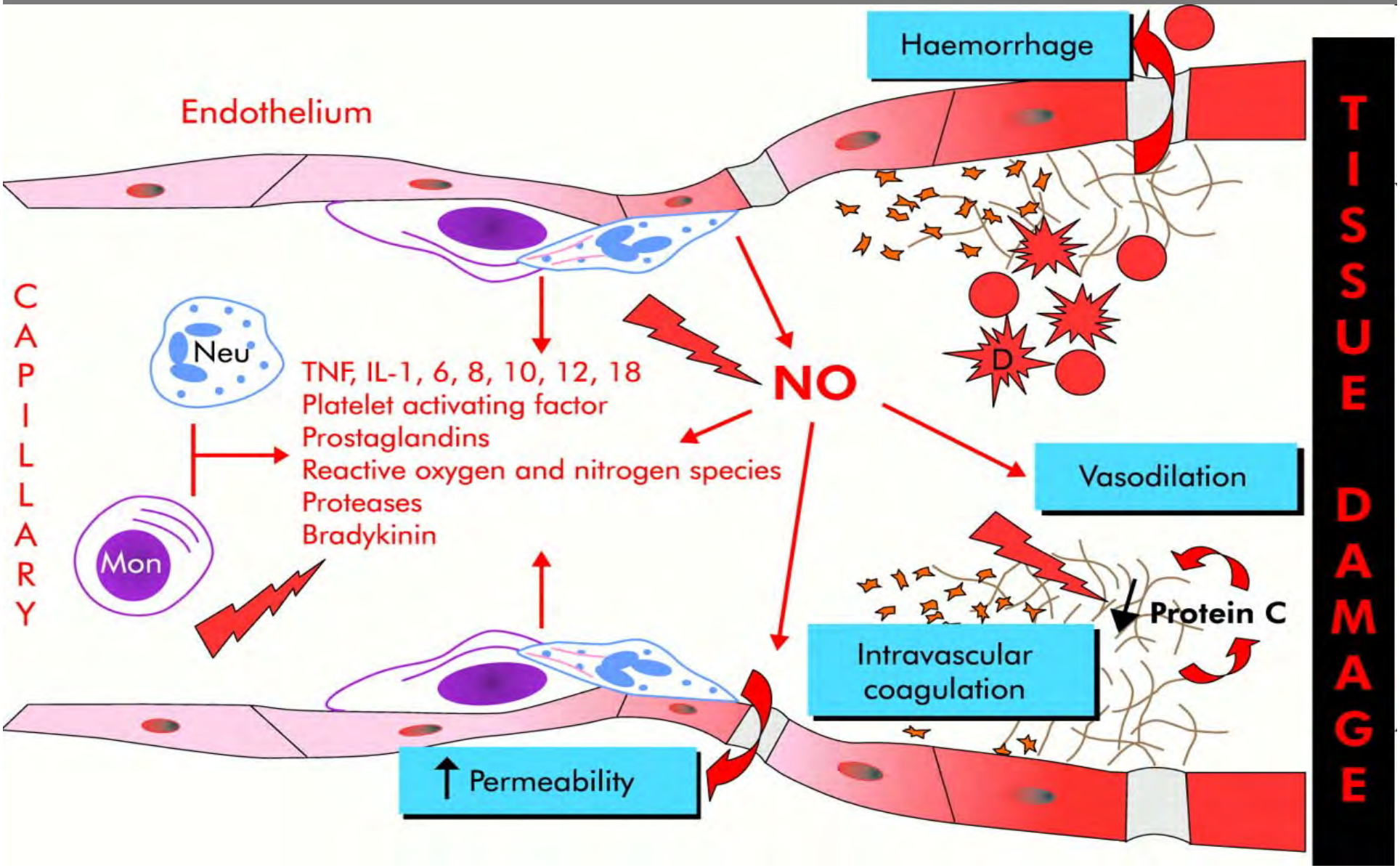
* Coagulopathy: clot formation in microcirculation

* Impaired thrombolysis

Leads to maldistribution of blood flow

- Massive vasodilation
- Severe hypo-perfusion of organ systems

Cellular Changes in Sepsis



Sepsis is a Clinical Diagnosis

- Symptoms can be vague, mimic many conditions
- Many high risk patients already look very ill
- Development of sepsis does not require bacteremia or endovascular infection.
- Toxins may be released into bloodstream from a localized site

- ***Need to develop a high index of suspicion for at risk patients***

Why Should Everyone be Talking About Sepsis?

- Early recognition and prompt treatment saves lives
- Standard screening tools have been developed
- Treatment recommendations are simple and straight forward

Recent Study
General Surgery Patients

- The incidence of sepsis and septic shock is more common after surgery than pulmonary embolism & MI *combined*
- Septic shock occurs 10 times more frequently than MI

- Those at highest risk:
  - Age > 60
  - Emergency surgery
  - Comorbidities: liver, cardiac, pulmonary, & renal disease

Share With Us
Submit Your Story
Names and Direct Links

Welcome to Faces of Sepsis™

Faces of Sepsis™ stories have been submitted by people who have been touched by sepsis. Some stories are of survival, of fighting back from this devastating illness. Other stories are written by people who have been left behind because someone they loved died of sepsis.

There is a list of names of submitted stories and below is a collage of people whose stories are here. A few stories do not have photos, a choice by the submittor. You can browse through the pages or click on a photo below to learn about the different people affected by sepsis.

Failure to Rescue

- Inability to save a patient's life after the development of a complication that was not present on admission

Circumstances Surrounding Failure to Rescue

- *Failure to Recognize* : Vital signs or status deteriorating over time with no response by caregiver
- *Failure to Communicate* : Delay in physician response to a call for assistance; inadequate communication between caregivers
- *Failure to Plan* : Deterioration of a patient while waiting for a transition in care

Empowering Care Givers

- Develop expertise in identifying and treating patients with sepsis
- Quickly calling for help in managing a deteriorating patient
- Ability to articulate the change in condition the patient is demonstrating
- Monitoring the patient's response to treatment

Positive Screening for Sepsis

Patient must have 2 of the following symptoms of infection both present and new to the patient:

Temp ≥ 100.4 ºF	Temp ≤ 96.8ºF
WBC ≥ 12,000 or > 10 % bands	WBC ≤ 4,000
HR ≥ 90 bpm	Altered mental status
RR ≥ 20 / min	↑ RR = key early indicator, often missed

Patient Must Also Have Suspected Source of Infection

Common Causes of Sepsis in Older Adults

- Respiratory Infections: CAP, NHAP
- Urinary Tract Infections
- GI infections: C diff, perforated bowel
- Giant Cell Arteritis (temporal arteritis)
- Prosthetic Device Infection: Biofilm
- Skin or soft tissue infections
  - decubitus ulcers
  - vascular ulcers

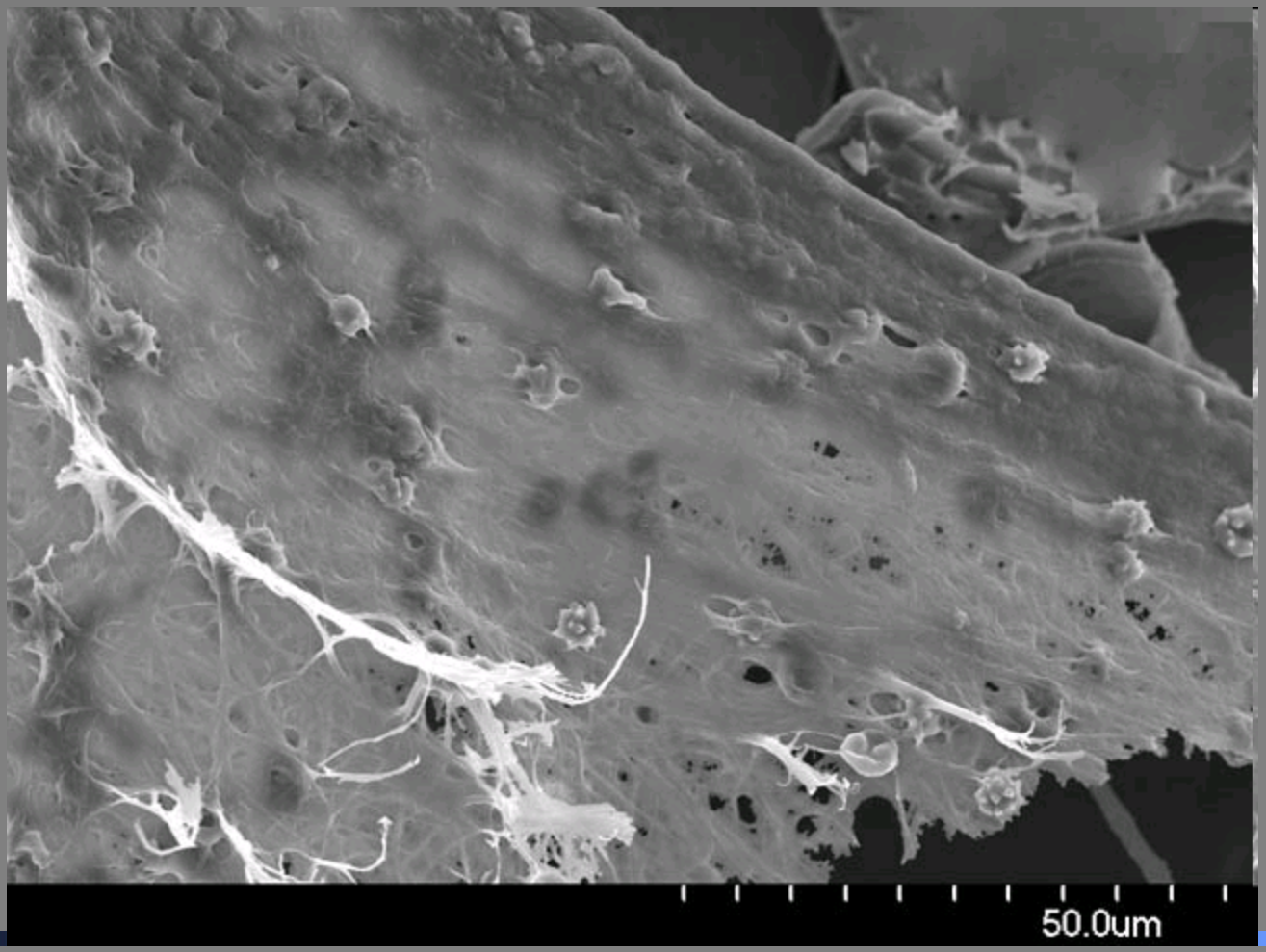
Clostridium Difficile

- Common infection in nursing homes
- Patients treated with antibiotics are at increased risk
- Most cases develop outside the hospital setting
- Linked to PPI use
- Requires isolation; spreads quickly

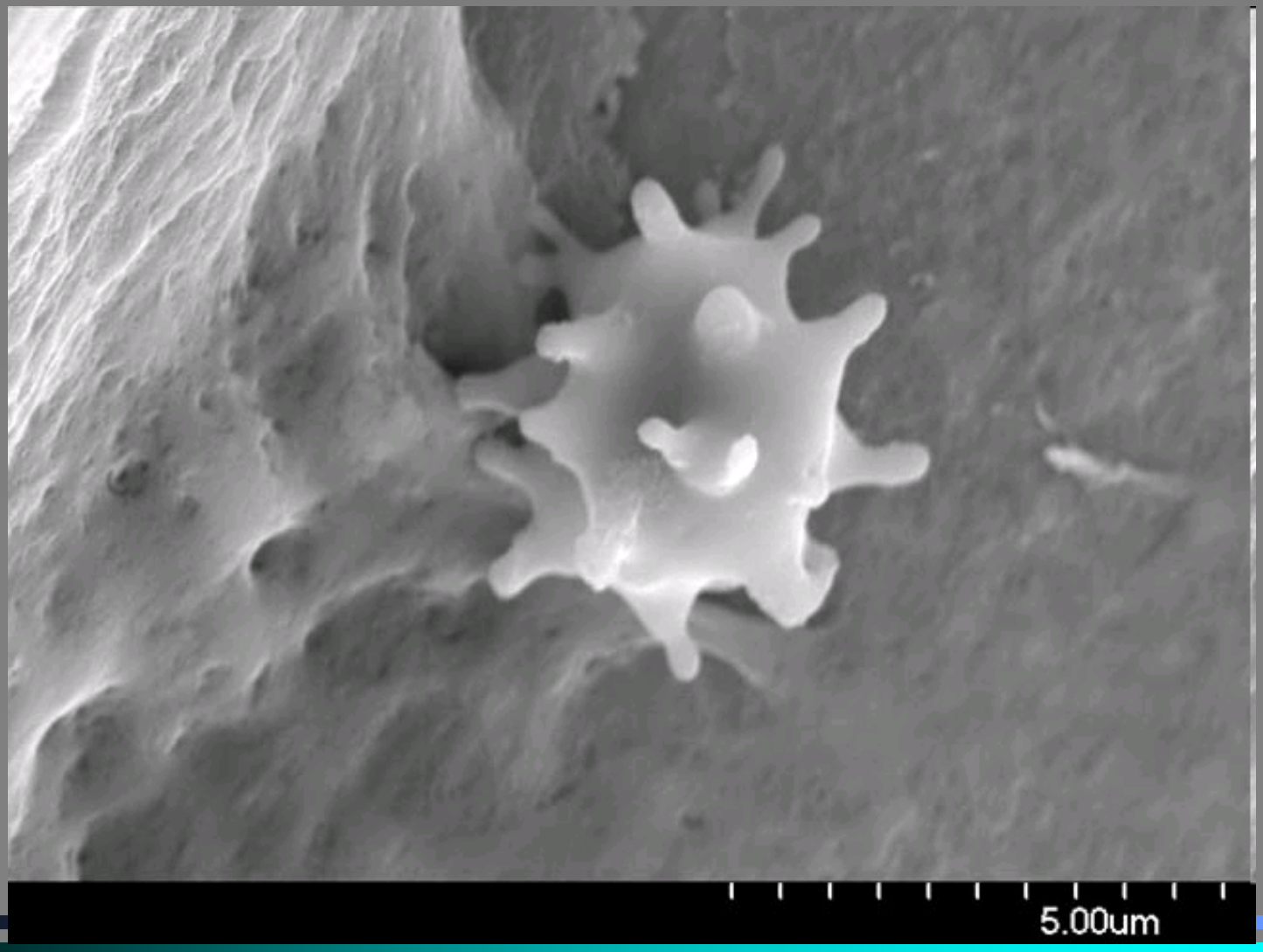
Patient's With Devices in Place

- Biofilm develops on surface of devices;
  - * Invasive lines * Tubes * Drains
  - * Prosthetics: heart valves, joints, etc..
- Biofilm is a a complex extracellular polymeric matrix (slime) composed of gram negative or gram positive bacteria, or yeast
- Difficult to penetrate
- Can lead to antibiotic resistance

Biofilm Attached to Graft



WBC on Biofilm



Surviving Sepsis Campaign

- 2004: International collaborative effort to improve treatment of severe sepsis & reduce high mortality rate
- A practice improvement program

- Developed evidenced based guidelines for management of severe sepsis and septic shock; updated 2008 & 2010

Surviving Sepsis > About the Campaign

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- Tools
- What You Should Know
- Why Implement the Campaign

Chart Review Database | Guidelines | Bundles | Patient & Family Information | Request More Info | Join The Community

ABOUT THE CAMPAIGN

The Surviving Sepsis Campaign

The Surviving Sepsis Campaign (SSC) was developed by the European Society of Critical Care Medicine, the International Sepsis Forum, and the Society of Critical Care Medicine, to help meet the challenges of sepsis and to improve its management, diagnosis, and treatment. The agreement between the three founding organizations and funding for the campaign was concluded December 31, 2008. A generous grant has been received to continue the important work of the campaign. The grant funding extends through 2013. Assistance for US hospitals interested in implementing the bundles can be obtained through the Society of Critical Care Medicine's Paragon program.

Why Sepsis?

Sepsis is a complex syndrome that is difficult to define, diagnose, and treat. It is a range of clinical conditions caused by the body's systemic response to an infection, which if it develops into severe sepsis, is accompanied by single or multiple organ dysfunction or failure, leading to death. It is a major cause of mortality, killing approximately 1,400 people worldwide every day (1).

Mortality

Mortality rates from severe sepsis are on a similar scale to lung, breast, and colon cancer, and it is one of the leading causes of death in the intesnive care unit (ICU) (1-3).

Due to its aggressive, multifactorial nature, sepsis is a rapid killer. Death is common among sepsis patients, with around 30% of patients dying within the first month of diagnosis and 50% dying within 6 months (4-6). The 28-day mortality rate in sepsis patients is comparable to the 1960s hospital mortality rate for patients of acute myocardial infarction (AMI) (7). Over recent years, there has been an improvement in the awareness and management of AMI, resulting in a decline in mortality, while sepsis remains an unacknowledged killer (7).

Moreover, the number of severe sepsis cases is set to grow at a rate of 1.5% per annum, adding an additional 1 million cases per year in the USA alone by 2020 (8). This will increase total mortality and increase the burden on healthcare resources. The increase is mainly due to the growing use of invasive procedures and increasing numbers of elderly and high-risk individuals, such as cancer and HIV patients. Older people are at an increased risk of sepsis as they are more vulnerable to infections due to aging, co-morbidities, use of invasive sugical techniques, and problems associated with institutionalization.

The SSC aims to raise awareness of these issues and to work with all parties to ensure the most appropriate management of these patients.

Challenges

Intensive care professionals consider sepsis to be one of the most challenging and difficult conditions to manage, as the course of sepsis varies widely from patient to patient and can develop as a result of a variety of circumstances.

Definition and Diagnosis

Sepsis is a range of clinical conditions caused by the body's systemic response to an infection. Severe sepsis is a condition in which sepsis is accompanied by organ dysfunction or failure. Although this much is known, there is no clear clinical definition that can be easily communicated and adopted globally. Its absence makes the diagnosis and management of sepsis a clinical challenge. Some of the symptoms of sepsis, such as fever, rapid pulse, and respiratory difficulty, are very general and are present in many other disorders. In a

Surviving Sepsis Campaign (SSC)

- Bundled care improves survival
- Implemented early goal directed therapy (EGDT) for rapid diagnosis and treatment
  - Early detection of infection….antibiotic therapy
  - Fluid resuscitation
  - Careful use of vasoactive medications to maintain perfusion
- Education and treatment aids improve bundle compliance

Who is Most at Risk for Sepsis?

- Recent surgery or invasive procedure
- Nursing home residents
- Underlying co morbidities:
  - Diabetes, cardiac, lung, & liver disease
- Elderly (> 60)
- Chronic renal failure
- Drug or ETOH abuse
- Persons undergoing treatment for cancer
- Transplant patients

Multiple Factors Increase the Older Adult's Risk for Sepsis

- Impaired Immune Function
  - Decreased function of mucous membranes
  - Decreased antibody response to vaccines
  - Impaired temperature regulation
- Multiple co morbid conditions
  - DM ∗Lung Disease ∗ Heart Disease
- Nutritional Deficiencies
- UTI's; most common illness ≥ age 65
  - Many drug resistant organisms

Why Are Nursing Home Residents at High Risk for Sepsis?

- More likely to have ≥ one infection at any time
- Drug resistant organisms common
- Antibiotic Use; appropriate / inappropriate

- Cognitive Impairment common
  - make diagnosis more difficult
    - Delirium
    - Dementia

- Nutritional deficiencies , aspiration

- Living in close contact with others


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Sepsis in Nursing Homes
Sepsis, an infection caused by bacteria entering through open wounds on the body, or through IV lines or catheters, continues to be a serious issue in nursing homes throughout the nation. If sepsis is not treated immediately, the results can be catastrophic. Unfortunately, there are far too many nursing homes with inadequate and/or overworked staff members, which results in nursing home residents contracting sepsis when it otherwise could have easily been prevented.
According to the consumer advocacy group, Nursing Home Complaint Center, sepsis is one of the most important warnings of nursing home abuse. Sepsis occurs when infections are left untreated which could have otherwise been treated quickly, and even prevented. In addition, patients with catheters and intravenous lines should be monitored closely at all times. If the aforementioned issues are not closely checked up on and treated immediately, the patient's bed sores, open wounds, and other exposed areas become a literal breeding ground for bacteria, which ultimately leads to sepsis.
Once the patient has sepsis, an array of symptoms usually follow, ranging from rapid heartbeats, shaking, sweating, confusion, fever, chills, hyperventilation, discolored skin, and low urination. Since the elderly have a lower immune system, sepsis is extremely dangerous and can quickly lead to sepsis shock; an advanced stage of the infection that can lead to organ loss, extremely low blood pressure, and wrongful death.
Abuse?
Often, loved ones and friends of the nursing home resident that is suffering from sepsis will wonder if the infection is a direct cause of abuse or nursing home neglect. There are tell-tale signs to progressively look for in order to determine if the infection occurred at the hands of the nursing home staff:
– Are the linens being cleaned normally?
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DESCRIBE WHAT HAPPENED
SEND REQUEST NOW
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The Mission: Saving Lives….

All members of the health care team

need to have a high index of suspicion

for development of sepsis

Sepsis Screening

- Should be routinely performed by nurses at every level of care
- On admission or arrival
- At regular intervals
- With any change in condition
- Tools improve early recognition of sepsis
- Early diagnosis and rapid treatment improve outcomes

Early Presenting Signs & Symptoms of Sepsis in Older Adults

- Tachypnea: RR > 20
- Altered mental status
- Altered Temperature Regulation
  - ∗Hyperthermia
  - ∗ Hypothermia
- Systemic Vasodilation
- Tachycardia
- Mild Hypotension
- Decreased urine output
- Hyperglycemia
- Ileus

Tachypnea: RR > 20

- Respiratory infection is the most common cause of sepsis
- Aspiration is more common in older adults
- Tachypnea almost always present but often overlooked
  - RT changes in acid base balance
  - Hypoxia, anaerobic metabolism, production of lactate
  - Patients medicated with narcotics or sedatives rarely become tachypneic

Tools for Evaluating Need for Hospitalization with Pneumonia

- CURB65
  - Confusion
  - Uremia
  - Respiratory Rate
  - Low BP
  - Age > 65

PSI Pneumonia Severity Index
On line tool

- Age Sex
- Nursing home resident
- Co-morbid disease
- Heart, liver, renal vascular, cancer
- Altered mental status
- SBP < 90
- RR > 30 HR > 125
- Temp < 35 or > 40
  Abnormal lab values

Risk	Class	Score	Mortality
Low	I	< 51	0.1%
Low	II	51 - 70	0.6%
Low	III	71 - 90	0.9%
Medium	IV	90 - 130	9.5%
High	V	> 130	26.7%

Altered Mental Status

- Confusion is common sign of infection in older adults
- Anxiety or apathy are early signs of sepsis = ⇓ perfusion to brain
  - Brain very sensitive to changes in pH, O2 & glucose!
- Hypoxia can cause anxiety & restlessness
- Elevated PCO2 causes lethargy, ⇓ RR
- Symptoms often blamed on meds! Look closely at your patient
- Late sign: patient becomes unresponsive

Systemic Vasodilation in Early Sepsis

- Toxins can circulate causing blood vessels to dilate
- SIRS can cause vasodilation
  - Warm, flushed skin
  - Bounding pulses
  - Rapid capillary refill
- Late sign: patients are cold, clammy, cyanotic, mottled = SHOCK

Mild Hypotension & Tachycardia in Early Sepsis

- As blood vessels dilate, B/P ⇓ slightly
- Initially body compensates by ⇑ HR
- Tachycardia = HR > 90
- **Body will ⇑ diastolic BP to maintain perfusion….look for this sign!!**
- Remember: patients on beta blockers & calcium channel blockers will not become tachycardic
- **Late Sign: severe hypotension** = SHOCK

Decreased Urine Output

- The body will conserve fluid in low perfusion state…..
- Kidneys retain Na and water
- Important to look at trends in urine output
- *Urine output is an important indicator of fluid volume status in people with normal renal function*
- Late sign: *oliguria,* renal failure develops

But My Patient Does Not Have a Fever……

- Older adults can have a severe infection and only have low grade fever
- Hyperthermia: T > 100.4˚F may not be present, or may be intermittent

- **Hypothermia: T < 96.8 ˚F is a bad prognostic sign!**
- Immunosuppressed patients won't mount a fever or have an elevated WBC
  - Transplant
  - Oncology

Hyperglycemia

- Pay attention to elevated glucose levels
  - May be sign of stress response from SIRS
  - May be indication of infection
- Look at trends in blood glucose levels & insulin needs
- **Hypoglycemia is a bad prognostic sign!**

Ileus

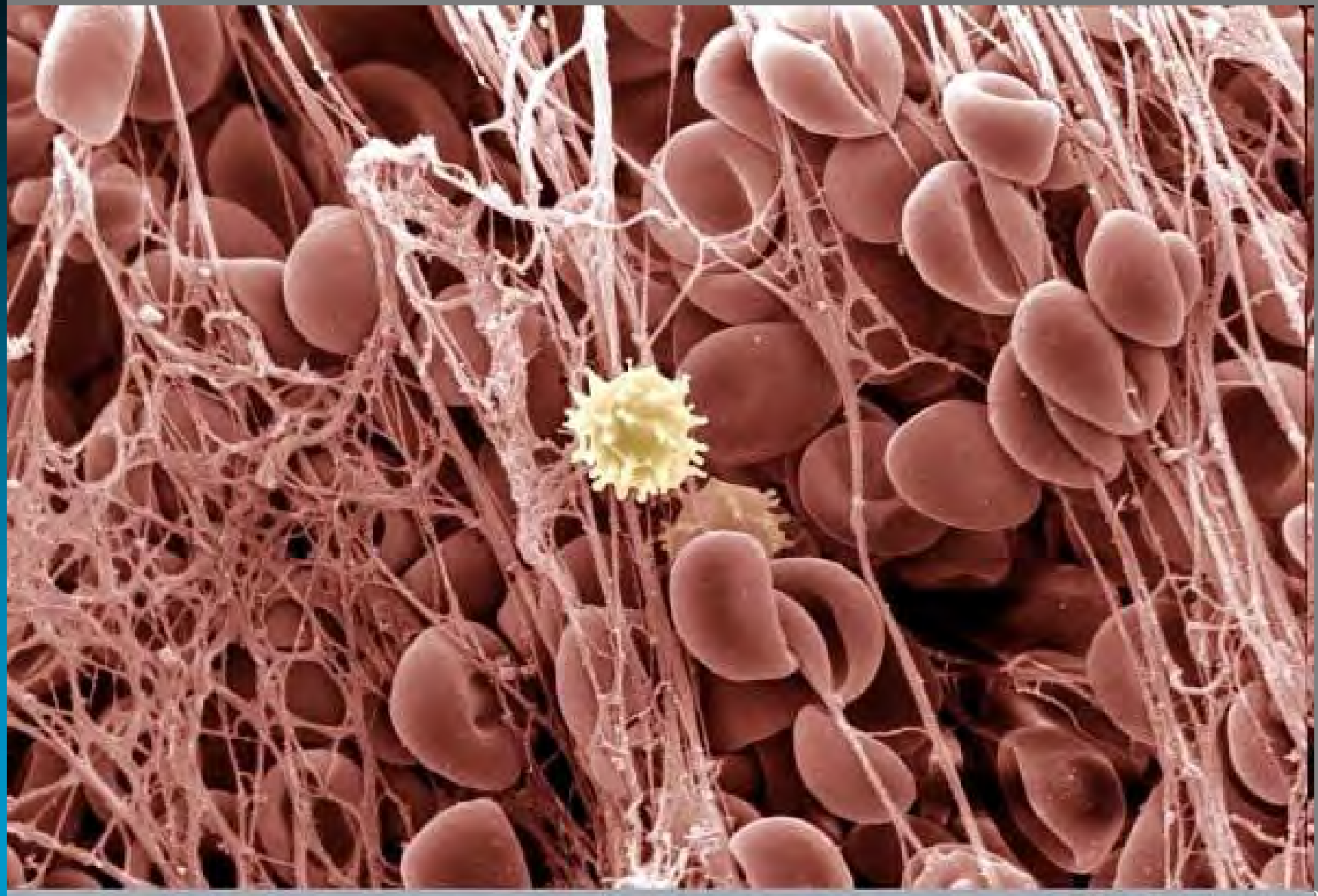
- Decreased bowel sounds often occur
  - Blood is shunted away from the bowel during low perfusion states.
  - Look for high residuals from tube feedings, decreased appetite, N/V
- Vomiting & aspiration pneumonia is a common complication
- Dead gut can occur

Look at WBC as Part of Routine Assessment

- In sepsis WBC can be ⇑ or ⇓:
- WBC > 12,000 , or > 10 % bands
- WBC < 4,000

- Look for trends in WBC

- ***Patients on antibiotics can become septic***



Wellcome Images

What Do These Three Things Have in Common?

- Confusion
- Falls
- Incontinence

- All three are signs of infection in older adults

It's truly a race against the clock

- Need to know who your high risk patients are and screen them regularly
- Need to quickly get patients transferred to ED for evaluation and treatment

Early Goal Directed Therapy
6 hour Sepsis Bundle

- Obtain STAT labs
- IV Fluid Resuscitation
- IV Antibiotics STAT
- Classify Sepsis & Determine Level of Care Needed

Obtaining STAT Labs

- Lactic acid level
- Blood Cultures: 2 sets = minimum

Other Labs as Necessary

- CBC with differential BMP
- UA Sputum Wound drainage
- ABG Liver panel, PT, PTT, INR
- Culture any IV line in place > 48 hours

Blood Cultures

- Minimum: 2 sets needed to ID organism.
  - One set percutaneous if possible
- ***Must attempt draw before starting antibiotics***

- Sterilization of blood cultures can occur within a few hours of 1st antibiotic dose
  - De-escalation of antibiotics more difficult.

Fluid Resuscitation

- Priority: Begin infusion of fluids
- Crystalloids: NS or LR
- Colloids: Albumin, Plasmanate, Blood
- Fluid boluses must be sufficient volume to cause detectable change
- 20 ml / kg bolus given rapidly (unless severe cardiac failure present)

- Average severe sepsis patient requires 4-6 L of fluid within the first 6 hours of treatment
- 10 L in 24 hours is common

Antibiotics

- *Starting antibiotics within 1 hour of diagnosis of severe sepsis = priority*

Need systems in place for timely delivery of antibiotics

- Hand off in care: must communicate
  - What antibiotics were given: dose, time
  - What antibiotics still need to be given

This is critically important!

Multiple Antibiotics Required

- Average septic pt started on 3 antibiotics
- Initial doses given as quickly as possible
- Life threatening antibiotic allergies occur within first 15 minutes of IV antibiotic infusion

- Start one, wait 30 min, start 2nd, wait 30 min, start 3rd

- Subsequent doses may be decreased
  - in amount of drug
  - in frequency of administration

Pharmacologic Concerns When Treating Infection in Older Adults

- Altered drug metabolism
- Treating drug resistant organisms
- Avoid creating drug resistant infections

- Many drug to drug interactions
  - Digoxin
  - Warfarin
  - H2 blockers
  - Oral hypoglycemics
  - Cardiac meds
  - Lipid lowering agents
  - Theoplylline

Adequate IV Access is Critical

- All patients with sepsis will need
  - Fluid resuscitation
  - IV antibiotic therapy
- PICC lines commonly used
  - Nurses can place device
  - Can monitor central venous pressure
  - Able to measure venous 02 saturation

Assess For NEW Organ System Dysfunction & Classify Sepsis

Circulatory	SBP ≤ 90 or MAP ≤ 65 Or SBP decrease > 40mm Hg from baseline
Respiratory	New or ↑ O2 needs for SPO2 > 90 %
Lactic Acid	> 2 mmol/L: Non specific for sepsis diagnosis
Renal	Creatinine > 2.0 or ↑ creatinine > 0.5 from baseline or urine output < 0.5 ml/Kg/hr x 2 hrs
Hematologic	Platelet count < 100,000 or > 50 % decrease in last 3 days, or INR > 1.5 or PTT > 60 in pt not on Coumadin or Heparin
Hepatic	Total bilirubin > 4 mg/dL
Severe Sepsis	≥ 1 organ system dysfunction or lactate level > 2
Septic Shock	MAP remains ≤ 65 after IV fluid bolus or lactate level > 4

Lactic Acid Can be Tricky…

- ⇑ during states of low perfusion
  - > 2 = severe sepsis; > 4 = tissue hypoxia
- ⇑ due to cellular metabolic failure
- **Can be mildly elevated by other conditions**:
- Cirrhosis, lymphoma, renal failure, ketosis, short gut syndrome
- Meds: can cause elevated level
  - Metformin, Nitroprusside, Retrovirals

- **Need to consider overall condition of patient before making decision if lactate level abnormal**

Additional Lab Markers in Sepsis?

- Procalcitonin
  - Elevated levels may indicate patient has bacterial infection
  - Can *possibly* help identify which patients would benefit from antibiotic therapy
  - More studies needed
- C - reactive Protein
  - Can identify inflammation in the body
  - Non specific for SIRS / sepsis

Saving Lives.....

- Initiate treatment as soon as hypo - perfusion is recognized
- Do not delay care waiting to transfer patient.
- For every hour of delay over 6 hours in IV antibiotics administration after the diagnosis of septic shock, mortality increases 7.6 %.

Nurses Play an Important Role in Identifying Patients with Sepsis

- Screen all patients for signs of sepsis
- Notify team members ASAP
- Initiate early goal directed therapy:
  - IV fluids
  - Cultures and other labs
  - Antibiotics
- Monitor patient's response to treatment

Communication Tools

- SBAR:
  - Situation
  - Background
  - Assessment
  - Recommendation
- RSVP
  - Reason
  - Story
  - VS
  - Plan

Rapid Response Teams

- Bring critical care staff to the bedside to help manage patients in crisis
- All team members should be trained to detect and manage sepsis
- Assist with patient transfer to higher level of care when needed

Preventing Infection is Everyone's Job

- Sepsis can develop from nosocomial infections
- Many initiatives in last few years to decrease hospital acquired infections

Culture of Safety

- Prevention of Central Line Associated Blood Stream Infections (CLABSI)
- Peter Pronovost
- Josie's story
- Checklists save lives

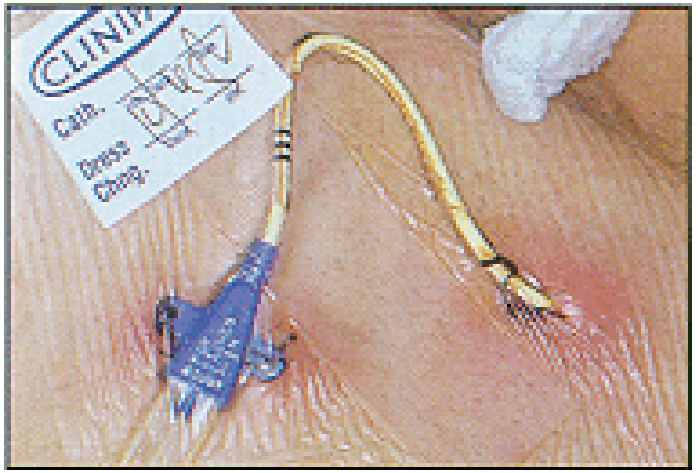


Fig 1. — Exit site infections. Note the localized erythema and edema at the exit site.

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- Johns Hopkins physician Peter receives a "genius grant"

How to Access Us

Peter Pronovost's Seemingly Simple Ideas Are Changing the Face of Patient Care

Peter Pronovost, M.D., Ph.D.

Johns Hopkins critical care specialist Peter Pronovost, who champions scientifically rigorous yet common-sense approaches to eliminating medical errors and complications, has been named a 2008 winner of a MacArthur Fellowship, the so-called "genius grant."

The award from the John D. and Catherine T. MacArthur Foundation recognizes recipients for their creativity, originality and potential to make important contributions in the future.

For his work developing simple tools that greatly improve patient safety and care, Pronovost was named one of the "most influential people of 2008" by Time magazine.

He is perhaps best known for creating a simple checklist of basic steps, such as hand washing and proper skin preparation, that has helped physicians and nurses dramatically reduce many kinds of hospital infections.

Pronovost, as medical director for Johns Hopkins' Center for Innovation in Quality Patient Care and director of the Hopkins Quality and Safety Research Group, is part of an institutional effort that has made Hopkins a world leader in the science and innovation behind patient safety.

This is the second straight year in which a Johns Hopkins physician has been awarded a MacArthur Fellowship. Lisa Cooper, an internist hailed for her research into health care disparities, received the fellowship in 2007.

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Catheter Associated UTI's
CAUTI's

- Limited use of foley catheters
- Routine perineal care ???
- Decrease manipulation and movement of foley catheter

Ventilator Associated Pneumonia

- VAP Bundles
- Chlorhexidine for routine oral care for all vented patients
- Subglottic suctioning
- HOB > 30 degrees
- No saline lavage of endotracheal tubes
  - Wash biofilm into lungs

Surgical Care Improvement Program = SCIP

- Antibiotics within 1 hour of incision
- Temperature management in the OR
- Glucose control in the post op period
- Appropriate and limited use of prophylactic antibiotic therapy

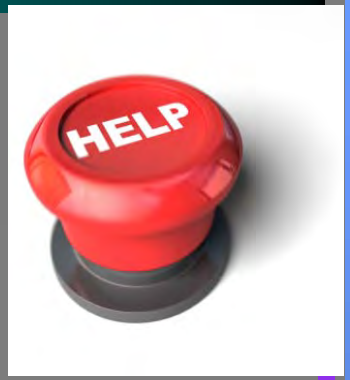
The Age Old Truth

- Good hand hygiene saves lives…..
- All institutions struggle with compliance

“You Get What You Inspect, Not What You Expect”

- **Quality data is critical for success**
- Need to do surveillance of compliance with infection control measures
- Real time feedback most beneficial
- Need to remove barriers to compliance

Prevent Failure to Rescue



- Development of systems where loved ones able to call for help when they are concerned for the patient's safety
- Information, including phone numbers of who to call , is posted in patient rooms

The Future State

- Will need “sepsis experts” at all levels of care
- Need more resources for early detection of sepsis outside the hospital setting
- Could NH’s have protocols for rapid transfer of patients with suspected sepsis?

It Takes a Village.....

- Need for more training for health care personnel at all levels of care
- Providers who manage NH patients need training in Sepsis management
- EMS transport
  - Sepsis is an emergency
  - Fluids should be started early
  - Call ahead to alert hospital staff of arrival of potential septic patient

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BACK TO TOP

STATUTE OF LIMITATIONS

- **3 years with Discovery Rule.** (Wis. Stat. Ann §893.54)
- **Medical malpractice** – 3 years from date of injury or 1 year from date of discovery, whichever is later, but no more than 5 years from the date of the act or omission. Foreign object cases must be brought within 1 year from date of discovery or reasonable discovery or 3 years from date of incident. Minors must bring suits against health care providers within 3 years of date of injury/1 year from date of discovery or by age ten. (Wis. Stat. Ann §893.55; Wis. Stat. Ann §893.56)

DAMAGES CAP

- **Noneconomic damages are limited** to $750,000. (Wisc. Stat. Ann. §893.55)

Wrongful Death

BACK TO TOP

STATUTE OF LIMITATIONS

- **3 years with Discovery Rule.** (Wis. Stat. Ann §893.54)

DAMAGES CAP

- **Judgment for damages for pecuniary injury** from wrongful death may be awarded to any person entitled to bring a wrongful death action. Additional damages not to exceed

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ABOUT JONATHAN ROSENFELD

Jonathan Rosenfeld is a lawyer who represents people injured in nursing homes and long-term care facilities. Jonathan has represented victims of nursing home abuse and neglect throughout Illinois and across the country. Jonathan's reputation as an aggressive advocate for the...

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Prevent Failure to Rescue

- Demonstrate due diligence in
  - Early recognition of sepsis
  - Transfer to appropriate level of care
  - Avoid preventable deaths

We Can Save Lives…….

- Early Screening
  - Nurses need to be looking for signs and symptoms of sepsis in every patient
- Early and aggressive treatment
  - Know the guidelines for EGDT
  - Get patients to the appropriate level of care


Do not give up, the beginning is
always the hardest.

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