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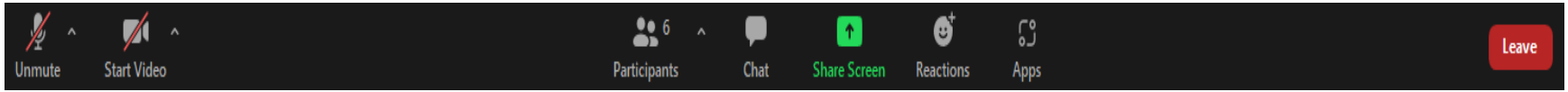
Health Quality Innovation Network

Sepsis Affinity Group

August 5, 2021

Logistics – Zoom Meeting



To ask questions, click on the **Chat** icon.

Raise your hand if you want to verbally ask a question by clicking on the **Reactions** icon and then clicking on “Raise Hand”.

You may adjust your audio by clicking the caret (^) next to the **Unmute** icon.

A recording and slides from today’s session will be shared after the call.

Today's Speaker

Deb Smith, MLT (ASCP), BSN, CIC, CPHQ

Health Quality Innovation Network

Session 1:
Early Screening Strategies

Agenda

1. Quality Improvement process
2. Building you TEAM
3. Setting your goal
4. Identifying patients at risk for Sepsis
5. Identifying Sepsis in the ED
6. Identifying Sepsis in the ICU and floors
7. Follow up and homework

Why Focus

1

Published studies demonstrate wide practice variation

- Poor compliance with known quality indicators
- There is benefit from standardization

2

Performance metrics can change clinical practice

- It is feasible to use data to audit and change clinical behavior
- Increased compliance with performance metrics is associated with improved survival

3

HQIC Data confirms the need to focus on Sepsis mortality reduction

Surviving Sepsis Campaign®

Mitchell M. Levy MD, FCCM Professor of Medicine Chief, Division of Pulmonary, Sleep, and Critical Care Warren Alpert Medical School of Brown University, Providence, RI

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Project Plan

1. Define Sepsis Program Goal and align with organizational goals
2. Identify leadership sponsor
3. Develop sepsis team (do we have all the right people here?) and schedule monthly (at minimum) meetings for at least 6 months
4. Collect baseline data – essential step; understand your current process (covered in session 3)
5. Identify nursing and physician champions in ED and ICU and ensure champions attend team meeting
6. Ensure bedside nurses are on the team
7. Begin to define action plan and timeline for program development and implementation

Action Plan

Action Plan

Focus Area	Measure
☐ COVID	Choose an item. Click or tap here to enter text.
☐ Opioids	Choose an item. Click or tap here to enter text.
☒ Patient Safety	**Severe Sepsis & Septic Shock 30-Day Mortality** Click or tap here to enter text.
☐ Care Transitions	Choose an item. Click or tap here to enter text.
☐ Person & Family Engagement	Choose an item. Click or tap here to enter text.
☐ Health Equity	Choose an item. Click or tap here to enter text.

Improvement Opportunity	Insert text to describe the gap or opportunity addressed in this action plan

Recommended Root Cause Analysis and Improvement Techniques
1. 5 Whys
2. Fishbone or Cause and Effect Diagram
3. PDSA Cycle (Plan-Do-Study-Act)
4. Creating SMART Goals

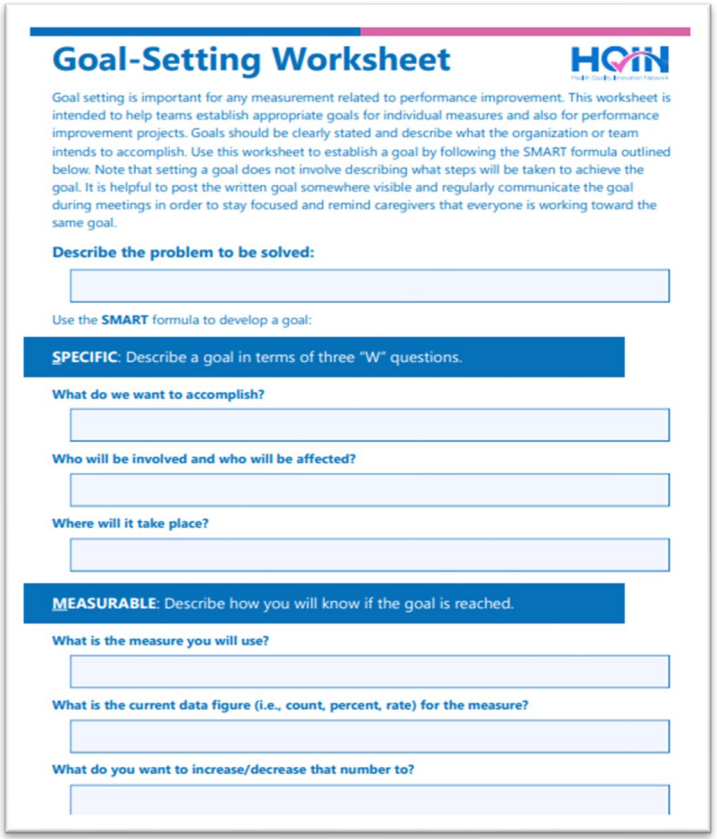
Five Whys Tool for Root Cause Analysis

- Develop a clear specific problem statement
- The team facilitator asks why the problem happened and records the team response.
- If the answer provided is a contributing factor to the problem, the team keeps asking "Why?" until there is agreement from the team that the root cause has been identified.
- It often takes three to five whys, but it can take more than five!

Keep going until the team agrees the root cause has been identified.

Problem statement	One sentence description of event or problem
Why? ⇨	
Why? ⇨	
Why? ⇨	
Why? ⇨	
Why? ⇨	
Root Cause(s)	1. 2. 3. To validate root causes, ask the following: If you removed this root cause, would this event or problem have been prevented?

Smart Goal



Goal-Setting Worksheet

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Goal setting is important for any measurement related to performance improvement. This worksheet is intended to help teams establish appropriate goals for individual measures and also for performance improvement projects. Goals should be clearly stated and describe what the organization or team intends to accomplish. Use this worksheet to establish a goal by following the SMART formula outlined below. Note that setting a goal does not involve describing what steps will be taken to achieve the goal. It is helpful to post the written goal somewhere visible and regularly communicate the goal during meetings in order to stay focused and remind caregivers that everyone is working toward the same goal.

Describe the problem to be solved:

Use the **SMART** formula to develop a goal:

SPECIFIC: Describe a goal in terms of three "W" questions.

What do we want to accomplish?

Who will be involved and who will be affected?

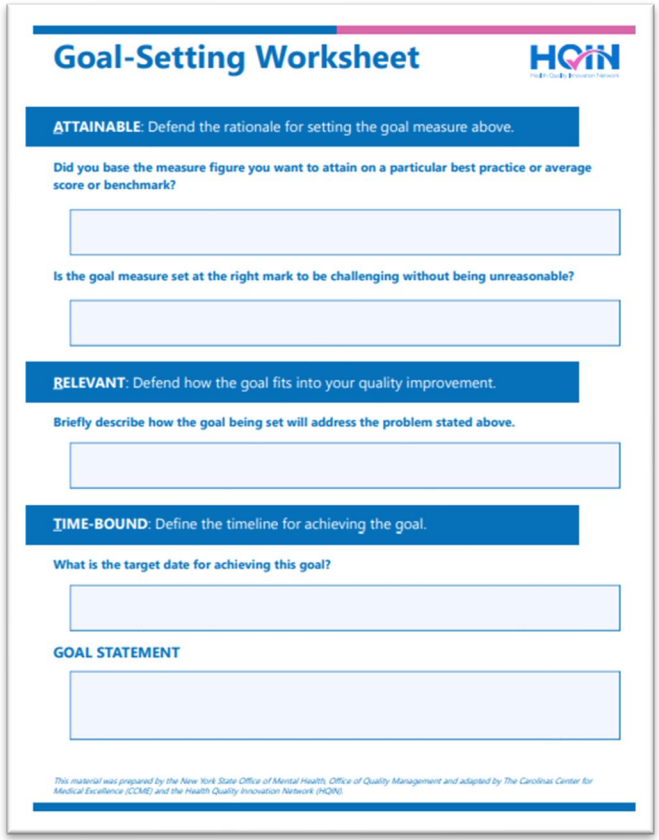
Where will it take place?

MEASURABLE: Describe how you will know if the goal is reached.

What is the measure you will use?

What is the current data figure (i.e., count, percent, rate) for the measure?

What do you want to increase/decrease that number to?



Goal-Setting Worksheet

HQIN Health Quality Innovation Network

ATTAINABLE: Defend the rationale for setting the goal measure above.

Did you base the measure figure you want to attain on a particular best practice or average score or benchmark?

Is the goal measure set at the right mark to be challenging without being unreasonable?

RELEVANT: Defend how the goal fits into your quality improvement.

Briefly describe how the goal being set will address the problem stated above.

TIME-BOUND: Define the timeline for achieving the goal.

What is the target date for achieving this goal?

GOAL STATEMENT

This material was prepared by the New York State Office of Mental Health, Office of Quality Management and adapted by The Carolinas Center for Medical Excellence (CCME) and the Health Quality Innovation Network (HQIN).

Action Plan cont.

Action Plan

Specific Actions and Interventions	Baseline Rate	Goal Rate	Projected Completion Date	Responsible Parties	Ongoing Monitoring	Comments and Resources
[enter start date here] Analyze sepsis mortality rates and determine your goal						
[enter start date here] Identify gaps in current practice						• Hospital Sepsis Gap Analysis • Fishone Diagram
[enter start date here] Create your process map						• Sepsis Road Mapp • Hospital Toolkit for Adult Sepsis Surveillance
[enter start date here] Introduce early detection education and guidance						• Seeing Sepsis • It's About TIME • In Situ Simulation Sepsis Telehealth Toolkit
[enter start date here] Practice the approach						• Sepsis Simulation Tool: ED • Sepsis Simulation Tool: Inpatient
[enter start date here] Provide tools						• Emergency Department and General Floor Sepsis Algorithm • CODE: Sepsis Order Sub Set

Gap Analysis Starting Point

Hospital Sepsis Gap Analysis

Element	Yes	No	N/A	Unsure	Comments
Leadership Support					
1. Do you have a sepsis program? If yes, please describe in comments					
2. Does your sepsis program have leadership support, i.e. administrator, medical director, medical staff, clinical staff?					
3. Is your medical staff actively involved in sepsis prevention?					
Committees					
4. Do you report on sepsis at?					
a. Quality Committee					
b. Infection Control Committee					
5. Do you share infection or sepsis data with staff? If yes, list type of data under comments.					
6. Do your share information with patients and families? List how under comments.					
Education					
7. Do you have a sepsis early recognition training program?					
a. If No, do you need assistance setting up a training program?					
8. Does hospital staff have an annual competency for sepsis?					
9. Do you utilize skills days for nursing assistant sepsis training?					
10. What are the tools you use to train staff, i.e., INTERACT, Seeing Sepsis 100, or other? List under comments.					
a. Do you have sepsis education materials for staff?					
b. Do you have sepsis education materials for patients and families?					
Early Identification of Sepsis & Infection Risk					
11. Does your admission assessment include an infection and sepsis risk assessment?					
12. Do you audit the admission nursing assessment to ensure it is completed?					
13. If infection/sepsis risk is triggered on assessment, do you care plan the level of infection/sepsis risk?					
14. Does your care planning include interventions appropriate to the level of risk i.e. high-risk rounding, more frequent monitoring of vital signs and mental status?					
15. Do you audit the care plan and implementation of interventions for those identified at risk?					
16. Are bundles (Hour 1, etc.) used to guide front line team in the care of a patient with sepsis?					
Patient and Family Education					
17. Do you provide sepsis education to patients and families?					
18. Do you provide any material (CDC, HQI Patient and Family Guide) to families, board members, community? If so, please list under comments.					
19. How do you involve your patient and/or family council in sepsis education? Please list under comments.					

[Link to online Gap Analysis]

Sepsis Facts

In the US, **1.7 million people** get sepsis each year
(1 every 20 seconds)

Sepsis is the **leading cause of death** in hospitals

In the US, **270,000 die** from sepsis each year
(1 every 2 minutes)

19% of sepsis hospitalizations readmit within **30 days**

87% of sepsis cases start in the **community**

Sepsis mortality increases **8%** for **each hour** of delayed treatment

The risk of sepsis is lowered with **vaccines** to prevent illness, **rapid treatment** of infection, and **good infection prevention practices** especially hand hygiene.

Anyone can get sepsis but the most at risk are the **very young**, **elderly**, people with a **chronic disease** or **weakened immune system**.

http://www.sepsis.org/references

The Importance of Early Detection

- Efforts to just treat recognized sepsis alone is not enough.
- Critical to mortality reduction is pushing practitioners to identify sepsis early.
- Earlier recognition may account for much of the mortality reduction and may partially explain sharply increasing incidence.
- Without recognition that the clock is ticking, there is simply no incentive to recognize a challenging diagnosis early

Clinicians benefit from reminders!

INITIAL SCREENING FOR PATIENTS FOR SEPSIS

Before	Now
Supine in bed	Sitting up in bed
Ventilator	Nasal cannula
Fluids wide open	IV boluses
Increasing vasopressors	Weaning vasopressors
Minimally responsive	Awake

“Don’t look sick enough to be in the ICU or to have a central line”

Must correct this misconception

Polling Question

If you are screening for sepsis, what criteria/tool are you using?

a) SIRS
b) SOFA
c) qSOFA
d) MEWS
e) Hospital based tool
f) Not routinely using a screening tool

Sepsis Early Detection

- SIRS: Systemic Inflammatory Response Syndrome
  Consider sepsis when 2 criteria have been met
  - Temp < 96.8F or >101.4F
  - Heart Rate > 90 beats per minute
  - Respirations > 20 breaths per minute OR PP CO2 < 32mmHg
  - WBC < 4,000 or >12,000 or > 10% immature cells
- SOFA: Sequential Organ Failure Assessment
  - Scoring system based on Respiratory, Coagulation, Liver, Cardiovascular, CNS and Renal function observation and laboratory testing
- Q (quick) SOFA:
  - Shortened version for ICU that includes, RR > 22, Altered mental status and systolic BP < to 100mmHg
- MEWS: Modified Early Warning System
  - Respiration, Heart Rate, Blood Pressure, Temp, urine output, conscious level

Systemic Inflammatory Response Syndrome (SIRS): Background, Pathophysiology, Etiology (medscape.com)

The SOFA Score

- Standardized numeric score
- Has been shown to have a significant correlation with outcomes
- Higher scores indicate higher risk of death
- Triage tool to be used in conjunction with disease specific predictive factors

Organ System, Measurement	SOFA Score				
	0	1	2	3	4
Respiration PaO_2/FiO_2, mmHg	Normal	<400	<300	<200 (with respiratory support)	<100 (with respiratory support)
Coagulation Platelets $x10^3/mm^3$	Normal	<150	<100	<50	<20
Liver Bilirubin, mg/dL (µmol/l)	Normal	1.2-1.9 (20-32)	2.0-5.9 (33-101)	6.0-11.9 (102-204)	>12.0 (<204)
Cardiovascular Hypotension	Normal	MAP<70 mmHg	Dopamine ≤5 or dobutamine (any dose)**	Dopamine >5 or epinephrine ≤0.1 or norepinephrine ≤0.1	Dopamine >15 or epinephrine >0.1 or norepinephrine >0.1
Central Nervous System Glasgow Coma Score	Normal	13-14	10-12	6-9	<6
Renal Creatinine, mg/dL (µmol/l) or Urine output	Normal	1.2-1.9 (110-170)	2.0-3.4 (171-299)	3.5-4.9 (300-440) or <500 mL/day	>5.0 (>440) or <200 mL/day

* Source: Vincent et al., 1996.

**Adrenergic agents administered for at least 1 hour (doses given are in mcg/kg/min).

SOFA Score: What it is and How to Use it in Triage (asprtracie.s3.amazonaws.com)

The qSOFA Score

- A shortened or "Quicker" version of the SOFA to be used on the floors including the ICU
  - RR > 22, Altered mental status and systolic BP ≤ 100mmHg
- qSOFA was also designed to predict increased mortality within the context of a cohort of patients with suspected infection.
- qSOFA should not be used as a "Sepsis Screen."
- qSOFA and SOFA are both predictors of mortality; they are not tests of early sepsis at risk to progress to organ failure.

The MEWS tool

- Like the SOFA score
- Comprised of 6 vital signs for the score
- Identifies patients at high risk for developing sepsis
- MEWS ≥ 5 was associated with increased risk of death
- Not to be confused with an assessment

MEWS (Modified Early Warning System)

	3	2	1	0	1	2	3
Respiratory Rate (per minute)		< 8		9 - 14	15 - 20	21 - 29	> 30
Heart Rate (per minute)		< 40	40 - 50	51 - 100	101 - 110	111 - 129	> 129
Systolic Blood Pressure	< 70	71 - 80	81 - 100	101 - 199		> 200	
Conscious Level (AVPU)	Unresponsive	Responds to Pain	Responds to Voice	Alert	New Agitation / Confusion		
Temperature (°C)		< 35.0	35.1 - 36	36.1 - 38	38.1 - 38.5	> 38.6	
Hourly Urine (For 2 Hours)	< 10mls / hr	< 30mls / hr	< 45mls / hr				

Modified Early Warning Score

MEWS Color	MEWS Score	Action
Green	0-2	Continue to monitor
Yellow	3	Re-assess patient and VS
Orange	4	Notify RRT RN or Call RRT
Red	5+	

Screening process (cont.)

- Implement the screening process for ED, rapid response team, ICU, house wide (including specialty units i.e., OB)
- Develop audit process to evaluate compliance and effectiveness
- Ensure screening process has clear “next steps” defined for practitioners and nursing staff

Early Detection: Diagnosing potential Sepsis

Patient identified as at risk for Sepsis with 2 or more SIRS or using the SOFA, qSOFA or MEWS screening criteria

- Assess the patient for a potential source of infection

Screening for Source of infection

Does the patient's history suggest an infection?

- ❑ Pneumonia/empyema
- ❑ Urinary tract infection
- ❑ Acute abdominal infection
- ❑ Meningitis
- ❑ Skin/soft tissue infection
- ❑ Bone/joint infection
- ❑ Wound infection
- ❑ Blood stream infection
- ❑ Endocarditis
- ❑ Indwelling or implantable device infection
- ❑ Any other bacterial, viral or fungal infection

Screening for Source of Infection (cont.)

Does the patient have two or more of these S/S of infection?

- ❑ Hyperthermia >101.0 F
- ❑ Hypothermia < 96.8 F
- ❑ Altered mental status
- ❑ Tachycardia > 90 bpm
- ❑ Tachypnea > 20 bpm
- ❑ Leukocytosis; WBC > 12,000
- ❑ Leukopenia; WBC < 4,000
- ❑ Hyperglycemia in the absence of diabetes

Early Detection: Diagnosing Severe Sepsis

Patient with a suspicion of infection due to S/S and a history

Obtain	Consider
☐ Lactic acid	☐ Chest x-ray
☐ Blood cultures	☐ Amylase
☐ CBC with differential	☐ Lipase
☐ Basic chemistries	☐ CRP
☐ Bilirubin	☐ CT scan

Early Detection: Diagnosing Severe Sepsis

Yes; there is a potential source of infection

- Sepsis documented
- Initiate the sepsis pathway
- Assess the patient for sepsis related organ dysfunction

Identifying Acute Organ Dysfunction in Severe Sepsis

CNS

- Altered consciousness (unrelated to primary neuro pathology)
- Glascow Coma Score less than or equal to 12

Respiratory

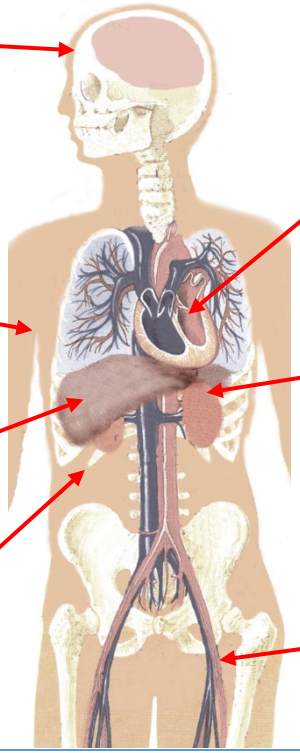
SaO2 less than 90% or increasing O2 requirements

Hepatic

Serum total bilirubin greater than or equal to 4mg/dl

Metabolic

Serum lactic acid greater than or equal to 2mEq/L



Cardiovascular

- SBP less than 90mmHg or 40mmHg less than baseline or MAP < 65mmHg
- Need for Vasopressors

Renal

- UO < 0.5 ml/kg per hr (despite fluid)
- Creatinine increase of > 0.5mg/dl from baseline

Hematologic

Platelets less than 100,000; INR greater than 1.5

Assess for organ dysfunction (cont.)

SBP < 90 mmHg or **MAP <65 mmHg**	**SBP decrease > 40 mm Hg** from baseline	**Creatinine > 2.0 mg/dl** (176.8 mmol/L) or **urine output < 0.5 ml/kg/hour** for 2 hours	**Bilirubin > 2 mg/dl** (34.2 mmol/L)	**Platelet count < 100,000 µL; INR > 1.5**
Lactate > 2 mmol/L (18.0 mg/dl)	**Coagulopathy (INR >1.5** or **aPTT >60 secs)**	**SaO2 < 90%** or **increasing O2 requirements**	**Glasco Coma score of ≤ 12**	**Serum Lactate ≥ 2**

Early Detection: Diagnosing Sepsis

Yes; there is evidence of organ dysfunction

- Severe Sepsis documented
- Assess for evidence of shock

Severe Sepsis with shock

Assess for evidence of shock

- Hypotensive after initial 30 mL/kg fluid bolus
- Initial lactate ≥ 4.0

Evidence of shock present

- Start vasopressors if still hypotensive
- Reassess fluid status and tissue perfusion
- Transfer to critical care or if CAH to a receiving hospital

Early Detection: Diagnosing potential Sepsis

Patient identified as at risk for Sepsis with 2 or more SIRS or using the SOFA, qSOFA or MEWS screening criteria

- Assess the patient for a potential source of infection

Yes; there is a potential source of infection

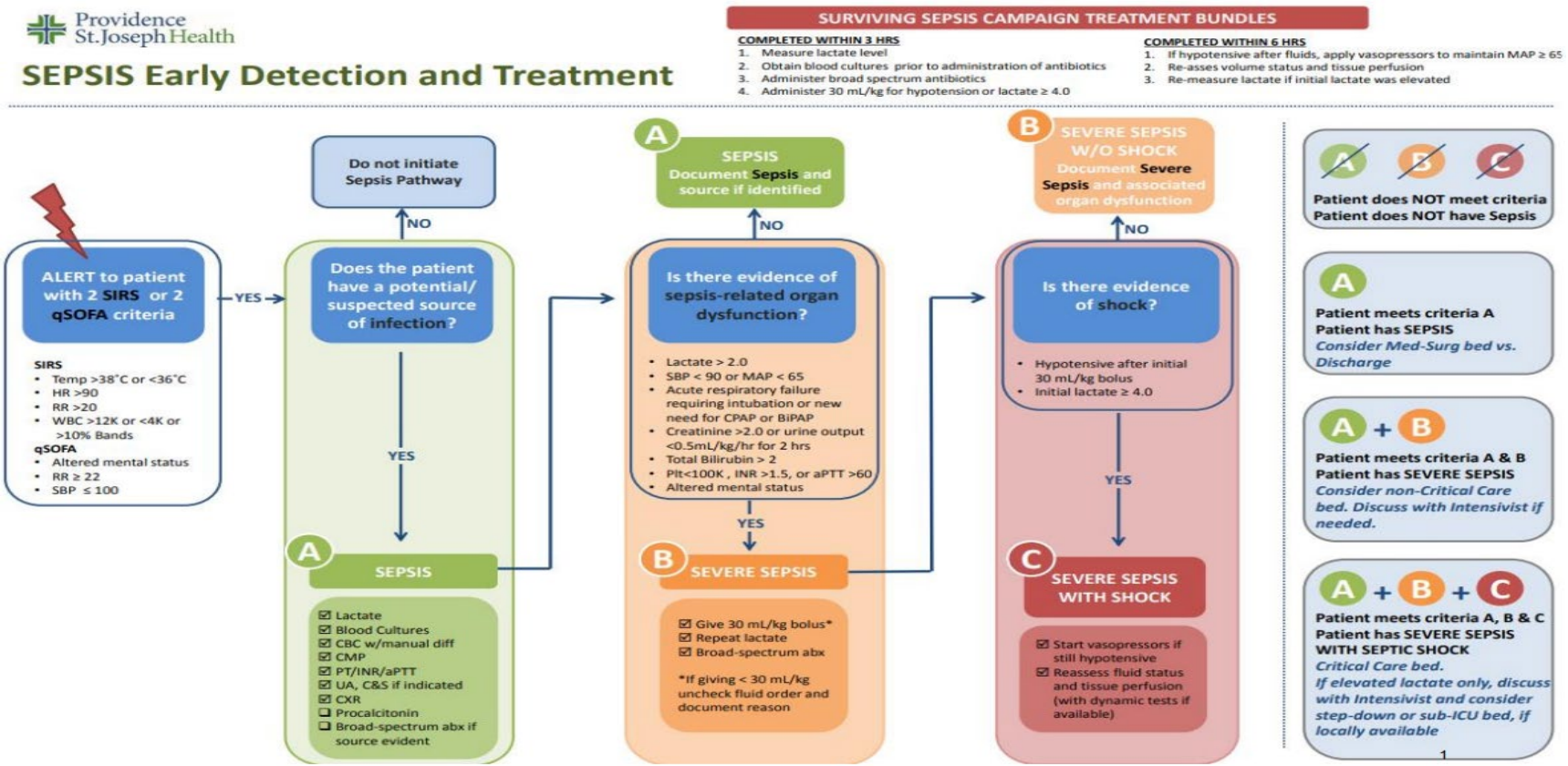
- Sepsis documented and Initiation of the sepsis pathway
- Assess the patient for sepsis related organ dysfunction

Yes; there is evidence of organ dysfunction

- Severe sepsis documented
- Assess for shock

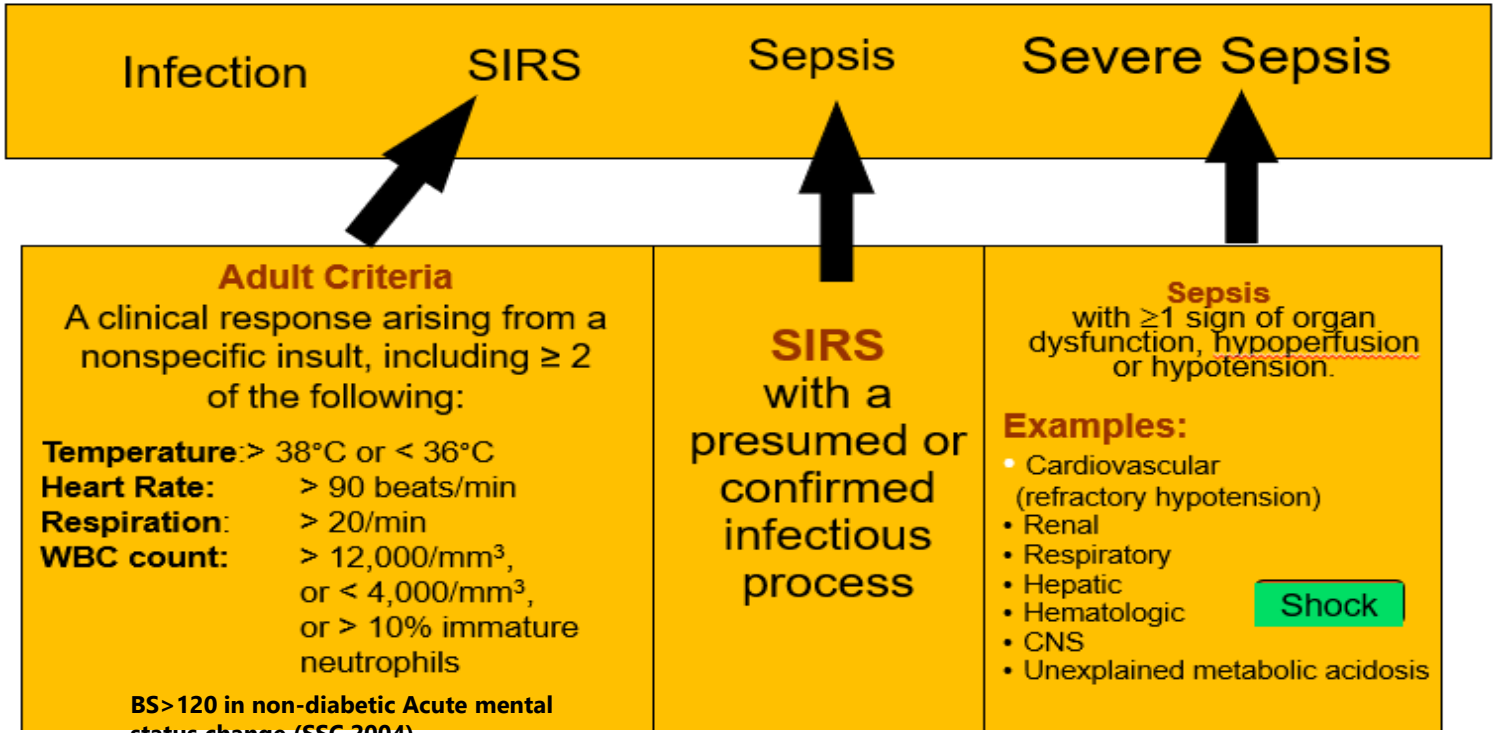
Yes; there is evidence of shock

- Severe sepsis with shock documented
- Critical Care bed needed



[PowerPoint Presentation (sepsiscoordinatornetwork.org)]

Severe Sepsis: Defining a Disease Continuum



SIRS = Systemic Inflammatory Response Syndrome
Bone et al. *Chest.*1992;101:1644-1654.

Sepsis can happen **at any time** with **any patient** in **any location**

Sepsis identification on the Floors

- Patients with severe sepsis and septic shock on general medical units have a higher rate of mortality than their counterparts identified in the ED, likely due to delays in recognition and treatment
- It's possible to institute nurse driven, every shift screening on medical units
- Early identification and management on the units are associated with improved survival

Surviving Sepsis Campaign®

Mitchell M. Levy MD, FCCM Professor of Medicine Chief, Division of Pulmonary, Sleep, and Critical Care Warren Alpert Medical School of Brown University, Providence, RI

RN Shift Screening example

SIRS (Systemic Inflammatory Response Syndrome) - (SIRS >=2, proceed to infection questions)			
Temperature >100.4 or < 96.8 F			
HR >90 BPM			
Resp Rate > 20 breaths/min			
WBC >12,000 or < 4,000 per uL or bands > 10 %			
SIRS Score (Read only)			
Infection			
Does this patient have a known or suspected			
Is this patient on antibiotics (not prophylactic)?			
End Organ Dysfunction (Acute Changes/Not Chronic Condition)			
Acutely Altered Mental Status			
SBP < 90 mmHg OR MAP < 65 mmHg			
Oxygenation (see details in the ROW information)			
Glucose >140 mg/dL without Diabetes or Steroids			
Lactate Level > 2 mmol/L			
Creatinine > 2 mg/dL or an increase > 0.5 mg/dL.			
Bilirubin > 2 mg/dL			
Platelet Count < 100,000 per uL			
Coagulopathy: INR >1.5; APTT >60 seconds AND			
Urine Output < 0.5 mL/kg/hr for greater than 2			
Was at least one (1) of the above criteria			
IHS Sepsis Resource RN review initiated			

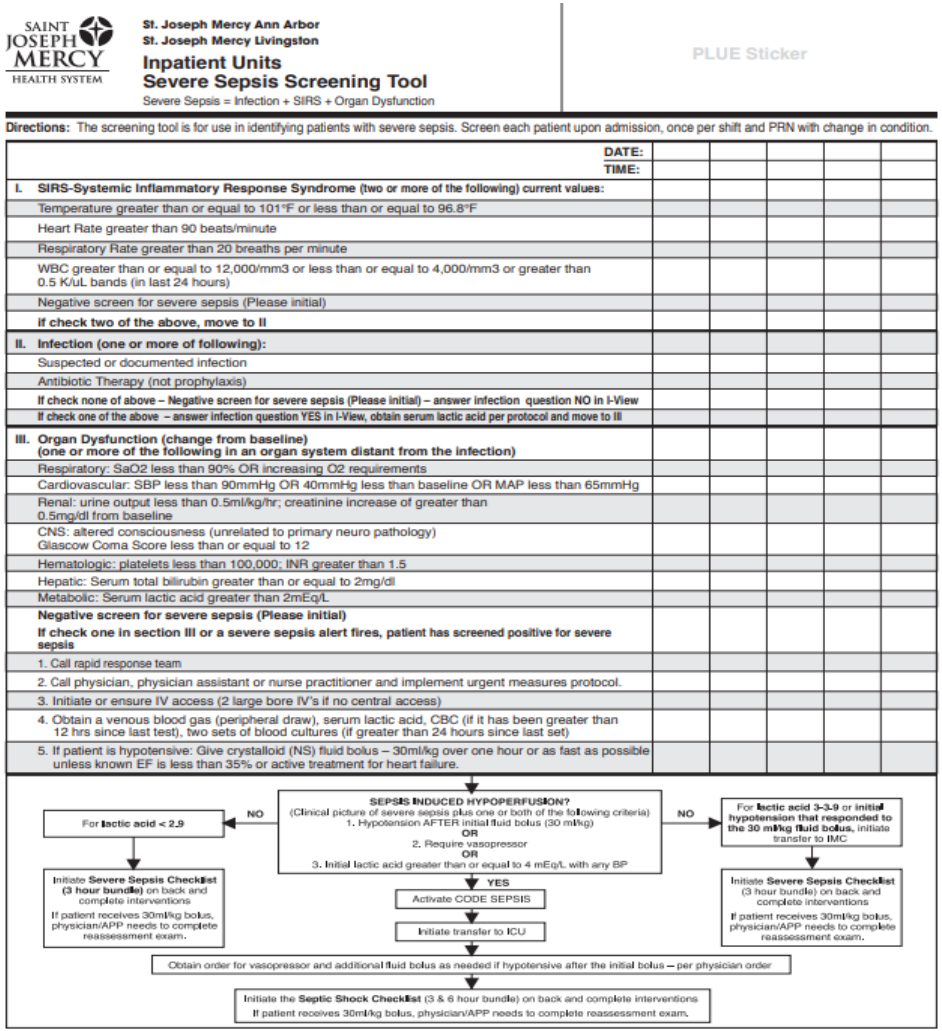
Make Screening for Sepsis Process-Dependent

- Weave into fabric of current practice
- Bedside nurse should do the *screening*—
  - *Every shift and prn with condition changes*
  - *Audit for compliance and accuracy*
- Define expectation to screen during shift assessment and PRN with changes in patient's conditions
- Screen for severe sepsis with *every rapid response or medical response team call*
- Identify strategies for initiation of therapy once patient with positive screen for severe sepsis is identified

Inpatient Sepsis Screening Tool

Features of this tool:
- Evaluate SIRS before infection
- Call RRT when organ dysfunction noted

[Inpatient-Severe-Sepsis-Screening-Tool-St-Joseph-Mercy.pdf (sepsiscoordinatornetwork.org)]



SAINT JOSEPH MERCY HEALTH SYSTEM

St. Joseph Mercy Ann Arbor
St. Joseph Mercy Livingston

Inpatient Units
Severe Sepsis Screening Tool
Severe Sepsis = Infection + SIRS + Organ Dysfunction

PLUE Sticker

Directions: The screening tool is for use in identifying patients with severe sepsis. Screen each patient upon admission, once per shift and PRN with change in condition.

	DATE:				
	TIME:				
I. SIRS-Systemic Inflammatory Response Syndrome (two or more of the following) current values:					
Temperature greater than or equal to 101°F or less than or equal to 96.8°F					
Heart Rate greater than 90 beats/minute					
Respiratory Rate greater than 20 breaths per minute					
WBC greater than or equal to 12,000/mm3 or less than or equal to 4,000/mm3 or greater than 0.5 K/uL bands (in last 24 hours)					
Negative screen for severe sepsis (Please initial)					
If check two of the above, move to II					
II. Infection (one or more of following):					
Suspected or documented infection					
Antibiotic Therapy (not prophylaxis)					
If check none of above – Negative screen for severe sepsis (Please initial) – answer infection question NO in I-View					
If check one of the above – answer infection question YES in I-View, obtain serum lactic acid per protocol and move to III					
III. Organ Dysfunction (change from baseline) (one or more of the following in an organ system distant from the infection)					
Respiratory: SaO2 less than 90% OR increasing O2 requirements					
Cardiovascular: SBP less than 90mmHg OR 40mmHg less than baseline OR MAP less than 65mmHg					
Renal: urine output less than 0.5ml/kg/hr; creatinine increase of greater than 0.5mg/dl from baseline					
CNS: altered consciousness (unrelated to primary neuro pathology) Glascow Coma Score less than or equal to 12					
Hematologic: platelets less than 100,000; INR greater than 1.5					
Hepatic: Serum total bilirubin greater than or equal to 2mg/dl					
Metabolic: Serum lactic acid greater than 2mEq/L					
Negative screen for severe sepsis (Please initial) **If check one in section III or a severe sepsis alert fires, patient has screened positive for severe sepsis**					
1. Call rapid response team					
2. Call physician, physician assistant or nurse practitioner and implement urgent measures protocol.					
3. Initiate or ensure IV access (2 large bore IV's if no central access)					
4. Obtain a venous blood gas (peripheral draw), serum lactic acid, CBC (if it has been greater than 12 hrs since last test), two sets of blood cultures (if greater than 24 hours since last set)					
5. If patient is hypotensive: Give crystalloid (NS) fluid bolus – 30ml/kg over one hour or as fast as possible unless known EF is less than 35% or active treatment for heart failure.					

SEPSIS INDUCED HYPOPERFUSION?
(Clinical picture of severe sepsis plus one or both of the following criteria)
1. Hypotension AFTER initial fluid bolus (30 ml/kg)
OR
2. Require vasopressor
OR
3. Initial lactic acid greater than or equal to 4 mEq/L with any BP

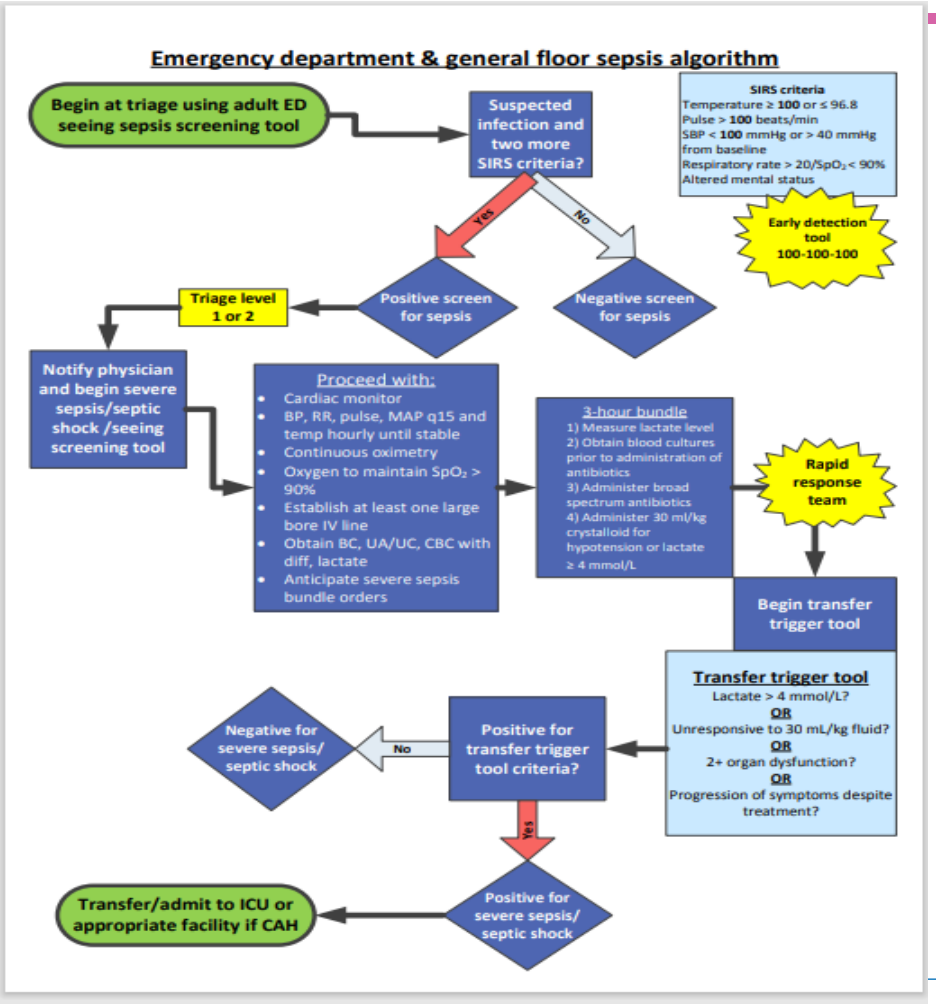
NO → For **lactic acid < 2.9**: Initiate **Severe Sepsis Checklist (3 hour bundle)** on back and complete interventions. If patient receives 30ml/kg bolus, physician/APP needs to complete reassessment exam.

NO → For **lactic acid 3-3.9 or initial hypotension that responded to the 30 ml/kg fluid bolus**, initiate transfer to IMC. Initiate **Severe Sepsis Checklist** (3 hour bundle) on back and complete interventions. If patient receives 30ml/kg bolus, physician/APP needs to complete reassessment exam.

YES → Activate CODE SEPSIS → Initiate transfer to ICU

Obtain order for vasopressor and additional fluid bolus as needed if hypotensive after the initial bolus – per physician order

Initiate the **Septic Shock Checklist** (3 & 6 hour bundle) on back and complete interventions
If patient receives 30ml/kg bolus, physician/APP needs to complete reassessment exam.



[Sepsis Algorithm v11.pdf (mnhospitals.org)]

Early Identification: Beyond the Hospital Walls

Partnering with EMS, Skilled Nursing Facilities

& Home Health

it's all about the early

Reaching Beyond

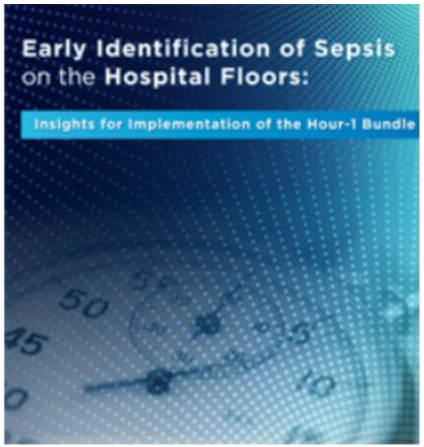
- Partner with EMS - Have them screen and begin fluids for hypotension, possibly draw lactic acid
- Partner with PCPs and medical and surgical homes to educate on severe sepsis
- Partner with Extended Care Facilities and Home Care to educate on sepsis and implement early identification and management

Polling Question

Where does Sepsis screening take place in your facility? Check all that apply.

a) Your hospital has a screening process in place in the ED
b) Your hospital has a screening process in place in the ICU
c) Your hospital has a screening process in place on the Medical Floors
d) Your hospital has reached out to partner with EMS to identify and manage sepsis in the field
e) Your hospital has partnered with LTC to identify sepsis and manage symptoms before transfer
f) Your hospital has a physician lead for the sepsis program
g) Your hospital has a multidisciplinary team dedicated to the success of the sepsis program

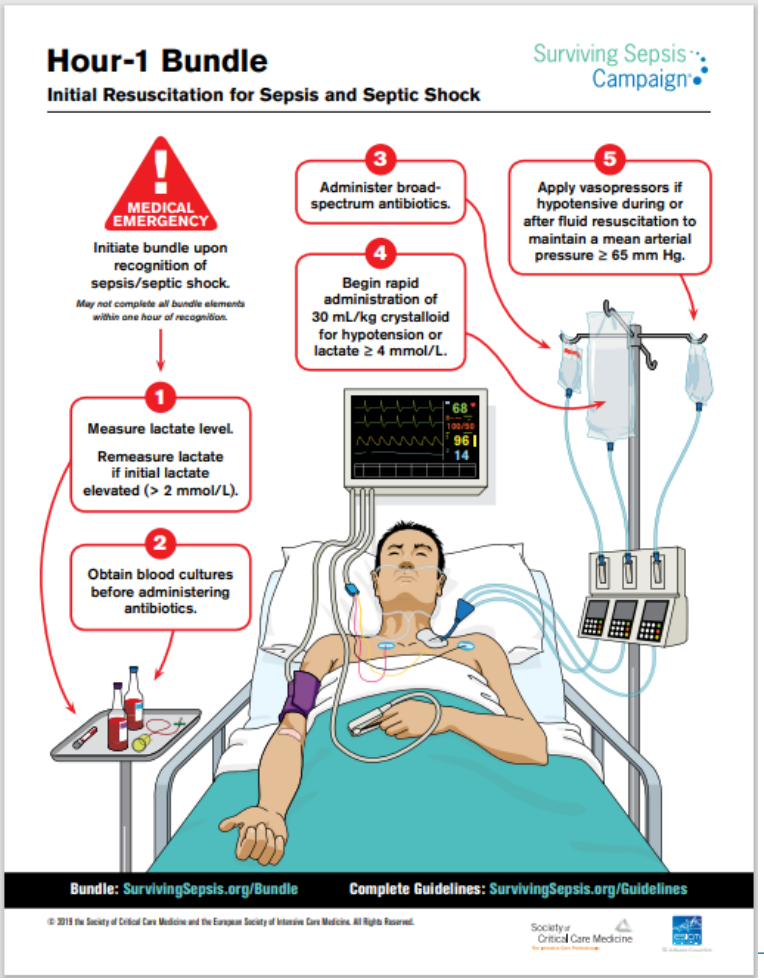
Early Identification of Sepsis Guide



Supports the use of the Hour-1 Bundle

- Best Practices for early identification of sepsis
- Implementing a QI program
- Define the team members roles
- Overcoming Barriers
- Screening

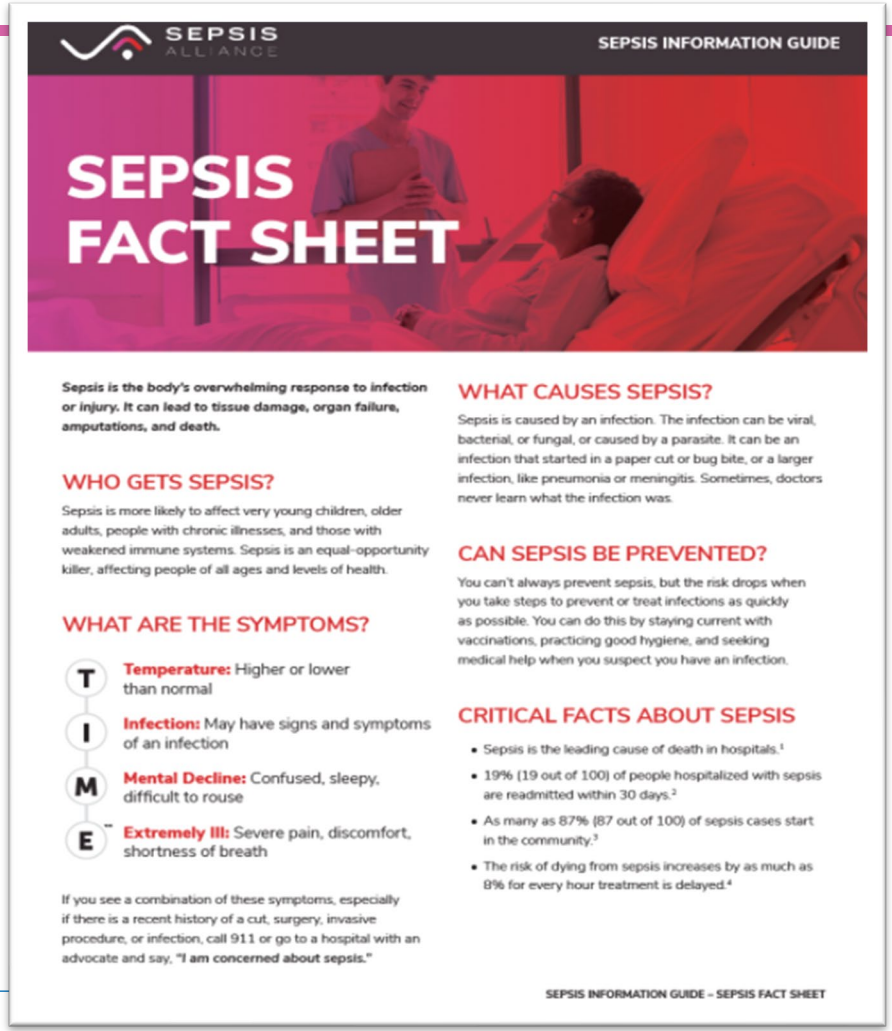
Surviving-Sepsis-Early-Identify-Sepsis-Hospital-Floor.pdf.aspx (sccm.org)



Hour-1 Bundle

- Act quickly upon sepsis and septic shock recognition
- Minimize time to treatment – Sepsis and septic shock are emergencies
- Closely monitor response to interventions
- Communicate sepsis status to **ALL** caregivers and include in hand-off

Just the Facts Resource



SEPSIS ALLIANCE

SEPSIS INFORMATION GUIDE

SEPSIS FACT SHEET

Sepsis is the body's overwhelming response to infection or injury. It can lead to tissue damage, organ failure, amputations, and death.

WHO GETS SEPSIS?

Sepsis is more likely to affect very young children, older adults, people with chronic illnesses, and those with weakened immune systems. Sepsis is an equal-opportunity killer, affecting people of all ages and levels of health.

WHAT ARE THE SYMPTOMS?

- **T** — **Temperature:** Higher or lower than normal
- **I** — **Infection:** May have signs and symptoms of an infection
- **M** — **Mental Decline:** Confused, sleepy, difficult to rouse
- **E** — **Extremely Ill:** Severe pain, discomfort, shortness of breath

If you see a combination of these symptoms, especially if there is a recent history of a cut, surgery, invasive procedure, or infection, call 911 or go to a hospital with an advocate and say, **"I am concerned about sepsis."**

WHAT CAUSES SEPSIS?

Sepsis is caused by an infection. The infection can be viral, bacterial, or fungal, or caused by a parasite. It can be an infection that started in a paper cut or bug bite, or a larger infection, like pneumonia or meningitis. Sometimes, doctors never learn what the infection was.

CAN SEPSIS BE PREVENTED?

You can't always prevent sepsis, but the risk drops when you take steps to prevent or treat infections as quickly as possible. You can do this by staying current with vaccinations, practicing good hygiene, and seeking medical help when you suspect you have an infection.

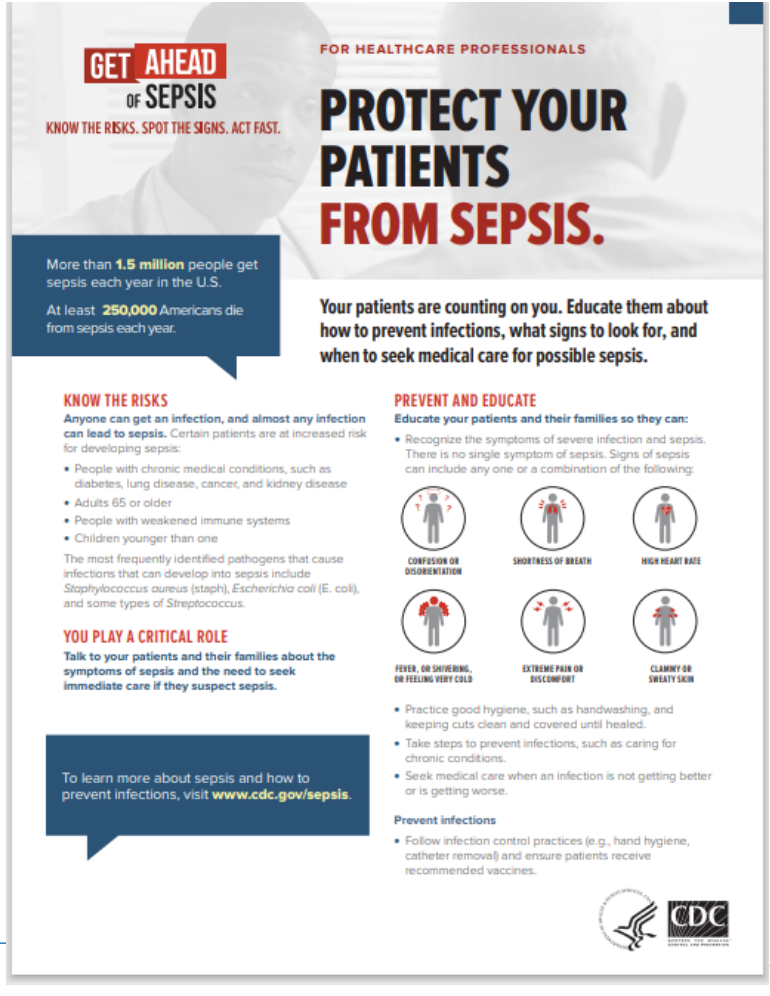
CRITICAL FACTS ABOUT SEPSIS

- Sepsis is the leading cause of death in hospitals.[1]
- 19% (19 out of 100) of people hospitalized with sepsis are readmitted within 30 days.[2]
- As many as 87% (87 out of 100) of sepsis cases start in the community.[3]
- The risk of dying from sepsis increases by as much as 8% for every hour treatment is delayed.[4]

SEPSIS INFORMATION GUIDE – SEPSIS FACT SHEET

[What is Sepsis | Sepsis Alliance]

CDC Sepsis Resources



[Protect Your Patients From Sepsis. Fact Sheet (cdc.gov)]

Polling Question

In preparation for the second session in this series:

What components of the SEP1 bundle do you have the most difficulty meeting? Please choose all that apply.

a) Physician buy-in
b) Early identification to call “code sepsis”
c) Obtaining the second lactate
d) Sepsis orders after transfer to the ICU or another hospital
e) Obtaining blood cultures before antibiotics
f) Documentation of the elements in the EHR
g) Meeting the fluid bolus infusion element
h) Other (write in chat)

Polling Question

In preparation for the third session in this series, Audit, Measure, and Feedback for Success:

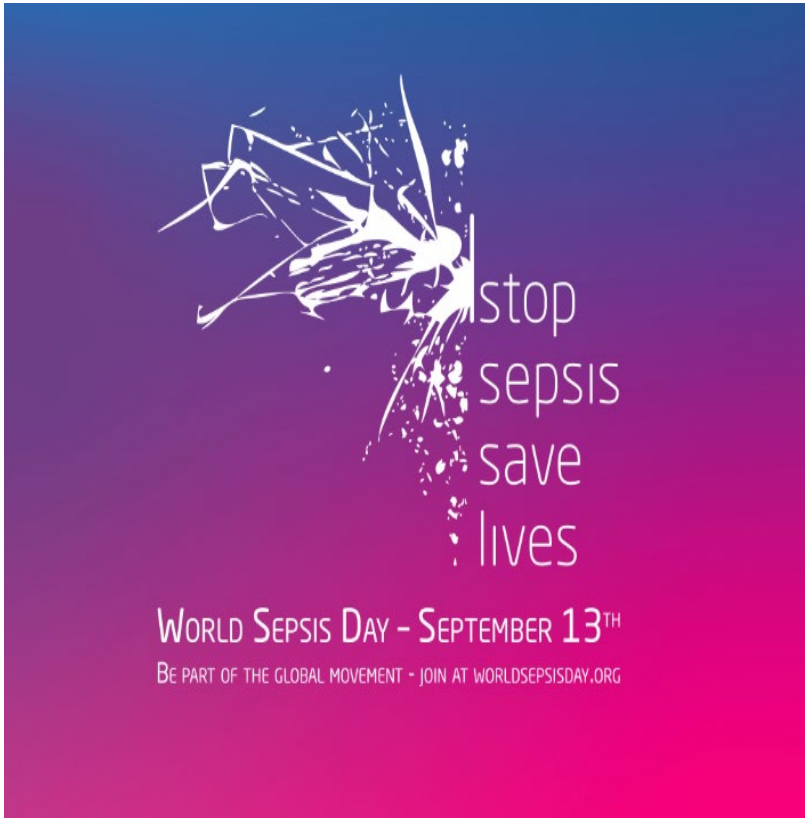
How does your hospital collect data for sepsis bundle compliance? Select all that apply.

a) We do not have a way to efficiently collect sepsis bundle compliance data
b) We collect it retrospective through paper chart review and paper data collection tool
c) We pull that data from our EHR and have an electronic tracking sheet to share the data
d) We would like assistance with a bundle compliance tracking tool

World Sepsis Day

https://www.youtube.com/watch?v=NsPDjOX8QHA

Toolkits — World Sepsis Day - September 13



World Sepsis Day - September 13


MEETING
Chat
DIALOG
TALK
BUSINESS
Answers
IDEAS
Communicate
SOCIAL
PROPOSAL
IDEAS
Discuss
Discussion
Connection
Session
Group
INPUT
CONVERSATION
SHARE
OPERATING
QUESTIONS
Dialog
Business
Communication
PARTNERSHIP
Forum
EXPLORATION
Community
Group
TALK
Debate

Homework

For our next session, please complete the Hospital Sepsis Gap Analysis by **8/13**:

Link to online Gap Analysis

Additional Resources

1. Hospital Toolkit for Adult Sepsis Surveillance (cdc.gov)
2. It's About TIME | Sepsis Alliance
3. Sepsis flowchart (hqin.org)
4. Surviving-Sepsis-Campaign-Hour-1-Bundle.pdf (sccm.org)

Next Sepsis Affinity Group Session

Session 2: Implementation/Improvement of Sepsis Bundles

Guest Speaker: John Lawrence, BSN, RN, SCRN
RN Sepsis Coordinator

Date: August 19, 2021
Time: 1:30 PM EDT

This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this document do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 12SOW/HQI/HQIC-0064-08/06/21

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