IPRO HQIC
Mid to Large Hospital Sepsis Affinity Group

April 20, 2023

2:00 – 3:00 PM ET | 3:00 – 4:00 PM CT

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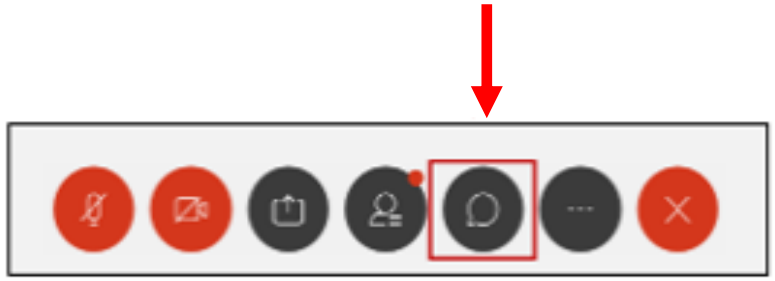

- ***Scroll*** *all the way* ***down***
- ***Select "Everyone"***
  - ***Do not*** *select* ***"All Attendees"***
- **Type message** in Chat Text Box, press **Enter** on your keyboard

Enter in Chat:

- **Name**
- **Role**
- **Organization**
- **State**

Polling Question #1

1. The most challenging element(s) of timely sepsis care and bundle compliance for our emergency department is (are) (Select ALL that apply):

a. Timely screening / identification

b. Collecting and documenting blood cultures

c. IV antibiotic administration within one hour

d. Administration of crystalloids

e. Volume / Tissue Perfusion Reassessment

f. Re-draw lactate

g. Other

Today's Agenda

- Brief Introductions
- Polling Questions
- Presentation: Sepsis Care in the Emergency Department
- Discussion / Takeaways
- Next Steps

Today's Speakers

Karan Shah, MD

Baptist Health Louisville, Vice President of Physician Integration

- Karan Samir Shah, MD, MMHC, is system physician advisor for Baptist Health and Vice President for Physician Integration. A member of the hospital's executive leadership team, he provides leadership to case management, directs strategic projects, collaborates with the Chief Medical Officer and quality department to improve overall care. As a system leader, he works closely with leaders of case management, denials management, revenue cycle, and managed care organizations to develop a successful internal utilization management program, which helps decrease denials for all 9 hospitals.
- Dr. Shah graduated with a Bachelor of Science in biology and a Bachelor of Arts in religious studies from Bucknell. He earned a medical degree from Wake Forest University School of Medicine and completed an emergency medicine residency at Vanderbilt University Medical Center. He obtained a Master of Management in healthcare from Vanderbilt University Owen School of Management. At Vanderbilt University, he completed a hospital and clinics administrative fellowship at the medical center. Dr. Shah is currently a candidate for a Master of Science in health informatics from University of South Florida Morsani College of Medicine and will receive his degree in December 2024.

Welcome and Introduction of Today's Speakers

Stacey Monarch BSN, RN, CPHQ

Sepsis Coordinator, Baptist Health Louisville

Facilitated organizational TJC sepsis certification

Critical care nurse

Firsthand experience with the devastating effects of sepsis

Why Focus on Sepsis Mortality? 1 in 3

- Sepsis is a complex and challenging condition to manage. Despite substantial attention to improvement, an opportunity still exists to decrease sepsis-related morbidity and mortality. The CDC estimates more than 1.7 million adults in the U.S develop sepsis every year leading to over 270,000 deaths and that **one in every three people who die in the hospital have sepsis.**

- Hospitals are committed to improving sepsis care, outcomes and costs; however, many have expressed that they wrestle with where and how to start their quality improvement efforts.

Today's Learning Objectives

- Discuss delivery of care for sepsis patients in the Emergency Department.
- Assess opportunities to decrease sepsis mortality from the "door to door " in hospitalized patients.
- Discuss challenges, successes, and experience with improving the timeliness of SEP-1 elements and reducing sepsis mortality.
- Identifying tools, resources and best practices to accelerate the provision of care and throughput for emergency department sepsis patients.
- Discuss organizational challenges and solutions for issues related to obtaining blood cultures and antibiotic timing.
- Discuss organizational challenges and solutions for issues related to volume resuscitation
- Evaluate your organizational opportunities to educate and build feedback loops to improve sepsis care "real time".

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Sepsis Opportunities in the Emergency Department (ED)

Stacey Monarch, RN, BSN, CPHQ

Sepsis Coordinator, Baptist Health Louisville

Karan Shah MD, MMHC, FACEP

VP, Physician Integration

How to Improve Sepsis Care in the ED?

- Gap Analysis
- Set Goals
  - Decrease Door-to-Antibiotics Time
  - Improve Sepsis Mortality
- Break down bundle into manageable pieces
  - Physician Buy-In
  - Nursing Buy-In
  - IT fixes
  - Process Improvement

Polling Question #2

2. Time to antibiotic administration at our organization begins:

    a. Upon patient's arrival to the facility

    b. Upon positive patient screening for sepsis

    c. Upon written/verbal timed order for IV antibiotics

    d. Other

Clinical Time Zero

- Arrival time vs. Triage time vs. Sepsis recognition
  - Differences
  - How to choose?
- Why did we choose arrival time?
  - Consistent with other measures
  - Decrease confusion
  - Right thing for the patient

Polling Question #3

3. Sepsis education takes place in our organization (select ALL that apply):

    a. Annually competency for staff

    b. Annually competency for providers

    c. Staff orientation

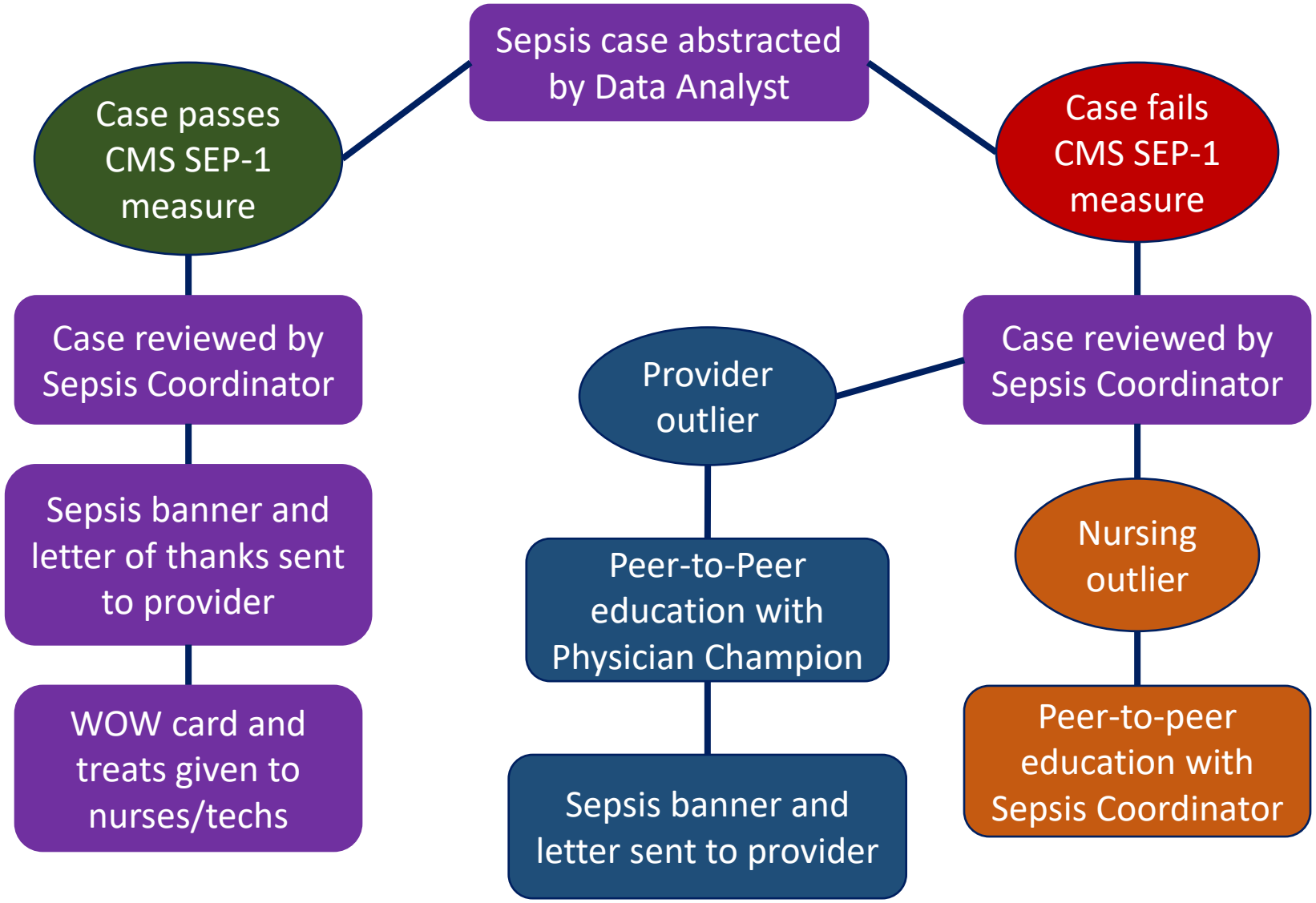
    d. Monthly department meetings

    e. Peer to Peer review

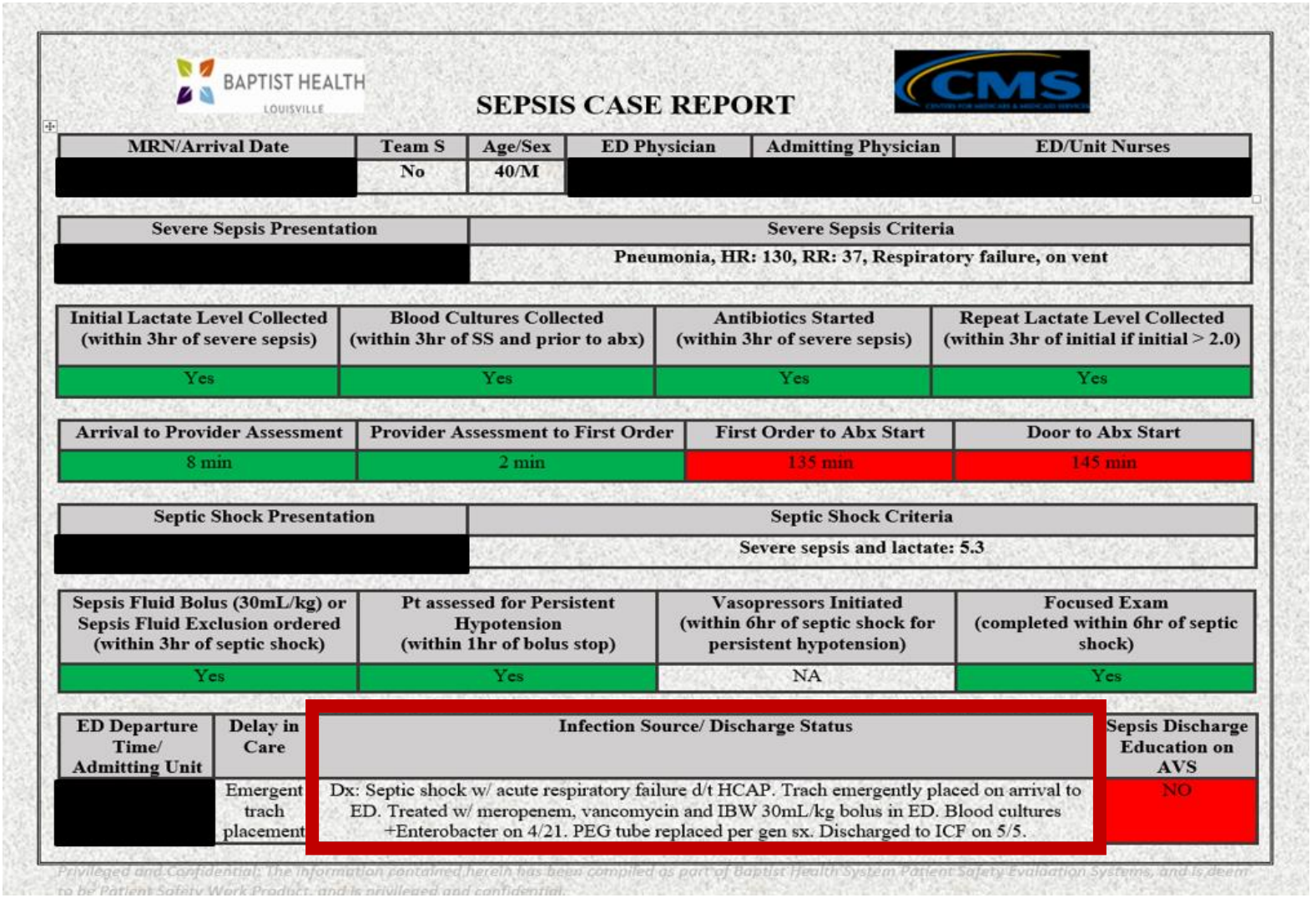
Communication with Frontline Staff

- Focus on processes, not people
- Negative feedback = opportunities for improvement
- Reward successes (5:1 feedback)
- Focused, Real-Time, Peer-to-Peer feedback
- Peer-to-Peer reviews

Standardized Sepsis Case Review



Sepsis Banners



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SEPSIS CASE REPORT

CMS

MRN/Arrival Date	Team S	Age/Sex	ED Physician	Admitting Physician	ED/Unit Nurses
[redacted]	No	40/M	[redacted]		

Severe Sepsis Presentation	Severe Sepsis Criteria
[redacted]	Pneumonia, HR: 130, RR: 37, Respiratory failure, on vent

Initial Lactate Level Collected (within 3hr of severe sepsis)	Blood Cultures Collected (within 3hr of SS and prior to abx)	Antibiotics Started (within 3hr of severe sepsis)	Repeat Lactate Level Collected (within 3hr of initial if initial > 2.0)
Yes	Yes	Yes	Yes

Arrival to Provider Assessment	Provider Assessment to First Order	First Order to Abx Start	Door to Abx Start
8 min	2 min	135 min	145 min

Septic Shock Presentation	Septic Shock Criteria
[redacted]	Severe sepsis and lactate: 5.3

Sepsis Fluid Bolus (30mL/kg) or Sepsis Fluid Exclusion ordered (within 3hr of septic shock)	Pt assessed for Persistent Hypotension (within 1hr of bolus stop)	Vasopressors Initiated (within 6hr of septic shock for persistent hypotension)	Focused Exam (completed within 6hr of septic shock)
Yes	Yes	NA	Yes

ED Departure Time/ Admitting Unit	Delay in Care	Infection Source/ Discharge Status	Sepsis Discharge Education on AVS
[redacted]	Emergent trach placement	Dx: Septic shock w/ acute respiratory failure d/t HCAP. Trach emergently placed on arrival to ED. Treated w/ meropenem, vancomycin and IBW 30mL/kg bolus in ED. Blood cultures +Enterobacter on 4/21. PEG tube replaced per gen sx. Discharged to ICF on 5/5.	NO

Reporting patient outcomes to admitting providers

Partnering with CIT

- Clinical IT representative on Sepsis Team
- EMR doesn't treat sepsis
- Feedback from Frontline
  - Fine-tune existing workflow

- CIT opportunities:
  - One-click ordering
  - Order sets
  - BPAs
  - Electronic Checklists
  - Reports
  - Analytics

Audience Question: Crystalloid Fluids

We created an autotext phrase to assist with remembering the key points to administer less fluid, but this still seems like a challenging part of the measure. Any ideas that have helped with compliance for this and some of the following bundle elements, I would definitely find beneficial.

Early Goals of Care Discussions

- Partner with Palliative Care Team
- Early Goals of Care Discussions for patients presenting with poor prognosis
  - Out of hospital cardiac arrest
  - Likely to expire in the hospital or over the next 12 months
  - Readmissions: 3 or more admissions/ED visits in last 6 months
  - Functional decline and/or advanced dementia
  - Multiple comorbidities being admitted to critical care unit

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Any Questions?

Focusing on Bundle Elements

Polling Question #4

4. In what circumstances would Fluid 30ml/kg resuscitation after positive sepsis screen NOT occur or be considered “N/A”?

a. Patient does not have lactate greater or equal to 4mmol/dL

b. Patient does not have 2 incidents of MAP <65 or SBP <90

c. Patient received fluid resuscitation < 30ml/kg

d. Other

Sepsis Screening

- To be completed:
  - Triage
  - Q shift (12 hours)
  - Sepsis Predictive Analytic Model prompts
  - With any acute decline in patient's condition
  - Discharge

Sepsis Screening	Complete at triage, Qshift, and when BPA prompts
1. Does patient have **2 SIRS criteria**?	• Temp < 96.8 or > 100.9 • WBC < 4,000 or > 12,000 • HR > 90 • RR > 20
2. Does patient have known/suspected **infection**?	Cough/Sputum, Abdominal pain/Diarrhea, Line/Device Infection, Wound/Cellulitis, Dysuria, Headache w/ Stiff Neck
3. Does patient have any signs of end **organ dysfunction**?	• SBP < 90 or MAP < 65 • Creatinine > 2.0 • UOP < 0.5mL/kg/hr • Total Bilirubin > 2.0 • Lactic Acid > 2.0 • PLT < 100,000 • INR > 1.5 • Resp failure requiring mechanical ventilation
If **YES to ALL**, screen is **POSITIVE** → Notify MD and start sepsis bundle	

Code Sepsis Criteria

- Adjust screening to meet the needs of population
- Empower nursing to advocate for septic patients
- Opening dialogue amongst treatment team
- Okay to be wrong!

Team S

MD ordered blood cultures? Call Team S.

Patient has Documented or Suspected Infection?

- Abdominal pain, distention, diarrhea
- Altered mental status
- Cough, sputum
- Wound infection or cellulitis
- Headache with stiff neck
- Line or Device infection
- Dysuria
- Order for blood cultures

AND Any TWO of the following:

- Temp < 96.8 or > 100.4
- HR > 110
- O2 Sat < 90%
- SBP < 100

Call Team S and Notify MD immediately!

Audience Question re: Blood Cultures

We suspect that in many of our cases nursing is getting the blood culture before administering abx but are documenting it later and thus we fall out although the process was correct.

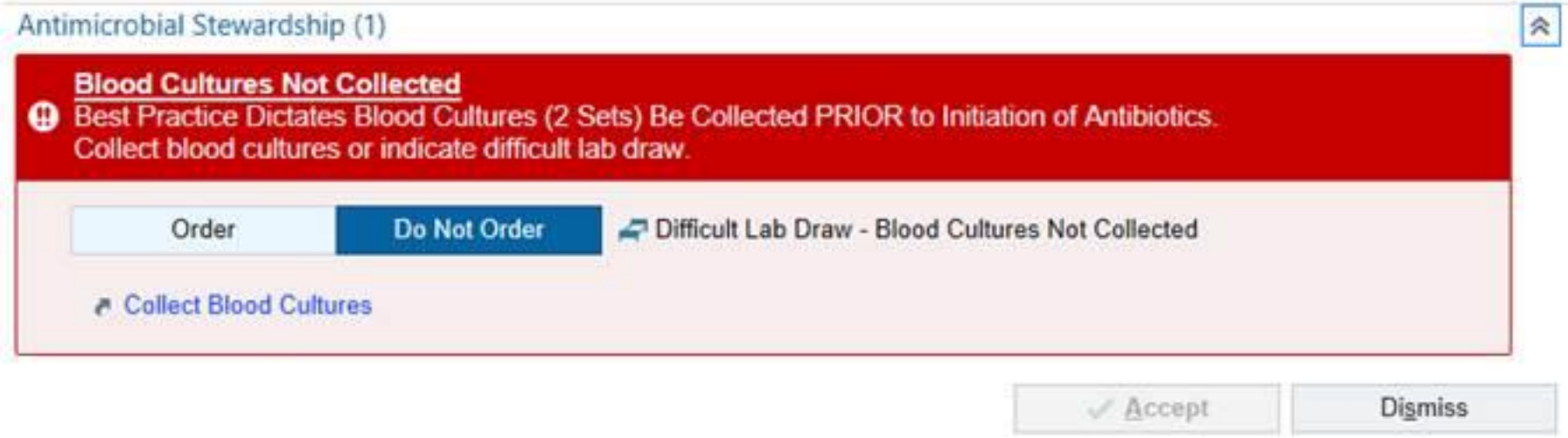
I wonder what other places are doing to make it easier for nurses to document when they get the BC? We use EPIC.

Blood Culture Bottleneck

- Nursing Education: team communication for missing orders/hard stick
- Provider Education: answering the why behind Team S
- Time consuming task
- Equipment immediately available
- Process to prioritize septic patient

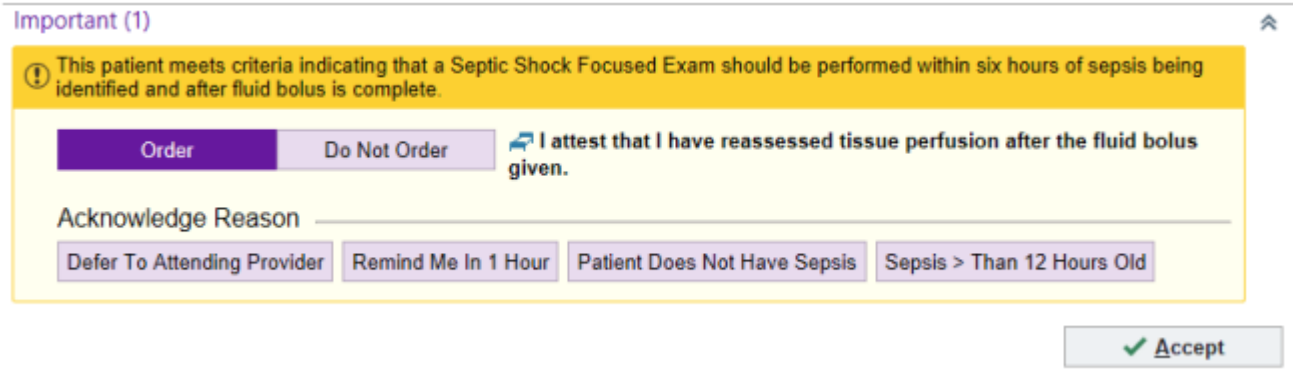
Blood Culture Collection vs. Documentation

- Collecting Blood Cultures → 2 separate tasks:
  - Collection of sample
  - Documentation of collection in EMR
- Nursing Education: team communication, proper documentation
- BPA creates a safety net



Focused Exam

- Education with ED providers
- SmartPhrase attestation
- Education with Intensivists – Focused Exam in H&P
- BPA reminder to enter SmartPhrase
- Attestation order embedded in BPA



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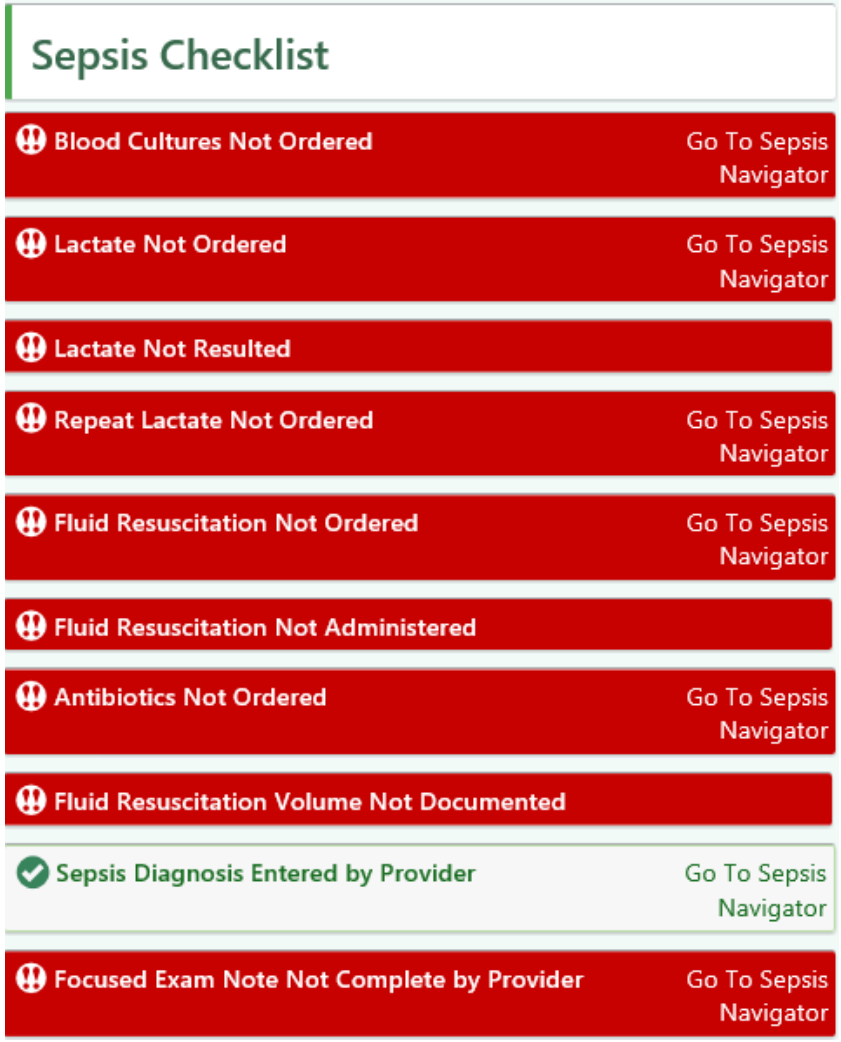
Safe Patient Handoff



Patient Sticker

Sepsis Checklist

Emergency Department Downtime Form

Positive Sepsis Screen Date: _____ Time: _____ **Simple** **Severe**

Team S called @ _____ (if applicable) Circle one

Sepsis Bundle

- **Initial Lactic Acid** Collection Time:_____ Result: _____
- **Blood Cultures** (collect prior to starting antibiotics)

  Collection Time - Set 1: _____ Collection Time - Set 2: _____
- **Antibiotics administered STAT**

  Antibiotic start time – first antibiotic: _____

  Antibiotic start time – second antibiotic: _____ (if applicable)
- **Reflex Lactic Acid** (required if initial lactic acid > 2.0)

  -Reflex lactic acid due 3 hours after initial lactic acid collection time

  Reflex Lactic Acid Due: _____ Collection Time: _____
- **Fluid Bolus** (required for SBP < 90, MAP < 65, or lactic acid ≥ 4.0)

  Bolus Start: _____ Bolus Stop: _____ Volume: _____
- **Vasopressors** (indicated for persistent hypotension despite fluid bolus)

  Vasopressor Start: _____ Vasopressor Stop: _____

Checklist should be sent with patient to next unit if not complete and used for handoff communication. When checklist is complete, place in EMS breakroom. THIS IS NOT PART OF THE PERMANENT MEDICAL RECORD. All documentation must be entered into Epic once downtime has ended.

Updated Nov 2022

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Any Questions?

Audience Question re: Lactate

We are having some L.A.'s that fall through the cracks during transfer from ED to the floor.

We mostly use point of care L.A. in ED and with our new system, they do not automatically reorder if the first L.A. happens to be positive.

I just thought someone else might have some helpful hints/suggestions?

Any Questions?

Interactive Discussion: Speakers & Attendees

- What are some **challenges, barriers, and best practice strategies** with reducing sepsis mortality?
- How can HQICs **best support hospitals** going forward?
- How can hospitals **partner with patient & families** to support improvement in sepsis mortality?
- How do we best **identify and close any disparity/gaps in care** related to sepsis mortality?
- Do you think you can **implement** any of the **strategies** you heard today by our next meeting?

Enter in Chat:

- Thoughts
- Experiences
- Questions

Key Takeaways

- Early recognition of sepsis is critical to reducing sepsis mortality.
- Establishing “time zero” correctly drives expedited delivery of necessary sepsis care.
- Closing organizational feedback loops with staff and clinician collaboration is key.
- Varied educational offerings provide staff the tools and skills to protect and manage sepsis patients.
- Patient and Family Engagement is a vital piece of sepsis mortality reduction.

Wrap-Up and Highlights of Upcoming Events

Next Meeting

May 18, 2023 2:00 – 3:00 PM ET

Please forward Action Plans by 5/8/23 to:

crkistner@ipro.org

Please bring your Sepsis Gap Assessment and Action Plan/Coaching tool for our next meeting.

We will discuss the action plans, and the Sepsis Gap Assessment results.

Thank You for Attending Today's Event

We value your input!
Please complete the brief survey after exiting event.

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