







# **Exploring Sepsis Strategies – Part 1:** Early Identification, Patient and Family Engagement, and Disparities in Care

IPRO, Alliant, Telligen, and Compass Joint HQIC LAN Event August 24, 2021

Please note, this event is being recorded.

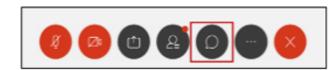


#### **How To Use Chat Feature**

#### **Chat Feature Highly Encouraged**

#### To send a Chat Message:

Open the Chat Panel



- In the Send To or To **drop-down list**, select the recipient of the message
  - Scroll All the Way Down
  - Select "Everyone"
  - Do not select "All Attendees"
- Enter your message in the Chat Text Box, then press Enter on your keyboard

# Everyone Sophia Cunningha... (Host) Rebecca Steinfield (IHI) (Presenter) Abby Zier Alyesh Danyce Seney Edy emunene Jeff Wetherhold jennifer Everyone

#### **Enter in Chat:**

- Your Name
- Your Role
- Your Hospital
- Your State



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#### **Collaborating to Support Your Quality Improvement Efforts**















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### Today's Agenda

- Welcome & Introductions
- Setting the Stage/Circle of Safety
- Hospital Baseline Assessment Data
- Health Equity/Disparities Lens
- Patient/Family Voice
- Hospital Story & Screening Tool
- Interactive Discussion/Facilitated Q&A
- Summation/Key Takeaways
- Wrap-up/Highlights of Upcoming Events

#### **Exploring Sepsis Strategies: Part 1**

#### **Focus**

 Importance and impact of early, equitable sepsis recognition from patient/family and healthcare provider perspectives

#### **Learning Objectives**

- Understand the interconnectedness of early identification, patient/ family engagement and disparities in care to enhance patient safety
- Learn how a sepsis screening tool was successfully implemented and achieved results in a 100-bed rural hospital using a multidisciplinary approach
- Listen to a sepsis survivor experience and how early identification may have assisted with improving care delivery and patient outcome

#### Welcome and Introduction of Today's Speakers



Brandy Moore, BSN, RN
Director of Quality/
Infection Control
Wagoner Community Hospital
Wagoner OK
Telligen HQIC



Sandy Cayo DNP FNP-BC
Vice President of Clinical
Performance & Transformation
New Jersey Hospital Association
IPRO HQIC



Patrice Greenawalt, RN, MS
Clinical Initiatives Manager
Oklahoma Hospital Association
Telligen HQIC



Christine LaRocca, MD
Medical Director
Telligen HQIC



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# Setting the Stage – IPRO HQIC Circle of Safety: All-Cause Harm Prevention Model & Resource Tool

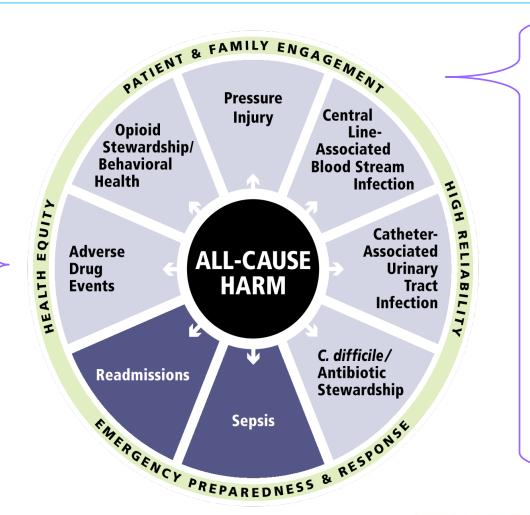
#### **Health Equity**

Collect REaL Data

Stratify quality & safety outcomes data by REaL

Identify disparate gaps in care

Take action to close gaps using targeted solutions



Patient & Family Engagement

Planning Checklists
Admission

Planning Checklists
Discharge

**Huddles Shift Change** 

Accountable PFE leader

**Active PFE Committee** 

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# What is Sepsis and Why Focus On It Now?

- Sepsis is the body's extreme response to an infection, including COVID-19, and is a life-threatening medical emergency
- Early detection and timely treatment are critical to prevent tissue damage, organ failure and death
- Anyone can get sepsis, know the early warning signs and act fast to help save a life
- Sepsis is a leading cause of death among critically ill people and a top reason for readmissions
- Sepsis can worsen pre-existing conditions
- Sepsis is costly to treat, fraught with human and economic costs and annual costs to hospitals to treat is estimated to be \$24 billion
- September is Sepsis Awareness Month

# **Enter Thoughts in Chat**

Does this resonate with you?

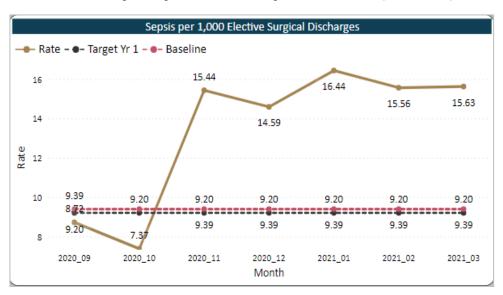
Have you, or someone close to you, had sepsis?



#### **Alliant HQIC: Data**

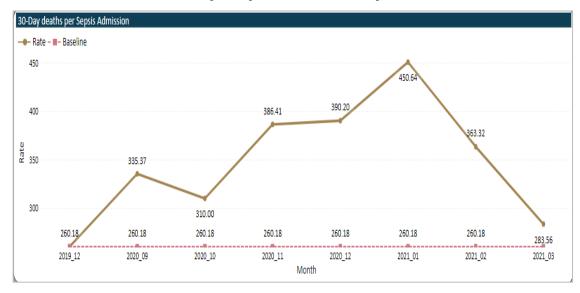
Performance data show variation over time; however, to date, we do not have improvement over baseline nor have met Year 1 goal

#### Post Op Sepsis and Septic Shock (PSI-13)



N=102 hospitals

#### **30 Day Sepsis Mortality Rate**



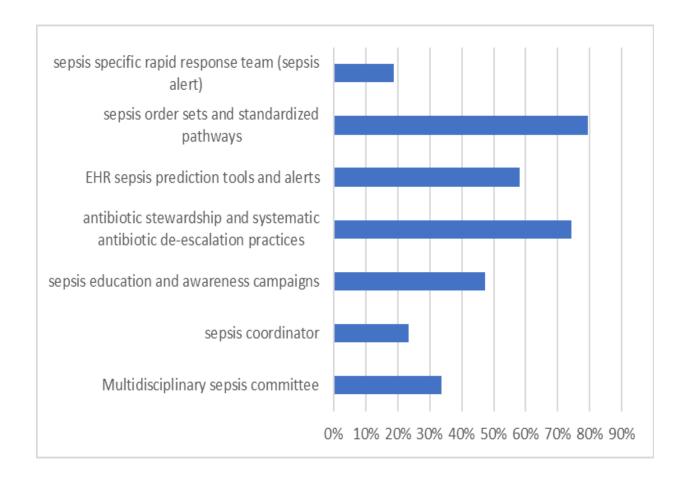
N=136 hospitals



#### **Telligen HQIC: Hospital Baseline Assessment**

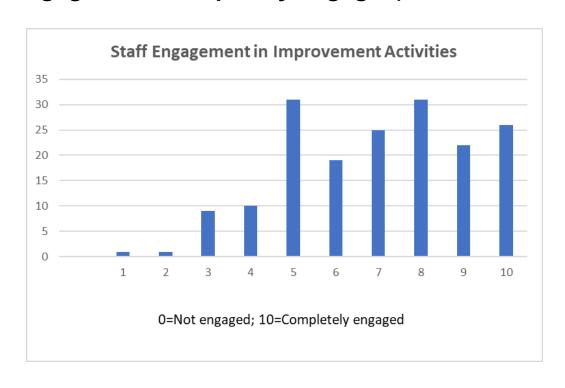
# Which elements of a sepsis program does your hospital utilize?

Overview of Sepsis Assessment (HQIC Hospitals) Data from **175** HQIC Enrolled Hospitals



### Telligen HQIC: Hospital Baseline Assessment

Indicate how engaged your hospital's front-line staff are with the organization's improvement efforts in this area (0=not engaged; 10=completely engaged)



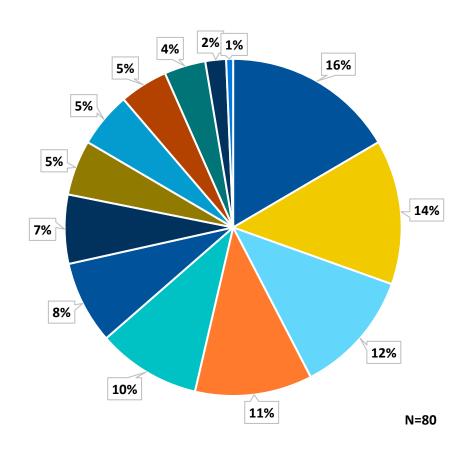
# Enter your thoughts in Chat!

What are strategies you could attempt to gain staff buy-in related to sepsis quality improvement activities?



### **Compass HQIC: Hospital Readiness Assessment**

#### **Best Practice Interventions Not Started or Needing More Information**

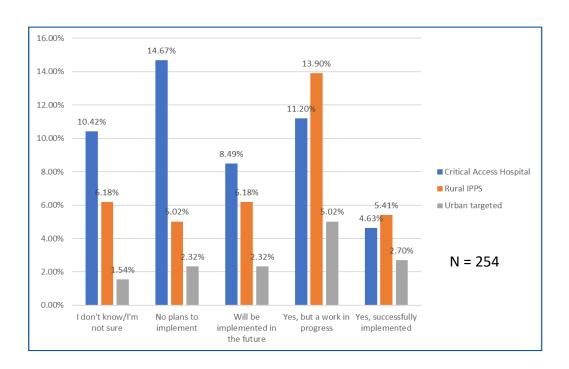


- Establish a multidisciplinary team
- Identification of strategies aimed at disparities
- Integration of patient/family engagement
- Modified Early Warning System (MEWS) early detection system
- Sepsis education on recognition, treatment, post-sepsis symptoms
- Use of 1-hour sepsis bundle
- Hand off of care
- EHR integration-use of alerts
- Use of 6-hour sepsis bundle
- Use of early detection sepsis screening tool
- Use of 3-hour sepsis bundle
- Development of standardized order sets for care
- Broad spectrum antibiotics availability in ER

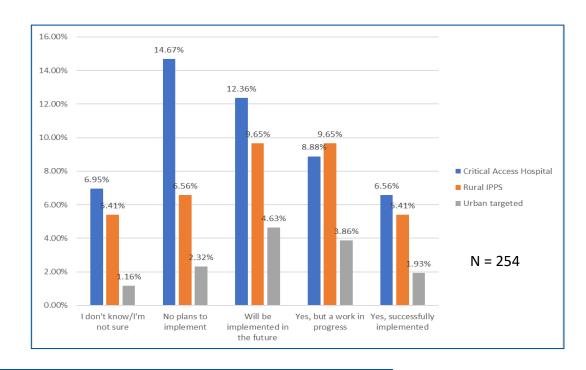


#### **IPRO HQIC: Hospital Baseline Assessment – Education**

Does your facility use data or other means to identify gaps in care by REaL or SDoH?



Does your facility regularly establish goals to reduce health disparities in any quality measures?



Over 55% stated would like education and assistance with both



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# RACIAL DISPARITY: Sepsis in Vulnerable Populations

Sandy Cayo, DNP, FNP-BC
Vice President Clinical Performance and Transformation
NJHA's Health Research and Educational Trust of NJ
Lead for IPRO HQIC in NJ

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#### **Objectives**

- To discuss the disparity in sepsis treatment and management among vulnerable populations
- To understand underlying causes for disparity in racial and ethnic groups related to sepsis
- To identify sustainable and evidence-based approaches to managing disparity in sepsis care

### **Background**

#### Some of the most vulnerable populations at risk for developing sepsis include:

- Older adults
- Male gender
- Immunocompromised
- History of chronic conditions
- Black/African American race

### **Background**

- Typically older age presents as a risk factor, however, sepsis impacts all ages from newborn to elderly
- Studies show specifically in neonates, insurance payer status, income, race, and gender were strong indications for increased sepsis mortality
- Despite standardization of care through evidence-based practice bundles, wide disparity among races still exist

#### **Facts and Stats!**

- One of the main drivers to disproportionate outcomes in sepsis is access to high quality care
- Vulnerable minority patients may only have access to care in more urban, safety net hospitals which have a disproportionate impact on individual outcomes
- Literature suggest indications for approaching care from an organizational and systems-level have better outcomes than an individual focus
- Population focus help mitigate sepsis among vulnerable groups

#### **Supporting Literature**

- Significant racial differences have been observed in the emergency department (ED) as well as primary and specialty care settings. A 2018 study by DiMeglio et al., found that black patients presenting to the ED received lower acuity ratings and experienced significantly longer wait times following triage compared to white patients.
- A 2015 meta-analysis found that structural racism was associated with poorer mental health, including depression, anxiety, psychological stress and other outcomes including poorer general health (Paradies et al 2015).
- Perceived discrimination can have an impact in physiological and psychological outcomes (Carlisle 2015; Sims et al 2015).

#### **Facts and Stats: Implicit Bias**

- Implicit or unconscious bias the association of negative attitudes to individuals based on irrelevant characteristics such as race or gender - has been observed among healthcare professionals
- Little to no studies look at the role of implicit bias in the identification and management of sepsis
- Implicit bias among providers has shown to diminish relationships as well as trust among providers

#### Facts and Stats: Sepsis Disparity in Post Acute

- 25% of patients diagnosed with sepsis are transferred to post acute facilities
- Variability in care in post acute skilled nursing homes
- Black patients are more likely to be discharged home compared to White patients discharged to skilled nursing facility
- More research needed on outcomes post-discharge and readmissions among African American patients
- Insurance plays a role in management of sepsis for outcomes

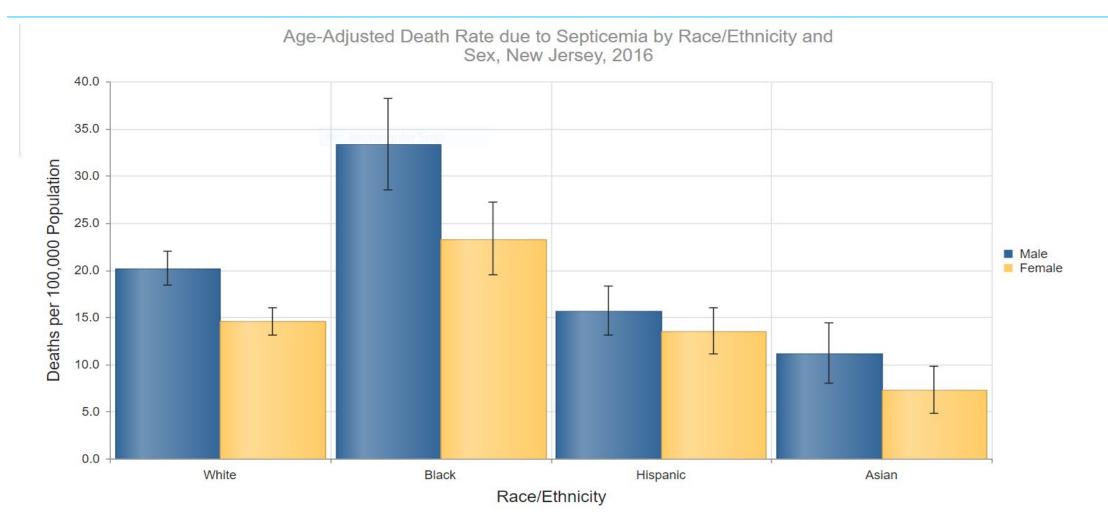
#### Opportunities and Innovation: The Role of Quality

- Quality improvement initiatives focused on underserved hospitals using REaL data
- Improving access to care and insurance enrollment for eligible patients
- Improving primary care service accessibility to patients
- Recognizing the role of EMS in sepsis care
- Home health education and training in sepsis

#### Social Determinants of Health, Culture & Language & Sepsis

- Social determinants of health include conditions in which people are born, grow, live, work and age
- REaL Data using standardized categories for the variables of race, ethnicity and language
- Providing linguistically appropriate care including interpreter services

# **Sepsis Mortality in NJ**



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#### **Next Steps:** *Improving Research*

- Interventions that address the lack of inclusion of minority patients in research studies related to sepsis
- Reduce burden of chronic disease in vulnerable groups
- Minimize bias through adherence to treatment protocols and establishing standardized order sets for admission and discharge

# Next Steps: Recommendations for Best Practice on Implicit Bias

- **Stereotype replacement:** Recognizing that a response is based on stereotype and consciously adjusting the response
- Counter-stereotypic imaging: Imagining the individual as the opposite of the stereotype
- Individuation: Seeing the person as an individual rather than a stereotype (e.g., learning about their personal history and the context that brought them to the doctor's office or health center)
- Perspective taking: "Putting yourself in the other person's shoes"
- Increasing opportunities for contact with individuals from different groups: Expanding one's network of friends and colleagues or attending events where people of other racial and ethnic groups, gender identities, sexual orientation and other groups may be present
- Partnership building: Reframing the interaction with the patient as one between collaborating equals, rather than between a high-status and a low-status person

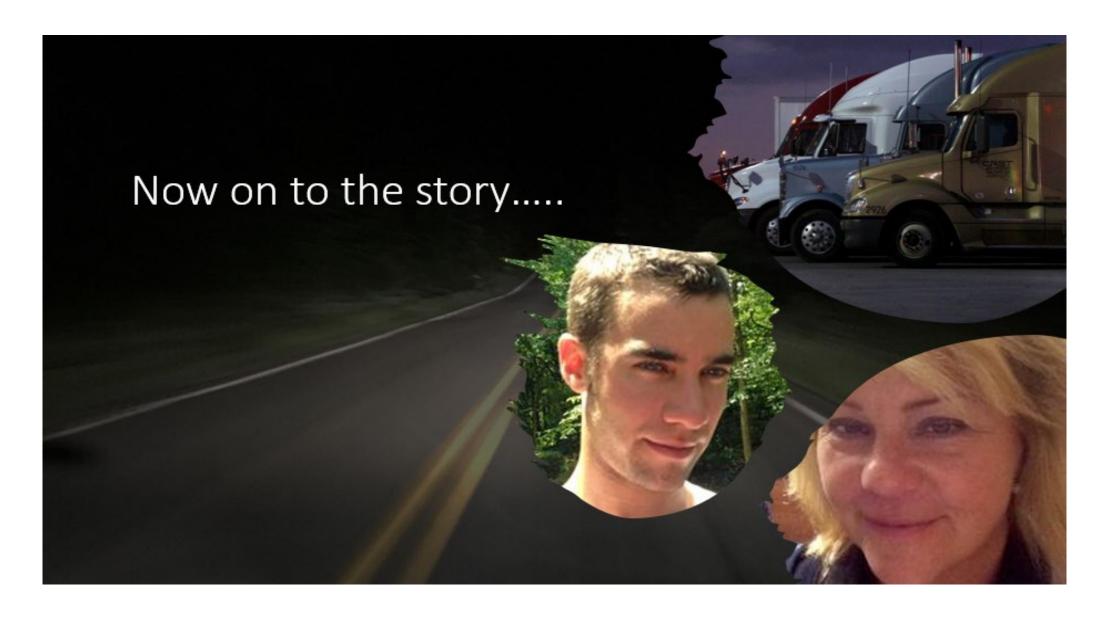
# When Sepsis Becomes Personal: The Story of Team Gary

Patrice Greenawalt, RN, MS

Clinical Initiatives Manager
Oklahoma Hospital Association
Telligen HQIC
Patient/Family Voice

# 2016: The Oklahoma Sepsis Learning Collaborative

- OHA received a grant from Telligen Community Initiatives for the Collaborative
- Objectives of the Collaborative included utilization of a sepsis screening tool for inpatients age 18 and older, on participating units.
- Outcomes:
  - 228,735 patients screened on 20 participating units (13 ICU, 20 ED, 7 non-ICU, non-ED units: med surg, CCU, hospital-wide)
  - Decrease in the sepsis mortality rate by 15% for participating OK hospitals as compared to OK State Department of Health public discharge data;
  - Data analysis interpreted into saving 280 lives!





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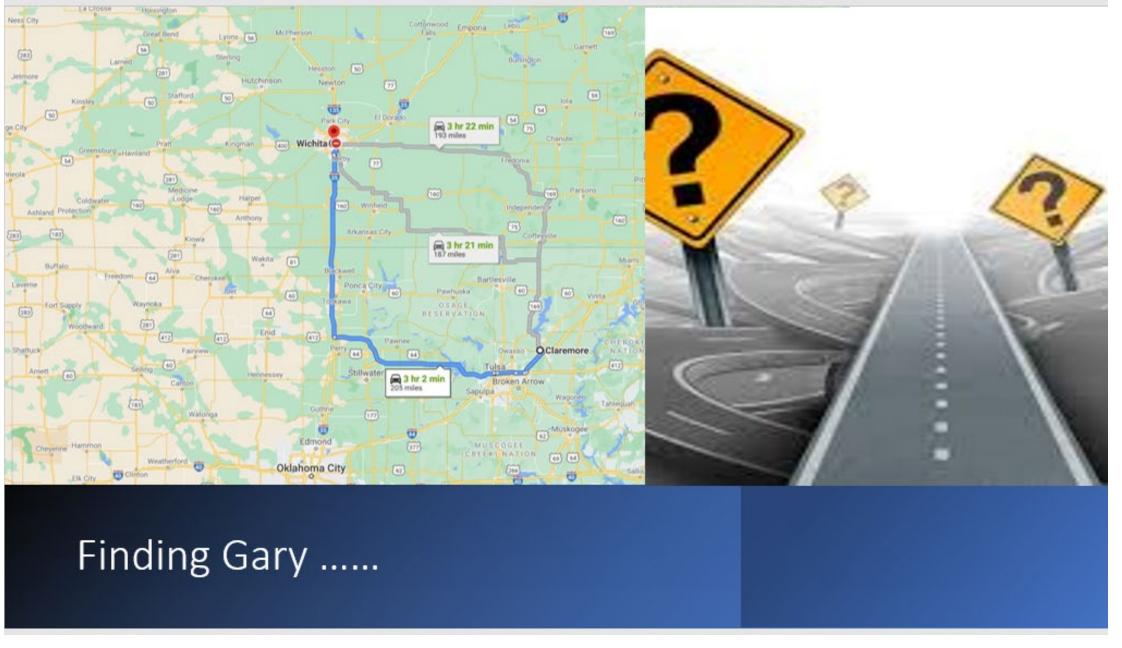




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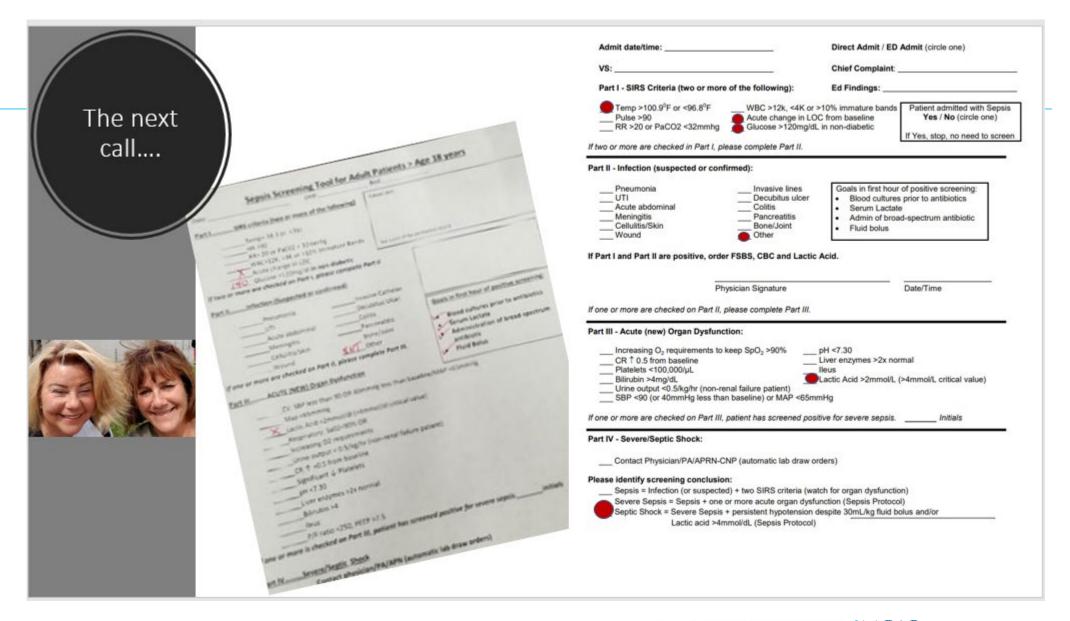


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# The ICU...

- Fluids
- CT Scan
- X-Rays
- EEG
- Spinal Tap
- Antibiotics
- Vancomycin
- Levophed
- Lab tests sent to Mayo Clinic



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24 hours later......
Where's Mom?





3 days in ICU

Source of infection not found



Discharged to home on day 4



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It's not the end of the story.....

Post discharge day 1: back to the local ED

Transferred to metro hospital and admitted for antibiotics

Discharged the day-after admission with a diagnosis!

PS: what happened BEFORE the 1<sup>st</sup> hospitalization?

# Fast forward, 6 months later (NY's Eve)

An outpatient tonsillectomy. Septic shock secondary to tonsillitis.





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Healthy (and grateful) Gary!



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# **Hospital Story**

Brandy Moore, BSN, RN

Director of Quality/Infection Control
Wagoner Community Hospital
Wagoner OK
Telligen HQIC

# **Wagoner Community Hospital**





Wagoner Community Hospital is a 100-bed hospital located in rural Wagoner County, Oklahoma. Wagoner County has a population of 81, 289 and an area of 591 square miles.

# **Our Sepsis Story**



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# **Multidisciplinary Sepsis Screening Action**

- Rapid implementation of new screening tool
- Bedside education to physician using tools from the Surviving Sepsis Campaign website
- "Just in time" pharmacist engagement to determine IVF bolus
- Lifesaving results!

# **Initiating a New Sepsis Protocol**

- Debrief of collaborative ED intervention experience to gain leadership buy-in for a new sepsis screening process
  - Pharmacy
  - Chief of Staff
  - Emergency Department Director
- C-suite and board leadership presentation for approval
- Staff buy-in for screening ALL patients
  - Understanding the "why"
  - Sepsis Alliance video
  - Brief education for all ED staff



# **Sepsis Screening Tool**

Page 1 of 2	Patient Label Here:	Page 2 of 2			Patient Label Here:
WCH Evaluation for Sepsis Screening Tool			WCH SEPSIS PROTOCOL		
Is the patient's history suggestive of a new infection? (may check boy   Pneumonia, empyema   Bloone/joint infection   Ulrinary tract infection   Wound infection   Other   Ot	r <u>if infection is suspected)</u> ection	S E P S I S	At least 2 SIRS  Temp >100.4 or < 96.8		WITHIN 1 <sup>ST</sup> HOUR OF DIAGNOSIS  Lactate Redraw at:  Blood Cultures (prior to Antibiotics)  Stat Broad Spectrum IV Antibiotics  Name of Antibiotic
PRESENT, PLEASE PERFORM DUTIE  ✓ Obtain: Lactic Acid, Blood Cultures (PRIOR to antibiotic administration), CBC v  ✓ Start: Broad Spectrum IV Antibiotics (as ordered by physician)  ✓ At the physician's discretion obtain: UA, chest X-Ray, amylase, lipase, ABG, CR  3. Are any of the following organ dysfunction criteria present at a site reconditions? Note: in the case of bilateral pulmonary infiltrates the rer  □SBP <90 mmHg or Map <65 mmHg or a decrease of 40 below normal for tha  □Acute Respiratory Failure (new need for invasive or non-invasive mechanica  □Creatinine > 2.0 mg/dl or urine output <0.5ml/kg/hour for 2 hours  □Billirubin > 2 mg/dl	STOPPED; IF ANSWERS ARE YES TO BOTH QUESTIONS SUSPICION OF SEPSIS IS SELOW AND MOVE TO QUESTION 3* w/ Diff, Basic Chemistry labs, Bilirubin P, CT Scan whote from the site of the infection that is NOT considered to be chronic mote site stipulation is waived t patient	S E V E R E S E P S I S	Any Features of Severe Sepsis? (i.e. End Organ Dysfunction)  SBP < 90 or MAP < 65 or a decrease Of 40 below normal for that patient Acute Resp Failure – new need for Invasive or non-invasive mechanical Ventilation - VENT or BIPAP  Creatinine > 2 or urine output < Sm./kg/hr x 2 hours  Platelet count < 100,000  INR > 1.5 or a PTT > 60 sec Lactate > 2 mmol/L Bilirubin > 2 mg/dl (Do not include evidence of organ dysfunction that is considered to be due to a chronic condition or medication)	YES	Ensure that all above steps have been completed Fluid resuscitation with a bolus of Crystalloid Solution at: 30 ml/kg/hr. Name of Solution: Time of infusion: Amount infused: (Administer even if other co-morbidities present) REPEAT LACTATE  ** The fluid order must contain TYPE, VOLUME & DURATION or ADMINISTRATION RATE.
□Platelet count < 100,000 □Lactate >2 mmol/L □Coagulopathy (INR>1.5 or PTT > 60 secs) □Acute lung injury with PaO2/Fio2 < 250 in the absence of pneumonia as inference of the substitution of SEPSIS IS PRESENT AND ORGAN DYSFUNCTION (NO PRESENT, THE PATIENT MEETS CRITERIA FOR SUSPECTED SEVERE SEPSIT DOCUMENTATION OR CONCERN OF SEPTIC SHOCK IS PRESENT PLEASING SEPTIC SHOCK P	T CONSIDERED TO BE DUE TO A CHRONIC CONDITION OR MEDICATION) IS SIS AND SHOULD BE ENTERED INTO THE SEVERE SEPSIS PROTOCOL. IF	Signature:	SEPTIC SHOCK  There must be documentation of Septic Shock present - PLUS - Tissue hypo perfusion persisting in the hour after crystalloid fluid administration - OR - Lactate > 4 - OR - Physician/PA documentation of "Septic Shock" or suspected S.S.  Time:	YES	WITHIN 6 HOURS OF DIAGNOSIS  Ensure that all the above steps have been completed Vasopressors for persistent hypotension after infusion of Crystalloid fluids Reassessment of volume status and tissue perfusion  Date:
	vate		Healthcentric Advi		Hospital Quality Improvement Contractors

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# **Implementation Process**

### **PLAN**

- Team leader: Emergency Department Manager
- Subject Matter Experts: ED Manager and ED Physician Director reviewed the tool

## DO

- Intervention: Implement sepsis screening tool for all patients in the ED
- Implementation: Infection control and ED Manager took 24 hr. call for questions and assistance for physicians and staff

## **STUDY**

- Tracked implementation progress
- Identified barriers and successes via the Clinical Safety Team
- Data collection: outcomes performance on departmental scorecards

### **ACT**

- Share the data with leadership
- Regularly evaluate effectiveness of the process

# Interactive Discussion/Facilitated Q&A – Use Chat

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- **Enter** your **message** in the Chat Text Box, then **press Enter** on your keyboard



## **Enter in Chat:**

- Your Thoughts
- Your Questions
- Your Concerns



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# Interactive Discussion: Speakers, Panelists & Attendees

- What are some challenges, barriers and best practice strategies with sepsis prevention, recognition and management in general and with COVID-19?
- How can HQICs best support hospitals going forward?
- How can hospitals partner with patient and families to support sepsis recognition/management?
- How do we best identify and close any disparity/gaps in care related to sepsis?
- Do you think you can implement any of the strategies you heard today by next Tuesday?

## **Enter in Chat:**

- Your Thoughts
- Your Questions

## **Tools & Resources**

Tools, Resources, and Links will be provided after today's event.

# Suggested tools you can quickly use and adapt to drive improvement based on your identified needs:

- CDC Patient & Provider Education tools
- IPRO HQIC Circle of Safety: All-Cause Harm Prevention Resource Tool
- Wagoner Community Hospital Sepsis Screening Tool
- HQIC Change Path Sepsis
- Sepsis Alliance Tools & Resources
  - Nursing Resources
  - Patient & Family Resources

# **Summation & Key Takeaways**

- Sepsis is a life-threatening medical emergency: everyone has a role to play
- Treating sepsis is costly: major human & economic impact, especially with COVID-19
- Keep sepsis top of mind: stay vigilant to early warning signs & symptoms
- Anyone can get sepsis: even from simplest of infections (i.e. tonsils)
- Start sepsis screening now: early detection can save lives
- Implement key strategies & drivers to reduce sepsis-related harm & readmissions
  - Infection/sepsis prevention
  - Early, equitable detection & treatment
  - Patient & family engagement

# Wrap-up & Highlights of Upcoming Events

## Save the Date for Exploring Sepsis Strategies - Part 2

- September 30, 2021 11 PT/12 MT/1 CT/2 ET
- Registration link and flyer will be forthcoming
- Focus is on preventing harm and avoidable readmissions using effective care coordination and hand-off strategies to the next level of care provider
- Prepare for meaningful participation:
  - Implement strategies learned today and consider sharing at Part 2 event
  - Review your hospital readmission and sepsis-related data in advance

## **Decreasing Sepsis Mortality through Bundle Compliance**

- September 14, 2021 9 PT/11 CT/12 ET
- Register Today

## Sepsis Alliance Summit September 14 – 16, 2021







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# Thank You for Attending Today's Event

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

# **HQIC & Speaker Contact Information**



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- Superior Health Quality Alliance
- O3 Health Innovation Partners







HOSPITAL QUALITY

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## **Speakers**

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