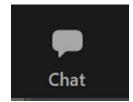
# We Will Get Started Shortly

- Lines have been muted upon entry to reduce background noise
- We encourage you to ask questions for the presenter(s) throughout the event using the Chat Box feature
- Please enter your name, role, organization and State into Chat Box

Open Chat



Scroll Down & Select To Everyone











# Transitions in Care: Preventing Sepsis Readmissions

**April 27, 2023** 

Please Note: This LAN is being recorded.



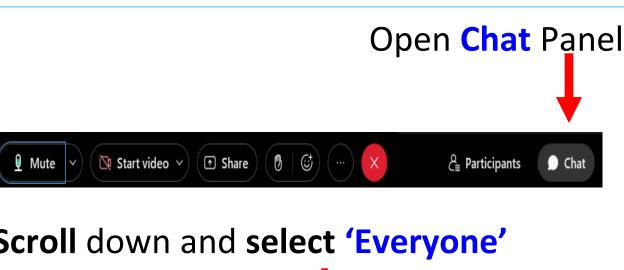




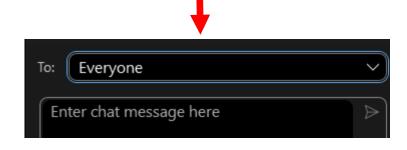


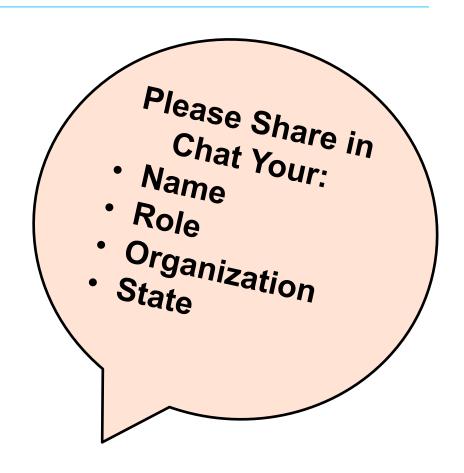


# **How to Use & Send a Message in Chat Box**



Scroll down and select 'Everyone'







- Healthcentric Advisors Qlarant
- Kentucky Hospital Association
- Q3 Health Innovation Partners Superior Health Quality Alliance
- Hospital Quality Improvement Contractors

# Agenda

- Welcome & Introductions
- National Sepsis-related Readmissions Data & Trends
- Care Coordination & Partnerships Across the Continuum in Preventing Sepsis-related Readmissions
- Sepsis Survivor Story
- Q&A
- Tools & Patient Education Resources
- Key Takeaways & Wrap-up

# **Learning Objectives**

- Describe successful care coordination and partnership strategies across the care continuum to prevent sepsis-related hospital readmissions.
- Explore promising practices for overcoming challenges that affect care coordination and handoffs to the next level of care.
- Learn how to engage patients and families as partners and integrate their health-related social needs into the discharge planning process to improve patient outcomes.
- Hear about a sepsis survivor story.

## **Featured Speakers**



Amanda Karrels, BS RN CPHQ Clinical Quality Coordinator Monument Health



Katie Noyes, BSN Sepsis Coordinator Monument Health



Jackie Dinterman, M.A., LBSW, ACM
Director of Care Management
Frederick Health



**Lisa Bromfield, MSN RN** SNF Nurse Liaison Frederick Health



Leigh Hunter, LCSW, ACM-CM Manager of Integrated Care Management Frederick Health



Karen Holtz, MT (ASCP), MS, CPHQ HQIC Education Lead Alliant Health Solutions



Lynne Hall, RN BSN LSSBB, Master TeamSTEPPS Trainer Georgia Hospital Association

### **Facilitator**



Lynda Martin, MPA BSN RN CPHQ Senior Director Patient Safety Qlarant IPRO HQIC



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- Kentucky Hospital Association
   Q3 Health Innovation Partners
- Superior Health Quality Alliance

# **Sepsis Readmissions – National Trends**







270,000 people die from sepsis every year in the U.S. – one every two minutes – more than from prostate cancer, breast cancer, and opioid overdose combined.

Sepsis is one of the most costly conditions in the U.S., with costs for acute sepsis hospitalization and skilled nursing estimated to be \$62 billion annually.

Sepsis is the leading cause of readmission to the hospital, with as many as 19 percent of people originally hospitalized with sepsis re-hospitalized within 30 days and about 40 percent re-hospitalized within 90 days.

https://www.sepsis.org/references

https://journals.lww.com/ccmjournal/FullText/2020/03000/Sepsis Among Medicare Beneficiaries 3 The.4.aspx https://jamanetwork.com/journals/jama/article-abstract/2667727?redirect=true



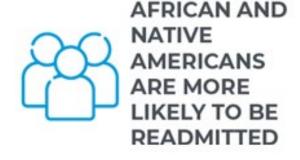
# **Sepsis Readmissions – National Trends**



Adults age 65+ are 13 times more likely to be hospitalized with sepsis than adults younger than 65.



Nursing home residents are over six times more likely to present with sepsis in the emergency room than non-nursing home residents.



African and Native
American patients are
more likely to be
readmitted following a
sepsis hospitalization
compared to their white
counterparts.

https://www.sepsis.org/sepsisand/aging

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC34955/

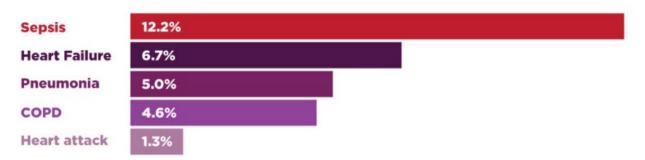
https://www.sepsis.org/news/sepsis-alliance-invites-health-sector-colleagues-to-sign-equity-diversity-and-inclusion-pledge/



# **Sepsis and Readmissions – National Trends**

### Hospital readmissions and healthcare costs after sepsis

Percentage of hospital readmissions



### Estimated average cost per readmission

Sepsis	\$10,070	
Pneumonia	\$9,533	
Heart attack	\$9,424	
<b>Heart Failure</b>	\$9,051	Fro
COPD	\$8,417	30- Co

15% of total readmission-related costs

1 in 3 readmitted

within 90 days

From: Proportion and Cost of Unplanned 30-Day Readmissions After Sepsis Compared With Other Medical Conditions. JAMA. 2017;317(5):530-531



- Healthcentric Advisors Qlarant
- Kentucky Hospital Association
- Q3 Health Innovation Partners
- Superior Health Quality Alliance



# Partnering to Improve Patient Outcomes and Prevent Sepsis-Related Readmissions

Jackie Dinterman, M.A., LBSW, ACM Lisa Bromfield, MSN RN Leigh Hunter, LCSW, ACM-CM

### Frederick Health

Our Mission: To positively impact the well-being of every individual in our community



- Frederick Health Hospital (269 licensed beds),
   Not-for-profit
- Frederick Health Medical Group, Frederick Health Employer Solutions, Frederick Health Home Care, Frederick Health Hospice, Cancer Center
- Frederick County: 40% population growth over the past 25 years resulting in an additional 95,000 people in the health system's service area.

### SNF/AL/FHH Collaborative

- Created SNF/AL/FHH collaborative in 1997 to improve communication among post acute providers
- Developed universal FMH/NH/AL transfer form
- Access to Meditech referral/admission assessment
- Observation status education
- Readmission reduction strategies
- Meetings with nursing leadership to discuss quality of care issues
- NH/AL's take weekend/evening admissions
- Partnering with CMS QIO Care Transitions Improvement Consultant and NH Improvement Consultant
- Successful sepsis readmission reduction initiative
- Piloting Circle Back program RN follow up with SNF within 24 hours of dc
- Warm Handoff pilot



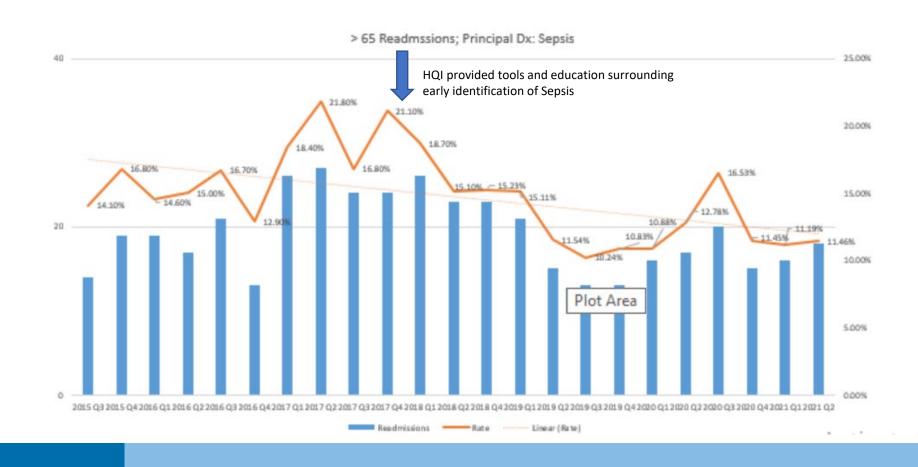
# **Keys to Success**

- Meeting monthly is essential to building relationships
- Build respectful and non-punitive environment no finger pointing
- Shared goals = shared successes
- Decision makers needed at meetings Administrators, DON's,
   Admission Coordinators, Infection Prevention leadership
- Consistently remind mission and goals
- Can learn from all facilities
- Have a hospital champion
- Involvement on hospital committees



# Sepsis Data after Start of Project

### > 65 Population 30-day Readmissions; Principal Dx: Sepsis



# Strategies for Sepsis Identification

- Process change
  - Sepsis risk assessment on admission
  - Ongoing assessment for changes that could mean sepsis – all employees
- Sepsis training & resources to all employees at nursing facilities
  - Sepsis pocket cards, posters
  - Sepsis risk assessment evaluation tool
  - SBAR tools and Information, customized to sepsis
  - Resident/family education brochure
- Assessment, feedback on facility infection prevention programs
- Regional sepsis forums to foster dialogue between hospitals, nursing homes for better coordinated sepsis care

If resident has suspected infection AND two or

- Temperature >100°F or <96.8°F</li>
- Pulse >100
- SBP <100 mmHg or >40 mmHg from baseline
- Respiratory rate >20/SpO2 <90%</li>
- Altered mental status

#### lan for:

- Review advance directive
- Contact the physician
- Contact the family

### If transferring resident to hospital:

- Prepare transfer sheet
- Call ambulance
- Call in report to hospital
- Report positive sepsis screen

If resident stays in facility, consider options below that are in agreement with resident's advance directives:

- Labs: CBC w/diff, lactate level (if able)
- UA/UC, blood cultures, as able from 2 sites, not from lines
- Establish IV access for IV 0.9% @ 30m
- Administer IV, PO or IM antibiotics
- Monitor for worsening in spite of treatment such as:
  - Urine output <400ml in 24 hours</li>
  - SBP <90 despite IV fluids
     Altered mental status
- Comfort care:
- Pain control
- Analgesic for fever
- Reposition every 2-3 hrs
- Oral care every 2 hrs
- Offer fluids every 2 hrs
- Keep family informed
- Adjust care plan as needed
- Consider transferring to another level of care such as palliative care, hospice or hospital

Every hour a resident in septic shock doesn't receive antibiotics, the risk of death increases 7.6%

Call the doctor!





# Then, COVID Happened.....All Focus was on Survival

- Collaborative continued but became virtual webex once per week focusing just on COVID:
  - Frederick County Health Department
  - Nursing and Assisted Living Facilities
  - Frederick Health, FH Supportive and Geriatric Care and FH Hospice
  - DDA residential setting group homes
- TeleSupportive Services implemented quickly to support nursing homes and assisted living facilities



**Relationships already built = Shared Goals = Shared Successes** 

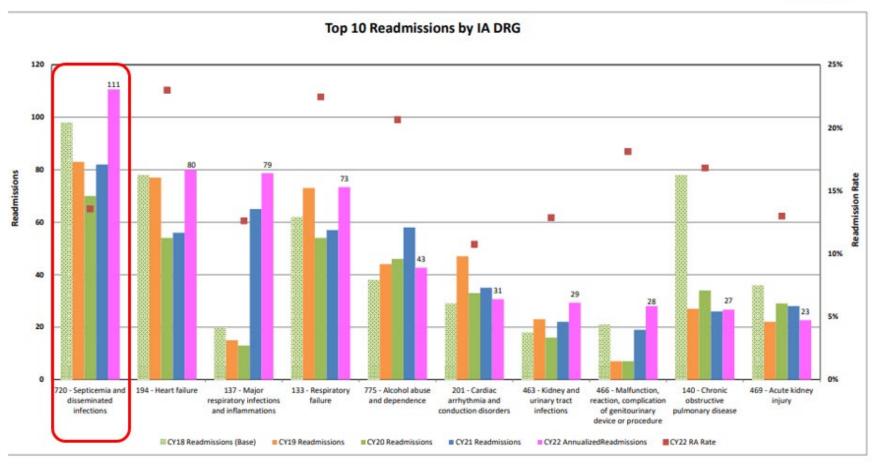
# Sepsis Kick Off Initiative – November 2022

- 2 SNF DON's shared successes from the past
- Shared new Sepsis statistics and readmission rates
- Shared past successful tools and new tools
- Recommitted to initiative



# **Top 10 IA DRGs**





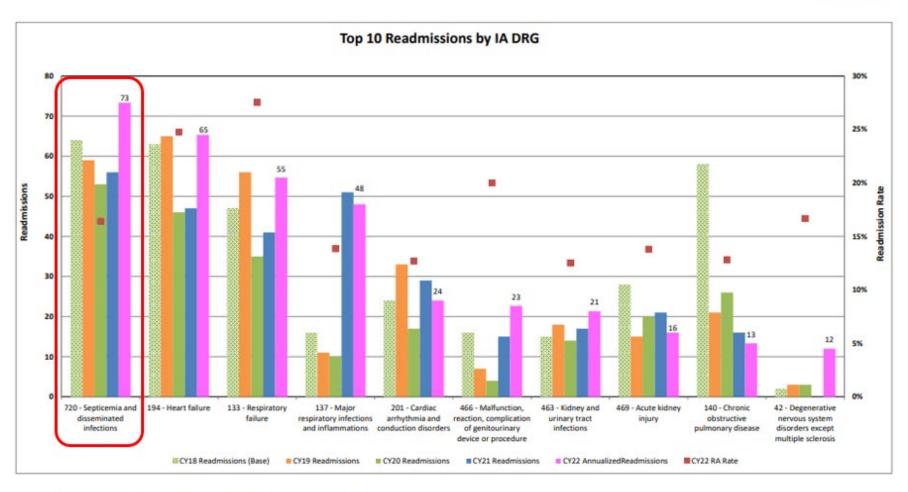
[1]: CY 2020 results exclude COVID-19 discharges.

[2]: CY 2021 & CY 2022 results include COVID-19 discharges.

### **Medicare FFS**

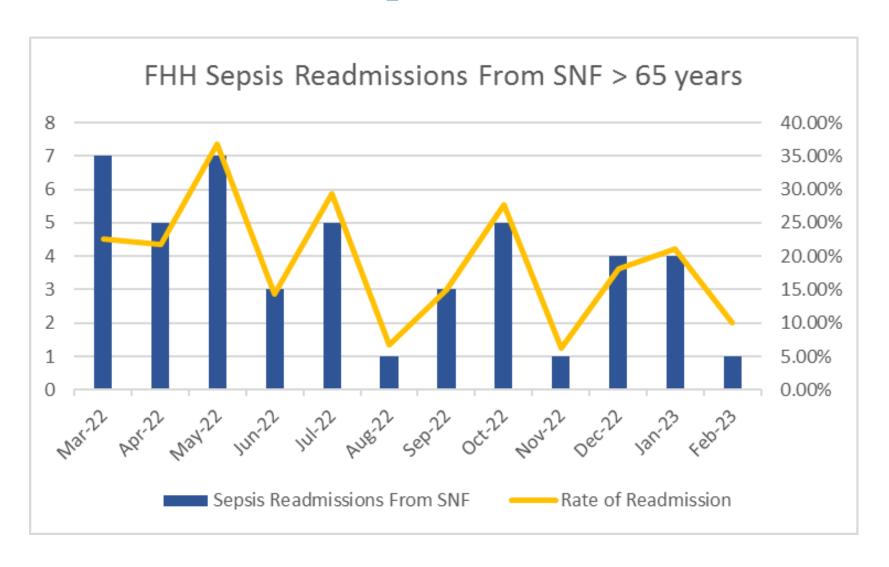
# **Top 10 IA DRGs**





- [1]: CY 2020 results exclude COVID-19 discharges.
- [2]: CY 2021 & CY 2022 results include COVID-19 discharges.

# Sepsis Data



# Partnering to Prevent Sepsis Harm & Readmissions from Long-Term Care Facilities

### **Good & Bad Changes = Opportunity**

- Need for communication about unknown
  - Fear of transfer
    - COVID changed considerations of transfer
- Chance to improve consideration & communication
  - Real time clinical data prior to transfer
    - What matters to resident / patient
    - Public health concerns
      - Avoid communicating NO TRANSFERS
- Open Dialogue about transfers to ED

# Positive Communication Improves Relationships

- Trust based on mutual assistance and respect
- Ask how you can help them
- Communicate how they can help you (and your mutual patients)
- Find out how Long-Term Care staff feel about calling your staff. How are they treated?

### **Enhance Collaboration Around Transfers**

### Recognize problems that affect transfer decisions & outcomes

- Is there communication prior to a transfer?
- Can you discuss transfers at some point? Via Roundtable or a call when patient is discharged.
  - How was discharge information? (hospital accountability)
  - Was the transfer necessary and/or timely? (SNF accountability)
- Know the abilities of different facilities ahead of time
  - Who handles what / does what
- Completed MOLST\* (POLST) & Advance Directive How are updates shared?
- How LTC staffing affects transfers
  - Credentials, shift, staffing levels & off-site or on-site
- How reimbursement affects transfers
- Are your staff tuned in to these questions?

<sup>\*</sup>Medical Orders for Life-Sustaining Treatment

# What about Sepsis?

- You want Long Term Care staff to surveil, recognize, then treat, or transfer as appropriate.
- Can they communicate with you to achieve this?
- Tele-Supportive Services calls were a way to communicate and to model calm assessment
  - Used a transcript to help NPs address crisis / panic
    - Does LTC do training around ACP / MOLST and death with staff so they do not panic
- Recognize possible sepsis and begin protocol
  - As able

## Are Staff at Facilities Looking for Sepsis?

- We had an experience pre-pandemic with increased sepsis surveillance
  - Teaching done with 2 LTCs
  - Tools initiated to draw attention to anyone with possible sepsis or risk factors
- Survey LTCs
  - Would they be interested in receiving help with education?
  - Can they start IVs, get and hang antibiotics quickly, etc.?
  - Barriers they see to engaging in this initiative
- Share benefits to engaging in this initiative
  - Are benefits all yours?

# True Collaboration is a Two-Way Street

- Be open to limitations & worries related to sepsis
- Ask them, where can YOU improve?
  - For us discharge information/calling report
  - Imperative to ask <u>&</u> follow up
    - Follow up includes still working on it, haven't forgotten
  - Do you have a liaison or relationship with DONs?
  - Do you have a geriatrics department/specialist/ outreach? Include them!
- Remember to consider benefit for facilities
  - When will the CMS dings for readmissions be felt?
    - How does that cost compare to change?

# Strategies for Education

- Arrange to educate in person or virtually
- Teach to your audience
  - Scope of practice / education level
  - Who will do which part of surveillance?
- Do they have time or bandwidth?
  - If you provide education, consider recording
    - High turnover
    - Sustainability
- Need champions
  - Among group being taught, not just supervisors
- Use data to focus education needs or shared resources…

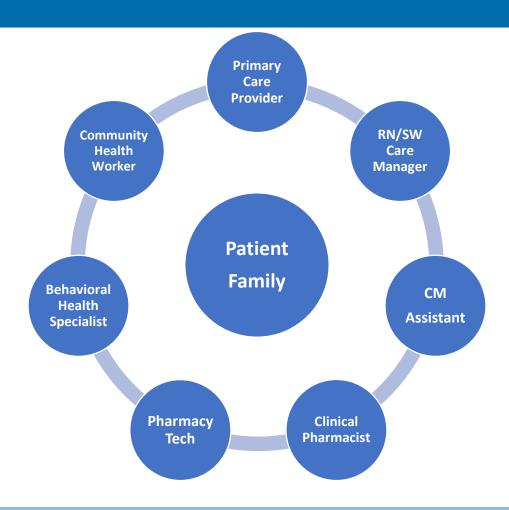
### Data Driven Education & Collaboration

- Some DATA to Collect
  - How many folks sent from LTC to R/O sepsis
    - How many of those folks were admitted
  - Which facilities they came from
  - # of sepsis admissions sent for something else?
  - Presenting concern for folks not sent for sepsis but admitted for sepsis?
  - Outcomes by site
    - Are some sending sicker folks some catching earlier?
- Site specific data should be shared with admin of site
  - To measure needed change and note positive change
  - And to get buy-in for further and specific education
  - Hope based on the success of others!

# Integrated Care Management

- Who are we?
  - A multidisciplinary care management team supporting primary care practices
- Who do we support?
  - Frederick Integrated Healthcare Network (FIHN) clinically integrated network
  - 16 primary care practices with Frederick Health Medical Group and the community
  - 4 pediatric practices

# Integrated Care Management Team



# Engagement

- Transitions of Care
- Provider/Care Team Referrals
- Risk Stratification Tools
- Community Partner Referrals

### Interventions

- Transportation assistance
- Information & Referral
- Advanced Care Planning
- Caregiver Support
- Self-Management Education
- Goal Setting

- Home visits
- Appointment Scheduling
- SoDH assessment
- Long term care planning
- Comprehensive MedicationManagement
- Behavioral Health Support

# **Community Partners**

- Agencies (Dept of Aging)
- DSS
- Private Duty
- HHC
- FH Ambulatory CM programs

- Food Security agencies
- Transportation services
- SNF/ALF
- CDSMP/DPP
- Pharmacies

# Collaboration Opportunities with SNF/AL

- May receive contact from CM team for updates on discharge plans
- CM team can provide important information on home environment/social needs/barriers to care
- Clinical pharmacist communication
- Contact within primary care practice to help facilitate post-discharge appointments
- Team will outreach to patient following a SNF discharge and intervene as needed
- Referrals for placements from community (skilled, respite, LTC)

# Sepsis Assessment

- Transitions of Care assessments are standardized across ambulatory care management teams
- Allows for screening for complications after discharge related to CHF/COPD/Sepsis
- Sepsis Assessment includes:
  - Heart rate/breathing
  - Temperature
  - Skin/Nails
  - Energy
  - Thinking

# Choosing the Right Level of Care in a Medical Emergency



Everyone knows that a primary care doctor is the best place to go when you are sick or in pain. By seeing your primary care physician on a regular basis, they will have your complete health history and an understanding of any underlying conditions you may have.

Sometimes you become sick or injured when the doctor's office is closed, and sometimes you need more urgent medical attention than your doctor can provide. This handout helps to explain where to seek the best care in your time of need.

### **Primary Care** Call to make an appointment with your primary care provider if you have symptoms of a regular illness or need a regular check-up.

- Treatment of illness, including:
  Colds and coughs
  Sore throat
  Flu and flu-like symptoms
  Ear infections
  Urinary tract infections
  Minor aches and pains
  Alleraies

  Ireatment of illness, including:
  Cold and Cold a
- Management of chronic conditions, such as: Diabetes
   Heart Disease
   COPD
- General medical advice
- Annual Well Exams
- Immunizations
- Respiratory problems

### If you believe a life is in jeopardy, always call 911!

### **Urgent Care** is an option if you have a minor illness or injury, your primary care provider is not available, and your problem cannot wait.

Treatment of illness, including: Colds, coughs, and upper respiratory infections; Sore throat; Flu and flu-like symptoms; Ear infections/Earache; Suspected urinary tract infection;

Sexually Transmitted Illness:

- Fever If having seizures, go to the Emergency Department
- Upset stomach
- Nausea or vomiting

- Adult IV hydration
- Skin rashes and infections
- Abscesses
- Sprains or suspected minor broken bones
- Musculoskeletal injuries
- Back pain or joint pain
- Toothache (if dentist is not available)
- Allergies
- Animal or insect bite

- Eye irritation and redness
- Minor cut/abrasion and sutures/stitching
- Minor burn
- Frequent, bloody, or painful urination
- Motor Vehicle Collision exams
- Workman's Comp exams
- Sports/DOT physicals
- Travel vaccines
- Laboratory and blood work
- X-Rays

(over)

### Choosing the Right Level of Care in a Medical Emergency CONT.

## The Emergency Department (ED) is open 24 hours a day, 7 days a week. You should seek care at the Emergency Department without delay if you have a serious or a life-threatening illness or injury.

- Chest pain or other heart attacks symptoms, such as: Pressure, fullness, squeezing/pain in the center of your chest Tightness/burning/aching under the breastbone Chest pain with lightheadedness
- Signs of a stroke, such as: Sudden weakness or numbness of the face/arm/leg on one side of the body Sudden dimness or loss of vision Loss of speech or trouble talking Sudden severe headaches with no cause
- Head injury or eye injury
- Sudden and severe headache or loss of vision
- Heavy bleeding that won't stop
- Dislocated joints

- Severe abdominal pain
- Deep cuts or severe burns
- High fever
- Severe asthma attack
- Loss of consciousness
- Severe or worsening reaction to an insect bite, sting, or medications
- Constant, severe/persistent vomiting
- · Coughing up or vomiting blood
- Poisoning Call Poison Control at 1-800-222-1222 and ask for immediate home treatment advice
- Domestic violence or rape
- Feelings of suicide

### If you believe a life is in jeopardy, always call 911!





#### VISION

#### It starts with heart.

Our vision is to be one team, to listen, to be inclusive, and to show we care.

To do the right thing. Every time.

#### VALUES

Trust
Respect
Compassion
Community
Excellence

#### PRIORITIES

Deliver high-quality care
Provide a caring experience
Be a great place to work
Impact our communities
Be here for generations to come

#### MISSION

Make a difference. Every day.

# Why Sepsis?

Increased Compliance
With Early Sepsis
Management
Preventing
Sepsis-related
Readmissions
In A Critical Access
Hospital





# Centers for Medicare and Medicaid Services (CMS) SEP-1

### Treatment Bundle

#### Within 3 hours:

- Initial Lactic Acid
- Blood cultures drawn prior to antibiotics
- Start broad-spectrum antibiotics
- 30 ml/kg fluid bolus
   -Any initial LA > 4 or initial hypotension

#### Within 6 hours:

- Repeat Lactic acid
   Reflex order will only place repeat when >2
- Vasopressors
- Provider Documentation of Repeat Volume and Tissue Perfusion Assessment

#### Severe Sepsis 3-Hour Bundle SEV SEP 3

Percentage of patients who received an intravenous antibiotic, had blood cultures drawn prior to antibiotics, and had a lactate level drawn, all within three hours of severe sepsis presentation.

#### Numerator: (Patients who)

- Met all requirements for the broad spectrum or other antibiotic administration data elements and calculations, and who were not excluded for broad spectrum antibiotic timing being less than -1440 minutes, AND
- . Met all requirements for the blood culture collection data elements and calculations, AND
- Met all requirements for the initial lactate level collection data elements and calculations.

#### Denominator:

(Patients who)

- Are age 18 years and over with an ICD-10-CM Principal or Other Diagnosis Code of Sepsis, Severe Sepsis, or Septic Shock and not equal to U07.1 (COVID-19), with a length of stay less than or equal to 120 days, AND
- Met Severe Sepsis Present data element criteria, AND
- Were not transferred from another hospital, were not in a clinical trial, did not have an
  administrative contraindication to care for severe sepsis, did not have a directive for
  comfort care or palliative care for severe sepsis, and were not discharged more than six
  hours after severe sepsis presentation.

#### Severe Sepsis 6-Hour Bundle SEV\_SEP\_6

Percentage of patients who had an elevated *Initial Lactate Level Result* (> 2 millimoles **per** litre [mmol/L]), and had a repeat lactate drawn within six hours of severe sepsis presentation.

#### Numerato

(Patients who)

Met all requirements for the repeat lactate level collection data elements and calculations.

Denominator: (Patients who) • Met all requirements for the Severe Sepsis 3-hour bundle, and had an elevated *Initial Lactate Level Result* (> 2 mmol/L).

#### Septic Shock 3-Hour Bundle SEP\_SH\_3

Percentage of patients who had *Initial Hypotension* or septic shock, and 30 mL/kg of crystalloid fluids were started within three hours of septic shock or initial hypotension presentation.

#### Numerator:

- Met all requirements for the Initial Hypotension (if present), septic shock (if present) data elements and calculations, AND
- Metall requirements for the crystalloid fluid administration data elements and calculations.

#### (Patients who)

- Met all requirements for the Severe Sepsis 3-hour bundle and Severe Sepsis 6-hour bundle (if eligible), AND
- Met criteria for Initial Hypotension (if present) or Septic Shock Present (if present) data elements, AND

#### Denominator: (Patients who)

 If septicshock was present, did not have an administrative contraindication to care for septicshock, did not have a directive for comfort care or palliative care for septic shock, and were not discharged more than six hours after septic shock presentation.

#### SepticShock 6-Hour Bundle SEP\_SH\_6

Percentage of patients who received a vasopressor, if persistent hypotension was present, and who had a repeat status and tissue perfusion assessment completed within six hours of persistent hypotension or septic shock presentation.

#### Numerator: (Patients who)

- If Persistent Hypotension was present, met all requirements for the vasopressor administration data elements and calculations, AND met all requirements for the repeat volume status and tissue perfusion assessment data elements and calculations, OR
- If persistent hypotension was not present but septic shock was present, met all requirements for the repeat volume status and tissue perfusion assessment data elements and calculations.

#### Denominator: (Patients who)

- Met all requirements for the Septic Shock 6-hour bundle for which they were eligible, AND
- Met criteria for Persistent Hypotension OR an Initial Lactate Level Result greater than or equal to 4 mmol/L.

actic Acid - Test







#### Compass Hospital Quality Improvement Contractors (HQIC) Run Charts Monument Health Sturgis Hospital

#### Severe Sepsis and Septic Shock

Severe Sepsis and Septic Shock Measure

# Severe Sepsis and Septic Shock 3-Hour Management Bundle Compliance (NQF 0500) Self-Reported Higher is Better



	Jan *20	Feb '20	Mar '20	Apr *20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	*Oct *20	Nov '20	Dec '20	Jan *21	Feb *21	Mar '21	Apr '21	May '21
Facility	0.00	0.00	100.00		33.33	33.33	0.00			33.33			50.00		0.00	100.00	50.00
Avg HQIC	67.68	72.11	69.76	69.29	68.54	67.65	77.60	74.66	74.13	68.08	39.10	67.66	65.27	66.60	67.77	50.41	66.87
Num/Den	0/2	0/1	2/2	0/0	1/3	1/3	0/1	0/0	0/0	1/3	0/0	0/0	1/2	0/0	0/2	1/1	1/2

Jun '21 Facility 75.00 Avg HQIC 70.27 Num/Den 3/4

Month	Intervention
*Oct *20	Two physicians have joined the system Sepsis PI team.

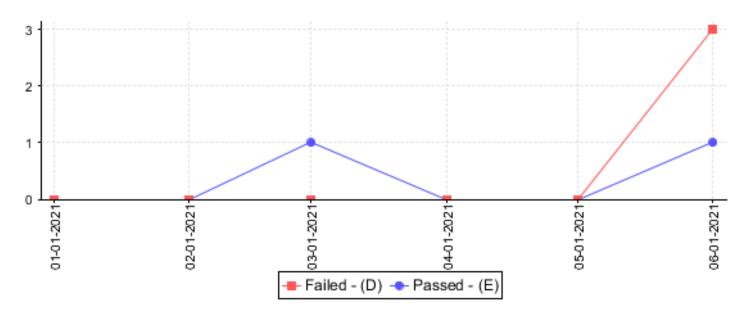
# CMS Reporting – All Sepsis Measures

Report Run Date: 03-02-2022 Page: 1 of 1

#### Measure Trending - Hospital IQR

Provider: Sturgis Regional Hospital - 431321 Discharge Date Range: 01-01-2021 - 06-30-2021

> Measure Set: IQR-SEP Measure: SEP-1



*Note: Low numbers and inconsistent performance* 

# Opportunity to Improve

Transferred > Admitted

What data was not being captured?

Why is our data inconsistent



Goal

Provide consistent and highquality care to patients with sepsis including both those who are admitted to the Sturgis Hospital and those who are transferred to a higher level of care.



# **Action**

- Continued measurement and participation in HQIC database as well as CMS reporting for patients admitted to the Sturgis Hospital
- Added measurement of sepsis charts for patients transferred to higher levels of care for both the 3- and 6-hour bundles
- Physician and nurse peer feedback on opportunities identified in chart reviews, including those chart that are not reported i.e. transferred patients
- Targeted education during department meetings with emphasis on documentation and the resources available
- Physician and nurse peer feedback on great care
- Continued participation and collaboration with system and Hills' market sepsis team
- Regular reporting of data to medical and nursing staff
- Inclusion of Sturgis Urgent Care Services
- Creation of reference sheets for Emergency Department and for Urgent Care Services

# Provider Documentation Requirements SEPSIS QUALITY DOCUMENTATION

MH Severe Sepsis and	Septic Shock Quality Checklist HPI ROS Physical Exam Procedures MDM		
Concern for infection/sepsis:	Now		
	SIRS (2+/4) AND any organ dysfunction (any 1 of the following: lactate >2, hypotension - SBP <90 or MAP <65, Cr >2, Bili >2, Plt <100,000, INR > 1.5 (not on AC), or MC - intubation, CPAPA, or BiPAP)		
Lactate	Lactate < 2- No repeat required  Lactate > 2- Repeat ordered within 6h		
Blood Cultures	Blood culture(s) obtained prior to antibiotics  Unsuccessful attempts to collect blood cultures. Given severity of infection and risk for deterioration from rapidly advancing infection, and	itibiotics were given prior to blood co	ulture collection.
Please document 'Time blood Cx not prior to Ak		IVFs	SBP < 90 mmHg and/or MAP < 65 mmHg and/or Lactate >4
Antibiotics	Less than 3 hours  Greater than 3 hours		Concerned 30 cc/kg bolus would be harmful for the patient  Not indicated (no hypotension and/or lactate < 4)
IVFs	SBP < 90 mmHg and/or MAP < 65 mmHg and/or Lactate >4  Concerned 30 cc/kg bolus would be harmful for the patient  Not indicated (no hypotension and/or lactate < 4)	Contraindicated due to:	Concern for fluid overload  Heart failure  Renal failure  Blood pressure responded to lesser volume of fluid
Septic Shock  Volume Status & Tissue Perfusion Assessment Please document "Time	Provider documentation of Septic Shock AND/OR Lactate greater than equal to 4 AND/OR Persistent HypoTN after IVF bolus  I have reassessed patient's hemodynamic status & tissue perfusion after target bolus given  of exam"  ① Now	Volume instead of 30 cc/kg	250 ml crystalloid fluid bolus  500 ml crystalloid fluid bolus  1000 ml crystalloid fluid bolus

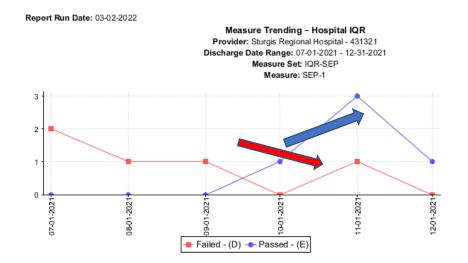
### Results

PI project started July 2021 Compass Hospital Quality Improvement Contractors (HQIC) Run Charts C@MPASS Monument Health Sturgis Hospital Severe Sepsis and Septic Shock Severe Sepsis and Septic Shock Measure Severe Sepsis and Septic Shock 3-Hour Management Bundle Compliance (NQF 0500) Self-Reported Higher is Better — Facility Median 120.0 96.0 72.0 48.0 24.0 Aug '21 Oct '21 Reporting Month - Year Apr '22 0.00 100.00 100.00 100.00 Facility 0.00 0.00 50.00 75.00 50.00 100.00 100.00 100.00 100.00 0.00 100.00 100.00 Avg HQIC 67.66 63.89 65.46 68.46 67.99 66.52 70.18 69.29 69.08 64.02 67.76 67.05 66.52 66.98 71.75 71.30 64.78 Num/Den 1/2 1/1 1/2 3/4 1/2 1/1 1/1 May '22 Jun '22 Jul '22 Aug '22 Sep '22 Oct '22 Nov '22 Dec '22 Jan '23 Facility 100.00 100.00 100.00 100.00 100.00 100.00 100.00 85.71 Avg HQIC 73.72 73.80 71.01 69.75 69.73 70.06 69.10 70.53 66.79 Num/Den 6/7

## Results

### CMS Reporting – All Sepsis Measures

Page: 1 of 1



Note: Increase in pass rate and decrease in fail rate

Report Run Date: 02-06-2023

Measure Trending – Hospital IQR
Provider: Sturgis Regional Hospital - 431321
Discharge Date Range: 01-01-2022 - 06-30-2022
Measure Set: IQR-SEP

Note: Zero admitted Severe Sepsis/Septic Shock patients in January and April 2022

## Results

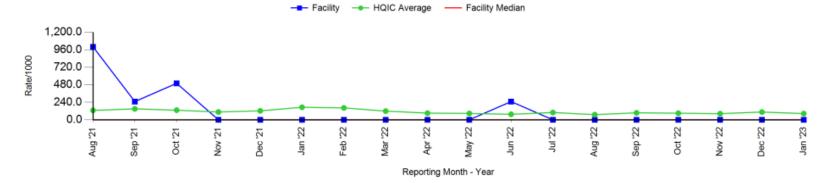


Compass Hospital Quality Improvement Contractors (HQIC) Run Charts
Monument Health Sturgis Hospital

#### Severe Sepsis and Septic Shock

Severe Sepsis and Septic Shock Measure

#### Sepsis Mortality Statewide Database Lower is Better



	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22	Oct '22	Nov '22	Dec '22
Facility	1,000.00	250.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Avg HQIC	129.30	150.00	131.91	106.35	122.69	171.80	163.28	119.36	91.25	87.22	75.44	100.00	70.41	95.68	90.19	84.04	106.29
Num/Den	1/1	1/4	1/2	0/5	0/2	0/1	0/2	0/1	0/1	0/1	1/4	0/4	0/0	0/2	0/4	0/0	0/7

| Jan '23 | Facility | 0.00 | Avg HQIC | 84.99 | Num/Den | 0/6

# **Evaluation**



- Improvement in both the 6-hour and the 3-hour bundle for patients admitted
- 17 months in a row Sturgis Hospital has been at 100% for the 3-hour bundle
- Opportunities remain with patients transferred to a higher level of care



# **Impacts**

- Through collaboration, data monitoring, and a feedback loop, strong improvements in quality can be demonstrated
- Supports our organizational priority to deliver high quality care
- Improved patient outcomes
  - Patients transferred to higher levels of care
  - Decreasing sepsis mortality
  - Decreasing Sepsis related readmissions

# **Total Hospital Readmissions**

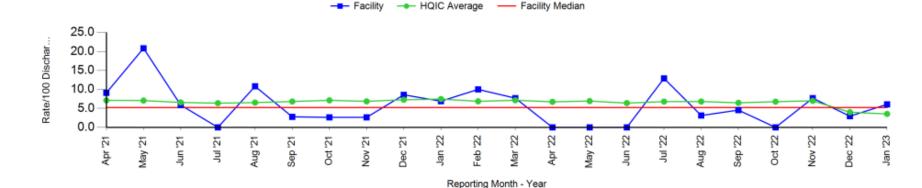


Compass Hospital Quality Improvement Contractors (HQIC) Run Charts
Monument Health Sturgis Hospital

#### Readmissions

Readmissions Measure

#### Unplanned All-Cause, 30-Day Readmissions Same Hospital Statewide Database Lower is Better



	Apr '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22
Facility	9.09	20.83	5.88	0.00	10.81	2.78	2.63	2.63	8.57	6.90	10.00	7.69	0.00	0.00	0.00	12.90	3.13
Avg HQIC	7.11	7.06	6.57	6.37	6.53	6.81	7.13	6.86	7.28	7.44	6.87	7.14	6.73	6.93	6.39	6.79	6.81
Num/Den	2/22	5/24	2/34	0/27	4/37	1/36	1/38	1/38	3/35	2/29	2/20	2/26	0/22	0/24	0/26	4/31	1/32

	Sep '22	Oct '22	Nov '22	Dec '22	Jan '23
Facility	4.55	0.00	7.69	2.94	6.06
Avg HQIC	6.46	6.76	6.99	3.99	3.54
Num/Den	1/22	0/23	3/39	1/34	2/33

# **Takeaways**

- Hospital 30-day readmissions remain a major quality and cost indicator
- Sepsis is a leading cause of hospital readmissions
- Well-defined system processes and compliance for the Severe Sepsis/Septic Shock Early Management Bundle (SEP-1) are crucial to deliver high quality care and reduce readmissions.



## **Team Members**

- Amanda Karrels BS, RN, CPHQ, Quality Coordinator
- Dr. Joy Mueller MD, Family Practice and Emergency Room Physician
- Dr. Chuck Lewis DO, Family Practice and Emergency Room Physician, Community Medical Director
- Dr. Connie Stock MD, Family Practice and Emergency Room Physician
- Dr. Josie Davis MD, Family Practice and Emergency Room Physician
- Dr. Kent Wright MD, Family Practice and Emergency Room Physician
- Sturgis Hospital Emergency Room Nursing Staff, Manager, and Director
- Sturgis Clinic Urgent Care Services Providers, Staff, and Director

### References

Society of Critical Care Medicine. *Critical Care Medicine: October 4, 2021.* Surviving Sepsis Campaign Guidelines 2021 | SCCM (Link)

Batalden, P.B. & Davidoff F. (2007). What is quality improvement and how can it transform healthcare. Quality Safety Health Care, 16(1):2–3. <a href="https://qualitysafety.bmj.com/content/qhc/16/1/2.full.pd">https://qualitysafety.bmj.com/content/qhc/16/1/2.full.pd</a> (Link)

Community-based Care Transitions Program. Center for Medicare and Medicaid Services Innovation Center. 2019. https://innovation.cms.gov/initiatives/CCTP/ (Link)

Gaieski DF, et al. Impact of time to antibiotics on survival in patients with severe sepsis or septic shock in whom early goal-directed therapy was initiated in the emergency department. Crit Care Med. 2010;38(4):1045–1053.



**Questions?** 

**Questions?** 

VISION

It starts with heart.

Our vision is to be one team, to listen, to be inclusive, and to show we care.

To do the right thing. Every time.

#### **VALUES**

Trust
Respect
Compassion
Community
Excellence

**Questions?** 

#### **PRIORITIES**

Deliver high-quality care
Provide a caring experience
Be a great place to work
Impact our communities
Be here for generations to come

MISSION

Make a difference. Every day.

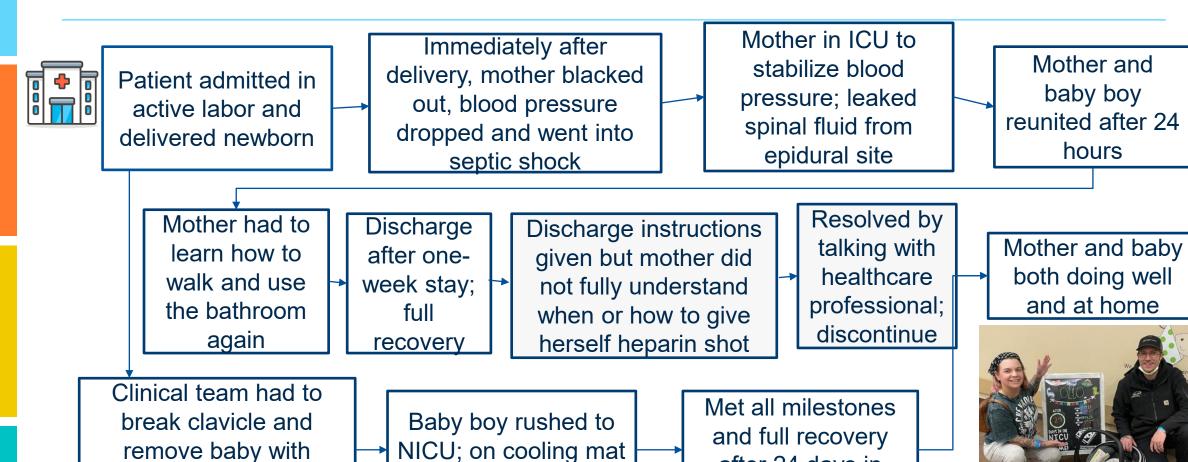
**Questions?** 

# Sepsis Survivor – Patient Story

Lynne Hall, RN BSN

LSSBB, Master TeamSTEPPS Trainer Georgia Hospital Association

# Patient's Story: Female with pre-eclampsia; uterine infection not found until active labor and went into septic shock



for three days

forceps; not breathing

for 20 seconds

IPRO

after 24 days in

**NICU** 

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- Superior Health Quality Alliance

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### **Interactive Discussion: Panelists & Attendees**

- What are some challenges, barriers & successes you have experienced with implementing best practice strategies?
- How can HQICs best support you going forward?
- How are you partnering with patient & families to support safe & equitable transitions in care?
- Have you identified &/or closed any disparities/gaps in care to prevent sepsis-related readmissions?

Please enter your questions or comments into Chat or raise your hand to be unmuted

### **Tools & Resources**

Sepsis Alliance Institute

Sepsis Alliance Institute link
Sepsis Alliance Resources link
Sepsis Alliance Education link

CDC

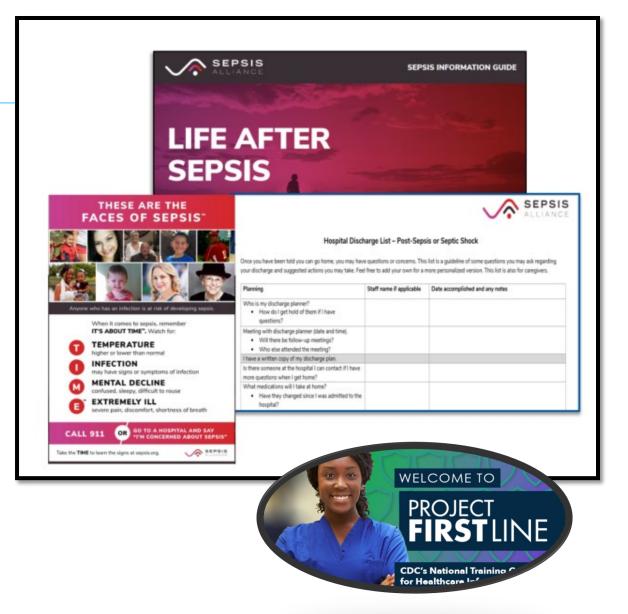
CDC Sepsis Tools & Resources link

CDC Infection Control - Project Firstline link

CDC Interactive Infographic

Surviving Sepsis Campaign

**Surviving Sepsis Campaign link** 





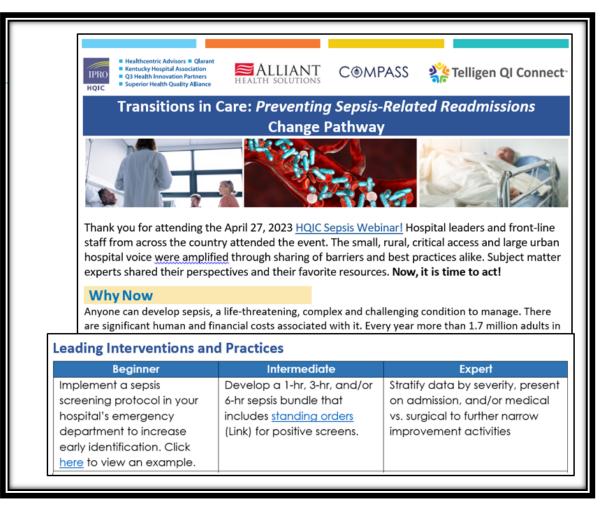
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### **Tools & Resources**

### **HQIC Change Pathway**

- Compilation of challenges, barriers
   & best practices for implementation
- Adapt & use to help address your opportunities &/or augment existing interventions
- Links to tools & resources for planning & executing your QI project





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- Superior Health Quality Alliance

# **Key Takeaways**

### Sepsis is a life-threatening medical emergency

- Everyone has a role to play
- Treating sepsis is costly significant human & economic impact
- Use evidence-based practices to reduce variations in care
- Start sepsis screening now early detection can save lives

### Know your data & own your results

- Stratify by REAL & SDOH drill down into root causes
- Empower teams to design & implement actions to drive improvement

### Collaborate & coordinate care transitions across the continuum

- Form partnerships engage in active dialogue & listening
- Helps to prevent sepsis-related harm & readmissions

### Engage patients & families as partners

- Increased communication & education = less confusion
- Integrate health-related social needs into care & discharge planning to improve outcomes (e.g., health literacy, transportation needs, access to medication, food insecurity etc.)



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   Qlarant
   Kentucky Hospital Association
- Kentucky Hospital Association
   Q3 Health Innovation Partners
- Superior Health Quality Alliance

## Wrap-up

Today's slides, recording & resources shared within 1-2 weeks

# **Upcoming Events**



May 11, 2023 | 1 – 2 pm ET

Partnering with Patients & Families to Prevent All-Cause Harm
Registration Link

June 20, 2023 | 2 – 3 pm ET

**Falls Prevention** 

Registration forthcoming



# Thank You for Attending Today's Event

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



## **HQIC Contact Information**



- Healthcentric Advisors Qlarant
- Kentucky Hospital Association
- Q3 Health Innovation Partners
- Superior Health Quality Alliance







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