

An Overview of HQIC Sepsis Resources

August 8, 2024

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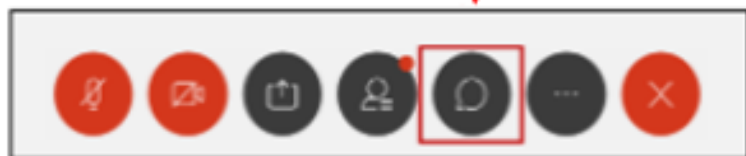
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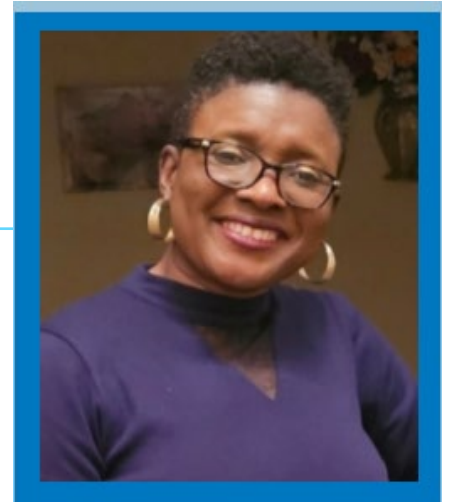


Enter in Chat:

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

Speaker

Priscilla Ebone, MSN, RN, CPPS Patient Safety Subject Matter Expert IPRO HQIC



Priscilla Ebone provides patient safety expertise to healthcare systems and organizations to advance the culture of patient safety and innovations at the point of care.

- With 15 years of RN bedside nursing care, Priscilla has practiced in the areas of home healthcare, acute care hospitals, hospice care, rehabilitation, and post-acute care settings. She recognizes that across the continuum of care, quality care is the necessary basic step to improve patient satisfaction, decrease length of stay, and improve outcomes.
- Her passion to improve patient safety has motivated her to facilitate quarterly *HQIC Lunch and Learns*.
- She has chosen to focus on sharing an overview of sepsis resources for this quarter.

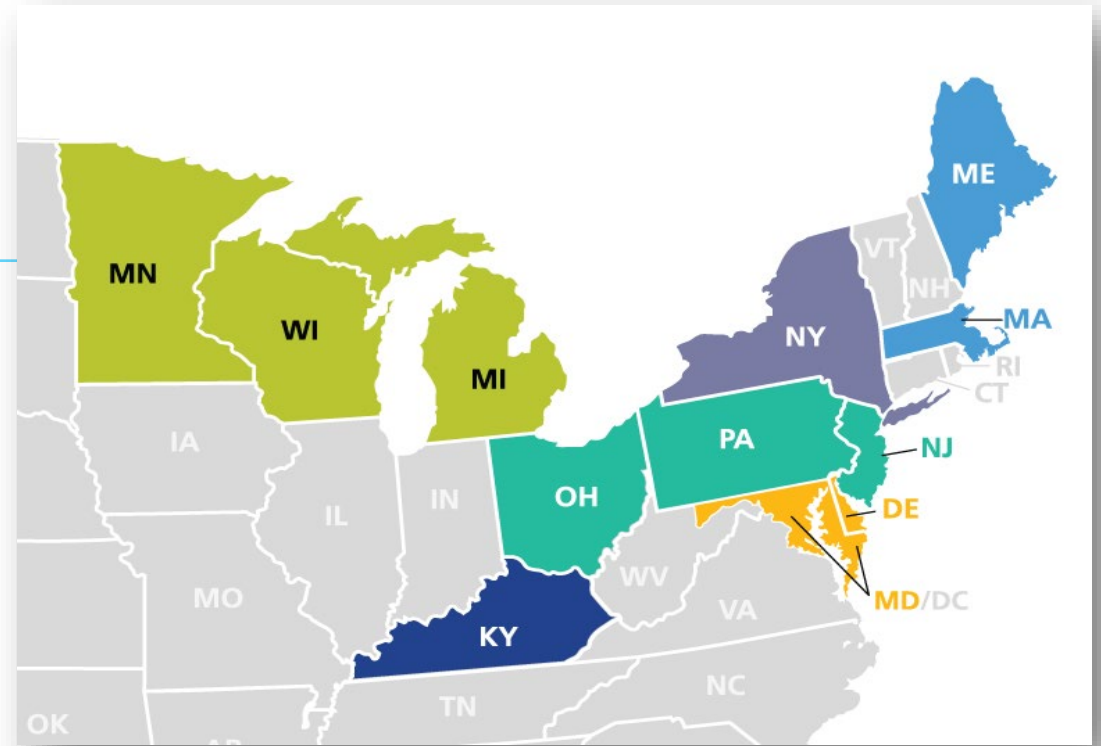


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IPRO HQIC

- A federally funded Medicare Hospital Quality Improvement Contractor (HQIC)
- 272 Hospitals
- 12 States
- IPRO collaborates with organizations to provide technical assistance to hospitals



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- American Institutes for Research (AIR)

- IPRO supports hospitals in improving care delivery systems affecting vulnerable populations
- IPRO works with 272 hospitals across 12 states
- Focus areas include:
 - All-cause harm
 - Patient and family engagement
 - Health equity
 - Immunizations and vaccines
 - Healthcare-acquired infections



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Objectives of Today's Presentation

In this Lunch and Learn webinar, you will learn about:

- The prevalence of Sepsis
- Sepsis best practices and opportunities
- An Overview of the HQIC Sepsis resources



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Prevalence of Sepsis

- A life-threatening medical emergency. According to the Centers for Disease Control and Prevention, at least 1.7 million adults in the US develop sepsis each year.
- Nearly **270,000** Americans die as a result of sepsis (AHRQ 2024).



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Prevalence of Sepsis

- Sepsis mortality continues to be a challenge with sepsis and septic shock as leading causes of death worldwide. Adherence to clinical and operational best practices can profoundly reduce mortality rates and the costs associated with this disease.

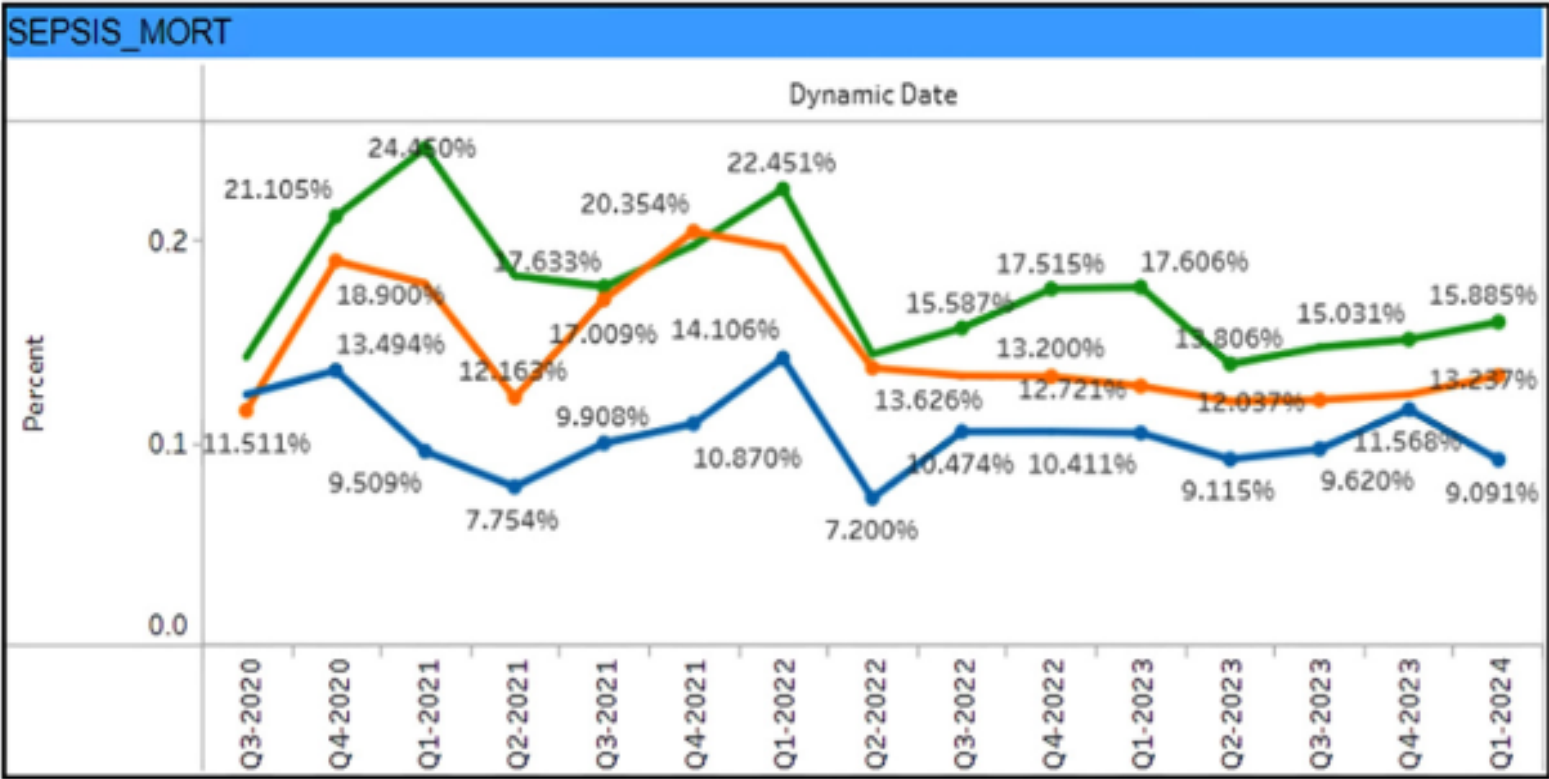


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HQIC Sepsis Data

As shown, sepsis rates vary by hospital type.



KEY - Hospital Type Critical Access Hospital — Rural IPPS* — Urban-Targeted —
 (*Inpatient Prospective Payment System)

SEPSIS COST

CMS Standardized Cost per Event How much can your hospital realize in savings?

- Sepsis: \$57,722
- Central line-associated bloodstream infections: \$55,132
- *C. difficile* infections: \$19,780
- Pressure ulcers: \$16,624
- All cause readmissions: \$16,402
- Catheter-associated urinary tract infections: \$15,807
- Methicillin-resistant *staphylococcus aureus*: \$7,683
- Adverse drug events: \$6,585

Source: CMS 2022 HQIC Cost Savings File



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Sepsis Best Practices

- Clinical teamwork focus on reducing barriers to timely antibiotic administration and fluid resuscitation.
- Improving antibiotic prescribing and use.
- CDC recognizes that there is no "one size fits all" approach to optimize antibiotic use for all settings.
- The complexity of medical decision-making surrounding antibiotic use require flexible programs and activities.

(See CDC Core Elements of Antibiotic stewardship) <https://www.cdc.gov/antibiotic-use/hcp/core-elements/>



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Sepsis Best Practices

In the months after hospital discharge for sepsis, management should focus on:

- (1) Identifying new physical, mental, and cognitive problems and referring for appropriate treatment.
- (2) Reviewing and adjusting long-term medications, and
- (3) Evaluating for treatable conditions that commonly result in hospitalization, such as infection, heart failure, renal failure, and aspiration.

Sepsis Best Practices - Leadership Support

- Create an organization-wide sepsis management protocol, policy, and/or necessary procedures to integrate evidence-based guidelines into clinical practice.
- Convene a multidisciplinary team that includes staff in different roles and service lines to work on sepsis projects.
- Incorporate the “Surviving Sepsis Campaign” evidence-based guidelines, including the three-hour resuscitation and six-hour care bundles, into the sepsis management protocol or procedures.



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Sepsis Best Practices - Leadership Support

- Develop a system-wide protocol and require that all adult services use the same protocol, including the emergency and intensive care departments.
- Develop order sets, preferably electronic, for non-severe sepsis and for severe sepsis/septic shock.
- Evaluate compliance by using process measures such as door-to-antibiotic time and share reports regularly with stakeholders to communicate progress.
- Use a system-wide mechanism, such as a sepsis management dashboard and/or reports, to share data with administrators, physicians, and other providers and staff.

An Overview of HQIC Sepsis Resources/LANS



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HQIC SEPSIS GAP ANALYSIS

- The HQIC Sepsis Gap Assessment has shown several areas of improvement needed in the clinical and operational tasks of sepsis care and the CMS SEP-1 bundle. This webinar showed how organizations are innovating and improving sepsis care through:
 - Application of goals to implement the one-hour bundle,
 - Coordination,
 - Education,
 - Peer to peer feedback, and
 - Patient/family engagement.

Gap analysis tool from HQIN

https://hqin.org/wp-content/uploads/2021/05/Hospital-Sepsis-Gap-Analysis_508.pdf



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Sepsis Gap Assessment High Value Focus Areas

Standards for Hospital Sepsis Care	% Not Fully Implemented IPRO HQIC Gap Assessment
Consistently use a “time zero” method for tracking the timing of interventions	63%
Rapid Response Team (RRT) or sepsis alert process is in place for new sepsis identification	72%
Process in place to document interval from time of positive sepsis screening to time of antibiotic administration	72%
Utilization of real-time method for tracking sepsis patients	78%
Process in place to monitor and identify concerns and barriers to bundle implementation	62%
Designated Sepsis Lead/Coordinator regularly rounds in clinical areas	84%
Data are stratified to identify disparities to facilitate improvements in health equity	91%
Explicit sepsis communication handoffs are utilized between health care staff for diagnosis and treatment plan	82%
Sepsis data are shared with patients/families	81%
Mandatory annual training on sepsis early recognition for providers	75%
Patient and family education process defined and tools developed to assist with implementation	78%



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IPRO HQIC LAN SERIES – Sepsis: Lessons Learned

Resource Location: <https://qi.ipro.org/2023/09/26/sepsis-lessons-learned/>

Sepsis: Lessons Learned, Part 1 of 2

Date and time:

Tuesday, September 19, 2023 2:00 PM |
(UTC-04:00)
Eastern Time (US & Canada)

[View Slides](#)

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PRESENTERS:

Dr. Karan Shah, MD, MMHC

Vice President of Physician Integration
Baptist Health

Stacey Monarch, BSN, RN, CPHQ

Sepsis Coordinator
Baptist Health Louisville

Sepsis: Lessons Learned, Part 2 of 2

Date and time:

Tuesday, October 17, 2023 2:00 PM |
(UTC-04:00) Eastern
Time (US & Canada)

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PRESENTERS:

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Dr. Thomas Workman Ph.D.
Principal Researcher
American Institutes for Research



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Sepsis – Costs of NOT Coordinating Hospital-wide Care

Increasing incidence



Over 1 million annual admissions for severe sepsis¹

Significant cost burden



Annual acute care costs for sepsis exceeds \$24 billion²

Risk of mortality



40 – 60% mortality rate for severe sepsis and septic shock³

Risk of readmission

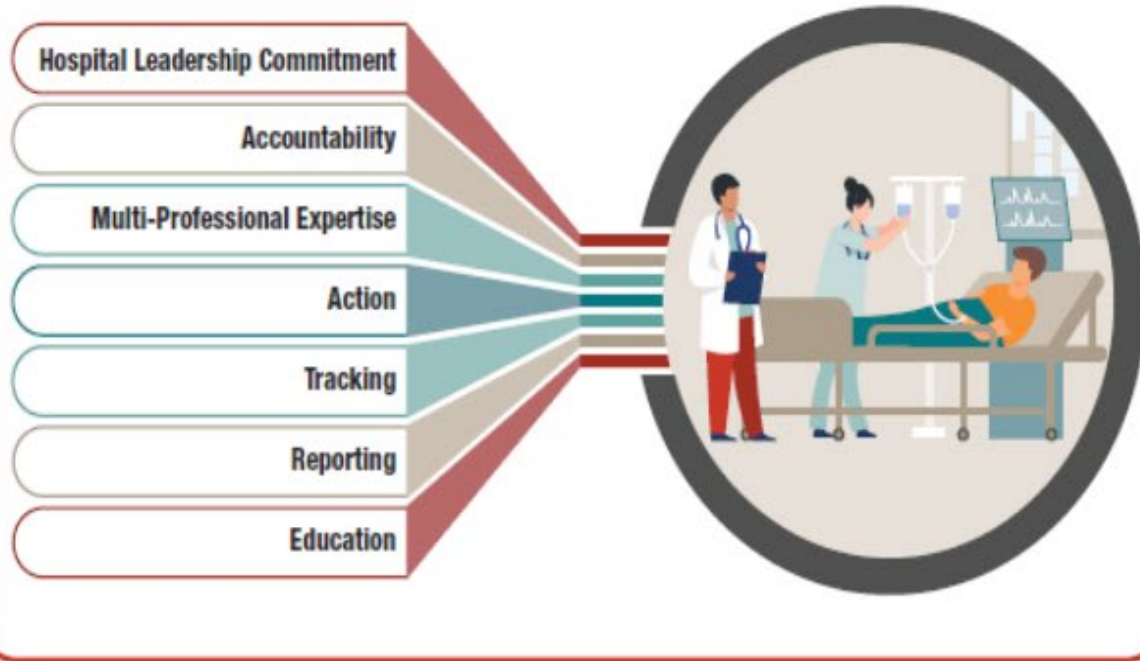


Nearly one half are readmitted within six months²

Premier 2019

2023 CDC Hospital Sepsis Program Core Elements

Figure: Hospital Sepsis Program Core Elements



Who is the Hospital Sepsis Program Core Elements guidance for?

Clinicians, hospitals, and health systems leading efforts to improve the hospital management and outcomes of sepsis.

Effective leadership is required to engage the multidisciplinary expertise required to support the care of patients with sepsis, as detailed later in this document.

Baptist Health Louisville

44 ED beds • 150-200 severe sepsis/septic shock patients per month

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



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Baptist Health Louisville

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



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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?	<ul style="list-style-type: none"> • Temp < 96.8 or > 100.9 • WBC < 4,000 or > 12,000 	<ul style="list-style-type: none"> • 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?	<ul style="list-style-type: none"> • SBP < 90 or MAP < 65 • Creatinine > 2.0 • UOP < 0.5mL/kg/hr • Total Bilirubin > 2.0 • Resp failure requiring mechanical ventilation 	<ul style="list-style-type: none"> • Lactic Acid > 2.0 • PLT < 100,000 • INR > 1.5
If YES to ALL , screen is POSITIVE → Notify MD and start sepsis bundle		

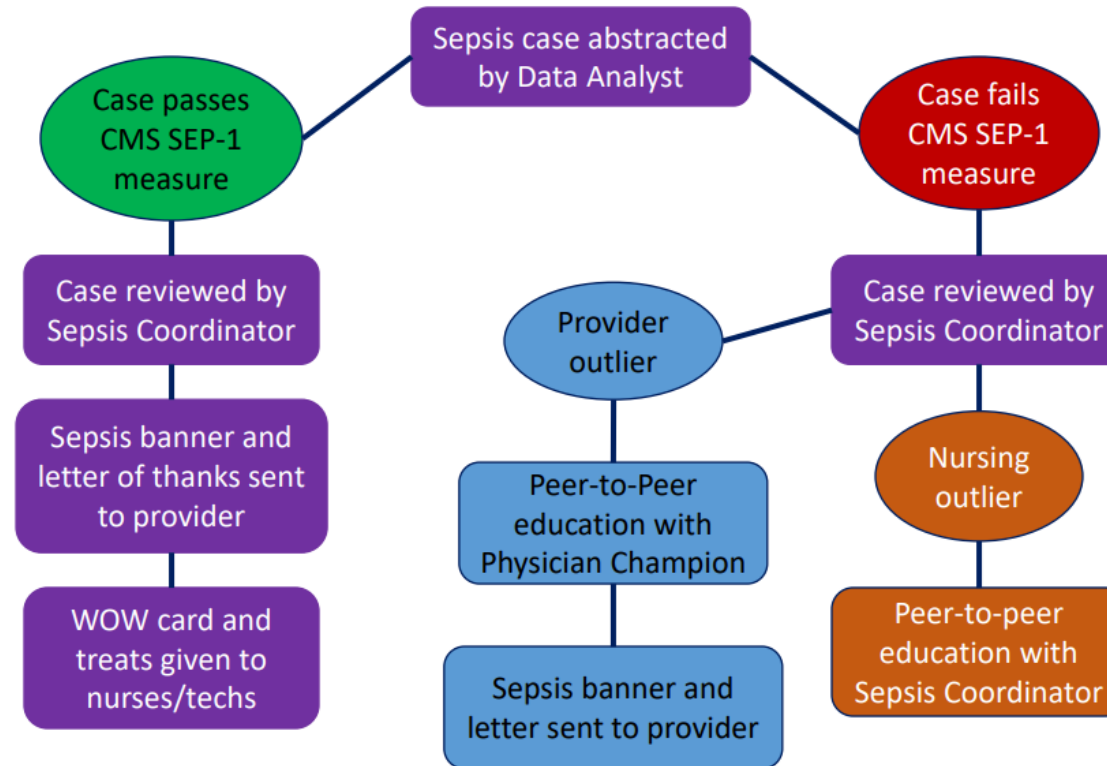


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Standardized Sepsis Case Review



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April 2023 Joint HQIC LAN –

Transitions in Care: Preventing Sepsis-Related Readmissions

- Resource Location: <https://qi.ipro.org/upcoming-events/transitions-in-care-preventing-sepsis-related-readmissions/>
- This event featured proactive transitions in care and hand-off strategies to the next level of care provider to improve patient outcomes and prevent sepsis-related readmissions.
- The patient voice was highlighted via a sepsis survivor story. Key discharge planning, patient and family engagement, health equity, infection prevention, and patient education tactics also shared.



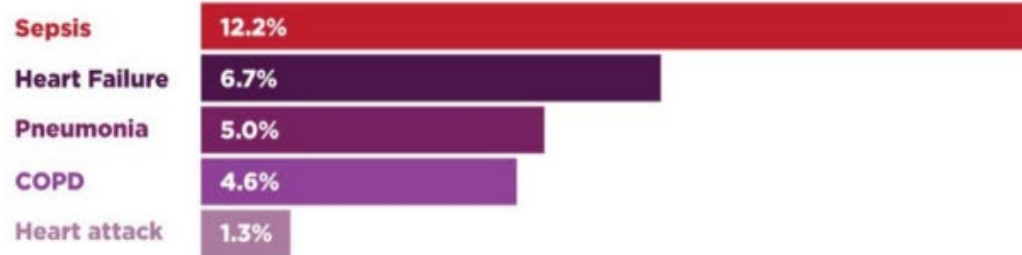
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Sepsis and Readmissions – National Trends

Hospital readmissions and healthcare costs after sepsis

Percentage of hospital readmissions



1 in 3 readmitted within 90 days

Estimated average cost per readmission



15% of total readmission-related costs

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



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Frederick Health

Frederick Health Hospital (269 licensed beds), not-for-profit



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



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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 Medication Management
- Behavioral Health Support



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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 more:

- Temperature >100°F or <98.8°F
- Pulse >100
- SBP <100 mmHg or >40 mmHg from baseline
- Respiratory rate >20/SpO2 <90%
- Altered mental status

Plan 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% @ 30ml/kg
- Administer IV, PO or IM antibiotics
- Monitor for worsening in spite of treatment, such as:
 - Urine output <400ml in 24 hours
 - 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!

100 seeing sepsis

Is their temperature above 100?

Is their heart rate above 100?

Is their blood pressure below 100?

And does the resident just not look right? Tell the nurse, screen for sepsis and notify the physician immediately.



Monument Health

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



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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



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.)



Sepsis and Health Equity Fact Sheet (Sepsis Alliance)

- Resource Location: <https://www.sepsis.org/wp-content/uploads/2021/01/Sepsis-and-Equity-Fact-Sheet-2021-1-25.pdf>
- Highlights:
 - **Racial/Ethnic Disparities in Patient Care and Outcomes:** longer ED wait times for Black people compared to White people.
 - **Poverty and Socioeconomic Status:** adult patients without health insurance are more likely to die of sepsis than privately insured patients.
 - **Awareness and Knowledge:** Sepsis Alliance survey - only 49% of Black people had heard the term sepsis, as compared to 76% of White people.

STOP Sepsis Now

- Resource Location: <https://qi.ipro.org/sepsis/>

#STOPsepsisnow campaign – an initiative to increase prevention and earlier identification of sepsis in the community for the general public and direct care staff across the continuum of care.

- Key vital tools and resources to train all levels of staff within healthcare organizations, patients, residents, and families
- Educational materials in English and Spanish
- Clinical reference guides for early sepsis recognition
- An overview of evidence-based sepsis protocols and best practices
- Comprehensive sepsis training for clinical and non-clinical direct care staff



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-
- **Patient-Facing Resources: Spanish**
 - [Tri-Fold Brochure](#)
 - [Self-Management Zone Tool](#)
 - **Quick References for Staff: All Care Settings**
 - [Rapid Assessment for Early Recognition of Sepsis: Quick Reference Guide](#)
 - **Sepsis Action Plan and Change in Condition Notification**
 - [Quality Improvement Action Plan for Sepsis](#)
 - [Notification of Change in Condition Form for Suspected Infection](#)



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- **Provider Training Materials: All Care Settings**
- [Training Flyer](#)
- [Instructions for Training](#)
- [Training Sign-In Sheet](#)
- [Training Evaluation](#)
- [Pre & Post Learning Assessment – Clinical](#)
- [Pre & Post Learning Assessment – Non-Clinical](#)
- [Sepsis Awareness Post-Test – Long Term Care Setting](#)
- [Sepsis Awareness Post-Test Answer Key – Long Term Care Setting](#)

Patient-Facing Resources: English

- [Sepsis Brochure: Every Minute Counts! Tri-Fold Brochure](#)
- [Self-Management Zone Tool](#)
- [Sepsis and Antibiotics: What You Need to Know Tri-Fold Brochure](#)

Nursing Home Training Materials

- [Skilled Nursing Facility Care Pathway](#)
- [Seeing Sepsis Cards for LTC](#) – Minnesota Hospital Association
- [Sepsis Clinical Staff Training Presentation](#)
- [Sepsis Non-Clinical Staff Training Presentation](#)
- [Sepsis Care Pathway](#)

Infection Prevention and Control

- [IPRO Project Firstline Training Materials](#)



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Speaking of Sepsis

- IPRO HQIC's unique spin on partnership with hospitals across the country to improve the care of sepsis patients and reduce mortality.
- “Speaking of Sepsis” highlights stories of hospitals and healthcare workers innovating and improving sepsis care through clinical and operational implementation of best practices and multi-professional collaboration.



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Have You Heard?

IPRO HQIC is Speaking of Sepsis



Listen to "Speaking of Sepsis," our new podcast series that puts a unique spin on partnering with hospitals across the country to improve the care of patients with sepsis and reduce sepsis mortality. The "Speaking of Sepsis" podcast highlights stories of hospitals and healthcare workers innovating and improving sepsis care through clinical and operational implementation of best practices and multi-professional collaboration. These sepsis warriors share the struggles and successes of sepsis improvement work, and their lightbulb moments along the way.



Episode 1	In this inaugural episode, host Rochelle Beard welcomes Natasha Reese, an Infection Preventionist from St. Joseph Health in the Lexington area of Kentucky to share her insights regarding the IP's involvement in sepsis prevention, identification, and care.
Episode 2	In this episode, Rochelle Beard, RN, Infection Preventionist, interviews Carrie Addy, RN, Sepsis Program Coordinator for Adena Health System in Ohio, about one of their hospital's Joint Commission Sepsis Certification, the system's sepsis program, and more.
Episode 3	Listen as host Jenny Pritchett, Quality Improvement Advisor with the Superior Health Quality Alliance, interviews Jodi Kerstead, a Performance Improvement Specialist from Northern Light A. R. Gould Hospital, who shares her insights and experience providing sepsis education to clinical staff.
Episode 4	Host Jenny Pritchett interviews Monica Theroux Inpatient, Quality Coordinator at Mount Desert Island Hospital in Bar Harbor, Maine. Monica shared her experiences in a dual role as both a quality coordinator and sepsis coordinator.
Episode 5	CarlaLisa Rovens-Kistner, LCSW, CPHQ, CCM, HQIC Quality Improvement Specialist, is our host for this episode. Tune in for an insightful conversation with Thomas Workman, PhD, Principal Research, American Institutes for Research, a patient and family engagement subject matter expert; and Pooja Kothari, a health equity subject matter expert from QSource. The topics: what is the impact of patients and families on sepsis treatment and outcomes, how can we address community vulnerabilities to sepsis by identifying those at highest risk, and more.
Episode 6	In this episode, host Rochelle Beard speaks to Lisa Zaykoski, Sepsis Coordinator, Commonwealth Health/ Wilkes-Barre General Hospital in Pennsylvania, about the importance of C-suite support in sepsis care.
Episode 7	Rochelle Beard, RN, Infection Preventionist, Kentucky Hospital Association, interviews Karan Shah, MD, of PCS Health, about physician engagement and buy-in regarding sepsis prevention, identification and treatment.

Listen to all the episodes here:

<https://www.iproshows.com/speaking-of-sepsis>



This material was prepared by the IPRO HQIC, a Hospital Quality Improvement Contractor, 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 material 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. Publication #: IPRO-HQIC-1848-24-432, LC/1032024 / v1.

Next Steps: Sepsis Virtual Gallery Walk

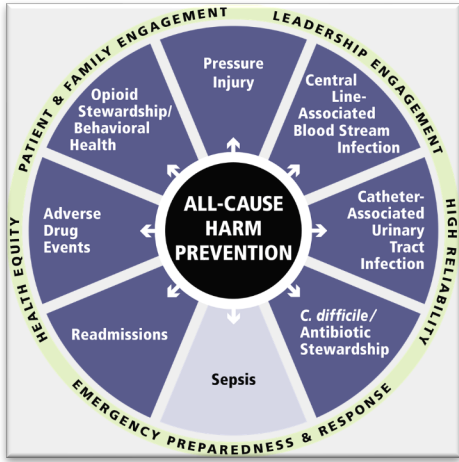
- What did you do (summarize your project steps):
 - Collecting and using data
 - Quality tools used
 - Intervention or change implemented
 - How staff/patients were involved in your work
- Your results:
 - How did the intervention(s) change/improve processes (include staff experience)?
 - What impact did this work have on patient experience?
 - Were there any health equity considerations?
 - What is your plan to sustain improvement over time?
- The opportunity:
 - Why was this issue important?
 - What were your patients experiencing?
 - How was this affecting your staff?



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Sepsis Resources



Item Information	Inspira_1001	Inspira_1002	Inspira_1003	Inspira_1004	Inspira_1005
RN #					
>65 years	N	N	N	N	N
if SIRS in ED if pt came through ED	3	2	2	2	2
if SIRS score if positive inpatient sepsis screen	NA	N	N	N	NA
OFA Score in ED if patient came through ED					
OFA Score if positive inpatient sepsis screen as patient admitted to ICU?	NA	NA	NA	NA	NA
3 sepsis occur within 30 days of surgery?	N	Y	N	N	N
3 sepsis occur within 30 days of surgery?	N	N	N	N	N
patient was screened for sepsis starting at triage in ED	Unknown	Unknown	Unknown	Unknown	Unknown
patient sepsis screen completed at least once per shift (NA once sepsis identified in ED or unit)	N/A	N/A	N/A	N/A	N/A
sepsis screen is positive, sepsis alert activated per facility protocol	Unknown	Unknown	Unknown	Unknown	Unknown
your bundle compliance (blue cells indicate HOUR 1 BUNDLE)					
30d cultures drawn prior to antibiotic administration	Yes	Yes	Yes	Yes	Yes
30d culture was determined to be contaminated	Unknown	Unknown	Unknown	Unknown	Unknown
rum lactate drawn after positive sepsis screen	Yes	Yes	Yes	Yes	Yes
abd spectrum antibiotics initiated after positive sepsis screen	Yes	Yes	Yes	Yes	Yes
id 30ml/kg initiated after positive sepsis screen and patient has lactate greater or equal to 10mg/dL OR 2 incidents of MAP <65 or SBP <90	N/A	Yes	N/A	N/A	N/A
your bundle compliance (blue cells indicate HOUR 1 BUNDLE)					
suppressors administered for persistent hypotension (2 incidents of MAP <65 or SBP <90)	N/A	N/A	N/A	N/A	N/A
peat serum lactate drawn and resulted within 6 hours after initial elevated lactate (if lactate was 10mg/dL)	Yes	Yes	Yes	N/A	N/A
id reassessment done at the end of the fluid resuscitation	N/A	Yes	N/A	N/A	N/A
		FAIL: NO VS			FAIL: NO LA

IPRO Hospital Quality Improvement Contractor (HQIC) Program C-Suite Newsletter – Q3 2021

IPRO HQIC: Partnering Together in 12 States to Improve Patient Safety

IPRO HQIC Circle of Safety: All-Cause Harm Prevention Model & Resource Tool – integrated technical assistance approach to address and improve outcomes in the Centers for Medicare and Medicaid Services (CMS) 2020-2024 Priority Focus Areas of Harm

IMPACT OF SEPSIS
Anyone can get sepsis, a life-threatening medical condition, which has significant human and financial associated costs:

- Sepsis is the leading cause of death in critically ill patients and a top reason for readmissions.
- CMS estimates that the cost per sepsis event is \$56,041.40*.

RECOMMENDED ACTIONS TO IMPROVE SEPSIS OUTCOMES

- Use a multidisciplinary approach to
 - manage sepsis care,
 - analyze current sepsis data, outcomes and 30-day readmissions.
- take actions based on results.
- View the [IPRO HQIC Sepsis Change Pathway](#)
- Watch [Exploring Sepsis Strategies Parts 1 & 2](#)

IPRO HQIC DATA HIGHLIGHTS

- Only 56% of HQIC hospitals have successfully implemented a process for the evaluation and treatment of sepsis.**
- Recent Medicare Part A claims data suggest that 12% of HQIC hospitals have shown a decrease in sepsis and septic shock rates between baseline & re-implementation and 11% have increased rates.***

Learn More about IPRO HQIC: <https://ipros.org/about-us/hqic> **State Contacts:** <https://ipros.org/about-us/hqic/hqic-contact>

*Mull, Carly | PharmD, MPH, Reynolds, Mark A. | PhD, Saha, Meenal MBChB, Gibbs, Matthew PharmD, Coates, Elissa MD | Epidemiology and Control of Sepsis in the United States – An Analysis Based on Timing of Diagnosis and Severity Level. Critical Care Medicine December 2018 | Volume 46 | Issue 12 | p 1889-1897
2018 hospitals reporting. Source: IPRO HQIC Executive Assessment *18 hospitals reporting. Trendline: Baseline 2018 Re-implementation Sept 20 - May 21

EVIDENCE-BASED PROCESSES TO PREVENT THIS HARM

EVIDENCE-BASED DISPARITIES
Black and other non-White individuals have nearly twice the incidence of sepsis as Whites (1.89 times the risk for Blacks, and 1.9 times the risk for other Non-White individuals). The death rate due to sepsis among Blacks, compared with the size of the Black population, is nearly twice the rate of deaths due to sepsis among Whites. The risk of sepsis deaths for AI/AN and Hispanics is also elevated as compared to Whites (1.24 times the risk for AI/AN and 1.14 times the risk for Hispanics). Limited English proficiency (LEP) is associated with an 80% higher mortality risk among sepsis patients.

Sources:
Sepsis Alliance, Sepsis and Health Equity Fact Sheet
Spoding MW, Dickson RP, Iwashyna TJ, Gay SE, Valley TS. Racial bias in pulse oximetry measurement. N Engl J Med. 2020;383(25):2477-2478.

HEALTH EQUITY CONSIDERATIONS

- Provide sepsis care education in multiple languages and consider patients with LEP.
- Train providers on sepsis awareness and disparities as well as culturally responsive care, and include resources related to specific populations impacted by sepsis (e.g., patients with intellectual disabilities), as well as the intersection of sepsis and other areas where disparities exist (e.g., opioid use, maternal health, pediatrics).
- Address how reliance on tools used by lead to inaccurate evaluations in Black

Connecting PFE Best Practices to All-Cause Harm Reduction

The purpose of the 5 PFE Best Practices is to engage patients as partners with hospital staff and clinicians in reducing the risk of harm while in the hospital. This partnership occurs at the intersection of patient needs, experiences, and perspectives with clinical interventions and practices designed to reduce harm, as illustrated in the graphic below:

Examples of Applying the Five PFE Practices Per All-Cause Harm Area

	Patient and Family Engagement at the Point of Care	Patient and Family Engagement in Hospital Operations
	PFE Best Practice 1: Implement a planning checklist for patients who have a planned admission Offer invitation to communicate when early symptoms of infection appear	PFE Best Practice 2: Implement a discharge planning checklist Prepare patient to recognize when early signs of infection appear and when and where to seek medical care
	PFE Best Practice 3: Conduct shift change huddles and bedside reporting with patients and families Review and confirm use of protocols to prevent sepsis, discuss and address potential signs of infection	PFE Best Practice 4: Designate a PFE leader in the hospital Identify and recruit former patients who have experienced sepsis, or their family caregivers, to participate in efforts to address sepsis in the hospital
Sepsis	PFE Best Practice 5: Active Person and Family Engagement Committee or other committees Invite and include patient and family perspectives and ideas regarding infection prevention and control in the hospital or department; partner with patient and family advisors to implement and evaluate efforts to reduce sepsis	

IPRO HQIC Sepsis Change Pathway Part 2

Exploring Sepsis Strategies Part 2: Care Coordination & Preventing Sepsis-Related Readmissions

Thank you for registering for and/or attending HQIC Sepsis Webinar! Hospital leaders across the country attended the event. The small, rural, critical access and large urban hospital voice were amplified through sharing of barriers and best practices alike. Furthermore, subject matter experts shared their perspectives and their favorite resources. **Now, it is time to act!**

Why Now
Sepsis, a life-threatening medical condition, is the body's extreme response to infection and it can occur in both bacterial and viral infections, including COVID-19. Sepsis can worsen chronic conditions, is a leading cause of death for critically ill patients and a top cause of 30-day readmissions with as many as 19% of patients readmitting and up to 40% within 90 days. Early, equitable sepsis screening and effective transitions in care strategies are crucial to preventing sepsis-related harm and/or readmissions. Survivors of sepsis are more likely to be skilled nursing facility placement, an increase of vigilant sepsis treatment.

Consider Common Barriers
Review common barriers identified during the webinar and brainstorm ways to mitigate challenges to implementation in your organization.

- Understanding the interconnectedness of early sepsis identification, provider and patient/family education and disparities in care to enhance patient safety
- Lack of effective hospital and skilled nursing facility partnering strategies to prevent sepsis-related harm and readmissions
 - Gaining
 - Challenging
 - Difficulty

Review
National Sepsis Hospital

Percentage
Sepsis
Heart Failure
Pneumonia
COPD
Heart attack

Estimated
Sepsis
Heart Failure
Pneumonia
COPD
Heart attack

From
IPRO HQIC
JAMA 2017;31

Craft Your AIM Statement
Identify your organization's goals related to sepsis screening and treatment. Fill in the blanks with your AIM. By (date), the team at (hospital) will implement (intervention) to improve (the problem) by (how much) to benefit (for whom).

Example AIM
By December 31st, 2021, the hospital and nursing home collaborative will implement a new sepsis screening tool to be performed on all patients upon arrival to the ED to decrease unnecessary sepsis-related readmissions.

Next Steps
Not sure how to identify your organization's root cause? Need help getting started on implementing your selected interventions? Seeking feedback on your Aim statement? Reach out to your IPRO HQIC quality improvement partner for assistance.

Reference Materials

- Exploring Sepsis Strategies Part 1 Slide Deck
- Sepsis Alliance
- Sepsis Part 1 Change Pathway
- Surviving Sepsis Campaign
- IPRO All-Cause Harm Resource
- INTERACT Communication Tools - create a free account for access
- IPRO HQIC Website
- Seeing Sepsis Cards
- IPRO HQIC Resource Library
- Facility Sepsis Algorithms
- CDL Clinical Tools

HQIC Resource Library

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

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Resources

IPRO

- [Sepsis Resources](#)
- [Sepsis: Lessons Learned](#)
- [Exploring Sepsis Strategies Part 1: Early Identification, Patient and Family Engagement, and Disparities in Care](#)
- [Exploring Sepsis Strategies Part 2: Care Coordination](#)
- [Transitions in Care: Preventing Sepsis-Related Readmissions](#)

Sepsis Alliance

- [Sepsis and Health Equity Fact Sheet](#)
- [Racial Equity in Sepsis Care Matters](#)
- [National Sepsis Group Adopts Health Equity Pledge](#)
- [Training: Closing the Gap: Sepsis Care in Underserved Communities](#)
- [Training: Developing Systems for Rural Sepsis Care](#)
- [Training: No More Stalling: Accelerating Patient Safety and Health Equity in the Wake of COVID-19](#)

Journal Articles

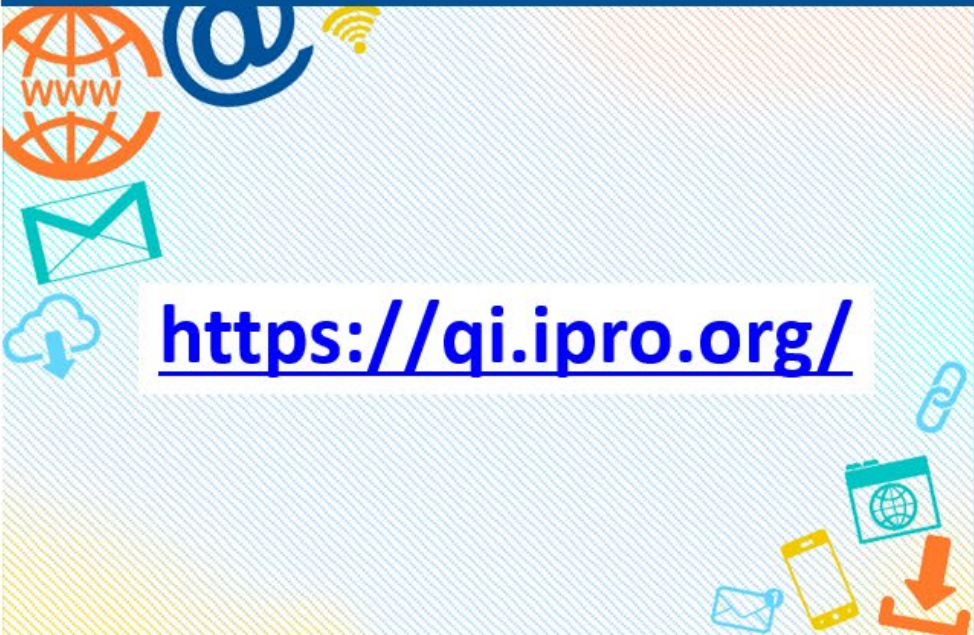
- [Factors Underlying Racial Disparities in Sepsis Management](#)
- [Health Disparities and Sepsis: a Systematic Review and Meta-Analysis on the Influence of Race on Sepsis-Related Mortality](#)
- [Inclusion Of Social Determinants Of Health Improves Sepsis Readmission Prediction Models](#)
- [Mitigating Structural Racism To Reduce Inequities In Sepsis Outcomes: A Mixed Methods, Longitudinal Intervention Study](#)
- [On Race, Human Variation, And Who Gets And Dies Of Sepsis](#)



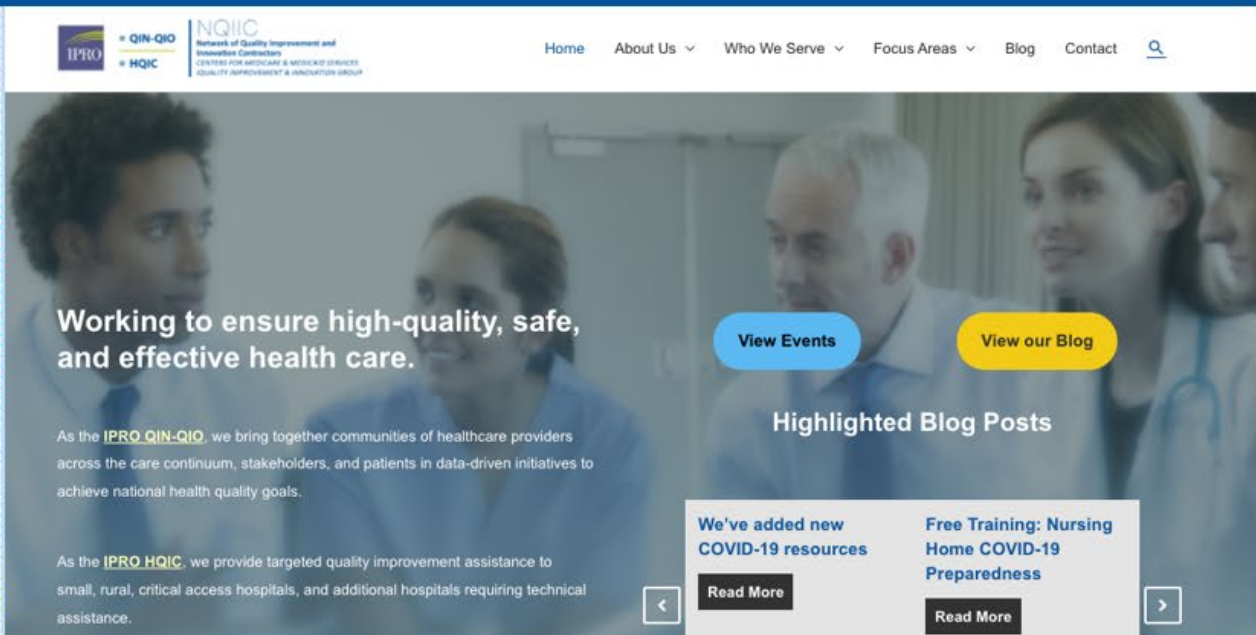
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Free Training: Nursing Home COVID-19 Preparedness Read More



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