HOME CARE ASSOCIATION OF NEW YORK STATE

STOP SEPSIS AT HOME NY INITIATIVE

PRESENTATION FOR

STATEW IDE SENIOR ACTION COUNCIL

TEACH-IN, SEPTEMBER 30, 2025





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PRESENT AT ION FACULT Y



Al Cardillo, LMSW HCA President & CEO Sepsis Alliance Advisory Board END SEPSIS Advisory Board

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Associate Director for Policy & Advocacy
HCA

SEPT EMBER IS SEPSIS AW ARENESS MONTH!!

BE PART OF THE SEPSIS AW ARNESS AND INTERVENTION EFFORT

Sepsis Awareness Month Leadership **Resources & Links**





NYS Legislative Sepsis Resolution



NYS Governor Sepsis Proclamation



By order of the Senate,

Many-Amer E Dentes

Mary-Anne E. Dandles, Clerk

THANKYOU STATEW IDE SENIORACTION COUNCIL!



Our thanks to StateWide Senior Action
Council for hosting this important
educational module on SEPSISand for
StateWide'scommitment to SEPSIS
prevention and intervention in community
and across the continuum of care!



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BACKGROUND
CRITICAL SEPSIS FACTS
HCA SEPSIS SCREENING & INTERVENTION TOOL FOR HOME & COMMUNITY HEALTH
GUIDANCE FOR AGENCY ADOPTION
COLLABORATION
EHR INTEGRATION
WHAT CAN YOU DO?
FUTURE ACTIONS
QUESTIONS / COMMENTS / RESOURCES

SEPSIS PARTNER THANKS

Thanks to our partners who are working to improve sepsis prevention, screening, and intervention in the community and across the continuum.























HCA sepsis initiatives have been generously supported by grants the NYS Health Foundation and the Mother Cabrini Health Foundation.



W HAT IS SEPSIS?





SEPSIS: W hat You Need to Know





W HAT IS SEPSIS?



ANY infection can lead to sepsis.

- Lungs / Pneumonia
- Catheter & IV sites
- UTI/ other kidney and bladder

- Wounds
- Cuts
- Burns

- Blood stream
- Gallbladder or liver infections
- Other bacterial infections

Sepsis can lead to:1

- Tissue damage
- Organ failure
- Death

Sepsis & Older Individuals

- Sepsis can occur in anyone but is especially prevalent in older individuals
- Sepsis education for older individuals and their family and care providers is vitally important



DIFFICULTY IN DIAGNOSING

Sepsis can happen quickly and can be confused with other conditions early on due to similar symptoms.

Symptoms:1

- Generalized body swelling
- Faster heart rate
- Rapid breathing
- Reduced urine output
- Fever and chills
- Decrease in platelet count

- Difficulty breathing
- Mental confusion
- Extreme Pain
- Fatigue
- Changes in mood
- Pale or mottled skin

W HO CAN GET SEPSIS?

Anyone.1

- Young

- OldSickHealthy

Highest At Risk Groups:1

- Older adults
- Infants
- Chronically ill
- Immunocompromised
- Those with opportune exposure to infection, those with catheters



A MEDICAL EMERGEN CY-TIME MATTERS



Sepsis is a medical emergency if not recognized and treated quickly.

The chance of sepsis progressing to severe sepsis and septic shock,

causing death, rises by 4% to 9% for every hour treatment is delayed.1

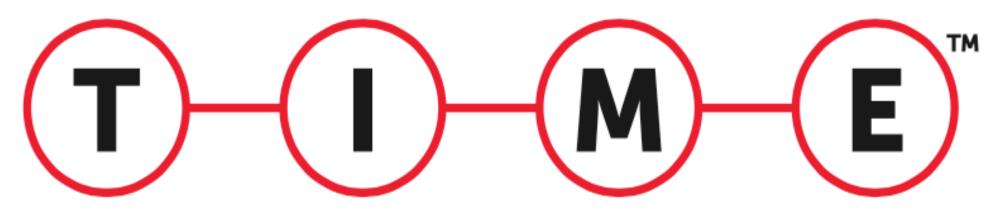
-Sepsis Alliance



SEPSIS IT'S ABOUT TIME TM

Sepsis Alliance Campaign

When it comes to sepsis, remember *IT'S ABOUT TIME™*. Watch for:



TEMPERATURE

higher or lower than normal

INFECTION

may have signs and symptoms of an infection **MENTAL DECLINE**

confused, sleepy, difficult to rouse

EXTREMELY ILL

severe pain, discomfort, shortness of breath

If you experience a combination of these symptoms: seek urgent medical care, call 911, or go to the hospital with an advocate. Ask: "Could it be sepsis?"

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sepsis.org





Click Here to learn more about this campaign.

PREVENT ABLE

Up to 80 % of sepsis deaths are preventable.



Sepsis kills more Americans than breast cancer, prostate cancer, AIDS and

opioid overdoses, combined. Raising awareness of sepsis and its

symptoms is critical to reducing the catastrophic death rate.¹

-END SEPSIS - The Legacy of Rory Staunton



The Legacy of Rory Staunton, told by his parents, Ciaran and Orlaith Staunton







CRITICAL SEPSIS FACTS









CRITICAL FACTS



- Every2 minutes someone in the US dies of sepsils.
- Takes more children than cancer18 kids each day
 - #1 driverof readmission to a hospital (30 days).
- 1 in 4hospital patients treated for sepsis is readmitted in the first 30 days after discharge due to weakened immune system.
 - 35% of all deaths inhospital are due to sepsis.



CRITICAL SEPSIS FACTS

- As many as87% of sepsis cases originate in themmunity and not in the hospital.
- Sepsis is the eading cause of death U.S. hospitals.
- An estimated 350,000 people die from sepsis every year in the U.S. Timisludes 270,000 people who die in hospital and an estimated 80,000 released to hospice.
- Sepsis is th#1 cost of hospitalization the U.S³. Costs for acute sepsis hospitalization and skilled nursing are estimated to b\$62 billion annually⁴
- Sepsis causes at leaæ61,000 maternal deathsevery year worldwide and is driving increases in pregnancy related deaths in the U.S.6
- In 2012, there were more than 13,700 sepsite lated amountations in the U.S. This works out to an average of 38 amountations per day



^{1.} Liu V, et al. JAMA. 2014;312(1):90-92. http://jama.jamanetwork.com/article.aspx?articleid=1873131&resultClick=3

^{2.} Rhee C, et al. JAMA. 2017;318(13):1241-1249. http://jamanetwork.com/journals/jama/fullarticle/2654187

^{3.} TorioC, Moore B. HCUP Statistical Brief #204. May 2016. Agency for Healthcare Research and Quality, Rockville, MD. https://www.hcup-us.ahrq.gov/reports/statbriefs/sb204-Most-Expensive-Hospital Conditions.pdf

^{4.} Buchman TG, Simpson SQ, Sciarretta KL, et al. Sepsis Among Medicare Beneficiaries: 3. The Methods, Models, and Forecasts of Sepsis, 2012-2018. Crit Care Med. 2020;48(3):302-318. https://journals.lww.com/ccmjournal/FullText/2020/03000/Sepsis Among Medicare Beneficiaries 3 The.4.aspx

^{5.} Say L, et al. Lancet Glob Health 2014;2(6):e323-333. http://www.sciencedirect.com/science/article/pii/S2214109X1470227X

^{6.} Pregnancy Mortality Surveillance System, CDC, February 4, 2020. http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.htm

^{7.} Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, 2012. Accessed April 6, 2016

CRITICAL SEPSIS FACTS: OLDER ADULTS

- More than 70% of adult sepsis patients ar 60 years of age or older.
- More than 1.3 millionadults 45+ are hospitalized with sepsis each year.
- Adults age65 yearsand olderare 13times more likelyto be hospitalized with sepsis than adults younger than 65.
- More than 40% of older patients have another hospitalization within three months of the initial sepsinsost commonly due to a repeat episodef sepsis or another infection.
- Nursing home residents are over times more likely to present with sepsis in the emergency room than nomursing home residents?
- 59% of sepsis survivors age 50 and older experience impaired cognitive or physical function, or both.
- Older sepsis survivors (65+) experience on averåge 2 new limitationson activities of daily living (e.g., bathing, dressing, managing money) after hospitalization.



^{1.} Rhee C, et al. Incidence and Trends of Sepsis in US Hospitals Using Clinical vs Claims Data, 2009-2014. JAMA. 2017;318(13):1241-1249. http://jamanetwork.com/journals/jama/fullarticle/2654187

^{2.} Elixhauser A, et al. Septicemia in U.S. Hospitals, 2009. HCUP Statistical Brief #122. October 2011. Agency for Healthcare Research and Quality, Rockville, MD. https://www.hcup-us.ahrq.gov/reports/statbriefs/sb122.pdf

Hall MJ, et al. Inpatient Care for Septicemia or Sepsis: A Challenge for Patients and Hospitals. NCHS Data Brief. 2011;(62):1-8. https://www.cdc.gov/nchs/products/databriefs/db62.htm

^{4.} Prescott HC, Angus DC. Enhancing Recovery From Sepsis: A Review. JAMA. 2018;319(1):62-75.https://jamanetwork.com/journals/jama/article-abstract/2667727?redirect=true

^{5.} Prescott HC, Costa DK. Improving Long-Term Outcomes After Sepsis. Crit Care Clin. Jan 2018;34(1):175-188. http://www.criticalcare.theclinics.com/article/S0749-0704(17)30078-7/abstract

^{6.} Wang HE, et al. Emergency department visits by nursing home residents in the United States. J Am Geriatr Soc. Oct 2011;59(10):1864-72. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3495564/

^{/.} Iwashyna TJ, et al. Long-term Cognitive Impairment and Functional Disability Among Survivors of Severe Sepsis. JAMA 2010;304(16):8.https://jamanetwork.com/journals/jama/fullarticle/186769

CRITICAL SEPSIS FACTS: OLDER ADULTS

As we age, our immune system becomes less effective at fighting infections.^{1,2}

Causes and Risk Factors:

- Older people contract more infections, and they are more severe.
- The most common risk factors and infections that trigger sepsis among older adults:^{1,2}
 - Pneumonia
 - Urinary tract infection (UTI)
 - COVID-19
 - Infections in the mouth
 - Catheter sites, IV sites, feeding tubes
 - Skin sores, from a simple skin tear due to dry or fragile skin, or a pressure injury
 - Chronic diseases

Additional Symptoms.¹

- Confusion and tiredness
- Fever and chills
- Rapid breathing
- Mottled or dusky skin
- Elevated heart rate
- Pain or physical discomfort





Faces of Sepsis 7th, Sepsis Alliance









SEPSIS HEALT H SYST EM RELVANCE



- #1 Medicaid expense or potentially avoidable hospitalizations for general MA population in NYS hospitals (excluding schizophrenia in the MH population.
- Sepsis is nearlydouble the readmission rate f top CMS-clocked readmission cause (i.e., heart failure) subject to hospital penalty
- Study in January 2017 JAMA showed that 12.2% of readmissions were caused by sepsis, compared to heart failure, pneumonia, COPD and heart attack, at 6.7%, 5%, 4.6% and 1.3%, respectively).
- Major quality and intervention area for home care, physician, hospital, payor collaboration and VPB aligned
- Significant to state and national health care reform, NYS's mandatorily tracked metrics and payment considerations under VBP methodology prioritize sepsis, along with respiratory infections, UTIs, heart failure, electrolyte imbalance, and anemia, which are often also implicated with sepsis.

MAKING THE CASE SEPSIS SCREENING	\$196M in Medical Evidence of sepsis prevalance	are e in NYS home care population Prior to the HCA Screening Tool*		
SPAN OF HOME CARE (in days)	NO. OF MEDICARE HOSPITAL ADMISSIONS COINCIDING WITH HOME CARE	STOP O SEPSIS AT HOME NY		
1-7 Days of Home Care	1,635	19.2%		
8-30 Days of Home Care	3,014	35.4%		
30+ Days of Home Care	3,870	45.4%		
TOTALS	8,519	100%		
8,519 X \$23,050 = \$196M Avg. Medicare Hospital FFS expenditure per sepsis case				

(Source: IPRO; CMS Medicare Claims Data)



SEPSIS HEALT H SYSTEM RELEVANCE

SEP-1: Inclusion in Hospital Value-Based Purchasing Program

CMS Proposed PPS rule for 2024, Issued Aprilh Includes sepsis criteria in hospital VBP measures.

Background

- In 2015, CMS began usin*the Severe Sepsis and Septic Shock Early Management Bu*(௸ 1)to guide sepsis management
- SEP-1 lays out a process for clinicians in hospitals that uses on timely sepsis recognition and early intervention with lifesaving therapies
- Hospital receiving reimbursement from Medicare or Medicaid must measure and report on how well their institution is complyithgSEP1

This is a good thing for patients with sepsis because

- Having a standard process for every patient with sepsis encourages closing gaps in sepsis outcomes across race, socioeconomic status, geography, and insurance status
- Encouraging hospitals to report on their sepsis processes helps ensure that hospital leadership and clinicians are keeping their focus on the possibility of sepsis in every case
- Providing incentives for hospitals to report how well they comply with SEPhelps ensure that they follow evidence guidence that benefit patients

New ICD 10 Code for Sepsis After Care

• October 2024 a new ICD-10 code for sepsis aftercare **Z51.A** took effect for care post-acute, like home health care.



^{1.} https://www.sepsis.org/protect-sep-1/

^{2.} Effects of Compliance with the Early Management Bundle (SEP-1) on Mortality Changes Among Medicare Beneficiaries with Sepsis

HOME CARE RELVANCE

The highrisk populations ARE the home care population.

- Older adults
- Chronically ill
- Persons with disabilities
- The very young; esp medically fragile children
- Individuals with compromised immune systems
- · Individuals with recurrent UTI and pneumonia
- Others routinely within home care's service scope and reach (e.g., post surgical, maternal and neonatal care).

HOME CARE RELEVANCE

Why engage home care in sepsis education and prevention?

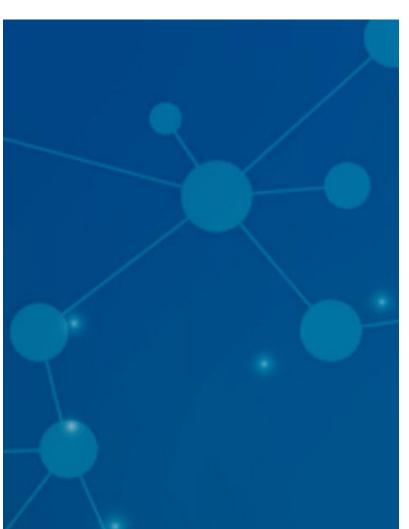
Home care's unique position and credentials make it a compelling role player in the sepsis effort.

These include:

- 87% of sepsis infections originate in home and community.
- · Home care clinicians are in homes and in communities statewide.
- Home care agencies are essential community partners to hospitals, physicians, EMS, aging services agencies, community mental health, local public health, and more.
- Home care adoption of sepsis screening and intervention protocols is critical for sepsis prevention and early and timely identification and intervention to limit morbidity, mortality, and system impact.
- · Home care clinicians are expert educators, screeners, evaluators, interveners, and system navigators.
- · Home care is a patient- and culturally-centered, and cost-effective vehicle.
- · Home and community is the growing and future milieu of care.



HCAADULT SEPSIS SCREENING TOOL









Background & Development

- Starting in 20 10, HCA began to explore sepsis in home care. In 20 14, HCA intensified efforts to determine if and how home care could collaborate in sepsis prevention and intervention.
- Research across the country indicated there was **no models related to sepsis and home health** care.
- HCA engaged sepsis clinical experts and state national leaders to develop a strategic work plan.
- HCA established the Sepsis Clinical Workgroup.
 - The Sepsis Clinical Workgroup was led by Clinical leader Amy Bowerman.
 - The workgroup drafted the sepsis tool, corresponding algorithm and protocol.
 - The sepsis tool was vetted, beta tested, and refined with sepsis clinical experts.



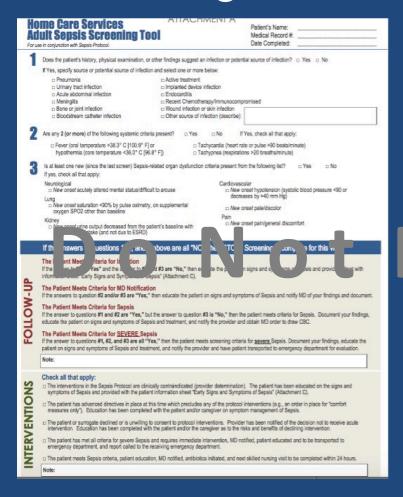


Background & Development

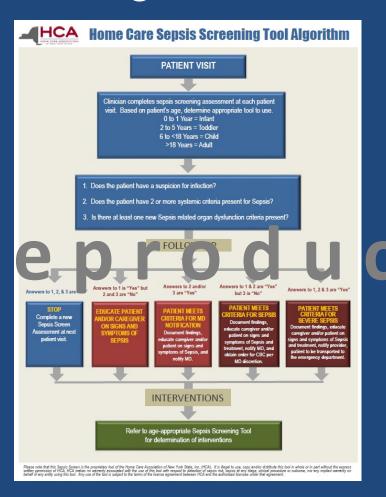
- The home care sepsis tool and initiative is first of its kind nationally.
- The sepsis tool was designed specifically to align with sepsis criteria used in our hospitals and NYS hospital sepsis protocol requirements.
 - > "Rory's Regulations" in NYS require all hospitals to develop and employ sepsis protocols.
- The Quality Improvement Organization State and Federal, "IPRO," piloted the tool under a CMS Special Innovations Project in sepsis early recognition, incorporating it the training of over 10,000 clinicians in NYS,
 - > Through this effort the "Sepsis Patient Education Zone Tool" was also developed and adopted by HCA for use with the Sepsis clinical Screening and Intervention Tool.

HCA SEPSIS SCREENING TOOL

Screening Tool



Algorithm



Zone Tool



Protocol



Authorized Use

To control for quality and use standards, the authorized access to or use of the HCA pediatric sepsis tool is permitted only via use agreement with HCA. Please note that it is illegal to use, copy, and/or distribute the tool for clinical or business use without the express written permission of the Home Care Association, Inc.





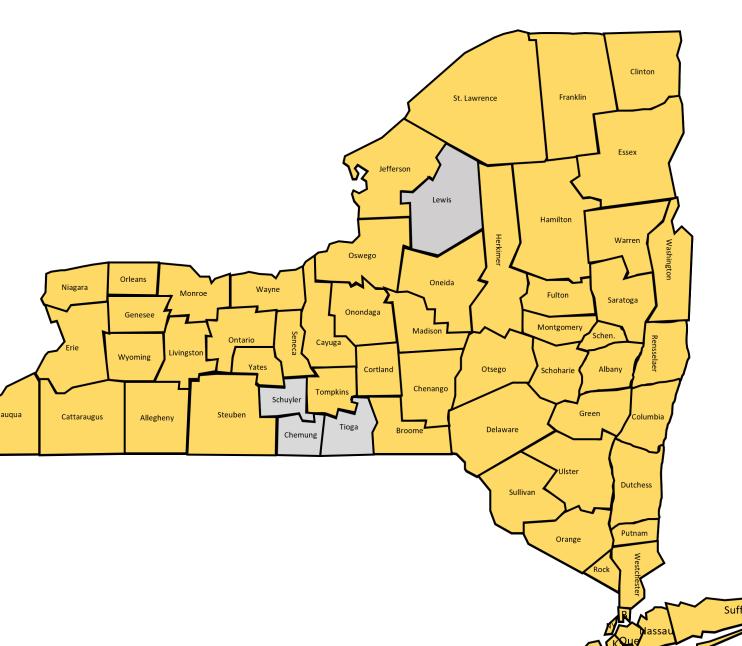
Background & Development

- In March 20 17, the sepsis tool was officially launched, and HCA developed the Sepsis Steering Committee to further guide and support implementation. The committee was composed of regional, state and national sepsis experts, health leaders of from sectors of the care continuum, government officials, sepsis families and survivors, consumers, and other essential stakeholders.
- Providers across NYS began using the tool and reported positive feedback and user experience.
- Providers and other state associations started adopting the tool.
- The NY Health Foundation awarded HCA a major grant "Stop Sepsis At Home NY" to promote statewide adoption through training and education, technical assistance, and cross-continuum coordination.

NYSCOUNTIES W HERE TOOL IS USED BY AT LEAST ONE PROVIDER SERVING THE REGION

HCA Sepsis Tool by County

• As of Augist 20 25, 58 out of 62 NYS counties have at least one home care agency that has trained and been authorized for the sepsis tool.







Sepsis Tool Prerequisites

- Orientation and training on the tool and on sepsis substantively are prerequisites for provider use of the tool.
- Authorized use of the tool is granted to providers via user agreement (<u>sepsistool@hcanys.org</u>) that confirms the prerequisites and strict adherence to use standards.

Prerequisites in user agreement include:

- o Completion of HCA Training.
- Agreement to use the tool and protocol as provided, included in embedded EHR format.
- o Agreement not to distribute the tool to unauthorized users.
- o Participation in data/experience sharing.

HCAADULT SEPSIS SCREENING TOOL



Sepsis Screen Tool Question Section

Adı	OME CARE SERVICES Ult Sepsis Screening Tool use in conjunction with Home Care Adult Sepsis Screening Tool Protocol.	Patient's Name: Medical Record #: Date Completed:				
1	Does the patient's history, physical examination, or other findings suggest an infection or potential source of infection? Yes No If Yes, specify source or potential source of infection and select one or more below:					
	□ Respiratory trac in ection □ Genitourinary injection U I) □ Gastrointestinal infection □ Acute abdominal infection □ Acute abdominal infection	□ Recent procedure □ Other source of infection (describe):				
	□ Meningitis □ Recent Chemomera, v/ mm in □ Bone or joint infection □ Wound infection or skin infection					
2	Are any 2 (or more) of the following systemic criteria present? □ Yes □ No	on Georgia of the Stributte of the Strib				
	□ Fever (oral temperature >38.3° C [100.9° F] or hypothermia (core temperature <36.0° C [96.8° F]) □ Tachypnea (respirations >20 b					
3	Is at least one new (since the last screen) Sepsis-related organ dysfunction criteria present from If yes, check all that apply:	rom the following list? □ Yes □ No				
	Neurological □ New onset acutely altered mental status/difficult to arouse	Cardiovascular □ New onset hypotension (systolic blood pressure <90 or decreases by >40 mm Hg)				
	Respiratory New onset saturation <90% by pulse oximetry, on supplemental oxygen SPO2 other than baseline	□ New onset pale/discolor				
	Renal	Pain □ <i>New onset</i> pain/general discomfort				

HCAADULT SEPSIS SCREENING TOOL

Sepsis Screen Tool Follow-up & Interventions Sections

Time criteria met and provider notified:

Positive findings for ANY of the 3 screening questions requires follow-up. The Patient Meets Criteria for Infection Complete this section for all patients that received "Follow-Up" actions. If the answer to #1 is "Yes" and the answer to #2 and #3 are "No:" Educate the patient and/or caregiver with education sheet "Adult Sepsis Check all that apply: Zone Tool: Early Signs and Symptoms of Sepsis." ☐ The patient and/or caregiver has been educated with education sheet "Adult Sepsis The Patient Meets Criteria for Provider Notification Zone Tool: Early Signs and Symptoms." If the answers to question #2 and/or #3 are "Yes:" Educate the patient and/or caregiver with education sheet "Adult Sepsis" The interventions in the protocol are clinically contradicted (provider determined). Zone Tool: Early Signs and Symptoms of Sepsis" Education has been completed with the patient and/or caregiver on symptom Notify provider of findings recognition and management of sepsis. □ The patient meets Sepsis criteria. Patient and/or caregiver educated, provider notified, antibiotics may be initiated, and next skilled nursing visit to be completed ш If the answer to questions #1 and #2 are "Yes," within 24 hours. #3 is "No" then the patient meets criteria for Sepsis. Notify provider of findings The patient has net all criteria for severe Sepsis and requires immediate intervention. Obtain provider order to draw CBC N Patient and/or caregiver educated. Provider notified, patient transported to emergency Educate the patient and/or caregiver with education sheet "Adult Sepsis department, and report called to the receiving emergency department Zone Tool: Early Signs and Symptoms of Sepsis" and on treatment Document The patient has advanced directives in place at this time which precludes and protocol interventions (e.g., an order in place for "comfort measures only"). The Patient Meets Criteria for SEVERE Sepsis Education has been completed with the patient and/or caregiver on symptom If the answer to guestions #1, #2, and #3 are all "Yes," then the patient management of Sepsis. meets screening criteria for severe Sepsis. Notify provider of findings ☐ The patient and/or caregiver declined or is unwilling to consent to protocol interventions. Educate the patient and/or caregiver with education sheet Adult Sepsis Provider has been notified of the decision not to receive acute intervention. Education Zone Tool: Early Signs and Symptoms of Sepsis" and on treatment has been completed with the patient and/or the caregiver as to the risks and benefits of Have patient transported to emergency department for evaluation declining intervention. Contact receiving emergency department to provide report Document Document any follow-up actions completed that are not listed. Note: Note:

Provider's Name

Please note that this Home Care Services Adult Sepsis Screening Tool is the proprietary tool of the Home Care Association of New York State, Inc. (HCA). It is illegal to use, copy and/or distribute this tool in whole or in part without the express written permission of HCA. HCA makes no warranty associated with the use of this tool with respect to detection of sepsis risk, sepsis at any stage, clinical procedure or outcome, nor any implied warranty on behalf of any entity using this tool. Any use of the tool is subject to the terms of the license agreement between HCA and the authorized licensee under that agreement.

Date/Time

Provider Notified:



Signature:



HCAADULT SEPSIS SCREENING TOOL

Sepsis Screen Tool Patient Education "Zone Tool" – Developed by IPRO

EARLY SIGNS AND SYMPTOMS OF SEPSIS



Has your healthcare provider diagnosed you with an INFECTION?
You could be at risk for SEPSIS. Know the signs!

What is Sepsis? Sepsis is your body's life-threatening response to an INFECTION anywhere in your body. Anyone can get sepsis!

Signs and Symptoms of Sepsis

Watch for a combination of INFECTION + fever or feeling chilled, confusion/sleepiness, fast heart rate, fast breathing or shortness of breath, extreme pain and pale/discolored skin.

SEPSIS IS A MEDICAL EMERGENCY

GREEN Zone: ALL CLEAR - Feeling well

· No fever or feeling chilled

No confusion or sleepiness

- No fast heart rate
- Easy breathing
- No increase in pain

RED Zone: Call your doctor or nurse immediately if you experience INFECTION and...

- Fever or feeling chilled
- Confusion/sleepiness (recognized by others)
- Fast heart rate

- Fast breathing or shortness of breath
- Extreme pain
- Pale or discolored skin

CALL 911 OR HAVE SOMEONE TAKE YOU TO THE EMERGENCY DEPARTMENT.

Key Contacts:









This material was prepared by the Atlantic Quality Innovation Retwork (AQIN), the Medicare Quality Innovation Network Quality Improvement Organization for New York State, South Carolina, and the District of Columbia, under contract with the Centers for Medicare & Medicard Sor vices (CMS), an agency of the U.S. Department of Health and Human Services. The contents do not noces sailly reflect CMS policy.



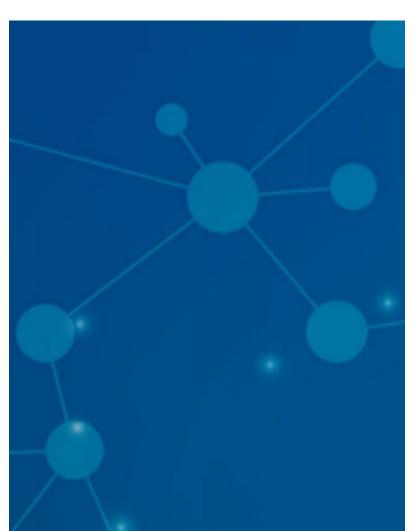


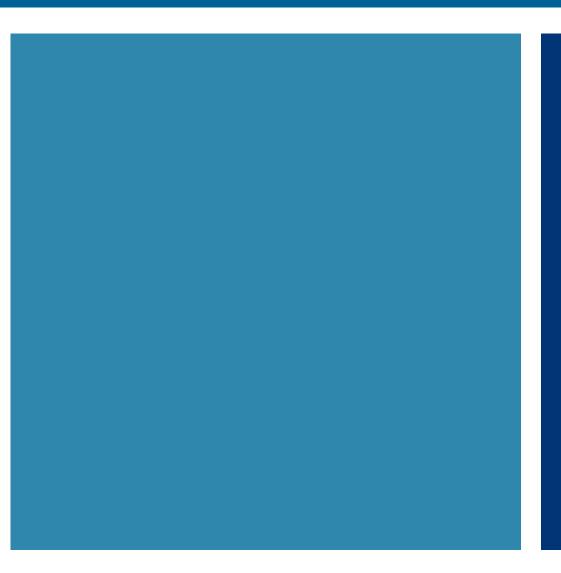
Important Points About the Sepsis Screening Tool

- Screening is to be completed at start of care, resumption of care, and yvisit.
- The interventions are recommended interventions and a substitute for treatment, consultation or direction from a physician or authorizing practitioner.
- If clinicians choose to order tests/interventions not listed on the tool, they need to document at bottom of the screen tool (or "refer to nurse note" and document on nurse note the intervention that was ordered).
- Patient/public education component is significant.



CASE ST UDY: APPLICATION OF THE ADULT SEPSIS SCREENING TOOL









Patient Scenario

A 65-year-old male admitted for diabetic teaching due to being new on insulin. Has a history of pneumonia and coronary heart disease. The patient has a wife in the home who supports the care. Upon assessment the nurse finds a reddened area to the lower right leg. The patient has a Temp 99.6, Pulse 10.0, Resp 22, SPO2 98% and BP 120/68. The patient has no complaints of pain, GI or GU issue.



Application of the HCA Sepsis ToolQuestion 1

Home Care Services Adult Sepsis Screening Tool

For use in conjunction with Sepsis Protocol.

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Patient's Name:	
Medical Record #:	
Date Completed:	

- Does the patient's history, physical examination, or other findings suggest an infection or potential source of infection?

 Yes No If Yes, specify source or potential source of infection and select one or more below:
 - □ Pneumonia
 - □ Urinary tract infection
 - □ Acute abdominal infection
 - □ Meningitis
 - □ Bone or joint infection
 - □ Bloodstream catheter infection

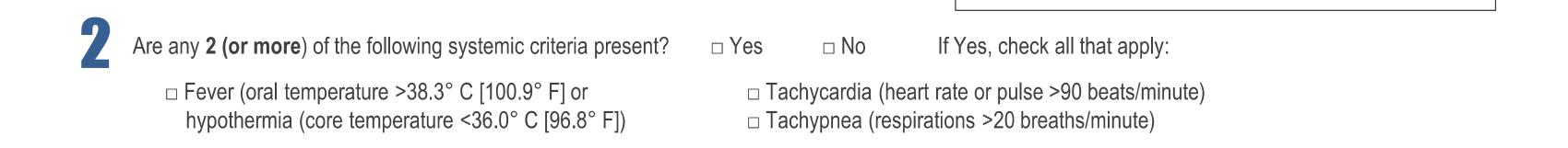
- □ Active treatment
- □ Implanted device infection
- □ Endocarditis
- □ Recent Chemotherapy/Immunocompromised
- □ Wound infection or skin infection
- □ Other source of infection (describe):

Reddened area to his lower right leg

Q1- Yes, Patient has a potential source site of infection with a reddened area to his lower right leg.



Application of the HCA Sepsis ToolQuestion 2



Q2 - Yes, Patient has 3 systemic criteria.



Application of the HCA Sepsis ToolQuestion 3

adequate fluid intake (and not due to ESRD)

3	Is at least one new (since the last screen) Sepsis-related organ dysfunction of the last screen of the last screen) Sepsis-related organ dysfunction of the last screen of the last scre	criteria present from the following list?	□ Yes	□ No
	Neurological □ New onset acutely altered mental status/difficult to arouse Lung	Cardiovascular □ <i>New onset</i> hypotension (syst decreases by >40 mm Hg)	olic blood pr	essure <90 or
	□ New onset saturation <90% by pulse oximetry, on supplemental oxygen SPO2 other than baseline	□ New onset pale/discolor		
	Kidney □ New onset urine output decreased from the patient's baseline with	Pain □ <i>New onset</i> pain/general disco	omfort	

Q3 - No, Patient has no signs and symptoms of new onset organ dysfunction.

Application of the HCA Sepsis ToelFollow – up

FOLLOW-UP

Positive findings for ANY of the 3 Screening Questions requires follow-up

Each Follow-Up item provides direction for the clinician's follow up.

The Patient Meets Criteria for Infection:

If the answer to #1 is "YES" AND the answers to #2 and #3 are "NO:"

• Educate the patient on the signs and symptoms of sepsis and provide the patient with "Early Signs and Symptoms of Sepsis" education sheet (Attachment C).

The Patient Meets Criteria for MD Notification:

If the answers to question #2 and/or #3 are "YES:"

• Educate the patient on the signs and symptoms of Sepsis and notify MD of your findings and document.

The Patient Meets Criteria for Sepsis:

If the answers to questions #1 and #2 are "YES," and answer to #3 is "NO," the patient meets criteria for Sepsis.

- Notify provider
- Educate the patient on the signs and symptoms of Sepsis and treatment
- Obtain MD order to draw CBC
- Document

The Patient Meets Criteria for SEVERE Sepsis:

Answers to questions #1, #2 and #3 are "YES." Patient has met criteria for infection, systemic involvement and sepsis-related organ dysfunction.

- Notify provider
- Educate patient on signs and symptoms of Sepsis and treatment
- Have patient transported to emergency department for evaluation
- Contact receiving emergency department to provide report
- Document





FREQUENTLY ASKED QUESTIONS







FAQ



Q: How often must the tool be completed?

A: Screening is to be completed at start of care, resumption of care, and ryclinical visit.

Q: Is the HCA Sepsis Screening Tool considered a diagnostic tool?

A: No. The Sepsis screen tool is designed to assist in streamlining a home care clinician's assessment to identify and recognize the early, critical signs and symptoms of sepsis in a post-acute care setting. It is not intended to replace a clinician's judgment based on their patient- specific observations, assessment, or determination of intervention.

Q: Is the clinician bound by the particular intervention indicated on the tool in the case of every patient, or does the clinician's judgement ultimately prevail?

A: The interventions are recommended interventions and not a substitute for treatment, consultation or direction from a physician or authorizing practitioner.

FAQ



Q: How are tests/interventions not listed on the tool to be handled?

A: If clinicians choose to order tests/interventions not listed on the tool, they need to document at bottom of the screen tool (or "refer to nurse note" and document on nurse note the intervention that was ordered).

Q: May LPNs complete the tool?

A: An LPN's scope of practice does not allow assessment, but an LPN may collect data and have it interpreted by a RN. An LPN in the home may complete the tool (gather the data). In the event that any of the information that has been obtained falls outside of the parameters then the LPN would contact their over-sighting RN. The RN would assess the data obtained, determine interventions, notify the MD, take any orders the MD provided and educate the patient.

Q: What role may Home Health Aides (HHA) and Personal Care Aides (PCA) play?

A: The tool may be completed only by licensed clinicians where assessment of the indicated criteria on the tool is within their lawful scope of practice.

However, HHAs and PCAs may be trained in signs and symptoms of sepsis based on the Patient Education Zone Tool, and report to the patient's home care agency RN their observations consistent with the Zone Tool. Agencies are encouraged to training and involve their HHAs and PCAs in these roles.



GUIDANCE FOR AGENCY ADOPTION AND USE









HCA Implementation Guidance to Agencies Advises:

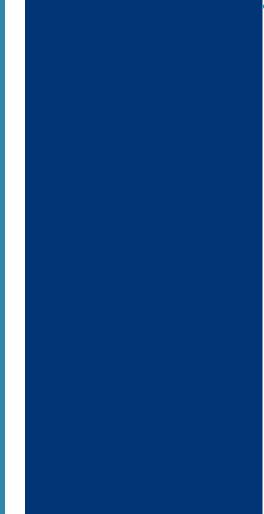
- Adoption of sepsis tool and protocol within agency policies and procedures, including procedures to ensure completion of screen on every RN assessment and clinical visit, unless contraindicated by MD; incorporation in agency quality assurance/ improvement committee review process.
- Integration into agency electronic health records.
- Training of all clinicians on sepsis and use of tools (including review of webinar series, case scenarios, additional educational material); training and education of aide staff, families, community.
- Outreach/ training/ education of strategic clinical/ community partners (e.g., physicians, hospital, EMS, managed care orgs).
- Other



COLLABORATION ACROSS THECONTINUUM











- Collaboration across clinical and continuum partners is critical to effective sepsis response.
- The standardization of sepsis screening and intervention in home and community health through the HCA tool is significant to the collaborative response, especially with hospital, EMS and physician partners.
- The tool is aligned with criteria for sepsis utilized in hospitals and EMS. Followand interventions indicated on the tool are also aligned.





- Regional sepsis training and crossector collaboration sessions conducted by HCA and IPRO across the state revealed important challenges and opportunities to address critical gaps.
 These include:
 - Report to ER, consultation with MD
 - Health information exchange upon ER referral
 - Discharge information from hospital to home health
 - Clinical pathways and interdisciplinary care plans for postpsis discharges
 - Mutual education/awareness of tools/criteria across sectors
 - Importance of rosssector clinician training
 - Data sharing
 - Sepsis Collaborative Care Model
 - University of Rochester Medical Center Critical Illness Recovery Program
 - HCR Physician and EMS Sepsis Collaboration

COLLABORATION ACROSS THECONTINUUM

Mohawk Valley Health System

- Hospital staff was invited and attended Home Care Sepsis Screen Tool Training
- MVHS VP of the Medical Group and Physician Practices attended the Home Care Sepsis Screen Tool Training
- Home Care Services is represented at the Hospital's Sepsis Committee Meeting. This meeting is an opportunity to communicate and learn about all the work within MVHS regarding Sepsis
- Home Care Services and the Hospital case management team have collaborated to use the same educational materials, such as the Sepsis Zone Tool.

Community Partners

- Group homes
- Assisted living facilities
- Lifespan



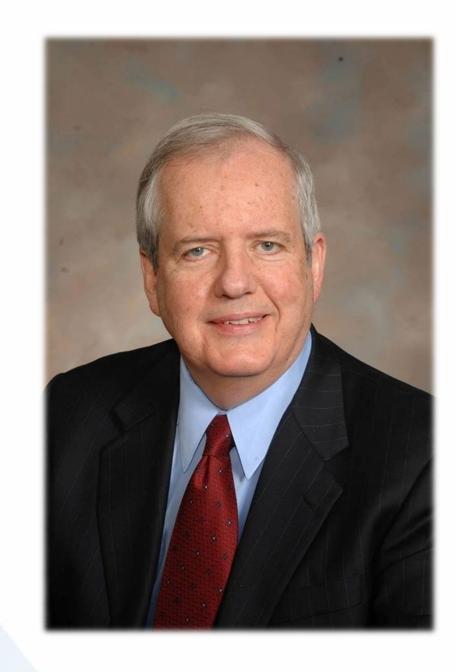


Side from Chris Chimenti, MSPT, ACHH Senior Director of Clinical Innovation 2022 Presentation to HCA: Sepsis in Home Health Care: Screening, Education, & Rapid Triage



Physician Collaboration

- HCR Medical Director
- In-person meetings with local physicians
 - Build awareness
 - Learn from providers
 - Discuss challenges





Side from Chris Chimenti, MSPT, ACHH Senior Director of Clinical Innovation 2022 Presentation to HCA: Sepsis in Home Health Care: Screening, Education, & Rapid Triage





EMS & ED Collaboration

- 4 critical alerts
 - Major trauma
 - Cardiac
 - Stroke
 - Sepsis
- ED & response team prepared in advance
- Average treatment care time for sepsis= 14:04
- 911 call vs. transport via family member
 - Treatment initiated during transport
 - Transportation expenses
- "I'm concerned about sepsis"



Side from Chris Chimenti, MSPT, ACHH Senior Director of Clinical Innovation 2022 Presentation to HCA: Sepsis in Home Health Care: Screening, Education, & Rapid Triage



Tim Czapranski Administrator Monroe County EMS



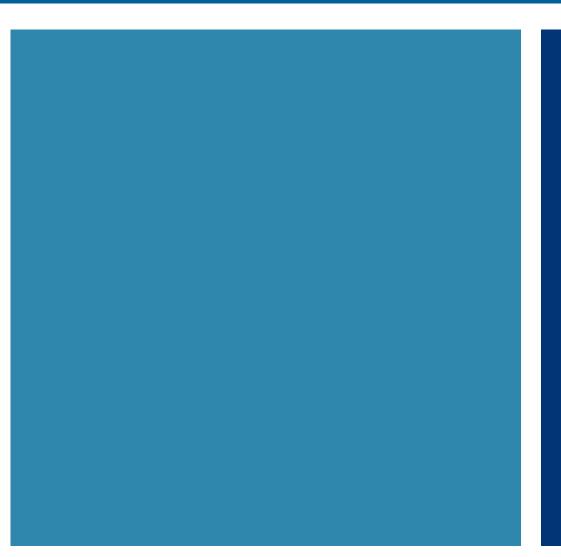






ELECTRONIC HEALTH RECORDINTEGRAION







EHR IN TEGRATION

Wherever possible, integration of the sepsis tool with agency electronic health records (EHRs) is vital.

- · Makes the entire process seamless within the context of all other assessment and clinical activity in the visit.
- Enables the information to be automatically integrated with key patient information and follow-up.
- Enables the information to be bulk exported to the IPRO REDCap sepsis data collection portal.
- Provides additional data profile benefit to the agency on key health/population health indicators.

• Important to note that there are providers successfully utilizing the tool in hardcopy/ paper form.



PROGRAM RESULT S TODATE





HOSPITAL PROTOCOL RESULT S TO DATE



Over 16,000 Lives Saved in New York State Following Implementation of Mandatory Sepsis Protocols. Sepsis is the leading cause of hospital deaths in the United States; New York was the first state to require the adoption of evidencesed protocols for the rapid identification and treatment of sepsis.

- NEW YORK, April 18, 2022: According to the NYS Department of Health, the implementation of mandatory sepsis
 protocols by all hospitals in New York State is estimated to have saved more than 16,000 lives between 2015 and
 2019.
- The protocol requirements were precipitated by the death of-Year-old Queens boy, Rory Staunton, from undiagnosed, untreated sepsis in a New York City Hospital in 2012. The regulations are known as Rory's Regulations in honor of Staunton. "Because of these regulations, there are 16,011 New Yorker families that have been spared the unspeakable pain that we have endured," said Ciaran and Orlaith Staunton, Rory Staunton's parents and the founders of END SEPSIS, the Legacy of Rory Staunton. "If they had been in place when we brought Rory to the hospital, he would be alive today. Sepsis protocols save lives. The federal government and other states need to follow New York's lead."
- <u>Link to Press Release</u>

The Legacy of Rory Staunton





Agencies achievingarlier sepsis identification and timely treatment.

• A study of cases served by HCR Home Care in Rochester, NY, of over 7,000 cases regularly screened with the HCA home care sepsis tool, showed that, of those identified as meeting sepsis criteria, 69.2% were successfully treated in collaboration by the patient's physician and the home care clinicians, avoiding hospitalization completely.





A study by the Visiting Nurse Service of New York showed similar patterns in avoidance of rehospitalizations.

• The study found that sepsis survivors who received a first nursing visit within two days of hospital discharge plus at least one additional home visit in their first post-hospital week, and who also saw a doctor in that first week, reduced their probability of 30 -day all-cause readmissions by seven percentage points.

Link to study





Creation of primary pre-hospital layer for sepsis screening, prevention, early intervention.

- · Near statewide geographic implementation accomplished.
- Hundreds of thousands of screens being conducted for risk, prevention, early treatment, and ongoing as part of system.
- · Significant new sepsis trained health workforce statewide.
 - Goal is for <u>every</u> home care agency and <u>every</u> community health setting in the continuum to adopt the screening and intervention tool.

CASE EXAMPLE

ILLUSTRATION OF POTENTIAL COST SAVINGS

One Home Care Agency. Millions (\$) in Potential Cost Savings Through Hospital Avoidance/Early Detection

TYPE OF SEPSIS CASE & ASSUMPTIONS (for purposes of illustration)	NO. OF CASES	100% of AVG. MEDIAN COST SEPSIS CARE IN NYS HOSPITAL	50% of AVG. MEDIAN COST SEPSIS CARE IN NYS HOSPITAL	Potential COST SAVINGS
ASSUMPTION 1 If hospitalization were to be averted for 50% of sepsis cases where in- home screening indicated sepsis-risk but NOT 'severe-sepsis' (218 cases).	109 (218/2)	X \$40,330		\$4.39M
ASSUMPTION 2 If hospitalization were to have occured, but LOS* reduced by half (due to early detection) for 50% of cases where in-home screening indicated sepsis- risk (218 cases).	109	>	\$20,165	\$2.2M
ASSUMPTION 3 Hospitalization unavoidable for 'severe-sepsis,' but if LOS' costs could be cut by 50% for half of these cases due to early detection (258 cases).	129 (258/2)		\$20,165	\$2.6M

criteria for 'severe-sepsis' using the HCA screening tool.







- Agencies report additional cost avoidance and improved outcome potential through overalater awareness and screening for infection risk via toolncreased preventive education with patients/familiesincreased identification of associated highrisk conditions(e.g., UTI, feverfocus on sepsis readmission avoidance, avoidance/mitigation.
- Model beingapplied to other settings and population (e.g., group homes for intellectually and developmentally disabled adults, hospice, assisted living, etc.)
- Model beingreplicated in other states y associations, health systems, agencies, organizations (incl. EMRs).
- Sepsis Alliancenational educationand level training video documentary produced on tool; being finalized and soon
 promoted to all applicable providers in US.
- Initiative recognized with statewide quality award \$2017, 2018) and with national "Sepsis Heroes" distinction (2019) by Sepsis Alliance, and with statewide grant awards (2019, 202122)





- Collaboration across clinical and continuum partnerscistical to effective sepsis response
- Identification of important challenges, gaps and goals between partners that should be addressed, include:
 - Consultation / engagement of PCP (timely, informed)
 - Hospital discharge home post-sepsis
 - Report to/response by ED (timely, informed, effective)
 - Interdisciplinary care and coverage for sepsis survivors
 - EMS engagement
 - Sector and cross-partner training and synchronization
 - EHR integration and key information exchange across partners
 - Data sharing

LIFE AFT ER SEPSIS





Click Here to Access
this Video and to
Learn More About
Life After Sepsis.



LIFE AFT ER SEPSIS

CriticalFacts

- Severe sepsis survivors remain at elevated risk of a future sepsis episode.¹
- \sim 60 % of sepsis survivors over the age of 50 experience worsened cognitive and/or physical function.²
- $\sim 1/3$ of all sepsis survivors, and more than 40% of older sepsis survivors, have another hospitalization within three months of the initial sepsis, most commonly due to a repeat episode of sepsis or another infection.³
- Black, Hispanic, and Native American adult sepsis survivors are more likely than white survivors to be readmitted after hospital discharge (1.3-1.5 times the risk for Blacks, 1.3 times the risk for Hispanics, and 2.4 times the risk for Native Americans).4,5,6
- Up to 50 % of sepsis survivors are left with physical and/or psychological long-term effects a condition known as post-sepsis syndrome.^{2,3,7,8}

Mostel Z, et al. Post-sepsis syndrome—an evolving entity that afflicts survivors of sepsis. Molecular Medicine 20 19;26(1):1- 4. https://molmed.biomedcentral.com/articles/10.1186/s10020-019-0132-z



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Lizza BD, et al. Racial Disparities in Readmissions Following Initial Hospitalization for Sepsis. Critical Care Medicine. 2021; 49(3):e258-e268. https://journals.lww.com/ccmjournal/Abstract/9000/Racial_Disparities_in_Readmissions_Following.95381.aspx

Reddy AR, et al. Investigating Racial and Socioeconomic Characteristics in Pediatric Sepsis Using Electronic Health Data. Hospital Pediatrics 20 23;13(2):138-146. https://pubmed.ncbi.nlm.nih.gov/36691761

Chang DW, et al. Rehospitalizations Following Sepsis: Common and Costly. Critical Care Medicine. 20 15; 43(10): 20 85-93. https://pubmed.ncbi.nlm.nih.gov/26131597/

Prescott HC and Angus DC. Postsepsis Morbidity. JAMA 20 18;3 19(1):91. https://jamanetwork.com/journals/jama/fullarticle/2667724

LIFE AFT ER SEPSIS: POST SEPSIS SYNDROME



PhysicalSymptoms^{1,2}

- Fatigue, Jethargy, insomnia
- Shortnessof breath, difficulty breathing
- Swellingin the limbs
- Reducedorgan function
- Repeat infections, particularly in the first few weekspost initial bout
- Poorappetite, taste changes
- Hair loss
- Skinrash,dry skin
- Changein vision
- Muscleor joint pain

Psychologica Symptoms 1,2

- Anxiety and fear of experiencingsepsisagain
- Panicattacks
- Depression
- Hallucinations
- Flashbacks
- Decreasedcognitive function
- PTSD
- Mood swings
- Memory loss
- Difficulty concentrating
- Lossof self-esteem





Post Sepsis Syndrome - End Sepsis
 Post-Sepsis Syndrome | Sepsis Alliance

W HAT CAN YOU DO?

What can YOU do as a AAA, Home Care Agency, Health Plan, LDSS or other HCBS Organization?



- Adopt the HCA Sepsis Screening and Intervention Tool
 - > Contact HCA at sepsistool@hcanys.org to request use, training, and other assistance to adopt the HCA Sepsis tool.
- Tap HCA special training modules for direct service staff (home health aides, personal care aides, CNAs), including for meeting in-service education requirements for infection control training, by also contacting sepsistool@hcanys.org.
- Reach out to the community with sepsis awareness education.
- Reach out essential partners across the continuum -- hospital, home care, physicians, EMS, health plans, other -- to develop mutual collaborative protocols in handling sepsis cases.
- If you are a health plan or an Area Agency on Aging, or a Local Social Services Department, encourage or require service organizations in your network to adopt the HCA sepsis tool.
- Access and utilize the sepsis education and resources offered by sepsis leaders Sepsis Alianvasepsis.org and by the END SEPSIS Legacy of Rory Stauntonwww.endsepsis.org and support these philanthropic sources that rely on community funding to support their resources.
- Talk to others about sepsis.

FUT URE ACTION









- June 25 Sepsis Summit Followp
- New component being piloted under Community Medicine /Paramedicine initiative
- Continued promotion of HCA sepsis tool adoption in home care, community based services, health plans, nursing homes, and specialty care settings, in NYS and other states
- Join<u>The Partnership for Sepsis and Aging</u>
- Sepsis coordination and collaboration across the continuum of care
- Ensure coverage for comprehensive and interdisciplinary care are possepsis patients
- Current health planhospital-homecare physician collaboration pilot in NYC
- Hospital Core Elements & Sep 1
- ICD-1- Aftercare for Sepsis in Home Care
- Research and data initiatives
- More, more and more

RESO URCES

- HCANYS <u>Stop Sepsis At Home</u> page
- Sepsis Alliance <u>www.sepsis.org</u>
- END SEPSIS Legacy of Rory Staunton <u>www.endsepsis.org</u>
- IPRO https://ipro.org/
- NYS Office for Aging https://aging.ny.gov/sepsis-awareness-and-prevention
- The Partnership for Sepsis & Aging https://www.sepsis.org/the-partnership-for-sepsis-and-aging-tpsa/
- CDC https://www.cdc.gov/sepsis/index.html





QUESTIONS/ COMMENTS?

Email HCA for Sepsis at: sepsistool@hcanys.org

Call HCA at: HCA 518-426-8764