



HCANYS

Home Care Association of New York State

HCANYS “Stop Sepsis At Home Initiative”

- Intervention at the Community Level -

HCANYS Home Care Sepsis Screening & Intervention Tool

Faculty

Amy Bowerman, RN, BSN, Vice President

Post Acute/Rehab, Mohawk Valley Health System, Utica NY
Member, HCANYS Board of Directors
Clinical Leader, HCANYS Sepsis Initiative

Al Cardillo, LMSW, President & CEO

Home Care Association of NYS & HCA Education & Research
Sepsis Alliance Advisory Board
END SEPSIS Advisory Board

Taylor Perre, MPH, MSW, Associate Director

Home Care Association of NYS & HCA Education & Research
HCANYS Sepsis Initiatives

DEDICATION OF PURPOSE

This initiative is inspired by the many lives fundamentally affected by sepsis in New York State and across the country.



Photo Courtesy of END SEPSIS – The Legacy of Rory Staunton

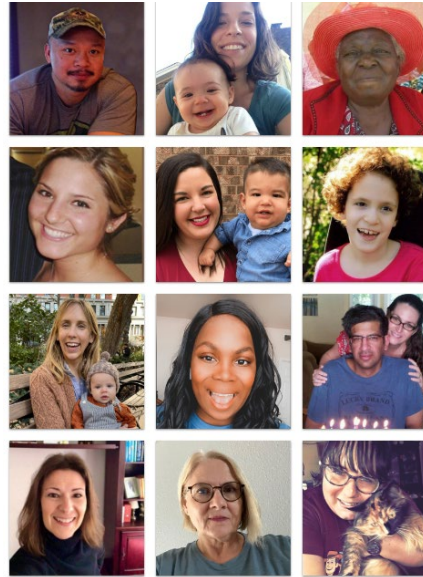


Photo Courtesy of END SEPSIS – The Legacy of Rory Staunton

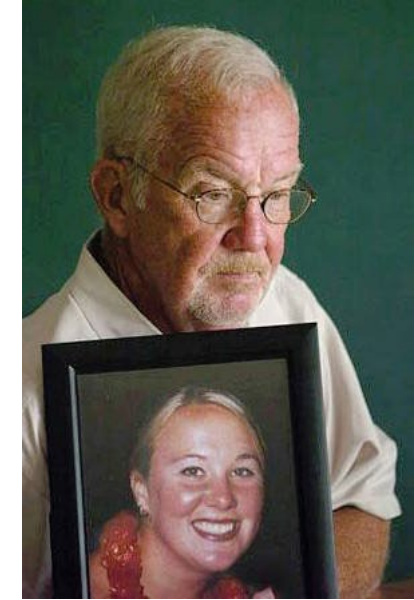


Photo Courtesy of Sepsis Alliance



Photo Courtesy of Sepsis Alliance

GRANT PARTNER THANKS

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



Better healthcare,
realized.



SEPSIS
ALLIANCE

ENDSEPSIS

The Legacy of Rory Staunton



Mother Cabrini
HEALTH FOUNDATION

This sepsis initiative is made possible through a generous grant by the NYS Health Foundation, and continued support by the Mother Cabrini Health Foundation.

Significance of Sepsis and Home Care

Key Fact: 87% of sepsis cases originate in the home and community (www.sepsis.org)

Compelling Sepsis Facts For Home & Community Health:

- #1 cost of care (far-and-away) for those admitted to hospitals, at \$62 billion for Medicare alone
- #1 cause of hospital readmissions
- #1 in avoidable Medicaid hospitalizations for the overall Medicaid population in NY
- #1 cause of death in hospitals
- A top cause of maternal mortality
- A top cause of the rise of neonatal deaths
- 65+ percent in the elderly
- 87% originating at home and community, with the highest risks mirrored in the home health population
- Mortality increases 4-9% for every hour treatment is delayed
- Estimated preventable/mitigatable 80%+ of the time

Significance of Sepsis and Home Care

- The high-risk populations for sepsis are mirrored in the home care population.
 - Older adults
 - Chronically ill
 - Persons with disabilities
 - The very young; especially 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).

Significance of Sepsis and Home Care

- Home care's unique position and credentials make it an all the more a compelling and crucial partner in the sepsis effort.
- These include:
 - Home care clinicians are in homes and in communities.
 - 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.
- How can home care agencies, aging network service organizations, community health centers and other home and community-based service providers respond?

Development of the HCANY Stop Sepsis At Home Initiative & Home Care Sepsis Screening & Intervention Tool

- 2010 Sepsis Alliance, conducting national outreach, queried HCANYS on sepsis. In response, HCANYS began to explore sepsis in home care.
- Follow-up research conducted by HCANYS across the country revealed no models related to sepsis and home health care.
- Rory's Regulations and Protocols instituted in NYS in 2013 (Rory Staunton Foundation, now END SEPSIS)
- HCANYS intensified efforts in 2014 to determine home care role in sepsis prevention and intervention.
- HCANYS engaged sepsis clinical experts in a workgroup, including state/national leaders (Sepsis Alliance, END SEPSIS, IPRO QIO, CDC, NYS DOH other) in a sepsis work plan.

Development of the HCANYS Stop Sepsis At Home Initiative & Home Care Sepsis Screening & Intervention Tool

- The sepsis clinical workgroup, with wide consultation, developed and drafted a clinical screening and assessment tool for home care; beta tested, vetted, and refined the tool.
 - As part of this process, IPRO/QIO under its CMS chartered sepsis initiative, utilized and vetted the tool in the training of 10,000+ NY clinicians, incorporating the experience in the final tool.
- HCANYS officially launched the sepsis tool for availability and adoption in March 2017.
- A pediatric iteration was created and launched 2021 – 2023.
- A training program and zone tool for providers for maternal patients was added in 2023.
- A module for in-service sepsis training for direct care workers in home care and specialty care settings, like adult care facilities, assisted living programs, community mental health providers, group homes for persons with i/DD needs, and other, was created and added in 2023

HCANYS Home Care Sepsis Screening & Intervention Tool & Related Instruments

Screening Tool Components

I. Screening Tool

- Infection Status
- Systemic Criteria
- New Onset Organ Dysfunction
- Follow-up
- Interventions



[HCA Stop Sepsis at Home NY](#)

II. Algorithm

III. Protocol

IV. Patient Education Zone tool

HCANYS Home Care Sepsis Screening & Intervention Tool & Related Resources

- Standardized Training Module for Clinicians
- Standardized Training Module for Direct Care Staff
- Home Care Maternal & Infant Sepsis Training and Tools
- Related Resources
 - Patient/Family Infection Prevention & Control Training & Tools
 - Translation of Patient/Family Education Zone Tools in 11 Languages

HCANYS SEPSIS SCREENING TOOL

Screening Tool

Algorithm

Zone Tool

Protocol

Adult Care Services

Home Sepsis Screening Tool

ATTACHMENT A

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

For use in conjunction with Sepsis Protocol

- 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
 - ☐ Wound(s)
 - ☐ Bone or joint infection
 - ☐ Bloodstream catheter infection
 - ☐ Other source of infection (specify) _____
- Any two (or more) of the following systemic criteria present?
 - ☐ Fever (normal temperature >38.3°C [101.9°F] or hypothermia (core temperature <36.0°C [96.8°F])
 - ☐ Tachypnea (respirations >20 breaths/min)
 - ☐ Tachycardia (heart rate >100 beats/min)
 - ☐ Hypotension (diastolic blood pressure <90 mm Hg)
- Is at least one new (since the last screen) Sepsis-related organ dysfunction or failure present? ☐ Yes ☐ No
If yes, check all that apply:
 - Neurological**
 - ☐ New onset altered mental status or decreased level of consciousness
 - Lung**
 - ☐ New onset dyspnea/hypoxia (hypoxic blood pressure <90 or increases by ≥40 mm Hg)
 - Circulation**
 - ☐ New onset tachycardia (heart rate >100 beats/min)
 - Renal**
 - ☐ New onset oliguria (urine output decreased from patient's baseline with adequate fluid intake) (Flow <30cc)
 - Pain**
 - ☐ New onset persistent discomfort

If the answers to questions 1, 2, and 3 above are all "NO," then STOP. Screening is complete for this visit.

The Patient Meets Criteria for Infection
If the answer to #1 is "Yes" and the answer to #2 and #3 are "Yes," then educate the patient on signs and symptoms of sepsis and provide patient information sheet Early Signs and Symptoms of Sepsis ("Attachment C").

The Patient Meets Criteria for MD Notification
If the answer to question #2 and/or #3 are "Yes," then notify the provider on signed written notification of Sepsis and notify MD of your findings and document.

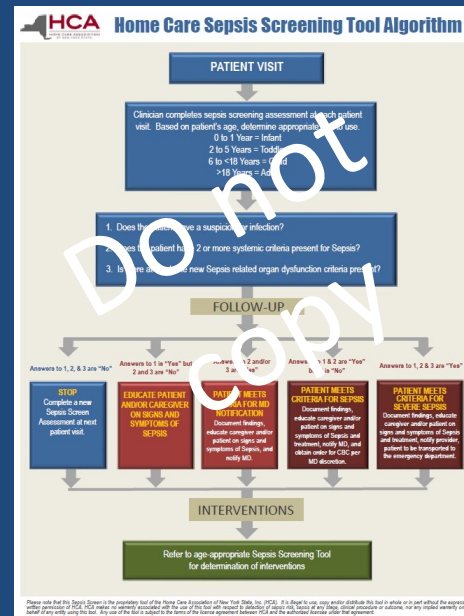
The Patient Meets Criteria for Sepsis
If the answer to questions #1 and #2 are "Yes" and answer to question #3 is "No," then the patient meets criteria for Sepsis. Document your findings, educate the patient on signs and symptoms of Sepsis, and notify the provider and obtain MD order to draw CBC.

The Patient Meets Criteria for SEVERE Sepsis
If the answer to questions #1, #2, and #3 are all "Yes," then the patient meets screening criteria for severe Sepsis. Document your findings, educate the patient on signs and symptoms of Sepsis and treatment, and notify the provider and have patient transported to emergency department for evaluation.

Check all that apply:

- ☐ The interventions in the Sepsis protocol are clinically contraindicated (provider determination). The patient has been educated on the signs and symptoms of Sepsis and provided with the patient information sheet "Early Signs and Symptoms of Sepsis" ("Attachment C").
- ☐ The patient has advanced directives in place at this time which preclude any of the protocol interventions (e.g., an order in place to "comfort measures only"). Education has been completed with the patient and/or caregiver on the meaning/emergency Department.
- ☐ The patient has purposeful decline or is unwilling to accept/proceed any interventions. Provider has been notified of decision not to receive acute intervention. Education has been completed with the patient and/or the caregiver as to the risks and benefits of declining intervention.
- ☐ The patient has met the criteria for severe Sepsis and requires immediate intervention, MD notified, patient educated and to be transported to emergency department, and report called to the receiving emergency Department.
- ☐ The patient meets Sepsis criteria, patient education, MD notified, antibiotics initiated, and next skilled nursing visit to be completed within 24 hours.

Note: _____



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. You 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 Fast heart rate
- No confusion or sleepiness
- No Fast breathing or shortness of breath
- No Extreme pain
- No Pale or discolored skin

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

- Fever or feeling chilled
- Fast breathing or shortness of breath
- Confusion/sleepiness (recognized by others)
- Extreme pain
- Fast heart rate
- Pale or discolored skin

...If you are unable to reach your doctor or nurse, CALL 911 OR HAVE SOMEONE TAKE YOU TO THE EMERGENCY DEPARTMENT.

Key Contacts:



This material was prepared by the National Quality Improvement Network (NQIN), the National Quality Improvement Network Quality Improvement Organization for New York State, South Carolina, and the District of Columbia. The content is intended to be used for educational purposes only. It is not intended to be used for medical advice or for the diagnosis, treatment, or prevention of any disease or condition. The content is not intended to be used for medical advice or for the diagnosis, treatment, or prevention of any disease or condition. The content is not intended to be used for medical advice or for the diagnosis, treatment, or prevention of any disease or condition.

[illegible]

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.

HCANYS SEPSIS SCREENING TOOL

Screening Tool

Home Care Services
Adult Sepsis Screening Tool
For use in conjunction with Sepsis Protocol.

ATTACHMENT A

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:
☐ Pneumonia ☐ Active treatment
☐ Urinary tract infection ☐ Implanted device infection
☐ Acute abdominal infection ☐ Endocarditis
☐ Meningitis ☐ Recent Chemotherapy/Immunocompromised
☐ Bone or joint infection ☐ Wound infection or skin infection
☐ Bloodstream catheter infection ☐ Other source of infection (describe): _____

2 Are any 2 (or more) of the following systemic criteria present? ☐ Yes ☐ No If Yes, check all that apply:
☐ Fever (oral temperature $>38.3^{\circ}\text{C}$ [100.9°F] or hypothermia (core temperature $<36.0^{\circ}\text{C}$ [96.6°F]) ☐ Tachycardia (heart rate or pulse >90 beats/minute)
☐ Tachypnea (respirations >20 breaths/minute)

3 Is at least one new (since the last screen) Sepsis-related organ dysfunction criteria present on the following list? ☐ Yes ☐ No
If yes, check all that apply:
Neurological ☐ New onset acutely altered mental status/difficult to arouse
Lung ☐ New onset saturation $<90\%$ by pulse oximetry on supplemental oxygen SPO2 other than baseline ☐ New onset hypotension (systolic blood pressure <90 or decreases by >40 mm Hg)
Kidney ☐ New onset urine output decreased from the patient's baseline with adequate fluid intake and not due to SRD ☐ New onset paresthesia
☐ New onset pain/general discomfort

If the answers to questions 1, 2, and 3 above are all "NO," then STOP. Screening is complete for this visit.

FOLLOW-UP

The Patient Meets Criteria for Infection
If the answer to #1 is "Yes" and the answer to #2 and #3 are "No," then educate the patient on signs and symptoms of Sepsis and provide patient with information sheet "Early Signs and Symptoms of Sepsis" (Attachment C).

The Patient Meets Criteria for MD Notification
If the answers to question #2 and/or #3 are "Yes," then educate the patient on signs and symptoms of Sepsis and notify MD of your findings and document.

The Patient Meets Criteria for Sepsis
If the answer to questions #1 and #2 are "Yes," but the answer to question #3 is "No," then the patient meets criteria for Sepsis. Document your findings, educate the patient on signs and symptoms of Sepsis and treatment, and notify the provider and obtain MD order to draw CBC.

The Patient Meets Criteria for SEVERE Sepsis
If the answer to questions #1, #2, and #3 are all "Yes," then the patient meets screening criteria for **severe** Sepsis. Document your findings, educate the patient on signs and symptoms of Sepsis and treatment, and notify the provider and have patient transported to emergency department for evaluation.

Note: _____

INTERVENTIONS

Check all that apply:

☐ The interventions in the Sepsis Protocol are clinically contraindicated (provider determination). The patient has been educated on the signs and symptoms of Sepsis and provided with the patient information sheet "Early Signs and Symptoms of Sepsis" (Attachment C).

☐ The patient has advanced directives in place at this time which precludes any of the protocol interventions (e.g., an order in place for "comfort measures only"). Education has been completed with the patient and/or caregiver on symptom management of Sepsis.

☐ The patient or surrogate declined or is unwilling to consent to protocol interventions. Provider has been notified of the decision not to receive acute intervention. Education has been completed with the patient and/or the caregiver as to the risks and benefits of declining intervention.

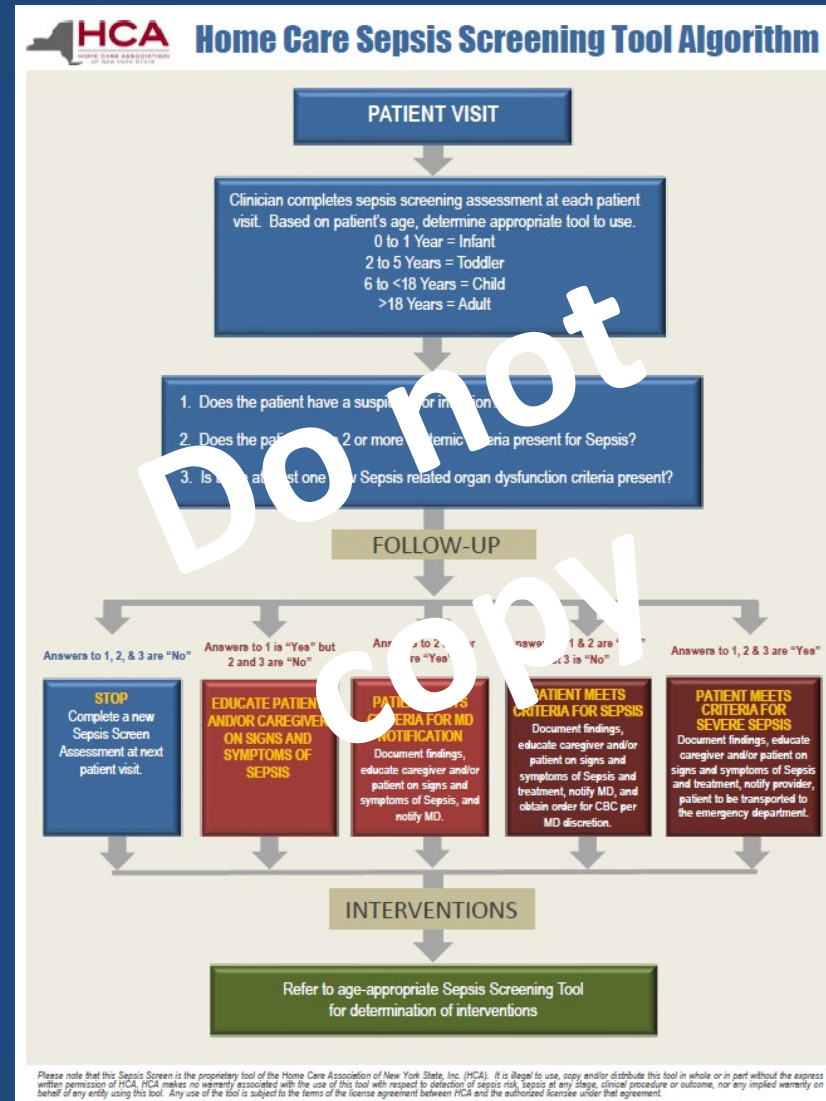
☐ The patient has met all criteria for severe Sepsis and requires immediate intervention, MD notified, patient educated and to be transported to emergency department, and report called to the receiving emergency department.

☐ The patient meets Sepsis criteria, patient education, MD notified, antibiotics initiated, and next skilled nursing visit to be completed within 24 hours.

Note: _____

HCANYS SEPSIS SCREENING TOOL

Algorithm



HCANYS SEPSIS SCREENING TOOL

Zone Tool

EARLY SIGNS AND SYMPTOMS OF SEPSIS

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

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 fast heart rate
- No increase in pain
- No confusion or sleepiness
- Easy breathing

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

- Fever or feeling chilled
- Fast breathing or shortness of breath
- Confusion/sleepiness (recognized by others)
- Extreme pain
- Fast heart rate
- Pale or discolored skin

If you are unable to reach your doctor or nurse, CALL 911 OR HAVE SOMEONE TAKE YOU TO THE EMERGENCY DEPARTMENT.

Key Contacts:

HCA
HCA
HCA

SEPSIS ALLIANCE
sepsis.org

THE RORY STAMMERTON FOUNDATION
RORY STAMMERTON FOUNDATION

IPRO
Serving New York State

Atlantic Quality Improvement Network
NY · DC · SC

This material was prepared by the Atlantic Quality Improvement Network (AQIN), the Medicare Quality Improvement Network-Quality Improvement Organizations for New York State, South Carolina, and the District of Columbia, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents do not necessarily reflect CMS policy.
1150N-AQINNY-SEP-SEP-17-02 Rev. 11/20/17

HCANYS SEPSIS SCREENING TOOL

Protocol

 SEPSIS PROTOCOL	
(Organization's Name)	
Number, Revision:	Effective Date:
Replaces Number, Revision:	Replaces Date:
	Page 1 of 2

1 PURPOSE
This protocol provides guidance for utilizing The Home Care Association (HCA) Sepsis Screening Tool. The Sepsis screen tool is designed to assist discharging a clinician's assessment to identify and recognize the early, critical signs and symptoms of sepsis in a post-acute care setting. The Sepsis screening tool aligns with the guidelines issued by the New York State Department of Health for hospitals under part 405.4 of Title 10, NYCRR Health, and provides a crosswalk between the community setting assessment and the assessment that is completed during an Emergency Department triage assessment. Prompt recognition of the early signs of Sepsis is the key to improving patient outcomes and decreasing Sepsis related morbidity and mortality. This protocol provides standardized guidance for home care clinicians' completion of the screening tool and follow-up, but is not intended to replace a clinician's judgment based on their patient-specific observations, assessment, or determination of intervention.

2 SCOPE
The Home Care Association Sepsis Screening Tool is to be completed by a licensed clinician at every home visit.

3 REFERENCES
New York State Department of Health 2013 Sepsis Mandate Guidelines for Hospitals
New York State's Regulations part 405.4 of Title 10, NYCRR Health

4 DEFINITIONS / ABBREVIATIONS:
SEPSIS: The body's dysregulatory response to infection which can result in life-threatening organ dysfunction.
SEVERE SEPSIS: A clinical condition characterized by organ dysfunction.
NEW ONSET ORGAN DYSFUNCTION: The onset of organ dysfunction should be distinguished from any baseline or previously existing organ dysfunction or pain.

5 INSTRUCTION ELEMENTS
The Adult Sepsis Screen Tool requires clinician through a Sepsis assessment screening. A clinician should follow the Sepsis Algorithm (Attachment B) when completing the Sepsis Screen Tool (Attachment A). There are three elements of the Screening Tool: The Screening Questions, Follow-Up and Interventions. All elements must be completed each time an Adult Sepsis Screen Tool is completed.

SCREENING QUESTIONS
The following three question areas on the tool will provide the clinician with clinical information to determine if the patient meets sepsis criteria or if the patient is at risk for sepsis.

- Determine Infection:**
 - Does the patient's history, physical examination, or other findings suggest infection or potential source of infection?
 - Document confirmed or potential source of infection if applicable:
 - If "YES," specify and select one or more suspected sources from the list.
 - If "YES," and the source or potential source of infection is not listed, use the text box to describe.
 - Examples of source or potential source of infection are:
 - Foley catheters
 - Vascular catheters
 - Open wounds
 - Implanted devices (ex. Pacemaker)
 - If the patient does not have any existing, suspected or potential source of infection answer "NO."
- Identify Systemic Criteria:**
 - Responses are based on objective data obtained from physical examination of the patient.
 - Refer to the list of systemic criteria on Sepsis Screen Tool for parameters (Fever, Tachypnea, Tachycardia, Are 2 or more present?)
 - If "YES," mark all that apply.
 - Answer "NO" if 1 or no systemic criteria are present.
- Identify New Onset Organ Dysfunction:**
 - Answer "YES" if ANY new onset sepsis-related organ dysfunction or pain is present:
 - Neurological
 - Lung
 - Kidney
 - Cardiovascular
 - New onset of pain

****IF RESPONSES TO QUESTIONS 1, 2 and 3 ARE "NO" THEN SCREENING IS COMPLETE FOR THE VISIT****
REPEAT SEPSIS SCREEN TOOL AT NEXT VISIT.

The sepsis screening tool to which this protocol applies is the proprietary tool of The Home Care Association of New York State, Inc. (HCA). It is illegal to use, copy and/or distribute the 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.

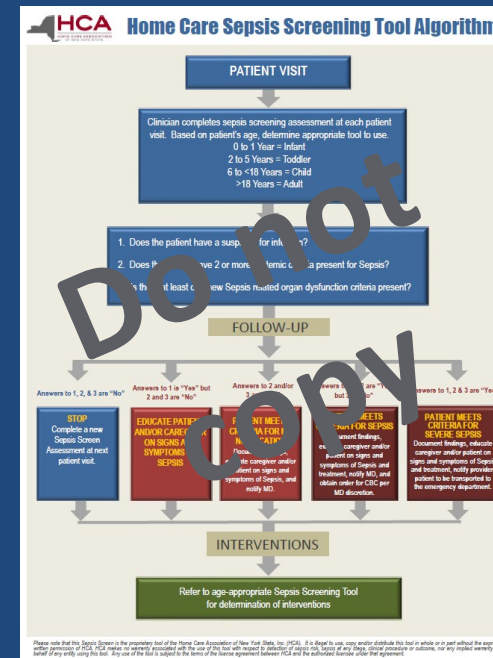
HCANYS SEPSIS PEDIATRIC SCREENING TOOL

Screening Tools Infant, Toddler, Child

Zone Tool

Algorithm

Protocol

[illegible][illegible]

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 .

HCANYS SEPSIS PEDIATRIC SCREENING TOOL

Shayhaan Shaikh, MD

Devneet Singh, MD

Leadership In Medicine,
& later Albany Medical College,
students led the pediatric R&D

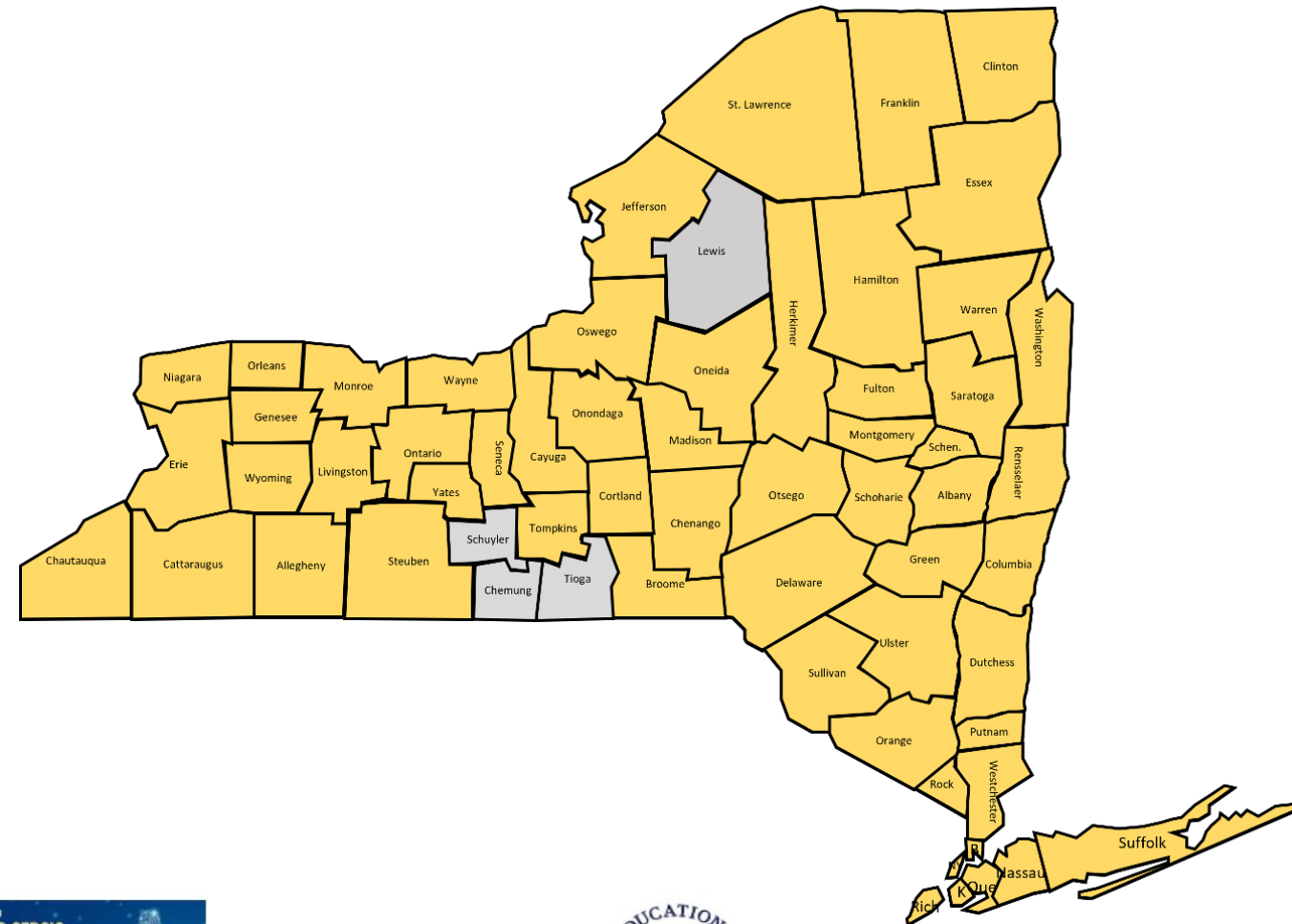


Accessing HCANYS Sepsis Tool & Resources

- **Contact** sepsistool@hcanys.org
- **Prerequisites**
 - Use authorization granted to providers via user agreement accessed at sepsistool@hcanys.org that confirms the prerequisites and strict adherence to use standards.
 - Completion of HCANYS training on the tool and on sepsis substantively.
 - Agreement to use the tool and protocol as provided, included in embedded EHR format.
 - Agreement not to distribute the tool to unauthorized users.
 - Participation in data/experience sharing.

HCANYS Sepsis Tool by NYS County

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



Sepsis Initiative Results to Date

- Agencies achieving earlier 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 HCANYS 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**.

Citation: Chimenti, Chris MS, PT; Sears, Geralyn BSN, RN; McIntyre, Jack MD. Sepsis in Home Health Care: Screening, Education, and Rapid Triage. Journal of Nursing Care Quality 36(3):p 210-216, July/September 2021. | DOI: 10.1097/NCQ.0000000000000525

Sepsis Initiative Results to Date

- Study of patients served by the Visiting Nurse Service of NY (now VNS Health) 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.

Citation: Deb P, Murtaugh CM, Bowles KH, Mikkelsen ME, Khajavi HN, Moore S, Barrón Y, Feldman PH. Does Early Follow-Up Improve the Outcomes of Sepsis Survivors Discharged to Home Health Care? Med Care. 2019 Aug;57(8):633-640. doi: 10.1097/MLR.0000000000001152. PMID: 31295191; PMCID: PMC11648946.

Sepsis Initiative Results to Date

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 <i>(for purposes of illustration)</i>	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 occurred, but LOS* reduced by half (due to early detection) for 50% of cases where in-home screening indicated sepsis-risk (218 cases).	109 (218/2)		X \$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)		X \$20,165	\$2.6M
 *Length of Stay All information based on a home care agency in upstate New York that has identified 218 cases meeting the criteria for sepsis and an additional 258 cases meeting the criteria for 'severe-sepsis' using the HCA screening tool.				\$9,193,240

Sepsis Initiative Results to Date

- 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 **every** home care agency and **every** community health setting in the continuum to adopt the screening and intervention tool.

Sepsis Initiative Results to Date

- Agencies report additional cost avoidance and improved outcome potential through overall greater awareness and screening for infection risk via tool, increased preventive education with patients/families, increased identification of associated high-risk conditions (e.g., UTI, fever), focus on sepsis readmission avoidance, LTC avoidance/mitigation.
- Model being applied to other settings and populations (e.g., group homes for intellectually and developmentally disabled adults, hospice, assisted living, etc.)
- Model being replicated in other states by associations, health systems, agencies, organizations.
- Sepsis Alliance national education and level-I training video documentary produced on tool.

Guidance for Provider Adoption

- 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).

Guidance for Provider Adoption

- 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 HCANYS 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. Follow-up and interventions indicated on the tool are also aligned.

Guidance for Provider Adoption

Regional sepsis training and cross-sector collaboration sessions conducted by HCANYS 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 post-sepsis discharges
 - Mutual education/awareness of tools/criteria across sectors
 - Cross-sector clinician training

Guidance for Provider Adoption

- Data sharing
- Sepsis Collaborative Care Model
 - University of Rochester Medical Center Critical Illness Recovery Program
 - HCR Physician and EMS Sepsis Collaboration

Mohawk Valley Health System case example

- 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.

Questions, Resources, Contacts

[HCANYS Homepage](#)

HCANYS [Stop Sepsis At Home](#) page

Al Cardillo acardillo@hcanys.org; alfredo.Cardillo@acphs.edu

Taylor Perre tperre@hcanys.org;

Amy Bowerman abowerma@mvhealthsystem.org

Sepsis Alliance www.sepsis.org

END SEPSIS - Legacy of Rory Staunton www.endsepsis.org

IPro <https://ipro.org/>

NYS Office for Aging <https://aging.ny.gov/sepsis-awareness-and-prevention>

Thank You

Thank you to our hosts,
the Albany College of Pharmacy & Health Sciences,
& presenters, participants, survivors, families,
National Sepsis Leader Organizations Sepsis Alliance & End Sepsis
& Summit Partners

