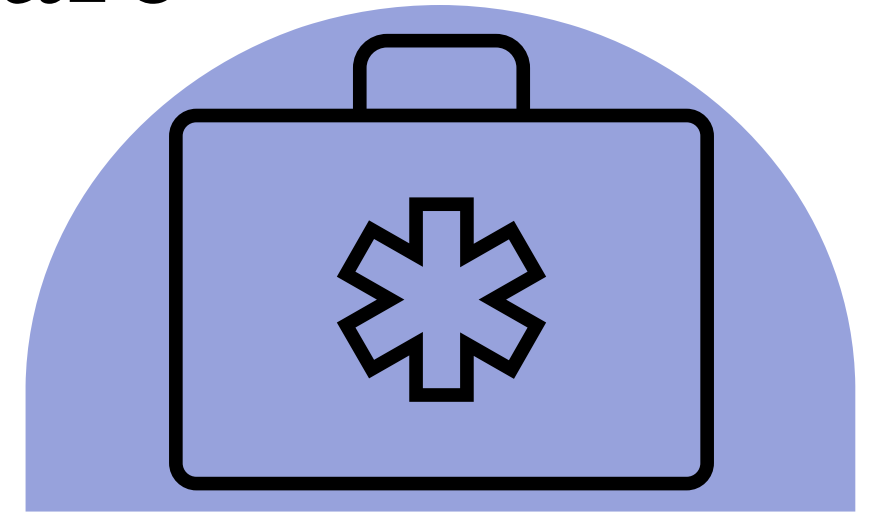




Sepsis Train the Trainer: When & How to Transfer to Acute Care

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Preventing Sepsis



1 GET VACCINATED against the flu, pneumonia, and any other infections that could lead to sepsis. Talk to your doctor for more information.



2 PREVENT INFECTIONS that can lead to sepsis by:

- **Cleaning** scrapes and wounds
- Practicing good **hygiene** (e.g., hand washing)

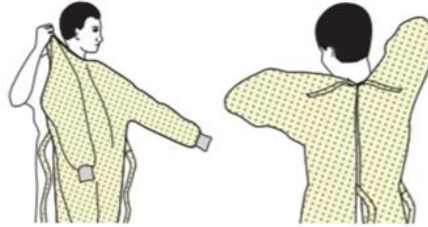


3 LEARN THE SIGNS AND SYMPTOMS of sepsis. If sepsis is suspected, seek medical attention immediately.

Personal Protective Equipment

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



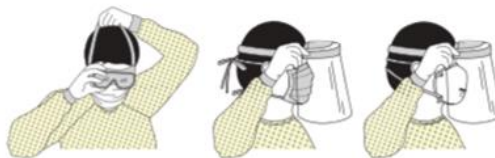
2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



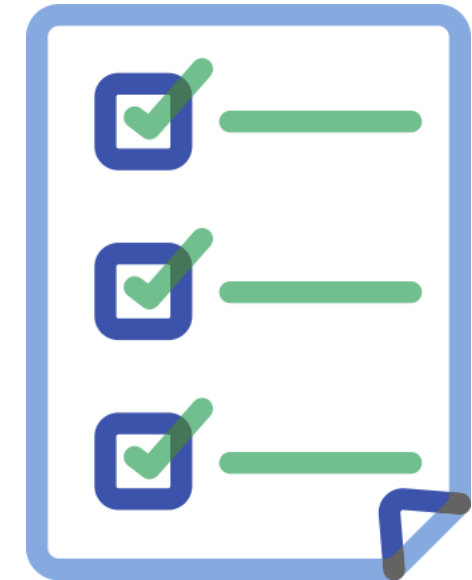
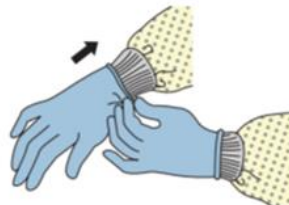
3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



Sepsis Prevention (World Health Organization)



A graphic with a light blue background. On the left, an orange circle contains icons of diverse people and the word "COMMUNITY". In the center, the word "Sepsis" is written in large orange letters. On the right, a blue circle contains icons of a hospital and a person, with the words "HEALTH CARE" below. At the bottom, the text "Anyone can get it, you can help to prevent it." is written in dark blue.

COMMUNITY

Sepsis

HEALTH CARE

**Anyone can get it,
you can help to prevent it.**



Early Recognition of Sepsis in Long-Term Care Settings



Signs and Symptoms

Recognition of Sepsis

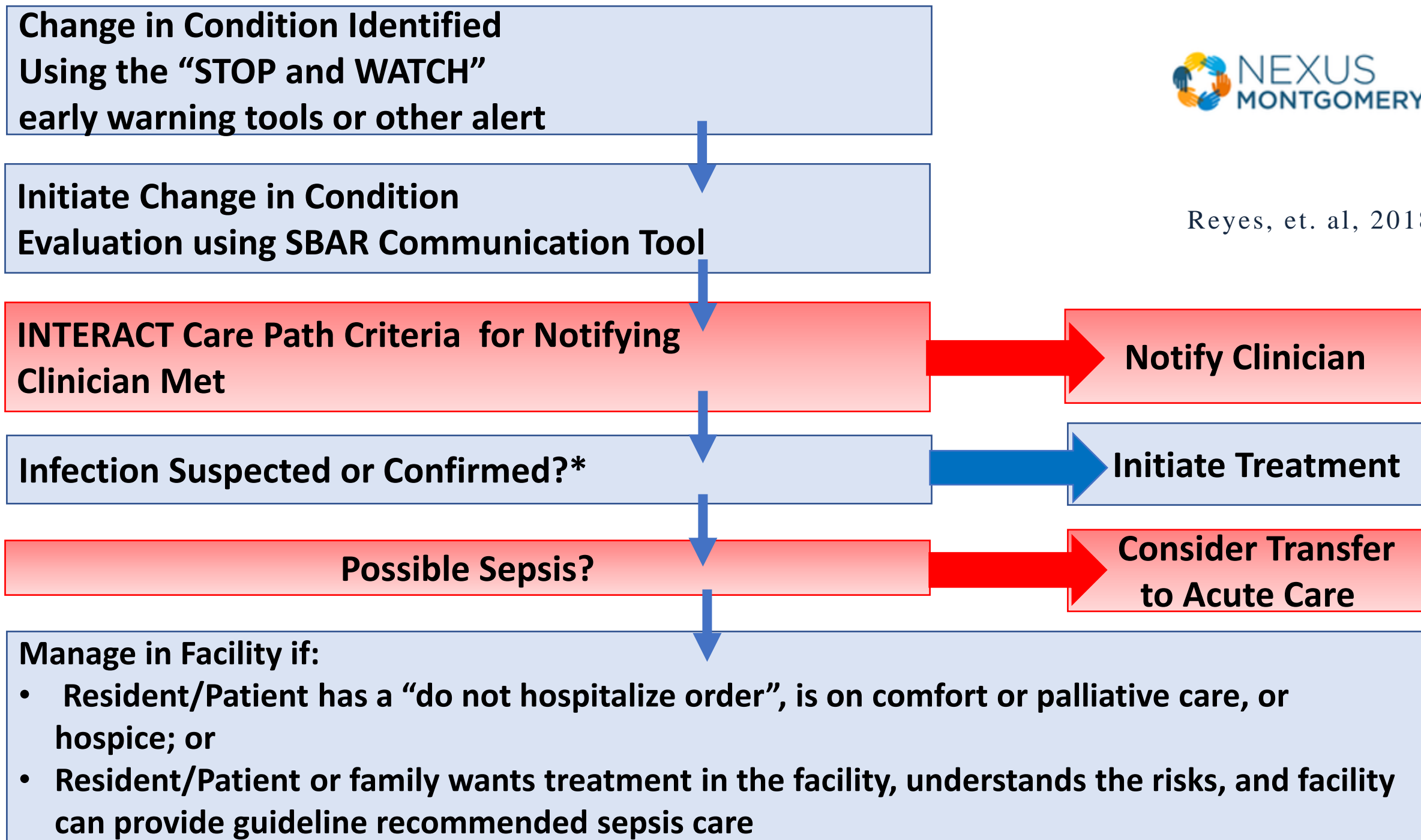
- Altered mental status
- Confusion
- Falls
- Malaise
- Tachycardia (heart rate > 90 bpm)
- Arterial hypotension (SBP < 90 mmHg, MAP < 70 mmHg, or an SBP decrease > 40 mmHg)
- Cough, dyspnea, tachypnea (respiratory rate > 22 breaths/minute)

Factors Complicating Recognition of Sepsis

- **Mental Status Changes** – Many residents have cognitive deficits making it difficult to recognize a cognitive decline
- **Increased respiratory rate** – Conditions such as asthma or COPD are common and can cause increased respiratory rate
- **Hypotension** – Medications given for hypertension, heart failure and psychological disorders can all lower blood pressure.
- **Tachycardia** – Beta blockers or cardiac conduction disorders can cause tachycardia
- **Fever** – Some residents don't exhibit fever when they are infected. Older people may have lower baselines temperatures than younger people

≡ Without prompt treatment sepsis can lead to



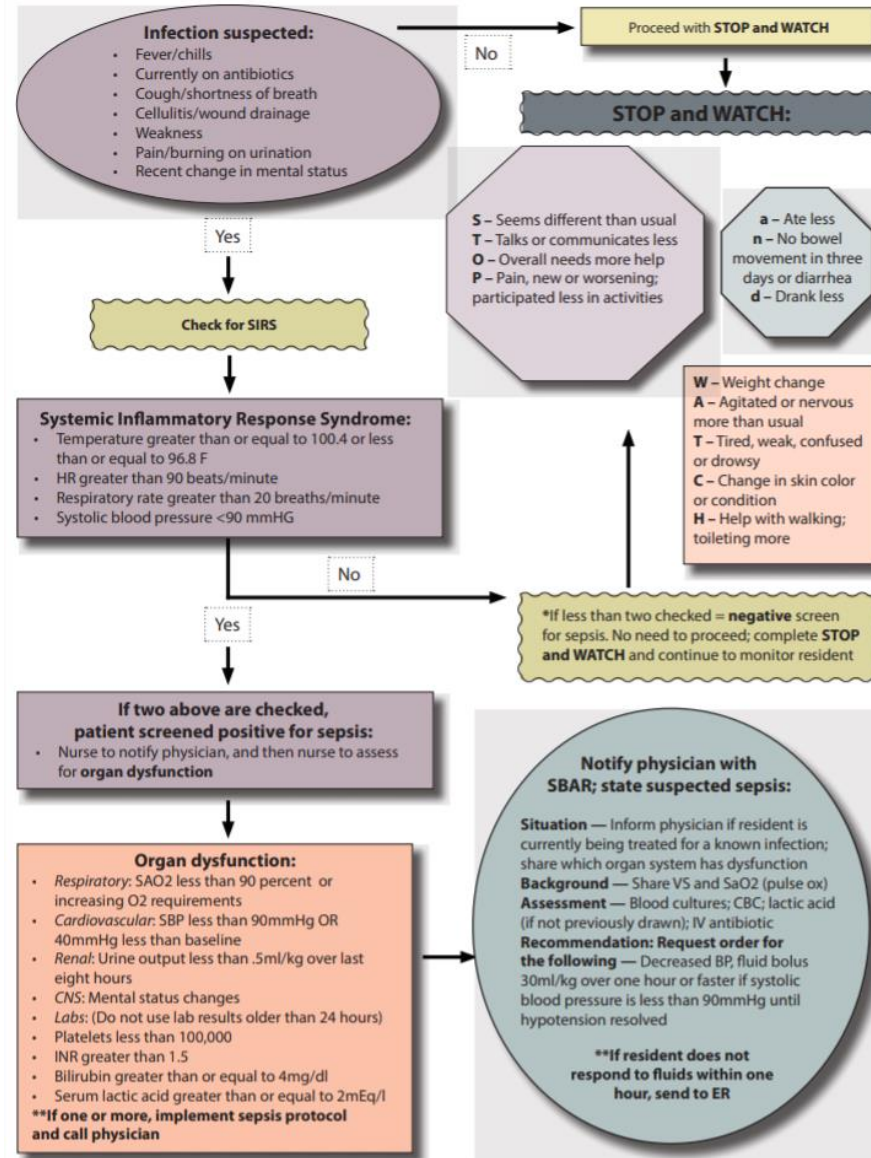


STOP and WATCH early warning tool

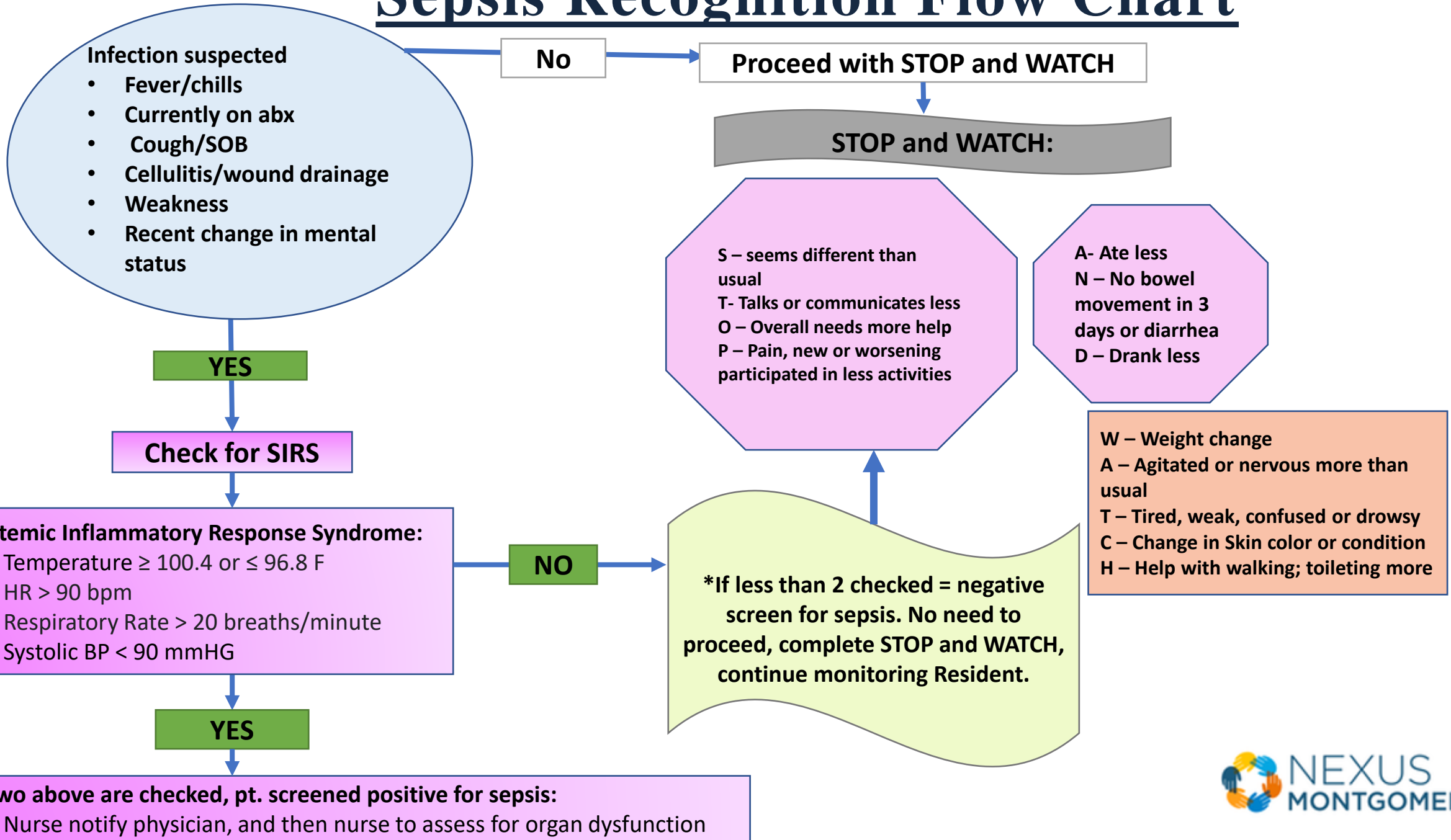
- S** Seems different than usual
- T** Talks or communicates less
- O** Overall needs more help
- P** Pain – new or worsening; Participated less in activities

- a** Ate less
- n** No bowl movement in 3 days; or diarrhea
- d** Drank less

- W** Weight change
- A** Agitated or nervous more than usual
- T** Tired, weak, confused, drowsy
- C** Change in skin color or condition
- H** Help with walking, transferring, toileting more than usual



Sepsis Recognition Flow Chart



Sepsis Recognition Flow Chart Continued



Systemic Inflammatory Response Syndrome:

- Temperature ≥ 100.4 or ≤ 96.8 F
- HR > 90 bpm
- Respiratory Rate > 20 breaths/minute
- Systolic BP < 90 mmHG

YES

If two above are checked, pt. screened positive for sepsis:

- Nurse notify physician, and then nurse to assess for organ dysfunction

Organ Dysfunction:

- **Respiratory:** SAO₂ < 90 % or increasing O₂ requirements
- **Cardiovascular:** SBP < 90 mmHG or 40 mmHg less than baseline
- **Renal:** Urine output < 0.5 ml/kg over last 8 hours
- **CNS:** Mental status changes
- **Labs:** (Do not use lab results older than 24 hours)
- **Platelets** $< 100,000$
- **INR** > 1.5
- **Bilirubin** ≥ 4 mg/dl
- **Serum lactic acid** ≥ 2 mEq/l

*If one or more, implement sepsis protocol and call physician

Notify physician with SBAR; state suspected sepsis

Situation: Inform physician if resident is currently being treated for a known infection; share which organ system had dysfunction

Background: Share VS and SaO₂ (pulse ox)

Assessment: Blood cultures; CBC; lactic acid (If not previously drawn); IV antibiotic

Recommendation: Request order for the following

- Decreased BP
- Fluid bolus 30 ml/kg over one hour or faster if systolic BP < 90 mmHG until hypotension resolved

Sepsis Recognition Flow Chart Continued



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**If Transfer to an Acute
Care Facility is needed**



Acute care transfer



Acute Care Transfer Log

You can use this tool as a worksheet for recording all acute care transfers during a month. Print more pages as needed. This tool is not necessary if you use the **INTERACT Hospitalization Rate Tracking Tool**, which allows you to enter the data directly into an Excel spreadsheet, and calculates rates and generates reports. A similar tracking tool is available through the Advancing Excellence Campaign in America's Nursing Homes at www.nhqualitycampaign.org

Facility Name _____ Month/Year _____ / _____

Resident ID	Date of Most Recent Admission to Facility	Admitted to Facility from ¹ (circle)	Status on Admission ² (circle)	Date of Acute Care Transfer	Time of Transfer (circle AM or PM)	Outcome of Transfer ³ (circle)	Reason for Transfer ⁴
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	
	/ /	Hosp H O	PAC LTC	/ /	AM PM	IP OBS ER	



≡ INTERACT TOOL FOR ACUTE MENTAL STATUS CHANGE

- Contains an algorithm that enables care staff and clinicians to determine if the resident's sepsis is serious enough to;
 - warrant transfer out of the facility
 - or managed within the long-term care setting.
- This tool also includes a comprehensive list of tests that should be ordered to determine sepsis.

https://pathway-interact.com/wp-content/uploads/2018/09/INTERACT-Care_Path_MENTAL_STATUS_CHANGE_v4.0-June-2018.pdf

≡ INTERACT TOOL FOR ACUTE CARE TRANSFER TOOL

- This tool helps to facilitate better information sharing and communication about the resident to hospital staff to help facilitate a more efficient transfer that is less disruptive to the resident, thus avoiding any lapse in care.

https://carecompassnetwork.org/wp-content/uploads/2017/03/QI_Tool-for-Review-Acute-Care-Transf_AL.pdf

≡ Considerations for Transferring a Resident to Acute Care

- Determine if patient record indicates that acute care is part of the treatment plan
- Determine if there is a DNR on record
- Discuss with nursing/medical staff
- Notify family members

≡ When Considering Transferring a Resident to Acute Care

- Make sure a complete record of symptoms, treatment, response to treatment by resident accompanies them to acute care.
- Make sure all laboratory results, whether positive or negative are sent to acute care facility preferably through a shared EMR but if not by fax or email.
- Make sure acute facility has contact information for the lab so they can discuss results if needed.
- Provide contact information for POC at LTC so that acute care staff can contact if they have questions about the transferred patient.



Case Study

Case Study

The time is 0900 pm. Deborah is a 73-year-old female who has chief complaints of weakness, dizziness, fever, and chills.

She had great difficulty standing this afternoon when she tried to go to dinner. It required two staff members to assist her.

She is a full code. Her medical history includes heart failure and hypertension. She is a one pack per day smoker. She has lived at the nursing facility for two years since her husband died.

Her current weight is 230 pounds. She has no known drug allergies. She has had limited oral intake over last two days due to nausea and decreased appetite. Her skin is pale and moist. Respirations are labored. No family has yet been notified of her condition.

Initial Assessment

Initial assessment:

Blood pressure: 84/52

NOTE: A blood pressure with a systolic value below 100 is a flag on one of the Sepsis screening tools.

Pulse: 145 – sinus tachycardia

NOTE: A pulse higher than 100 is a flag on one of the Sepsis screening tools.

Temp: 101.5

NOTE: A temperature greater than 100 is a flag on one of the Sepsis screening tools.

Oxygen saturation: 86% on room air

Respirations: 22, labored

NOTE: A respiratory rate higher than 20 is a flag on one of the Sepsis screening tools.

Lung sounds: coarse crackles

NOTE: Lung sounds could indicate infection.

Mental State: Confused. Patient states, “I feel terrible.”

NOTE: Confusion is a flag on one of the Sepsis screening tools.

≡ Resident Assessed for Infection and Organ Function

Labs were Ordered with instructions to rush results

- Lactate
- Blood cultures
- UA/UC,
- Electrolytes
- BUN
- Creatinine
- PT/INR

Sepsis Bundle Orders

Standing orders were present in the Electronic Health Record

- 30 mL/kg crystalloid bolus
- 230 pounds (104 kg) x 30 mL/kg = 3136mL for bolus (3 L of fluid)
- Started on broad spectrum antibiotics
- Vital signs at least every 15 minutes

Resident Reassessed

Vital signs following fluid bolus:

- **Blood pressure:** 78/46 (Initial Value 84/52)
- **Pulse:** 150 (Initial Value 145)
- **Temp:** unchanged
- **Oxygen saturation:** 88% on 2L
- **Respirations:** 20 – shallow (initial value 22)
- **Mental State:** Remains confused: answers questions inappropriately



Laboratory Values

Two hours later her labs are in:

- Lactate: 4.2
- WBC: 2.0
- Hemoglobin: 9.2
- Creatinine: 2.4
- INR: 2.1



What would you recommend?

1. What steps should be taken to respond to this new information about Dorothy's condition?
2. What do the results of the labs and the assessment indicate?
3. What would you recommend?



What would you recommend?

1. What concerns would you have as a nursing supervisor about Deborah?
2. What steps should the CNA take to document Deborah's change in condition?
3. What tools might be used in your facility to assist with documenting the change in condition?
4. Who should be alerted and how should they be alerted to Deborah's change in condition?

What happens to Patients following the initial Sepsis Occurrence?

- 60% are hospitalized again
- 1 in 6 die
- Most common cause of rehospitalization is infection (either unresolved/recurrent infection or new infection)
- Pneumonia most common site of infection in those hospitalized again

≡ **What are the Risk Factors for Rehospitalization?**

- Prolonged hospitalization
- Age
- Presence of an indwelling catheter