



# Nursing Home (NH) 7-Week Sepsis Sprint | Session 6

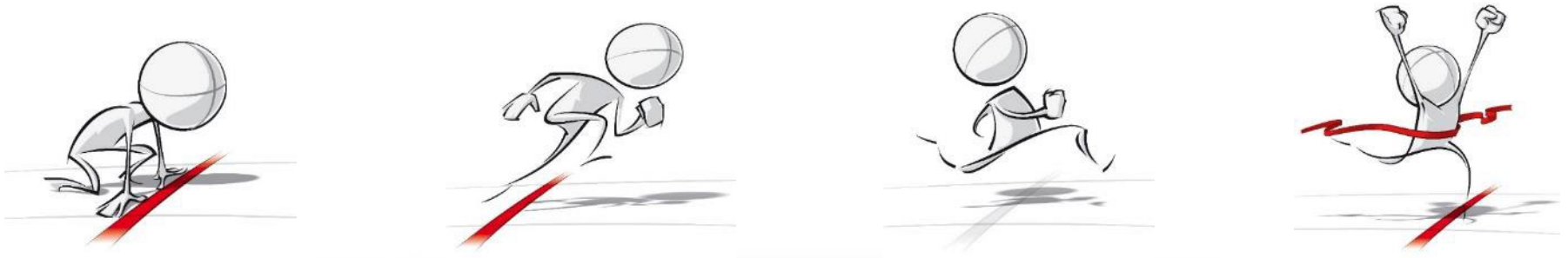
## Sepsis Sprint: On Your Mark, Get Set, Go!

### Post-Sepsis Syndrome (PSS)

Health Services Advisory Group (HSAG)

# Reminder

- Designed for each session to build upon the previous session(s) to provide a comprehensive strategy for advancing your sepsis prevention program.
- The educational component in each session was designed for you to use to educate your team and staff about sepsis.
- Each session is recorded and available on demand for you to use in your training sessions.



# Goals

1. Review the pathophysiology of PSS.
2. Discuss how to care for residents post sepsis.
3. Identify the interventions to reduce sepsis-related readmissions.





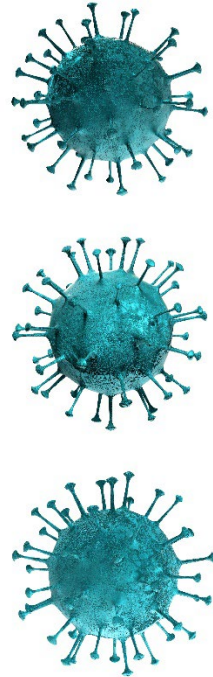
# Returning From the Hospital Post Sepsis

# What is PSS?

- PSS is a condition that affects up to 50 percent of sepsis survivors.
- PSS includes physical and/or psychological long-term effects.
- The risk of having PSS is higher among people who were admitted to an intensive care unit (ICU) and for those who have been in the hospital for extended periods of time.
- PSS symptoms can last for months or years after sepsis.

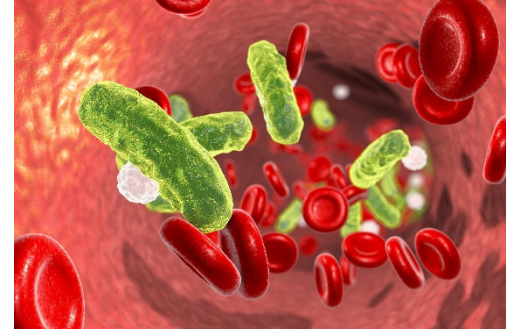
# Post-COVID Syndrome vs. PSS

- Residents who have severe COVID-19 have viral sepsis.
- COVID-19, the infection caused by the SARS-CoV-2 virus, causes sepsis and results in severe illness.
- The symptoms associated with post-COVID syndrome are identical to PSS except for the **loss of taste and smell**.
- Sepsis is rarely mentioned in relation to COVID-19.
- The lasting issues of COVID-19 are frequently referred to as post-COVID syndrome instead of PSS.



# PSS Pathophysiology

- Early in sepsis both inflammation and immunosuppression occur concurrently.
- If the inflammation is uncontrolled, it will lead to organ failure and death.
- Those that avoid the above or do not return to immune homeostasis will progress to prolonged immunosuppression.
  - This is marked by impaired cytokine secretion, dysfunctional T-cells, and reprogramming.





# PSS Pathophysiology (cont.)

- The prolonged immunosuppression results in:
  - Infections.
  - Rehospitalizations.
  - Ultimately death.





# PSS Symptoms

## Physical

- Insomnia, difficulty getting to sleep or staying asleep
- Disabling muscle and joint pain
- Fatigue, lethargy
- Shortness of breath (SOB)
- Swelling of limbs
- Repeat infections
- Poor appetite
- Hair loss
- Skin rash
- Reduced organ function (kidney, liver, heart)

## Psychological

- Nightmare, vivid hallucinations, and panic attacks
- Flashbacks
- Poor concentration
- Decreased mental (cognitive) function
- Loss of self-esteem and self-belief
- Depression
- Mood swings
- Memory loss
- Post traumatic stress syndrome (PTSD)

# PSS SBAR

**Situation:** Resident/patient has symptoms of PSS.


**Background:** A large percentage of sepsis survivors and their families experience PSS symptoms.


**Assessment:** The patient is experiencing the following symptoms:


- |  |   |
|--|---|
| <input type="checkbox"/> Insomnia, difficulty getting to sleep or staying asleep | <input type="checkbox"/> Nightmare, vivid hallucinations, and panic attacks |
| <input type="checkbox"/> Disabling muscle and joint pain                         | <input type="checkbox"/> Flashbacks   |
| <input type="checkbox"/> Fatigue, lethargy                                       | <input type="checkbox"/> Poor concentration                                 |
| <input type="checkbox"/> SOB   | <input type="checkbox"/> Decreased mental (cognitive) function              |
| <input type="checkbox"/> Swelling of limbs                                       | <input type="checkbox"/> Loss of self-esteem and self-belief                |
| <input type="checkbox"/> Repeat infections                                       | <input type="checkbox"/> Depression   |
| <input type="checkbox"/> Poor appetite   | <input type="checkbox"/> Mood swings  |
| <input type="checkbox"/> Hair loss   | <input type="checkbox"/> Memory loss  |
| <input type="checkbox"/> Skin rash   | <input type="checkbox"/> PTSD   |
| <input type="checkbox"/> Reduced organ function (kidney, liver, heart)           |   |

**Recommendation:** “I think this patient has post sepsis syndrome. Please consider a referral/consult for counseling or physical therapy.”

# PSS Assessment Tool

 **Quality Improvement Organizations**  
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FOCUSING ON MEDICAL & MEDICAL SERVICES

 **HSAG** HEALTH SERVICES ADVISORY GROUP



## Post Sepsis Syndrome (PSS) Assessment

PSS is a condition that can affect sepsis survivors and includes physical and psychological long-term effects. Complete this assessment upon admission to the facility with a diagnosis of sepsis or at any time after the resident had a sepsis diagnosis. If any of the below are present, further assessment is suggested as there may be the need for further evaluation and treatment to prevent hospital admission/readmission.

### ☒ Signs/Symptoms

- ☐ • Insomnia, difficulty getting to sleep or staying asleep
- ☐ • Muscle and joint pain
- ☐ • Fatigue and lethargy
- ☐ • Shortness of breath (SOB)
- ☐ • Swelling of limbs
- ☐ • Repeat infections
- ☐ • Poor appetite
- ☐ • Hair loss
- ☐ • Skin rash
- ☐ • Reduced organ function (kidney, liver, heart)
- ☐ • Nightmares, hallucinations, panic attacks
- ☐ • Flashbacks
- ☐ • Unable to concentrate
- ☐ • Decreased mental function
- ☐ • Loss of self-esteem
- ☐ • Depression
- ☐ • Mood swings
- ☐ • Memory loss
- ☐ • Post traumatic stress disorder (PTSD)

# PSS Treatment

- Early recognition by healthcare provider
- Cognitive/behavioral therapy
- Neuropsychiatric assessment
- Counseling
- Physical/occupational therapy
  - Neurorehabilitation
- Support groups
  - Allowing resident to share feelings



# Discharge Planning: PSS Tool

## Discharge Planning: Post Sepsis Syndrome—What Survivors Need to Know



**What is sepsis?** Sepsis is a complication caused by the body's overwhelming and life-threatening response to an infection, which can lead to tissue damage, organ failure, and death.

How will I feel when I get home?<sup>1,2</sup>



You have been seriously ill, and your body and mind need time to get better. You may experience the following physical symptoms upon returning home:

- Weakness and fatigue
- Breathlessness
- Body pains or aches
- Difficulty moving around
- Difficulty sleeping
- Weight loss, lack of appetite, food not tasting normal
- Dry and itchy skin that may peel
- Brittle nails and hair
- Unsure of yourself
- Not caring about your appearance
- Wanting to be alone, avoiding friends and family
- Flashbacks, bad memories
- Confusing reality (e.g., not sure what is real and what isn't)
- Feeling anxious, more worried than usual
- Poor concentration
- Depressed, angry, unmotivated
- Frustration at not being able to do everyday tasks

## Recovery steps



After you have had sepsis, rehabilitation usually starts in the hospital. The purpose of rehabilitation is to restore you back to your previous level of health or as close to it as possible. Begin your rehabilitation by building up your activities slowly, and rest when you are tired.

- Follow the treatment plan your healthcare provider prescribes.
- Set small, achievable goals for yourself each week.
- Follow activity restrictions, such as not driving or operating machinery, as recommended by your healthcare provider or pharmacist, especially if you are taking pain medicines.
- Rest and rebuild your strength. Try to get at least 7 to 9 hours of sleep each night.
- Eat a healthy diet.
- Drink enough fluids to keep your urine light yellow in color, unless you are told to limit fluids.
- Make a list of questions to ask your doctor when you go for a checkup.

## Appointments



- Keep follow up appointments including those for routine testing.
- Talk with your provider about any questions or fears you have.

### Measures to reduce the risk of infections and sepsis



- Vaccinate against preventable infections, such as flu, pneumonia, meningitis, or measles.
- Be aware of the early symptoms of sepsis and do not hesitate to call an ambulance—early treatment saves lives.
- Have a healthy lifestyle and respect basic hygiene measures.
- Regularly and thoroughly wash hands with soap (e.g., after using the toilet, after cleaning your nose, after contact with animals or raw meat).
- Pay attention to insect bites and skin injuries.

**Contact your doctor if you have the following symptoms:**



- Fever higher than 100.4 F or less than 96.8 F
- Shivering or very cold
- Pale discolored skin
- Pain and body aches that are worse than normal
- Nausea or vomiting
- Fast or skipping heartbeat
- Dizziness when you stand up or fainting
- Sleepiness, difficult to arouse
- New onset or increase in confusion
- Shortness of breath
- Redness, warmth, swelling, pain, or drainage of pus from any wound
- Anxiety

### References:

1. **Sepsis Definitions.** Society of Critical Care Medicine. Available at: <https://www.sccm.org/Research/Quality/Sepsis-Definitions>.  
text/The20new20recommendations20de-  
fine20sepsis,metabolic20abnormalities20substantially20increase20mortality. Singer M, et al. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). Accessed on: September 22, 2023
2. **Sepsis Alliance.** Post-Septic Syndrome – PSS. Available at: <https://www.sepsis.org/life-after-sepsis/post-sepsis-syndrome/>. Accessed on: September 22, 2023.
3. **CDC.** <https://www.cdc.gov/sepsis/pdf/life-after-sepsis-fact-sheet.pdf>.
4. **Indiana Hospital Association.** Infection and Sepsis Action Plan. <https://www.ihacenter.org/Resources/Public/Patient%20Safety/2021%20sepsis%20awareness%20month/H2A%20sepsis%20patient%20discharge%20education%20final.pdf>.

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# Key Take-Aways

- ✓ It is important to understand what happens to the body during PSS.
- ✓ Identifying the residents at high risk for PSS will help you prioritize.
- ✓ Early recognition with early treatment is vital to prevent readmissions to the hospital.



# Scenario

A 79-year-old resident returns from the hospital after being treated for sepsis. Seventy-two hours after his readmission, you notice several changes in his assessment. He has become slightly confused, appears short of breath when sitting up in bed, and the area of his forearm where there was an IV remains slightly warm and red. You assisted him in getting ready for lunch but notice he is not eating well. Upon interview, he complains that the food has a different taste. What diagnosis do you believe this resident has?

- A. Cellulitis
- B. COVID-19
- C. PSS





# Actionable Item?



## What will you do?

Before the next session, what is one thing you can commit to doing?

# Questions?



# Join Us For The Next Session

<b>Sepsis Sprint Kick-Off: On Your Mark, Get Set, Go!</b>	September 26, 2023
<b>Sepsis, the Silent Killer: On Your Mark!</b>	October 3, 2023
<b>Hand Hygiene—Spread the Word Not the Germs: Get Set!</b>	October 10, 2023
<b>Don't Wait Until It's Too Late to Vaccinate: Get Set!</b>	October 17, 2023
<b>Sepsis Prevention and Screening in NHs: Get Set!</b>	October 24, 2023
<b>Post Sepsis Syndrome and Readmissions: Get Set!</b>	October 31, 2023
<b>Wrap Up: Go!</b>	November 7, 2023



Thank you!



## Disclaimer

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