

Patient Name _____

MRN _____ Date _____

PERFORMANCE EXCELLENCE 2020

Developing a STEEP clinical experience systemwide



Main Line Health®

Sepsis Flowchart and Handoff Tool

TRIAGE/ASSESSMENT

Think SEPSIS if the patient has:

- ☐ Suspected/confirmed infection

AND

- ☐ **2+ SIRS criteria:**

- T > 100.4 or < 96.8
- HR > 90
- RR > 20
- WBC > 12,000 or < 4000 or > 10% Bands

SEVERE SEPSIS – Sepsis (above) and:

- ☐ **Organ dysfunction as evidenced by 1 of the following:**

- SBP < 90
- MAP < 65
- Lactate > 2
- Creatinine > 2
- INR > 1.5 or PTT > 60
- Acute respiratory failure requiring BiPAP or intubation
- Platelet count < 100,000
- Total Bilirubin > 2 mg/dL

IF SEPSIS SUSPECTED:

- ☐ Notify physician time
 - Time severe sepsis is identified: _____
 - Patient weight: _____ kg
 - Proceed to *Sepsis Flowchart*

SEPTIC SHOCK

Think SEPTIC SHOCK if the patient meets Severe Sepsis +

- Tissue hypoperfusion after 30ml/kg fluid administration as evidenced by SBP < 90 or MAP < 65 (2 consecutive readings)
- Or initial Lactate ≥ 4
- Or **documentation** by provider

SEPSIS FLOWCHART

Must be completed within 3 hours of Sepsis Time

- ☐ Draw initial Lactate level
 - Result _____ Time drawn _____
- ☐ Draw blood cultures – 2 sets
 - Before antibiotics administration
 - **Document** actual time drawn _____
- ☐ Insert 2 IVs for **SIMULTANEOUS** antibiotics administration
- ☐ Administer antibiotics **SIMULTANEOUSLY**
 - Time admin #1 _____ #2 _____ #3 _____
(Gram negative coverage first - see reverse)
 - Ensure scanned in EMR

For patients with SBP < 90, MAP < 65, or Lactate ≥ 4

- ☐ Resuscitation with **30 ml/kg** crystalloid fluid
 - Total volume to be administered _____
 - **Document** fluid type, rate, volume, route, time hung and time discontinued
 - Handoff – Volume given thus far _____

Must be completed within 4 hours of Sepsis Time

Note: fluid resuscitation ongoing or completed

- Draw repeat Lactate level if initial Lactate > 2
Result _____ Time drawn/due _____

If Septic Shock -> must be completed within 6 hours of Sepsis Time

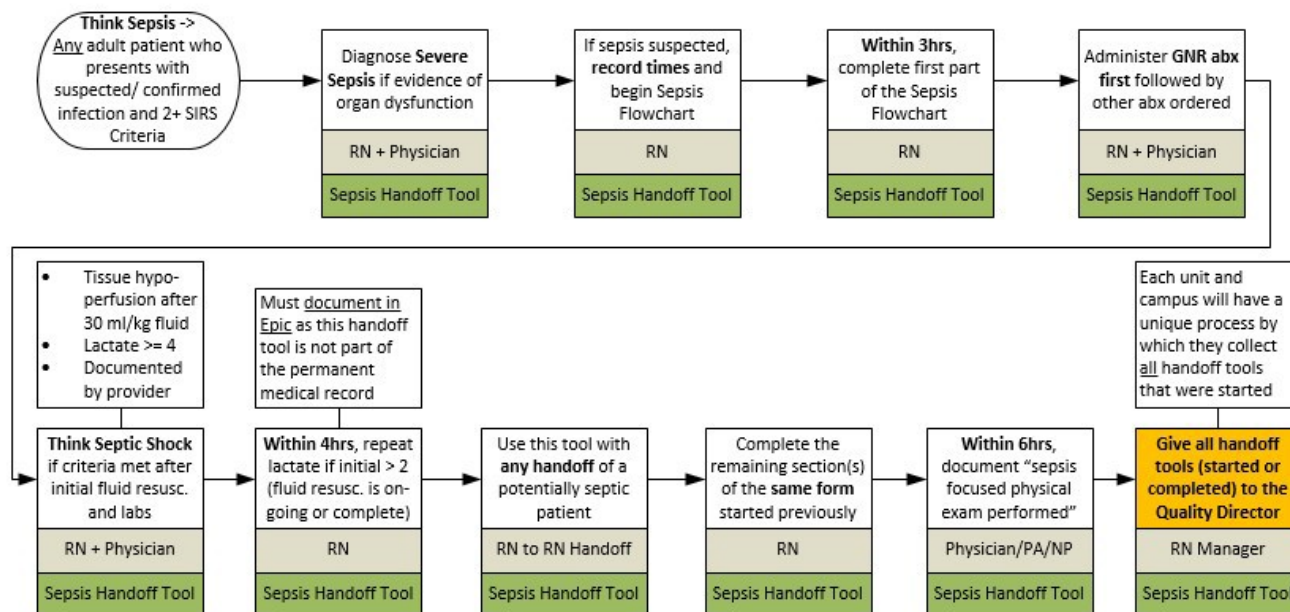
- ☐ Repeat volume status and tissue perfusion assessment
 - **Documentation** by a physician/PA/NP that “sepsis focused physical exam performed”
- ☐ If SBP < 90/MAP < 65 after 30 mL/kg of fluid administer a vasopressor:
 - Norepinephrine +/- Vasopressin (**preferred**)
 - OR**
 - Epinephrine, Phenylephrine, Dopamine (**if clinical condition requires**)

***PLACE ON FRONT OF CHART AS SOON AS SEPSIS PATIENT IDENTIFIED**

***USE TOOL IN HANDOFF/ COMMUNICATION WITH PROVIDERS AND NURSES *DOCUMENT IF PATIENT IS ON COMFORT CARE OR HOSPICE**
NOT PART OF THE PERMANENT MEDICAL RECORD / PLEASE SEND TO QUALITY DEPARTMENT WITHIN 24 HOURS

Safe – Timely – Efficient – Effective – Equitable – Patient-Centered

PROCESS TO COMPLETE AND SUBMIT THE HANDOFF TOOL



ANTIBIOTICS

Gram Negative Coverage (GNR)

1. Ceftazidime (Fortaz[®])
2. Piperacillin/tazobactam (Zosyn[®])
3. Imipenem/Cilastatin (Primaxin[®])
4. Ceftriaxone (Rocephin[®]) – community-acquired
5. Levofloxacin (Levaquin[®])

To be used in combination:

Amikacin (loading dose: 15-20 mg/kg of adjusted body weight)
Gentamicin (loading dose: 5-7 mg/kg of adjusted body weight)

For Penicillin allergic patients:

Aztreonam (Azactam[®])

Gram Positive Coverage

1. Vancomycin (Vancocin[®]) (loading dose 15-20 mg/kg)
2. Daptomycin (Cubicin[®]) (loading dose 6-8 mg/kg)

WHY FOCUS?

- Sepsis Bundle rate adherence is low across MLHS
- Sepsis will become a Core Measure
- ICU utilization and cost of care for sepsis patients are higher than benchmark

MEASURES

Process Measures: Handoff Tool Utilization = number of initiated handoff tools/ total number patients with a primary or secondary dx of sepsis (target = 50%)

Outcome Measures: Bundle Adherence Rate (target = 55%), Sepsis In- Hospital Mortality, Sepsis Critical Care Mortality, Sepsis Cost per Case

REFERENCES

1. Freund Y. et al. "Prognostic Accuracy of Sepsis-3 Criteria for In-Hospital Mortality Among Patients with Suspected Infection Presenting to the Emergency Department." *JAMA*, 2017; 317(3):301-308.
2. Rhodes A. et al. "Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016." *Journal of Critical Medicine*, 2017; 45(3); 486-552.
3. Singer M. et al. "The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)." *JAMA*, 2016; 315(8):801-810.

DESIGN TEAM

Dr. Bharti Asnani
Dr. Stuart Brilliant
Dr. Lia Desposito *
Mary DeSimone
Dr. Alyson Dobracki
Dr. Jim Gengaro
Eileen German
Andrea Hafer
Connie Lawrey
Diane Lynch
Stefanie McMahon *
Vicki Morrell
Jen Muner
Dr. Clark Piatt
* Team Lead

QUESTIONS: Contact Dr. Lia Desposito (DespositoL@MLHS.org) or Stefanie McMahon (McMahonS@MLHS.org)