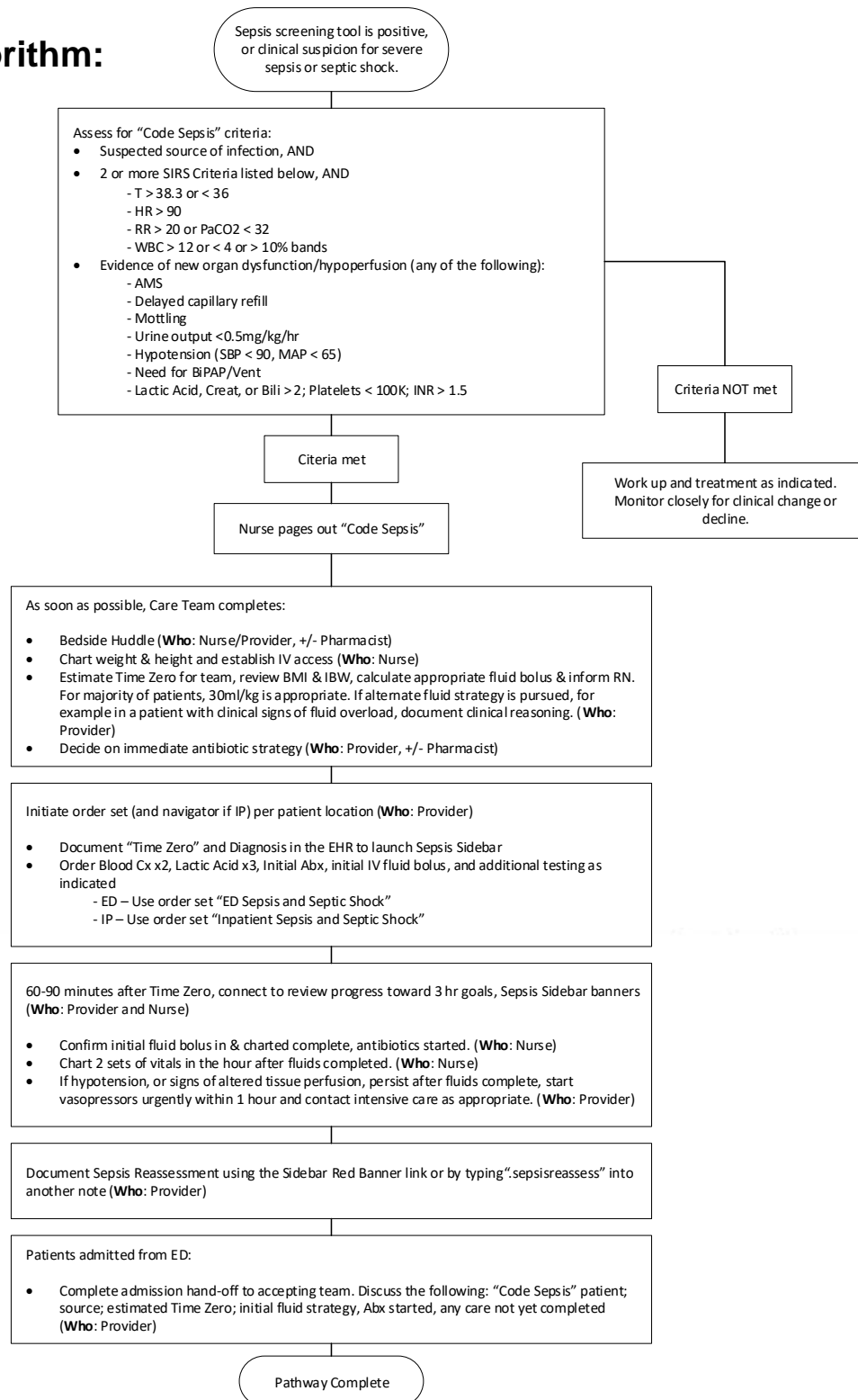


Clinical Pathway: Sepsis, Severe Sepsis and Septic Shock - Adult Inpatient

Updated: February 24, 2022

Clinical algorithm:



Clinical Pathway Summary

CLINICAL PATHWAY NAME: Severe Sepsis & Septic Shock - Adult

PATIENT POPULATION AND DIAGNOSIS: Care of adult patients with Severe Sepsis or Septic Shock upon meeting diagnostic criteria

APPLICABLE TO: All Spectrum Health West Michigan sites

BRIEF DESCRIPTION:

This clinical pathway outlines the identification and treatment of adult patients meeting criteria for severe sepsis or septic shock, referred to collectively as "Code Sepsis". Criteria are defined for the diagnosis and time zero. Best practice care goals are then completed in the first 3 hours and 6 hours after time zero. EHR tools support the accomplishment of these goals, including order sets, a dynamic Sepsis Sidebar, and dot phrases for provider documentation. Responsibility to complete the care goals lie with ED providers, attending providers, admitting providers, APPs, and bedside nurse teams.

OPTIMIZED CLINICAL DECISION SUPPORT: Sepsis screening tool, Sepsis Sidebar, order set "ED Sepsis and Septic Shock", order set "Inpatient Sepsis and Septic Shock"

OVERSIGHT TEAM LEADER(S): Dr. Nicholas Kuhl, Dr. Stephen Fitch, Dr. Benjamin Busman

OWNING EXPERT IMPROVEMENT TEAM (EIT): Sepsis

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Acute Health & Continuing Care CPC

OTHER TEAM(S) IMPACTED (FOR EXAMPLE: CPCs, ANESTHESIA, NURSING, RADIOLOGY): Nursing, Pharmacy, ED, ICU, Hospitalists and other admitting providers (Neurology, Cardiology, Oncology, Surgical Services)

IMPLEMENTATION DATE: September 2020

LAST REVISED: 2/24/2022

FOR MORE INFORMATION, CONTACT: Nicholas Kuhl, MD

LINK TO METRIC DASHBOARD: [Severe Sepsis and Septic Shock: Views - Tableau Server \(spectrum-health.org\)](https://spectrum-health.org)

Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

1. Sepsis screening tool fires, or nurse or provider has suspicion for Severe Sepsis or Septic Shock
2. Assess for "Code Sepsis" criteria:
 - Suspected source of infection, AND
 - 2 or more SIRS Criteria listed below, AND
 - T > 38.3 or < 36
 - HR > 90
 - RR > 20 or PaCO₂ < 32
 - WBC > 12 or < 4 or > 10% bands
 - Evidence of new organ dysfunction/hypoperfusion (any of the following) AMS, delayed capillary refill, Mottling, Urine output <0.5mg/kg/hr, Hypotension (SBP < 90, MAP < 65), need for BiPAP/Vent, Lactic Acid, Creat, or Bili > 2; Platelets < 100K; INR >1.5
3. If criteria met, nurse to page out a "Code Sepsis". As soon as possible, care team completes the following:
 - Bedside Huddle: Nurse/Provider/Pharmacist
 - Nurse: Chart weight & height and establish IV access (if not already done)
 - Provider: Estimate Time Zero for team, review BMI & IBW, calculate appropriate fluid bolus & inform RN. For majority of patients, 30ml/kg is appropriate. If alternate fluid strategy is pursued, for example in a patient with clinical signs of fluid overload, document clinical reasoning. (Use ED's orderset revision if we can for the inpatient space also)
 - Provider (with Pharmacist if present) decide on immediate antibiotic strategy
4. Provider initiates order set (and navigator if IP) per patient location
 - Document "Time Zero" and Diagnosis in the EHR to launch Sepsis Sidebar
 - Order Blood Cx x2, Lactic Acid x3, Initial Abx, initial IV fluid bolus, and additional testing as indicated

ED - Use order set "ED Sepsis and Septic Shock"
IP - Use order set "Inpatient Sepsis and Septic Shock"
5. 60-90 minutes after Time Zero, provider & RN connect to review progress toward 3-hour goals, Sepsis Sidebar banners
 - Nurse: Confirm Initial fluid bolus in & charted complete, Antibiotics started.
 - Nurse: Chart 2 sets of vitals in the hour after fluids completed
 - Provider: If hypotension, or signs of altered tissue perfusion, persist after fluids complete, start vasopressors urgently within 1 hour and contact intensive care as appropriate
6. Provider documents Sepsis Reassessment using the Sidebar Red Banner link or by typing ".sepsisreassess" into another note

7. If patient is being admitted from ED, provider completes admission hand off to accepting team. Discuss the following: "Code Sepsis" patient; source; estimated Time Zero; initial fluid strategy; Abx started; any care not yet completed

References:

Surviving Sepsis Campaign, CMS Severe Sepsis and Septic Shock Management Bundle

Early Care of Adults With Suspected Sepsis in the Emergency Department and Out-of-Hospital Environment: A Consensus-Based task Force Report

<https://doi.org/10.1016/j.annemergmed.2021.02.006>