

ADULT SEPSIS ASSESSMENT (≥18 years of age) and Physician Approved Sepsis Nursing Protocol

PURPOSE

To use a standardized, physician approved, nursing assessment and protocol to assess and/or screen all adult patients ≥ 18 years of age for Sepsis, Severe Sepsis or Septic Shock and implement specified elements of the Severe Sepsis/Septic Shock treatment bundle as indicated. The physician approved sepsis nursing protocol will be implemented system wide for all qualifying UCLA Healthcare inpatients ≥ 18 years of age.

SCOPE

This health system protocol applies to Registered Nurses (RNs) only and includes the Emergency Department (ED) and inpatient population ≥ 18 years of age at Ronald Reagan UCLA Medical Center and Santa Monica UCLA Medical Center & Orthopaedic Hospital. The protocol does not apply to the Resnick Neuropsychiatric Hospital (RNPH) at UCLA.

PROTOCOL Assessment

All patients ≥18 years of age will be screened/assessed for sepsis, severe sepsis, &/or septic shock upon triage to the Emergency Department (ED). Ongoing **reassessment** will occur in order to evaluate and/or update a patient's status to reflect changes as needed and to follow up with additional lab testing and/or treatment as warranted.

All inpatients ≥18 years of age will be screened/assessed/reassessed for sepsis, severe sepsis, &/or septic shock upon admission to all inpatient floors and/or units. Ongoing reassessment will occur throughout the hospitalization in order to evaluate and/or update a patient's status to reflect changes and additional treatment as needed. The adult sepsis assessment tool must be completed only by a Registered Nurse (RN). The completed sepsis assessment tool will be completed in the electronic medical record (EMR) and will become a permanent part of the patient's medical record (see Appendix I).

Criteria/Definitions

The following definitions and criteria were established for the purposes of the UCLA Health System–Bridge to Reform: Proposal for 1115 Medicaid Waiver under the California Delivery System Reform Incentive Payment Plan (DSRIP) (see Appendix IV); Surviving Sepsis Campaign (SSC) Updated Bundles 2015;

National Specification Manual for Hospital Inpatient Quality Measures version 5.0a: Core Measures: Early Management Bundle, Severe Sepsis/Septic Shock.

Systemic Inflammatory Response Syndrome (SIRS) = two (2) or more of the following:

- Temp $>38.3^{\circ}\text{C}$ (101°F) OR $<36^{\circ}\text{C}$ (96.8°F)
- HR $> 90/\text{min}$
- RR $> 20/\text{min}$
- WBC $>12,000$ or $< 4,000$ OR $>10\%$ Bands

Sepsis = Two (2) or more SIRS criteria *plus* a suspected or confirmed infection or immunocompromised (PNA, UTI, wound, etc.)

Severe Sepsis = Sepsis *plus* organ dysfunction &/or organ failure

Septic Shock = Severe Sepsis *plus* hypotension (SBP < 90 or MAP < 65 or decrease in SBP > 40 from baseline) &/or elevated lactate level $> 36\text{mg/dL}$ (4mmol/L)

Once a patient screens positive for **Severe Sepsis** and/or **Septic Shock**, the physician approved sepsis protocol should be implemented in the electronic medical record (EMR-CareConnect) by the RN.

Implementation

For all positive **severe sepsis** and/or **septic shock** assessments, the RN will immediately initiate an electronic order in CareConnect to obtain the following labs: (physician may choose to order additional labs, tests, and/or procedures; however, the following are minimum requirements per the six hour Sepsis bundle)

- 1) Serum **lactate** level (4mL to be obtained in a grey top tube to be sent to lab on ICE within 15 minutes of blood draw) and draw TWO (2) sets of blood cultures (to be obtained from two different sites); a total of 4 bottles, minimum of 8-10 mL per bottle.

Repeat lactate if initial lactate level is > 18 ; and

RN will also immediately notify physician of positive sepsis assessment and request the following electronic physician orders. Physician may also order additional labs and/or tests or procedures as indicated. (RN may use Appendix III-Nurse Call Script as needed)

- 2) **Broad-spectrum antibiotics**, using the electronic adult sepsis order set in CareConnect, to be initiated within one (1) hour of positive assessment; *and*
- 3) **IV fluid bolus of 30mL/kg to be initiated within 1 hour of time of presentation (TOP) and completed within 3 hours of time of presentation (TOP) of septic shock** (per 2015 National Specification Manual for Hospital Inpatient Quality Measures version 5.0a: Core Measures: Early Management Bundle, Severe Sepsis/Septic Shock

If physician declines to order Broad Spectrum antibiotics and/or the required amount of IV fluid bolus, based on a positive sepsis assessment, the RN should document in the patient's electronic medical record: the name of physician, reason(s) why Broad Spectrum antibiotics are not ordered for patient with severe sepsis or septic shock, and why IV fluid bolus of 30 mL/kg is not ordered for patient with septic shock. The RN may request the physician come to floor/unit to assess the patient to confirm a positive sepsis assessment and/or to determine the need for transfer of patient to a more acute setting.

Following physician's submission of electronic order for broad spectrum antibiotic(s) and/or IV fluids, the RN will contact pharmacy by phone to identify the need for STAT broad spectrum antibiotic(s) and/or fluids for all patients with severe sepsis or septic shock. The pharmacy will verify the request and dispense the appropriate medication(s) to RN within 30 minutes of receipt of physician order. Once antibiotic(s) and/or fluids are received, RN will assure that the both sets of blood cultures (2 bottles each) have been drawn and then administer the first dose of antibiotic(s) and start fluids within one (1) hour of the time of positive severe sepsis or septic shock assessment.

If there is a delay greater than one (1) hour from the time of patient's positive sepsis assessment to the time the patient receives the first dose of antibiotics, the RN will complete an online Event Report for a delay in antibiotic administration.

*NOTE: The RN should obtain lactate and collect blood cultures X 2 (4 bottles) prior to administering antibiotic(s), or prior to a change in antibiotic(s), following a positive sepsis assessment. The RN should not wait for lab results to administer the first dose of antibiotics or begin IV fluid bolus.

Administration/Documentation

The RN will administer antibiotic(s) and/or IV fluids as ordered by the physician. Administration of the antibiotic(s) and fluids must be documented in the patient's medication administration record. Blood cultures should be drawn prior to administration of antibiotics and documentation should reflect blood culture collection.

Training/Competencies

All UCLA Health System RNs will be provided either a written copy or directional link to the new Adult Sepsis Assessment (≥ 18 years of age) and Physician **Approved Sepsis Nursing Protocol**. All nursing staff will complete required CareConnect training, as well as annual competency education and training with post-testing and evaluation, on all required nursing assessments and documentation requirements, including the Adult Sepsis Assessment and Sepsis

Nursing Protocol. Additionally, all newly hired RNs are required to complete hospital wide nursing orientation which includes the same education component, training, and post-test/evaluation as what is offered for the annual nursing competencies.

With the assistance of the UCLA Health System Human Resources Department and Nursing Research and Education, all nursing education, annual competencies, and post-testing compliance exams for all sepsis education and training is tracked online by the Sepsis Coordinator and each Unit Director.

FORMS

Appendix I – Electronic Version of the Adult Sepsis Assessment (CareConnect)

*Appendix II – Positive Sepsis Assessment: Nurse Call Script (for use by RN as needed)

Appendix III - Adult Sepsis Order Set for inpatients ≥ 18 years of age (Form# 16037-rev. 7/29/2015. Written orders are the same as electronic orders in CareConnect)

*Appendix IV – Inpatient Adult Sepsis Assessment Tool (≥ 18 years of age).
Written form to be used during EMR/CareConnect downtime only
(*) Appendices included with online protocol posting

REFERENCES

California Safety Net Institute (SNI) Sepsis Prevention Collaborative
UCLA Health System–Bridge to Reform Proposal for 1115 Medicaid Waiver,
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