Appendix A: Nursing Sepsis Management Order Set

❖ **CMS Sepsis Management Components and Interventions ***
❖ **IV/Central Line Access – Hemodynamics Monitoring**
➢ IV/Central Line Access
• Initiate and maintain IV
- Insert peripheral line- routine, once - Sodium chloride 0.9% flush 10ml- 10ml, intravenous, Q 12 hours scheduled and as needed
➢ Hemodynamics Monitoring: If patient has Internal Jugular or Subclavian Venous Central Line
• Hemodynamics Monitoring: CVP- Q 1 hour
❖ **Nursing**
➢ Nursing
• Vital signs- T/P/R/BP Q 1 hour: Monitor Q 1-hour x 3 hours, or more frequently as indicated by clinical conditions and assessment findings, then re-evaluate frequency of vital assessment
• Pulse Oximetry- Place SpO2 monitor
➢ Notify Provider
• For MAP less than 65 mmHg or greater than 80 mmHg
• For heart rate less than 60 or greater than 120
• For urine output less than 30 ml/hour
• Immediately for any acute changes in patient condition (mental status, vital signs)
❖ **Initial Management of Suspected Sepsis**
➢ Laboratory- Microbiology
• Blood culture x2 (aerobic & anaerobic)- collect before antibiotics given. Draw each set from a different peripheral site
• Urine analysis and microscopy, with reflex to culture- once. Specimen must be received in the laboratory within 2 hours of collection
➢ Laboratory- Stat
• Lactic acid level, SEPSIS, Now and repeat 2 every 3 hours
• CBC with platelet and differential
• Comprehensive metabolic panel
• Prothrombin time with INR
• Partial prothrombin time, activated
❖ **Consult Sepsis Response Team**

Note. Adapted from Methodist's electronic medical records (EHRs) system. *: clicking this item will lead to drop-down instructions about CMS diagnostic criteria and treatment guidelines on severe sepsis and septic shock. CVP: central venous pressure; MAP: mean arterial pressure; T/P/R/BP: Temperature/pulse/respiratory rate/blood pressure; Q- every; CBC: complete blood count.

Appendix B: Definitions of Systemic Inflammatory Response Syndrome, Sepsis, Severe Sepsis, & Septic Shock

Infection: The presence of a suspected or confirmed clinical infectious process of bacterial, viral, fungal or parasitic origin.
Systemic inflammatory response syndrome (SIRS): the systemic inflammatory response to a variety of severe clinical insults. The response is manifested by two or more of the following conditions: (1) Temperature greater than 38.3 or less than 36.0 C (2) Heart rate greater than 90 beats per minute (3) Respiratory rate greater than 20 breaths per minute or $PaCO^2$ less than 32 mm Hg (4) White blood cell count greater than 12,000/cu mm, less than 4,000/cu mm, or greater than 10% immature (band) forms.
Sepsis: The systemic response to infection, SIRS (see above) and suspected or confirmed infection.
Severe Sepsis: sepsis (see above) associated with organ dysfunction, hypoperfusion, or hypotension. Hypoperfusion and perfusion abnormalities may include, but are not limited to, any ***one or more*** of the following thought to be due to infection: (1) lactic acidosis: lactate greater than 2mmol/L (2) oliguria: urine output less than 0.5mL/kg/hr for more than 2 hours despite adequate fluid resuscitation (3) invasive or non- invasive mechanical ventilation acute lung injury with Pao2/FI02 less than 250 in the absence of pneumonia as infection source (4) invasive or non- invasive mechanical ventilation acute lung injury with Pao2/FI02 less than 200 in the presence of pneumonia as infection source (5) creatinine greater than 2.0mg/dl (6) bilirubin greater than 2mg/dl (7) platelet count less than 100,000μmol (8) coagulopathy (international normalized ratio greater than 1.5) (9) acute alteration of mental status. (10) SBP less than 90 mmHg *OR* MAP less than 65 *OR* SBP decreased by 40 points
Septic Shock: Severe sepsis (see above) with initial lactate of 4 or greater; severe sepsis with hypotension despite adequate fluid resuscitation and requirement for inotropic or vasopressor agents.
Time of presentation: Provider* documentation of severe sepsis or septic shock or from the earliest chart annotation consistent with all elements of severe sepsis or septic shock as detailed in policy above, whichever is earliest.
Adequate fluid resuscitation: Administration of 30mL/kg of crystalloid solution

Note. Derived from HMH POLICY System_PCP151. *: Any physician, nurse practitioner or physician assistant. MAP: mean arterial pressure; SBP: systolic blood pressure.