Effectively Managing Sepsis Denials

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Learning Objectives

• At the completion of this educational activity, the learner will be able to:
  – Define sepsis, severe sepsis, and septic shock
  – Discuss sepsis core measures
  – Describe denials management of sepsis claims
Agenda

- Definition of sepsis
- Severe sepsis and septic shock
- Sepsis core measure
- Confusion surrounding sepsis criteria
- Denial doldrums
- Questions

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What Is Sepsis?

A clinical syndrome characterized by an overwhelming systemic inflammatory response to an infection

The systemic inflammatory response disrupts homeostasis through uncontrollable cascade

- Excessive inflammation
- Hypercoagulation
- Fibrinolysis
- Microvascular hypoperfusion
- Organ dysfunction
- Increased mortality
Recognizing Sepsis

There is **NO** single sign or symptom.

It is a collection or combination of signs and symptoms.

<table>
<thead>
<tr>
<th>Common manifestation of sepsis</th>
<th>Sign or Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altered mental status</td>
<td>Altered mental status including confusion, irritability, and lethargy</td>
</tr>
<tr>
<td>Bandemia</td>
<td></td>
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<tr>
<td>Elevated CRP and/or pro-calcitonin</td>
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<tr>
<td>Fever, chills, myalgias (temperature ≥ 38°C or ≥ 100.4°F)</td>
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<tr>
<td>Hyperglycemia in diabetes</td>
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<tr>
<td>Hyperlactatemia</td>
<td></td>
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<tr>
<td>Hypoventilation</td>
<td></td>
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<tr>
<td>Hypoxemia</td>
<td></td>
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<tr>
<td>Leukocytosis (white blood count ≥ 12,000 cells/mm³) and/or (≥ 10% immature white blood cells, &quot;bands&quot;)</td>
<td>Positive blood culture for bacteria (may or may not have positive blood cultures)</td>
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<tr>
<td>Proteinuria</td>
<td></td>
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<tr>
<td>Skin rash</td>
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<tr>
<td>Tachycardia (&gt; 90 beats per minute)</td>
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<tr>
<td>Tachypnea (respiratory alkalosis) (respiratory rate ≥ 20 breaths per minute)</td>
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</tbody>
</table>
Symptoms of Sepsis

- Shivering, fever, or very cold
- Pale or discolored skin
- “I feel like I might die”
- Extreme pain or general discomfort (“worst ever”)
- Sleepy, difficult to wake up, confused
- Short of breath

Source: CDC Sepsis Fact Sheet. For informational purposes only. Information should not be taken as definitive, comprehensive, exclusive, or diagnostic in nature.
Severe Sepsis/Septic Shock
Severe Sepsis and Septic Shock

**Severe Sepsis:**
This is still sepsis, but this degree of sepsis causes organs to malfunction and blood flow to become inadequate to parts of the body.

**Septic Shock:**
This is a worsening of severe sepsis, but now involves the circulatory system such as persistent hypotension which is refractory to fluid and requires a vasopressor.
Sepsis Signs and Symptoms

• Common manifestations seen in **severe sepsis or septic shock**:  
  – Acute liver failure  
  – Acute renal failure  
  – Acute respiratory failure  
  – Adult respiratory distress syndrome (ARDS)  
  – Cold, clammy, grayish-blue (cyanotic) skin  
  – DIC (disseminated intravascular coagulation)  
  – Encephalopathy  
  – Hypoglycemia  
  – Hypophosphatemia  
  – Hypotension
Sepsis Signs and Symptoms

• Common manifestations seen in **severe sepsis or septic shock** (cont.):
  – Hypothermia (temperature ≤ 36°C or ≤ 96.8°F)
  – Increased cardiac output with a low systemic vascular resistance
  – Increased O2 consumption
  – Leukopenia/leukemoid reaction (≤ 4,000 cells/mm³)
  – Metabolic acidosis/lactic acidosis (due to impaired organ function); pH < 7.30 and a plasma lactate > 1.5 times the upper limit of normal for the lab
  – Oliguria/decreased urine output (< 0.5 mL/kg/hr for 1 hour in the face of adequate intravascular volume or after adequate fluid challenge)
  – Prothrombin-INR greater than 1.2 that cannot be explained
  – Shock
  – Stupor, coma
  – Thrombocytopenia (< 100,000 platelets/mm³)
CMS IQR: Sepsis Core Measures
Sepsis Bundle Project

• Includes patients age 18 and over with a principal or other diagnosis code of sepsis, severe sepsis, or septic shock

Severe sepsis:

– Provider documentation of a suspected source of clinical infection
– Two or more SIRS criteria
– Organ dysfunction, evidenced by any one of the following:
  - SBP < 90 or MAP < 65 or a systolic BP decrease of more than 40 points
  - Creatinine > 2.0 or urine output < 0.5 mg/kg/hr for 2 hours
  - Bilirubin > 2 mg/dL
  - Platelet count < 100,000
  - INR > 1.5 or PTT > 60 sec
  - Lactate > 2.0 mmol/L
Sepsis Bundle Project

Septic shock:

• Provider documentation of severe sepsis

  and

• Tissue hypoperfusion persists in the hour after crystalloid fluid administration, evidenced by one of the following:
  – SBP < 90
  – MAP < 65
  – Decrease in SBP by > 40 points
  – Lactate level > 4.0
Sepsis: Key Concepts

- Key concepts of the measure:
  - The time of presentation (TOP)
  - Patient meeting criteria
    - Severe sepsis
    - Septic shock
Severe Sepsis: Completed Within 3 Hours

Top

Requirements:

• Draw lactate level
• Draw blood cultures x 2 (4 bottles) **before** antibiotics
• Administer broad-spectrum antibiotics
  – Piperacillin/tazobactam
  – Imipenem
  – Levofloxin
• Administer 30 ml/kg IV fluids (NS, LR) for hypotension or lactate
  \[ \geq 4\text{mmol/L} \text{ or } \geq 36 \text{ mg/dL} \]
Sepsis Bundle

Blood cultures x 2 (prior to starting antibx)
Serum lactate level
Broad-spectrum antibiotics (give 1st dose w/in 1 hour of onset of severe sepsis/septic shock)
IV fluid bolus minimum 30 mL/kg (vasopressor w/in 1 hour persistent hypotension septic shock)

1 hour: Septic shock / 3 hours: Severe sepsis
6 hours: Severe sepsis
CMS: SEP-1 Sepsis Guidelines

- Severe sepsis is defined as sepsis plus a lactate > 2 or evidence of organ dysfunction
- You need to meet ALL the measures in order to be compliant with this core measure
- Patients with septic shock require an assessment of volume status and tissue perfusion within 6 hours of presentation
- Patients NOT included are those transferred from another facility or those placed on comfort care

https://www.acep.org/content.aspx?id=104615
Sepsis-3 Definition
The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)

- **Sepsis**: Life-threatening organ dysfunction caused by a dysregulated host response to infection.

- **Organ dysfunction**: An increase in the Sequential (Sepsis-Related) Organ Failure Assessment (SOFA) score of 2 or more points. An **acute** change in total SOFA score ≥ 2 points consequent to the infection.

- **Septic shock**: A subset of sepsis in which particularly profound circulatory, cellular, and metabolic abnormalities are associated with a greater risk of mortality than with sepsis alone. Clinically identified via a vasopressor requirement to maintain a mean arterial pressure of 65 mm Hg or greater and serum lactate level greater than 2 mmol/L (> 18mg/dL) in the absence of hypovolemia.
# SOFA: Sequential Organ Failure Assessment

<table>
<thead>
<tr>
<th>System</th>
<th>Score</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>Respiration</strong></td>
<td></td>
</tr>
<tr>
<td>PaO₂/FiO₂, mmHg (kPA)</td>
<td>≥400 (53.3)</td>
</tr>
<tr>
<td></td>
<td>&lt;100 (13.3) with respiratory support</td>
</tr>
<tr>
<td><strong>Coagulation</strong></td>
<td></td>
</tr>
<tr>
<td>Platelets, x10³/μl</td>
<td>≥150</td>
</tr>
<tr>
<td><strong>Liver</strong></td>
<td></td>
</tr>
<tr>
<td>Bilirubin, mg/dL (µmol/L)</td>
<td>&lt;1.2 (20)</td>
</tr>
<tr>
<td><strong>Cardiovascular</strong></td>
<td></td>
</tr>
<tr>
<td>MAP ≥70 mm Hg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAP &lt;70 mm Hg</td>
</tr>
<tr>
<td><strong>Central Nervous System</strong></td>
<td>15</td>
</tr>
<tr>
<td>Glasgow Coma Scale score</td>
<td></td>
</tr>
<tr>
<td><strong>Renal</strong></td>
<td></td>
</tr>
<tr>
<td>Creatinine, mg/dL (µmol)</td>
<td>&lt;1.2 (110)</td>
</tr>
<tr>
<td>Urine output, mL/d</td>
<td></td>
</tr>
</tbody>
</table>

Source: [SOFA: Sequential Organ Failure Assessment](http://jama.jamanetwork.com/article.aspx?articleid=194262)
qSOFA Score (Quick SOFA)

- Used to identify patients with suspected infection who are at greater risk for a poor outcome outside the ICU
- Utilizes 3 criteria and assigns 1 point for:
  - Low blood pressure (SBP ≤ 100 mmHg)
  - High respiratory rate (≥ 22 breaths per min) or
  - Altered mentation (Glasgow Coma Scale < 15)
- The score ranges from 0 to 3 points
- Presence of 2 or more qSOFA points near the onset of infection is associated with a greater risk of death or prolonged intensive care unit stay

http://www.qsofa.org/
Industry Statements: Sepsis-3

- Published in *The Journal of the American Medical Association*, Sepsis-3 “discarded” the concept of SIRS as the basis for defining sepsis and eliminated the distinction between sepsis and severe sepsis

- The sepsis definitions used by CMS in SEP-1 sepsis management rely on sepsis as SIRS due to an infection and severe sepsis as sepsis with acute organ dysfunction; this will not change

- CMS will continue to track further research focusing on potential flaws in methods and statistical analysis and the need for prospective studies to substantiate the “real-world” clinical validity of the new Sepsis-3 definitions
Surviving Sepsis Campaign
Surviving Sepsis Campaign

• The Surviving Sepsis Campaign (SSC) is a voluntary-participation effort that focuses on the early recognition of infection and organ dysfunction

• SSC is a joint collaboration of the Society of Critical Care Medicine and the European Society of Intensive Care Medicine committed to reducing mortality from severe sepsis and septic shock worldwide

• March 2016: Surviving Sepsis Campaign Responds to Sepsis-3 (Society of Critical Care Medicine and the European Society of Intensive Care Medicine)

• March 2017: American College of Emergency Physicians endorses the latest iteration of the Surviving Sepsis Campaign
Surviving Sepsis Campaign Bundle

- Blood cultures x 2 (prior to starting antibx)
- Serum lactate level
- Broad-spectrum antibiotics (give 1st dose within 1 hour of onset of severe sepsis/septic shock)
- IV fluid bolus minimum 30 mL/kg or lactate level > 4 mmol (vasopressor for persistent hypotension)

1 hour: Septic shock / 3 hours: Severe sepsis
6 hours: Severe sepsis

http://www.survivingsepsis.org/SiteCollectionDocuments/SSC_Bundle.pdf
The 3 Definitions of Sepsis
<table>
<thead>
<tr>
<th></th>
<th>ESTABLISHED DEFINITIONS (used by CMS)</th>
<th>SEPSIS-3 DEFINITIONS</th>
<th>SSC GUIDELINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPSIS</td>
<td>Presumed/known infection + ≥2 systemic inflammatory response syndrome criteria</td>
<td>≥2 SOFA criteria (present or increased)</td>
<td>Sepsis = severe sepsis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Includes: hypotension + normal lactate (shock)</td>
<td></td>
</tr>
<tr>
<td>SEVERE SEPSIS</td>
<td>Sepsis + end organ dysfunction, lactate ≥2 mmol/L</td>
<td>Not a category</td>
<td>“Sepsis” = established severe sepsis definition</td>
</tr>
<tr>
<td>SEPTIC SHOCK</td>
<td>Sepsis + refractory hypotension (± lactate)</td>
<td>Vasopressors and lactate ≥2 mmol/L</td>
<td>Sepsis + refractory hypotension (± lactate)</td>
</tr>
<tr>
<td>MORTALITY RATIO =</td>
<td>Sepsis = low acuity</td>
<td>Sepsis = higher acuity</td>
<td>NA</td>
</tr>
<tr>
<td>OBSERVED MORTALITY</td>
<td>Observed mortality low</td>
<td>Observed mortality higher</td>
<td></td>
</tr>
<tr>
<td>EXPECTED MORTALITY</td>
<td>Expected mortality low</td>
<td>Expected mortality low</td>
<td></td>
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Coding Clinic Advice
**Clinical criteria and code assignment**

ICD-10-CM/PCS Coding Clinic, Fourth Quarter ICD-10 2016 Pages: 147-149 Effective with discharges: October 1, 2016

Question:

Please explain the intent of the new ICD-10-CM guideline regarding code assignment and clinical criteria that reads as follows: "The assignment of a diagnosis code is based on the provider's diagnostic statement that the condition exists. The provider's statement that the patient has a particular condition is sufficient. Code assignment is not based on clinical criteria used by the provider to establish the diagnosis." Some people are interpreting this to mean that clinical documentation improvement (CDI) specialists should no longer question diagnostic statements that don't meet clinical criteria. Is this true?

Coding must be based on provider documentation. This guideline is not a new concept, although it had not been explicitly included in the official coding guidelines until now. Coding Clinic and the official coding guidelines have always stated that code assignment should be based on provider documentation. As has been repeatedly stated in Coding Clinic over the years, diagnosing a patient's condition is solely the responsibility of the provider. Only the physician, or other qualified healthcare practitioner legally accountable for establishing the patient's diagnosis, can "diagnose" the patient. As also stated in Coding Clinic in the past, clinical information published in Coding Clinic does not constitute clinical criteria for establishing a diagnosis, substitute for the provider's clinical judgment, or eliminate the need for provider documentation regarding the clinical significance of a patient's medical condition.

While physicians may use a particular clinical definition or set of clinical criteria to establish a diagnosis, the code is based on his/her documentation, not on a particular clinical definition or criteria. In other words, regardless of whether a physician uses the new clinical criteria for sepsis, the old criteria, his personal clinical judgment, or something else to decide a patient has sepsis (and document it as such), the code for sepsis is the same as long as sepsis is documented, regardless of how the diagnosis was arrived at, the code for sepsis can be assigned. Coders should not be disregarding physician documentation and deciding on their own, based on clinical criteria, abnormal test results, etc., whether or not a condition should be coded. For example, if the physician documents sepsis and the coder assigns the code for sepsis, and a clinical validation reviewer later disagrees with the physician's diagnosis, that is a clinical issue, but it is not a coding error. By the same token, coders shouldn't be coding sepsis in the absence of physician documentation because they believe the patient meets sepsis clinical criteria. A facility or a payer may require that a physician use a particular clinical definition or set of criteria when establishing a diagnosis, but that is a clinical issue outside the coding system.
Denial Doldrums
ESCAPE the Doldrums

- Evaluate the denial
- Coding accuracy
- Search the denial/document letter
- Physician involvement
- Assess the clinical validity of the diagnosis
- Escalation policy
Evaluate: The Denial

• Review to determine if the denial is clinical or coding based and refer appropriately
• Assess the tone of the denial
• Look for the overall assumptions of the denial letter
• Review for any clinical references to infer the basis of the denial
• Check contract for specifics if applicable
Search: Denial Document for Each Item Identified

- Make a list of the assumptions identified in the denial letter
  - If basis of the denial is listing only one lab result or one vital sign, consider the trends
  - If coding is in question, review for the specifics
  - If denial document has an indication of lack of consistent documentation throughout the record, consider findings of documented evidence for sepsis
  - Look for terminology missing in the denial document that could potentially be a symptom of an overall diagnosis of sepsis
  - Create a checklist using known clinical criteria for sepsis and compare what is in the letter versus what is documented in the record
Coding: Accuracy

• List all code numbers mentioned in denial document
• Review the coding summary for overall accuracy of coding on the case
• Review for citation of coding guidelines or Coding Clinic to support conclusions
• Determine all coding reference material to support codes selected, including coding handbook, coding guidelines, Coding Clinic, and other material as appropriate
Assess: Clinical Validity of Sepsis

• Using previously referenced checklist of clinical criteria for sepsis, determine if the case meets the clinical validity of sepsis
• Determine if the sepsis was not consistently documented and was potentially a differential diagnosis in the ED/H&P and was later just not mentioned again
• Determine if a query should have been generated to obtain clarification of the diagnosis prior to coding
• Compare the clinical criteria to any hospital-established criteria for sepsis
Physician Involvement: Key to Success

- Determine what level of physician involvement is needed in the denial process
- Include a physician summary of the case and supporting factors, including one from the attending physician
- Present denial records to a clinical review of denials committee that includes physicians
- Establish physician sepsis criteria and compare the case to those criteria
- Involve infectious disease department and sepsis team if applicable
Escalation Policy: Essential to Allow Path for Denial Review

- All sepsis cases should go through a second-level review process to determine clinical validity of the diagnosis
- If sepsis criteria has been established by the hospital/system, charts should be compared to those criteria
- Charts with sepsis documented but not meeting criteria should be referred to a physician advisor/reviewer prior to billing
- Physician management should be included in report out of denial cases
Example of Denial Wording

- It was noted that the physician documented sepsis due to pneumonia in the chart. To validate sepsis, the medical record is examined for consistent documentation of the condition; evidence that the patient’s presentation cannot be explained by the local infection alone or by a non-infectious condition; and evidence of organ dysfunction caused by a dysregulated inflammatory response to infection. SIRS parameters represent a normal physiologic response to infection and are not a specific indication of sepsis. While the patient’s presentation warranted consideration of sepsis as a possible diagnosis and a localized infection of pneumonia was identified, upon investigation, the diagnosis of sepsis was not supported by the clinical evidence. The patient exhibited a fever and an elevated white blood cell count of 25.6 which could be explained by a normal physiological response to an infection. The patient did not exhibit any evidence of organ dysfunction or hemodynamic compromise related to infection. There was insufficient clinical evidence and supportive documentation in the records available for review to substantiate the coding of this condition.
Elements of a Letter to Overturn Case

• All documented vital signs and notes were mentioned, including:
  – Chills
  – Hazy airspace disease in left lung
  – Trending of tachycardia in the 95–120
  – Leukocytosis of 25.6, 31.5, and 17.7
  – High lactic acid 18.9
  – Vancomycin, Cefepime, and Zithromax
  – Yeast in respiratory culture
  – Paragraph detailing additional signs and symptoms of sepsis

• References:
  – Coding guidelines with actual citation of specific clinical reference criteria
  – Diagnostic criteria for lactate abnormalities
  – Sepsis-2 criteria were cited
Denial Letter Format

• Rebuttal summary
• Evidence to support coding of case
• Physician summary of clinical indicators of sepsis, including end-organ involvement if applicable
• Specific information based on denial document
• Clinical reference information to support position
• Copy of contract if applicable
• *Coding Clinics* to support position
Attachments to Denial Letters for Reference

- [http://jamanetwork.com/journals/jama/fullarticle/2536619](http://jamanetwork.com/journals/jama/fullarticle/2536619)
- *AHA Coding Clinic* for ICD-10, Fourth Quarter 2016 Pages: 147–149
- SEPSIS Rapid Response Team evaluation form
- Sepsis criteria for the hospital
- Coding guidelines detailing sepsis reporting
- Clinical reference information used in decision
Thank you. Questions?

In order to receive your continuing education certificate(s) for this program, you must complete the online evaluation. The link can be found in the continuing education section at the front of the program guide.