

# Mastering Clinical Documentation, Coding and Billing for Sepsis: Best Practices and Compliance

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Hospital Quality Improvement Contractors (HQIC)  
Focused Event Series  
Session 22

# Objectives for Today's Session

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1. Consider approaches to evaluate the quality of sepsis data being reported to CMS (Centers for Medicare & Medicaid Services) and CDC (Center for Disease Control).
2. Identify common coding challenges that lead to under and overreporting of sepsis.
3. Apply sepsis coding knowledge to make suggestions to hospital quality improvement staff to improve the coding of sepsis.



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- Dr. Sloan-Kelly is a notable expert in medical billing, coding and practice management. As the CEO of Dr. Sloan-Kelly Consulting, LLC, she provides a comprehensive suite of services, including consulting, auditing, training and billing support for medical practices and hospitals.
- A graduate of Wellesley College, Dr. Sloan-Kelly earned her medical degree from Tufts University School of Medicine and boasts over 17 years of expertise in clinical practice, billing and coding. Her consulting firm is dedicated to helping health care providers enhance their reimbursement processes by optimizing coding, billing and documentation practices, thereby ensuring compliance and minimizing the risk of audits and financial penalties.

# Overview

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- Overview – Sepsis
- Admission and Costs
- Documentation Challenges and Opportunities
- Coding Rules for Sepsis
- Denial Management
- Creating Compliance Policies and Tools

# Overview – Sepsis: A Growing Concern

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- Sepsis continues to increase as a leading principal diagnosis in U.S. hospitalizations.
- It ranks among the most costly conditions to treat in hospitals nationwide.
- Due to its high costs, sepsis is under increased scrutiny by payers.
- It is one of the most frequently denied diagnoses, adding to the challenges.

# Overview – Sepsis: Billing & Documentation Challenges

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- Various definitions and evolving clinical indicators complicate sepsis documentation and coding.
- Since the implementation of Sepsis-3 in 2017, these challenges have been highlighted in literature.
- Accurate diagnosis and reimbursement require:
  - Clear organizational policies.
  - Effective tools and resources.
  - Comprehensive education and training.
  - Robust denial management strategies.



# Sepsis: Admissions and Costs

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# Increasing Burden of Sepsis

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- Sepsis-related admissions and claims are on the rise.
- Significant financial burden on the healthcare system.
  - Average submitted charges and average Medicare payment amounts varied vastly across states in 2020.
- Health Care Cost and Utilization Project (HCUP) Data:
  - Septicemia: Most frequent principal diagnosis in U.S. hospitals in 2018.
  - 2,218,800 stays (8% of nonmaternal, nonneonatal stays).
  - Costing \$41.5 billion, averaging \$18,700 per stay.
  - Costs have risen significantly from 2011 to 2018.



# High Costs Due to ICU Utilization

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- Significant Intensive Care Unit (ICU) usage for sepsis patients:
  - 2011: Medicare Severity Diagnosis Related Groups (MS-DRG) 871 had 59% ICU utilization.
  - MS-DRG 872 had 27.5% ICU utilization.
- Super-utilizers and Sepsis:
  - Among top diagnoses for high healthcare resource users.
- Post-Acute Care (PAC) Discharges:
  - 2013: 441,400 discharges to PAC (39.4%).
  - Majority to skilled nursing facilities (53.5%).

# Readmissions and Vulnerability

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- High readmission rates:
  - 2014: 7-day (6.7%) and 30-day (18.5%) readmissions.
  - 2018: Highest number of 30-day all-cause readmissions (314,600).
- Impact on Vulnerable Populations:
  - Rural areas: Highest rate of septicemia stays, lower costs and shorter stays.
  - Elderly (75+): Most common diagnosis, over 10 times higher than ages 18-44.
  - Uninsured: Higher likelihood of 7-day readmission.
  - 2018: Highest readmission costs among self-pay/no charge and Medicaid patients.
- Need for improved diagnosis, documentation and coding to ensure accurate reimbursement and quality care.

# Sepsis Documentation: Challenges and Opportunities

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# Sepsis: Clinical Documentation

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- Accurate clinical documentation leads to specific and accurate coding.
- Clinical documentation must provide clear clinical picture, signs, symptoms and organ dysfunction.
- Clinical documentation must avoid pitfalls. For example, misleading terms like "septic" without organ failure.

# Sepsis: Clear and Consistent Documentation

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- **Use clear terms:** “sepsis,” “severe sepsis,” “septic shock.”
- **Identify and link:** Source of infection and sepsis.
- **Example Phrases:** “causing,” “caused by,” “associated with,” “related to,” “from,” “due to,” “with.”

# Sepsis: Detailing Organ Dysfunction

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- **Include:** “dysregulated host response to infection.”
- **Specify organ dysfunction:** Hypotension, renal failure, encephalopathy.
- **Avoid:** General phrases like “multiple system organ failure.”
- **Example:** “Acute kidney injury, likely due to sepsis with hypotension.”

# Accurate Sepsis Documentation

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- **Avoid:** "history of sepsis" for current conditions.
- **Document:** Sepsis with clear links to infections and organ dysfunction.
- **Example:** "Sepsis due to e-coli bacteremia."
  
- **Avoid:** "urosepsis," "sepsis-like," "meets sepsis criteria," "sepsis syndrome."
- **Clarify:** If patient has sepsis due to a urinary tract infection.
- **Problematic Terms:** "septicemia," "SIRS," "septic, toxic."

# Sepsis: Infection Related to Procedures

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- **Clarify:** If infection is related to recent surgery or device.
- **Document:** If present on admission.
- **Consistency:** Sepsis should be documented consistently through the stay.



# Sepsis: Documentation of SOFA and qSOFA scores

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- Clinical documentation should include Sequential Organ Failure Assessment (SOFA) and/or quick SOFA (qSOFA) scores.
- **qSOFA:** Quick, bedside tool, no lab tests required.
- **SOFA:** Detailed, requires lab tests, more comprehensive.
- **Prognostic Accuracy:** SOFA score of 2 or more points is more accurate for in-hospital mortality.
- NOTE: qSOFA is NOT used to diagnose sepsis.
- The Society of Critical Care Medicine endorses the Sepsis-3 SOFA scoring system for diagnosing severe sepsis.

# SOFA Score Components

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- **Respiratory function:** PaO<sub>2</sub>/FiO<sub>2</sub> ratio.
- **Coagulation:** Platelet count.
- **Liver function:** Bilirubin levels.
- **Cardiovascular function:** Hypotension and vasopressor use.
- **Central nervous system:** Glasgow Coma Scale.
- **Renal function:** Creatinine levels or urine output.

# qSOFA Scoring Criteria

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- **Respiratory rate:** 22 breaths per minute or more (1 point).
- **Systolic blood pressure (SBP):** 100 mm Hg or less (1 point).
- **Altered mental status:** Glasgow Coma Scale less than 15 (1 point).

# Quality Documentation

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- Ensures consistency in diagnosis conclusions post-discharge.
- Potential overuse of sepsis diagnosis to avoid fatal consequences.
- Consider empiric treatment options in clinical validation queries with minimal clinical support – essentially adding options for treatments that are based on experience rather than solid clinical evidence, especially if the current documentation doesn't provide much support for the diagnosis. This helps ensure that the treatment approach is still covered even if the initial documentation is weak.

# Coding for Sepsis

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# Coding for Sepsis

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- Coding sepsis is complex and often challenging, similar to its diagnosis.
- Discrepancies between clinical and coding definitions create difficulties.
- Importance of accurate documentation and coding for proper treatment and reimbursement.
- Physician documentation may not always be clear.
- Unclear documentation warrants a query to the provider.

# Coding for Sepsis

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- Communication may be difficult with offsite remote coders.
- Physician queries are not always received well from offsite remote coders.

# Common Coding Issues

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- Code A41.9: Most commonly used code for unspecified sepsis (72%).
- Viral Sepsis: No specific ICD-10-CM code; A41.89 (Other specified sepsis) is used.
- Incorrect Coding Rates:
  - 9.8% for MS-DRG 870.
  - 5.9% for MS-DRG 871.
  - 8.5% for MS-DRG 872.



# Studies on Sepsis Coding

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- Arberry et al.:
  - 59% of charts had evidence of sepsis at admission.
  - 52% had sepsis documented in notes.
  - Sepsis was documented on discharge summaries (10%) or coded (17%).
- Wilhelms et al.: 55% of critically ill patients with severe sepsis were discharged without appropriate ICD codes.
- Poor documentation and coding in administrative data.

# Sepsis Diagnosis and Coding

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- Assign appropriate code for underlying systemic infection.
- If unspecified, use A41.9 (Sepsis, unspecified organism).
- Do not assign R65.2 (Severe sepsis) unless severe sepsis or associated acute organ dysfunction is documented.

# Sepsis Diagnosis and Coding

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- Negative/inconclusive blood cultures don't rule out sepsis.
- "Urosepsis" is nonspecific; query provider for clarity.
- Sepsis with organ dysfunction should follow severe sepsis coding instructions.
- Acute organ dysfunction not linked to sepsis should not be coded as severe sepsis; query provider if unclear.
- When documentation does not clearly associate organ dysfunction with sepsis, querying the provider is mandatory to ensure accurate coding.

# Severe Sepsis Diagnosis and Coding

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- Requires a minimum of two codes:
  - Code for underlying infection.
  - Code from R65.2 (Severe sepsis).
- Additional codes for associated acute organ dysfunctions are required.
- Proper sequencing of severe sepsis is crucial for accurate medical records and reimbursement.
- Always follow guidelines for coding severe sepsis as principal or secondary diagnoses based on the timing of onset.

# Severe Sepsis Diagnosis and Coding

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- Sequencing diagnosis codes means deciding the order in which health conditions are listed in medical records. For sepsis, the correct order is important for accurate billing and treatment.
  - Main infection first.
  - Severe sepsis or septic shock next.
  - Other conditions last.
- Appropriate sequencing helps doctors understand the patient's health issues in the right order – and ensures hospitals and clinics get paid correctly by insurance companies.

# Sepsis: Challenges for Underreporting or Overreporting

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# Sepsis: The Challenges

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- Documentation! Documentation! Documentation!
- Nearly 70% of Clinical Documentation Improvement (CDI) professionals report sepsis as a top denied diagnosis (Association of Clinical Documentation Integrity (ACDIS), September 2022) – these denials are based on documentation.
- Denials often due to lack of documentation or clear clinical indicators.
- Importance of thorough and precise documentation.

# Sepsis: The Challenges

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- This documentation does not always refer to the provider's note but also other key metrics within the Electronic Health Record (EHR).
  - Lack of evidence showing impaired homeostasis.
  - Absence of laboratory findings supporting SOFA criteria.
- Many progress notes have inadequate treatment plans reflecting necessary monitoring and interventions.



# Sepsis: The Challenges

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- To avoid these issues training is key – for both clinical staff AND billing and coding staff.
- Clinical staff must undergo annual training that not only addresses the appropriate ways to code for Evaluation and Management (E/M) and procedures – but also to capture sepsis as it has a direct impact on reimbursement.
- Billing/Coding staff must know how to capture the data elements necessary to support the diagnosis codes reported for the visit – lack of clinical documentation can lead to claw backs – not coding for supportive documentation leads to lost revenue.

# Sepsis: The Challenges

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- Billing/Coding staff must not be afraid to query the provider when documentation is missing – avoid selecting an unspecified code at all costs.
- Create a query system that is easy to use – for both the clinician and the business team.
- Providers must be receptive, not defensive, about the queries – and update documentation in a timely manner so claims may be submitted.
- Conduct periodic internal audits throughout the year.

# Sepsis Data: How to Put it To Use

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- As of June 1, 2023:
  - 5,397 hospitals enrolled in National Healthcare Safety Network (NHSN) Patient Safety Component.
  - 5,228 hospitals completed the survey.
  - 7 surveys excluded due to incomplete responses.
  - Final analysis included 5,221 hospitals (97% completion rate).
- The key in using this data is to apply best practices to your hospital/group. Pay attention to information reported and NOT reported.

# Sepsis Data: How to Put it To Use

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- Survey covers majority of U.S. hospitals' sepsis programs.
- Sepsis committees present in most hospitals, less frequent in smaller hospitals due to fewer personnel and resources.
- Just over half of hospitals provide dedicated or protected time for sepsis program leadership.
- Opportunities exist to enhance institutional support and structure for sepsis care.

# Sepsis Data: The Limitations

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- Survey limited to acute care hospitals enrolled in NHSN, might not reflect practices of all U.S. acute care hospitals.
- Hospitals enrolled in NHSN represent at least 88% of U.S. acute care hospitals.
- Inclusion of specialty services like pediatrics and labor and delivery varied, making conclusions about their frequency difficult.
- Many sepsis committees do not monitor antimicrobial use, which overlaps with Antibiotic Stewardship Programs (ASP) responsibilities.
- NHSN surveys were self-reported, not independently confirmed.
- Survey did not strictly define criteria for a sepsis program, subject to respondent interpretation.

# Sepsis Data: Opportunities

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- Opportunities exist to improve early identification, care and outcomes of sepsis patients, especially in smaller hospitals.
- Important to ensure all hospitals have sepsis programs with protected time for leaders, engagement of specialists and integration with Antibiotic Stewardship Programs (ASPs).
- Sepsis Core Elements offers guidance for developing and implementing effective sepsis programs.
- Future NHSN surveys will monitor implementation of sepsis core elements.

# Conclusion: Tips for Working with Hospitals to Improve Sepsis Documentation and Coding

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# Conclusion: Tips

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- **DOCUMENTATION** – all starts and stops with proper documentation – providers must know the parameters used by coders to capture the appropriate codes to report sepsis.
- **QUERY** – Medical coders/billers must query providers when clinical documentation is lacking – if it is a consistent issue, the clinical director and medical director should become a part of the conversation.
- **TRAINING** – for clinical staff – regarding documentation and guidelines; for coding/billings staff – regarding criteria and how to communicate with their clinical provider.

# Conclusion: Tips

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- **DATA:** Monitor data that is released by CMS and CDC – this helps to create a “best practices” program within your own institution or group.
- **INTERNAL AUDITS:** Conduct internal audits – find the possible problems before they become a big issue.

# References

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- [https://www.cdc.gov/nchs/data/icd/icd10cm\\_guidelines\\_2014.pdf](https://www.cdc.gov/nchs/data/icd/icd10cm_guidelines_2014.pdf)
- ICD-10 Coding Guidelines 2024
- American Hospital Association (AHA) Coding Clinic



# Discussion

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**Mary Andrawis, DVA**

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# Discussion

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1. What is a sepsis measurement or coding question you receive from hospitals that has not been answered?
2. What insights or 'a-ha' moments have you had on sepsis coding/documentation that your hospitals may benefit from?
3. How can you support your hospitals to apply suggestions for improvement of sepsis coding such as proper documentation, monitoring data released by CMS/CDC, or conducting audits?

# Upcoming Sessions & Topics

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**July 17: TBD**



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