

# A Review of Evolving Criteria for Sepsis: Implications for Clinical Practice



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## BACKGROUND:

Sepsis impacts over 1.7 million U.S. adults annually with a >20% mortality rate, emphasizing the need for timely, accurate diagnosis. *The American Journal of Medicine* critiques SIRS for low specificity and high false positives. Sepsis-3 introduced SOFA and qSOFA to enhance diagnostic accuracy, but reliance on SIRS for CMS billing creates confusion and impedes adoption



## PURPOSE:

1. Inconsistent documentation of SOFA/qSOFA scores
2. Ongoing use of SIRS for billing

## METHODS:

A literature review was conducted to compare the diagnostic accuracy, sensitivity, and clinical outcomes of SIRS, SOFA, and qSOFA criteria & explore the integration of these criteria into clinical workflows, billing systems, and provider education efforts. The databases Embase, ScienceDirect, and Pubmed were searched using key words: *Sepsis-3*, *SIRS criteria*

## FINDINGS:

Category	SIRS	SOFA	qSOFA
Diagnostic Accuracy	Low specificity; high false positive rate	High specificity; support early interventions	Reduced false positives; sensitivity gaps noted
Clinical Workflows	SIRS in billing is a barrier to SOFA adoption	Workflow integration challenges, compounded by CMS reliance on SIRS	Easy to implement but lacks sensitivity for early sepsis recognition
Provider Education	Familiarity widespread but evidence evolving	Limited awareness; requires targeted education for adoption	Requires education; simpler scoring approach
Policy Implications	CMS reliance on SIRS contradicts SEP-3 guidelines, delaying widespread adoption	Aligns with evidence-based guidelines	Partial alignment; complement SOFA

## CONCLUSIONS:

- Provider education and streamlined documentation are essential to improve sepsis mortality and efficiency in clinical workflows.
- Transitioning to SOFA/qSOFA criteria in sepsis diagnosis, improves specificity and prognostic accuracy compared to SIRS.
- Continued reliance on SIRS for CMS billing creates misalignment with EBP, leading to documentation challenges.
- This misalignment complicates the integration of electronic tools for sepsis management and delays the adoption of SEP-3 criteria.

## RECOMMENDATIONS:

Aligning CMS billing with EBP, enhancing provider education, and streamlining documentation are key to improving sepsis diagnosis and patient outcomes



## ACKNOWLEDGEMENTS:

Terri L. Yost, PhD, RN, FNP-BC  
Amanda Datesman, MLIS, BSN, RN

## REFERENCES:

