



Where Are We With Sepsis?

Competing Definitions and
Perspectives Put Hospitals in a Bind

by Brian Murphy

Where Are We With Sepsis?

Introduction

Sepsis is deadly, prevalent, and expensive to treat

and therefore capturing it in documentation and coded data among the highest priorities of mid-revenue cycle professionals.

It's also one of the most difficult diagnoses to capture and the most at-risk, prone to denials and regulatory scrutiny. And there are two definitions of sepsis with key variations which remain a source of debate and put everyone in a bind.

Sepsis-2

uses Systemic Inflammatory Response Syndrome (SIRS) criteria.

It is diagnosed in a patient with infection plus two SIRS criteria (i.e., fever, high white blood cell count) and elevated heart rate.

Sepsis-3

In lieu of SIRS criteria sepsis-3 uses a Sequential Organ Failure Assessment (SOFA) score.

And is defined as *"a life-threatening organ dysfunction caused by a dysregulated host response to infection."*

Sepsis-3 was first introduced in 2016 and so seems to supersede sepsis-2, which first appeared in 2001. **But as will be shown, the debate over these competing definitions and criteria is far from settled.**

As sepsis is widely considered a clinical spectrum of disease severity that ranges from early, mild systemic signs to severe organ dysfunction and life-threatening shock, it's helpful to consider the spectrum of perspectives surrounding this deadly disease. We'll look at three:

1



Provider/
Physician

2



Payer

3



Hospital /
Healthcare Org

Then, with these perspectives as a frame,
I'll offer a recommendation for resolving these conflicts.



The Provider / Physician

Perspective 1

Dr. Steven Simpson dealt first-hand with sepsis in his early days treating critically ill patients while an assistant professor of medicine at the University of New Mexico. And it became clear right away that early sepsis detection was the difference between life and death.



"What I recognized when I was at the University of New Mexico was, hey, they're sending me all these people from the floor that are in septic shock with multiple organ failure.

And when I look through the chart, I can see they were septic 2 days ago, three days ago.

And not recognizing that and not intervening made a huge difference in their life and their death," he said, in an interview on the Off The Record podcast (ep. 96).

Simpson's clinical work led him to helping discover the Hantavirus Pulmonary Syndrome, often now called Hantavirus Cardiopulmonary Syndrome.

He got involved in researching and describing the hemodynamic and respiratory derangements of this specific form of sepsis and helped initiate the ECMO approach to the most severely ill patients.

He also participated in clinical research in severe sepsis in multicenter trials of various anti-inflammatory agents.

His perspective?

Sepsis is deadly and early identification and intervention is critical.

Which aligns better with sepsis-2.



The Payer Perspective 2



**is overinflated and adding to our
nation's out-of-control spending**

We've seen hospitals reporting sepsis DRGs with an MCC
...and a 2 day stay? For a patient that sick, that doesn't add up.

The OIG is on the case. In March 2024 the OIG put sepsis on its *Work Plan*, specifically whether hospitals are using the more generous sepsis-2 to improve their bottom lines.

Per the OIG *Work Plan*:

Sepsis is a frequently billed diagnosis in Medicare.

There are concerns that hospitals may be taking advantage of this broader definition, as they have a financial incentive to do so.

This study will analyze Medicare claims to assess patterns in the inpatient hospital billing of sepsis in 2023 and describe how the billing of sepsis varied among hospitals.

We await the results.

In the meantime, do you want to risk the ire of the OIG?
Payers use sepsis-3 (unless sepsis-2 allows them to deny a case).



The Hospital / Healthcare Org.

Perspective 3

Sepsis is most hospitals' highest reported DRG and most expensive to treat.

Nationally septicemia is the most expensive condition treated in hospitals



Septicemia accounts for 10.9% of aggregate costs for all hospital stays in 2022 across all payer groups — more than three times higher than the next most expensive condition (liveborn infants).

Hospitals employ the latest identification technologies at great cost.

Cutting out sepsis-2 in favor of sepsis-3 would greatly harm and possibly bankrupt hospitals with tight margins.



So... competing and conflicting perspectives, competing definitions, and no official source to settle the matter.

What To Do?

Sepsis-3 might be better at capturing a definitive diagnosis, but as a mechanism for early detection, and capturing the resources used in early detection including advanced technologies and drugs, its effectiveness and practicality is far less certain.

U.S. acceptance of sepsis-3 also remains cloudy. In the 2027 IPPS final rule CMS put sepsis into the Hospital Readmissions Reduction Program (HRRP), and could have gone with sepsis-3.

But CMS did not. It used sepsis-2.



Brian's Recommended Six-Point Plan

Since all we have is opinion, here is my recommendation.

Note this does not constitute legal advice nor any official policy of Norwood or its partners

Stick with Sepsis 2

Sepsis-2 is at least tacitly endorsed by CMS. We lack a mechanism to capture early sepsis, unless a new proposal before the ICD-10-CM Coordination and Maintenance Committee comes through.

1

It's too costly to move to sepsis-3 at this point, despite the higher audit risk and payer scrutiny. Sepsis-3 might be preferred by payers, but a large swath of the clinical community and hospitals/healthcare organizations still prefer sepsis-2.





2

Don't Abandon Sepsis 3

This advice might seem incongruous with point 1. But embracing sepsis-2 as your organizational definition doesn't mean sepsis-3 lacks value.

Equate it with severe sepsis. We may see improved coding and reimbursement alignments in the future so it's important to stay conversant.

3

Get It In Writing

Whatever definition you use make it an approved, systemwide organizational definition. Assemble a coalition of stakeholders (HIM, CDI, IT, relevant physician leadership including critical care, etc.) to draft the definition and policy.

Remove leaks from your system. If you're using sepsis-2, stress why, including its alignment with CMS and early detection.



4

Follow The Latest News

October 16 is the deadline for receipt of public comments on proposed new/revised sepsis codes discussed at the Sept. 15-16 ICD-10 Coordination and Maintenance Committee, including "pending sepsis."

Any new ICD-10 codes will be announced Nov. 2026 and implemented April 1, 2027

5

Employ Assistive Capture Technology, with a Skilled Human in the Loop.

The firm Prenosis developed an early sepsis detection tool, ImmunoScore, which collects more than 20 parameters, assessing vitals, labs, demographics, novel biomarkers, and puts it all together using AI to predict a patient's risk of developing sepsis within 24 hours.

It's a great tool, as are others...but given the grayness of the diagnosis a human is still needed to diagnose and capture.



6

Get an external auditor to review your sepsis claims.

Do you have red flags, for example high rates of MS-DRG 871 (Septicemia or severe sepsis with MCC) and a corresponding low length of stay that will attract the attention of auditors or the OIG?

Consider an external partner who can provide an unbiased look at your coded data.





We're Here If You Need Us

We have developed a sensitive, proprietary audit tool that can quickly identify your level of OIG audit risk. And we have industry-leading education, code audit, and audit defense services at your disposal.

Schedule a 30-minute call with Norwood SVP of Solutions Jason Jobes or Norwood Solutions Senior Director Joanne Wilson.

Contact Us
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References & Resources

- Becker's Hospital Review, "The 20 Most Expensive Conditions Hospitals Treat: Report":
<https://www.beckershospitalreview.com/rankings-and-ratings/the-20-most-expensive-conditions-hospitals-treat-report/>
- CMS, 2027 IPPS final rule: <https://www.cms.gov/medicare/payment/prospective-payment-systems/acute-inpatient-pps/fy-2027-ipp-final-rule-home-page>
- MobiHealthNews, HIMSSCast: Prenosis CEO on using AI to detect sepsis:
<https://www.mobihealthnews.com/news/himsscast-prenosis-ceo-using-ai-detect-sepsis>
- Off the Record ep. 96, Who Owns Sepsis? The Battle to Define a Deadly Condition:
<https://podcasts.apple.com/ph/podcast/who-owns-sepsis-the-battle-to-define-a-deadly-condition/id1641739619?i=1000788847261>
- OIG, Medicare Inpatient Hospital Billing for Sepsis: <https://oig.hhs.gov/reports/work-plan/browse-work-plan-projects/medicare-inpatient-hospital-billing-for-sepsis/>

