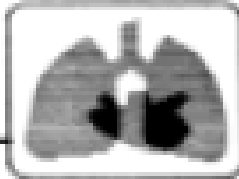


IHA Presentation

06.12.2019



History of Sepsis Definitions: “Sepsis-1”



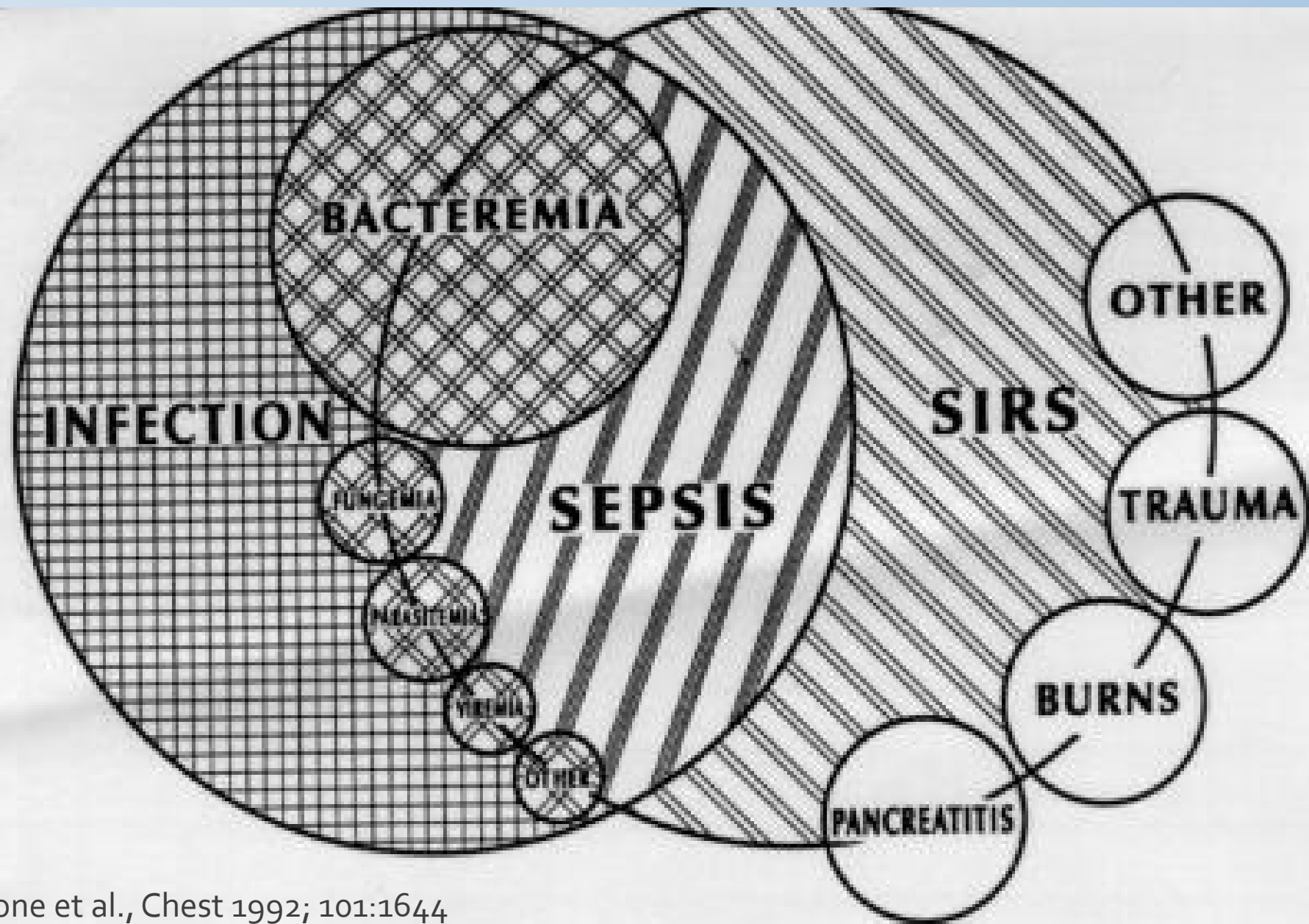
accp/sccm consensus conference

1991

**Definitions for Sepsis and Organ Failure and
Guidelines for the Use of Innovative Therapies in
Sepsis**

***“Sepsis represents the systemic inflammatory
response to the presence of infection”***

- ***SIRS*** = ≥ 2 of: Temperature >38.0 or <36.0 ; Heart Rate >90 bpm; Respiratory Rate >20 /min; WBC $>12k$, $<4k$, or $>10\%$ bands
- ***Sepsis*** = *Infection* + *SIRS*
- ***Severe Sepsis*** = *Sepsis* + *Organ Dysfunction*
- ***Septic Shock*** = *Sepsis* + *Refractory Hypotension (despite fluids)*



Bone et al., Chest 1992; 101:1644

“SEPSIS-2” - 2001 Consensus Conference SCCM/ESICM/ACCP/ATS/SIS

- Expanded list of possible diagnostic criteria, but otherwise no significant change to this framework

Table 1. Diagnostic criteria for sepsis

Infection,* documented or suspected, and some of the following[†]

General variables

- Fever (core temperature $>38.3^{\circ}\text{C}$)
- Hypothermia (core temperature $<36^{\circ}\text{C}$)
- Heart rate $>90\text{ min}^{-1}$ or >2 sd above the normal value for age
- Tachypnea
- Altered mental status
- Significant edema or positive fluid balance ($>20\text{ mL/kg}$ over 24 hrs)
- Hyperglycemia (plasma glucose $>120\text{ mg/dL}$, or 7.7 mmol/L) in the absence of diabetes

Inflammatory variables

- Leukocytosis (WBC count $>12,000\ \mu\text{L}^{-1}$)
- Leukopenia (WBC count $<4000\ \mu\text{L}^{-1}$)
- Normal WBC count with $>10\%$ immature forms
- Plasma C-reactive protein >2 sd above the normal value
- Plasma procalcitonin >2 sd above the normal value

Hemodynamic variables

- Arterial hypotension[‡] (SBP $<90\text{ mm Hg}$, MAP <70 , or an SBP decrease $>40\text{ mm Hg}$ in adults or <2 sd below normal for age)
- $\text{SpO}_2 >70\%$ [§]
- Cardiac index $>3.5\text{ L}\cdot\text{min}^{-1}\cdot\text{M}^{-2.5}$

Organ dysfunction variables

- Arterial hypoxemia ($\text{P}\text{aO}_2/\text{F}\text{I}\text{O}_2 <300$)
- Acute oliguria (urine output $<0.5\text{ mL}\cdot\text{kg}^{-1}\cdot\text{hr}^{-1}$ or 45 mmol/L for at least 2 hrs)
- Creatinine increase $>0.5\text{ mg/dL}$
- Coagulation abnormalities (INR >1.5 or aPTT $>60\text{ secs}$)
- Ileus (absent bowel sounds)
- Thrombocytopenia (platelet count $<100,000\ \mu\text{L}^{-1}$)
- Hyperbilirubinemia (plasma total bilirubin $>4\text{ mg/dL}$, or 70 mmol/L)

Tissue perfusion variables

- Hyperlactatemia ($>1\text{ mmol/L}$)
- Decreased capillary refill or mottling

Sepsis-3 : Conceptual Changes

- “Sepsis is defined as a life-threatening organ dysfunction caused by a dysregulated host response to infection”
- “Septic shock is a subset of sepsis and which particularly profound circulatory, cellular, and metabolic abnormalities are associated with a greater risk of mortality than with sepsis alone“
- SIRS criteria removed from definition
- “Severe Sepsis” removed from definition (replaced by “Sepsis”)

Sepsis-3 : Clinical Criteria

- Sepsis
 - Suspected or documented infection and an acute increase ≥ 2 SOFA points or a qSOFA of ≥ 2
- Septic Shock
 - Sepsis with vasopressor therapy needed to elevate MAP ≥ 64 mmHg and lactate > 2 mmol/L after adequate hydration.

Sepsis-3: Operational Clinical Criteria - SOFA

- Sepsis = Infection + **increase in SOFA score by ≥ 2 points** from baseline

Points	0	1	2	3	4
PaO ₂ /FIO ₂	≥ 400	<400	<300	<200 + mechanical ventilation	<100 + mechanical ventilation
Platelets	≥ 150	<150	<100	<50	<20
Bilirubin	<1.2	1.2-1.9	2.0-5.9	6.0-11.9	>12.0
Blood Pressure	MAP ≥ 70	MAP <70	Dopamine <5 or Dobutamine	Dopamine 5.1-15 or Epinephrine <0.1 or Norepinephrine <0.1	Dopamine >15 or Epinephrine >0.1 or Norepinephrine >0.1
Glasgow Coma Scale	15	13-14	10-12	6-9	<6
Creatinine	<1.2	1.2-1.9	2.0-3.4	3.5-4.9 or <500cc urine/d	>5.0 or <200cc urine/d

Vincent et al, Intensive Care Med 1996

Sepsis-3: Operational Clinical Criteria - qSOFA

qSOFA-"HAT"

- Hypotension-SBP<100
- Altered mental status-GCS < 15 (GCS 15 requires
 - a)spontaneous eye opening
 - b)accurate orientation person/place/time
 - c)appropriate motor response to commands
- Tachypnea-RR>22

Sepsis-3: Criticisms and Limitations

- **Concern that focus on qSOFA / organ dysfunction may delay early recognition and treatment of severe infection-not a screening tool**
 - Will these changes reverse decades of quality improvement efforts with old definitions?
- **SOFA mainly developed as a research tool rather than for clinical use**
 - Not easy to memorize or readily available at the bedside
- **Definitions are not harmonized with SEP-1 CMS reporting measure**
 - creates confusion

Sepsis-3 Criticisms and Limitations

Raising Concerns About Sepsis-3 Definitions

World J Emerg Surg
13:6;2018

- The Global Alliance for Infections in Surgery: 78 authors from around the world
- Biggest concern: no prospective validation in a generalizable population
- qSOFA not as diagnostic but rather as warning of poor outcome
- Continuum idea is helpful and should not be eliminated
- Distinguish screening tool from risk stratification tool—feel we still need a screening tool

Sepsis criteria used by hospitals may not have actually been intended for billing purposes...

SAY WHAT?!

Overarching Challenges with Sepsis

- High mortality rate! Can progress quickly!
- Difficult to diagnose
- Variable clinical presentations
- Few unifying pathological features
- Could be an appropriate host response – fighting an infection
- SIRS presentation may be due to a non-infectious process
 - Medication induced
 - Stress induced
- Sepsis is dynamic!
 - Shifting clinical and laboratory manifestations
 - Not all of the criteria necessarily present at once
- Sepsis is resource-intensive and costly making it highly audited!

James D.

Challenges with Using SIRS Criteria for Sepsis

- SIRS may reflect an *appropriate* host response to infection
- Infective and non-infective SIRS can *co-exist*
- Elevated WBC count could indicate stress and not infection
- Sepsis is dynamic and its manifestations can change without all criteria being present at once
- SIRS fails to promote an understanding of the underlying problem or disease process
- Hypotensive patients do not necessarily have shock
- Patients in shock may not be hypotensive

Challenges with Using Sepsis 3 Criteria

- Tremendous issues with coding!
 - Defines sepsis as life-threatening organ dysfunction caused by a dysregulated host response to infection [suspected or confirmed]
- Adherence to Sepsis-3 by not reporting any cases of sepsis without organ dysfunction would disrupt:
 - Coding
 - Reimbursement
 - Quality Analysis
 - Regulatory Oversight
- Expectations and practices for U.S. national coding and reporting requirements will be compromised
- Debate in the U.S. over early enough recognition of sepsis

Payers

- Focus on diagnoses known for clinical validation deficiencies
 - Sepsis is one of the top chosen
- Denials will often read “*although well documented...*”

• UHC moratorium on SOFA guidelines came out in Oct of 2018-phone meeting with them was not well received.

Oct 11

• November Beth Lefford from USA Hospital in Alabama placed similar ping on Vizient List Serve-I responded and we met via phone and shared best practice. It turns out Alabama had been dealing with the denials issue longer than any other market (they had received pushback from Blue Cross Blue shield as well as UHC)

Nov 7

January Healthcare Association of New York (HANY) told providers Tuesday that the Empire State that it will not use the UnitedHealthcare (UHC) Sepsis-3 criteria when reviewing claims to validate sepsis for payment. New York state law defines sepsis with systemic inflammatory response syndrome (SIRS) criteria, otherwise known as Sepsis-2.

Jan 1

“silent” pandemic of denials, that would have become commonplace, as no one really realized it was happening until SIH rang the alarm bells. Their CDI director in contact with BJC and SIH-SIH disseminates the information to UCLA, Alabama and Cedars Sinai. EPIC is planning on focusing their May Sespsi webinar on this issue, and recommends that institutions band together in pushback on these denials (a United front). Organizations began keeping their own trackers on the denials-they have become very cumbersome-BJC is close to needing a full time FTE to combat these. EPIC is looking to trial a documentation strategy of a denial/appeal letter that could be generated directly from the EMR. SIH is creating a Sharepoint site for the groups to collaborate and share documentation strategies.

Mar 1

2018

Oct

Nov

Dec

2019

Feb

Mar

2019

0.2 wks

Oct 12 - Oct 15

• Queries placed on Vizient in Oct did not get many answers back-but rather a lot of outrage and umbrage at the proposed payment model. Many asked what we proposed to do to apply these metrics. (“what are you going to do?”)

0.2 wks

Oct 30 - Oct 31

• Reached out to coding expert from East Cost who had given presentations (James Donaher) who was helpful (I can provide his PP if requested). Initial overtures to EPIC were unsuccessful. Russ Kerbel from UCLA reached out (from Vizient post) and was interested in collaborating

0.2 wks

• Reached out to EPIC again-but this time emailed Judy Faulkner-and captured their interest-as this would directly affect their AI and PA tools. They said they had only received anecdotal stories about Sepsis reimbursement denials-we requested report “behind the scenes” in all EPIC institutions on denials and came up with some interesting numbers. In Initial meeting with BJC and SIH,and EPIC-they presented the following:

When is it Time to Take Action?

When we felt strongly enough that SOFA guidelines were not in best interest of patient care we:

- Reached out to our legal team for advocacy
- Posted and responded to List Serve Queries
- Had meetings with other organizations
- Shared best practices and documents
- Reached out to EPIC who helped us with data(including behind the scenes across all EPIC organizations)

Recently – Inpatient Sepsis Kaizen Event

- Determined what the best care was
- Based off of Clinical Expertise
- Utilized CMS Regulatory Guidelines
- At no point did anyone find SOFA criteria to be helpful in diagnostic identification or treatment of septic patients

Contracting Role

- Payor Notification upon receipt of newsletter/policy update
 - Contractual notification terms
 - No contract- find another avenue
- Basis for Argument
 - Clinical/quality concerns
- Our Experience
 - Two payors applying SOFA guidelines
 - One payor changes DRG (lower reimbursement)
 - One payor denies claim (no reimbursement)
 - Both are back-end denials
- Use your Network!
 - Reach out to peers in similar roles
 - What is everyone doing/how handling?

Jenny H.

Being Resourceful

- Verbalize strategies to be resourceful when it comes to patient advocacy
- Comfortability in stating that this is the care you are providing, and that you expect to be reimbursed at that level
- Collaboratively support good patient care across organizations



2/8/2019

UnitedHealthcare

Patient Name:

Date of Service: 01/05/2017-01/10/2017

Date of Birth: 1933

To whom it may concern,

Herrin Hospital recently received notice of a potential coding change for the patient specified above. We respectfully disagree with the finding from UnitedHealthcare that states the medical record did not support the diagnosis code of A41.02, Sepsis due to Methicillin Susceptible Staphylococcus aureus as principal diagnosis. After review of the clinical documentation, it is our opinion that the data and clinical evidence documented by the attending physician supports this condition as the principal diagnosis. We are requesting reconsideration as we do not believe an overpayment has been made in this case.

The documentation in the record provides the following clinical validation of sepsis:

X presented to the ER due to right lower extremity swelling for the last couple weeks. Temperature in the ER was 102.8, pulse was 100, MAP was 63, systolic blood pressure was 99, and white blood cell count was 19.8. IV Vancomycin was started.

H&P dated 1/6/2017 states X presented with a significant past medical history of recurrent cellulitis of the lower extremities and chronic venous insufficiency. Patient stated the swelling started 2-3 weeks prior to admission in which she noticed that her right leg had increased swelling, erythema, and pain. She admits to having chronic venous insufficiency and chronic swelling of both extremities including erythema and chronic skin changes. However, over the course of 2-3 weeks, it has gotten worse and has spread up to her thighs. Blood pressure was noted to be 99/54 and a respiratory rate of 22. White blood cell count is 19.8 with a predominance of neutrophils at 18.3. Patient was admitted to the inpatient unit under sepsis protocol given her white blood cell count, fever, and hypotension. Patient is aggressively being hydrated and procalcitonin and lactic acid levels are pending.

Progress note dated 1/6/2017 states sepsis due to unspecified organism, questionable if secondary to cellulitis. White blood cell count has improved to 14.0, procalcitonin is 6.77 and lactic acid is 1.0. Patient is on IV Zosyn and Vancomycin for the acute cellulitis. Antibiotics will be tailored depending on

Progress note dated 1/8/2017 states sepsis due to unspecified organism, secondary to cellulitis. White blood cell count has improved to 6.8 and procalcitonin has improved to 2.52. Patient is continued on IV Zosyn and Vancomycin for the acute cellulitis. Wound culture was performed and results are pending.

Progress note dated 1/9/2017 states sepsis secondary to cellulitis has resolved. Wound culture grew MRSA and infectious disease was consulted. White blood cell count has improved to 6.3. Patient is continued on IV Zosyn and Vancomycin for the acute cellulitis. Assessment and Plan states sepsis secondary to cellulitis secondary to MRSA.

Progress note dated 1/10/2017 states sepsis secondary to cellulitis has resolved.

Discharge Summary dated 1/10/17 states X had sepsis secondary to right lower extremity cellulitis which has now improved. Her wound cultures grew MRSA. Patient was found to have sepsis, possibly secondary to cellulitis. She was started on broad-spectrum antibiotics. Blood cultures were done and these came back negative. X improved clinically with appropriate antibiotic therapy. She is being discharged on oral Zyvox as per infectious disease specialist recommendations.

Clear and consistent documentation of sepsis secondary to cellulitis can be found throughout the record. The diagnosis of sepsis due to MRSA is valid as the principal diagnosis according to the Uniform Hospital Discharge Data Set criteria and Coding Guidelines. Review of the physician's documentation, the patient's hospital course, and clinical evidence displayed throughout the record supports the diagnosis.

Thank you in advance for taking the time to review the findings of this patient. We would appreciate review and reconsideration of this case

Please contact me with any additional questions or concerns.

Sincerely,

Sepsis Denial Letter Example

Alicia

Insulation & Siloes

- Health Care used to be less segregated
- Teams pulled together for good of patient
- Detachment from patients journey through diagnosis and treatment

How Do We Make Our Way Back?

- Standards of care
- Treating patients in their best interest
- NOT what insurance companies formulaically dictate

What has SIH Changed?

- Many of our deliverables are yet to be determined
- Power in a unified approach
- Collaborating outside of facility

Patient Advocacy on Insurance Denials

- State and National Groups
 - Lots of Information
- Healthcare Companies
 - **Very little information**

The Domino Effect of Denials

Healthcare Institutions' Bottom Lines

Patient Outcomes

Confusion of Staff

Reimbursement

Higher Costs to Healthcare Consumers

Ambiguity of Care Models

Contact your local State Insurance Agency

Google if unsure 😊

- Illinois Department of Insurance
122 S. Michigan Ave., 19th Floor
Chicago, IL 60603
(312) 814-2420
- Illinois Department of Insurance
320 W. Washington St.
Springfield, IL 62767
(217) 782-4515

Understanding Insurance Companies

Not in Business of Treating Patients

For Profit

Counting on Attrition

Advocate for your patients!

Not unlikely the insurance company is wrong. Have conviction!