Please start the survey now by clicking on the Continue button below.

Please indicate your current position at WCHOB:

-- Select --

Faculty physicians only:
Please indicate your department/division

-- Select --

Resident physicians only:
Please indicate your department/division

-- Select --

Registered nurses, nurse practitioners, physician's assistants:
Please indicate your department/division
If you work in several patient care areas, please choose that in which you spend the majority (>50%) of your clinical time

-- Select --

Respiratory therapists only:
Please indicate your department/division
If you work in several patient care areas, please choose that in which you spend the majority (>50%) of your clinical time

-- Select --

Please indicate the number of years you have worked/practiced at WCHOB

- 0-3
- 3-6
- 6-9
- 10 or more

Housestaff only:
Please indicate your current level of training

- PGY-1
- PGY-2
- PGY-3
- PGY-4
Non-housestaff only:
Please indicate how many years you have been in practice (i.e. since completion of school/training)
- 0-3
- 3-6
- 6-9
- 10 or more

In a ranking of every U.S. children’s hospital, how would you predict WCHOB rates in its ability to recognize and manage sepsis and septic shock?
- Superior: Among the best in the nation
- Above average: Among the best in the region
- Average: Somewhere in the middle
- Below average: Among the worst in the region
- Inferior: Among the worst in the nation

To the best of your knowledge, are there any pediatric sepsis protocols currently in use anywhere at WCHOB?
- Yes
- No
- Not sure

Which of the following do you consider challenges or complicating factors when evaluating a pediatric patient for SIRS/sepsis? (Select all that apply)
- A confirmed viral infection
- Developmental delays and/or special needs
- Complex medical histories
- Numerous past admissions ("Patient X, probably back with another pneumonia..."")
- Range of "normal" vital signs, lab values for children
- Discouragement from colleagues, supervisors
- Tendency to "explain away" signs, symptoms (e.g. fever in an infant from "over-bundling")
- Ability of SIRS/sepsis to mimic other conditions
- Lack of familiarity with diagnostic criteria

Please state your level of agreement with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our institution excels at SIRS and sepsis recognition</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Our institution excels at SIRS and sepsis treatment</td>
<td>o</td>
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</tr>
</tbody>
</table>
Our institution routinely uses clear definitions of SIRS and sepsis.

I feel comfortable alerting other providers that a patient may have SIRS or sepsis based on my own evaluation.

I feel comfortable alerting other providers that a patient may have severe sepsis or septic shock based on my own evaluation.

I feel comfortable diagnosing a patient with septic shock if they have a blood pressure that is in the "normal" range.

Please indicate the frequency with which you have experienced the following:

I have hesitated to notify other providers about a patient I thought might be septic or in shock because of...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discomfort with giving patients that &quot;label&quot;</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Concerns about colleague or superior &quot;pushback&quot; or negative response</td>
<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>Further testing or escalation of care, and making such a &quot;big deal&quot; if I was actually mistaken</td>
<td>○</td>
<td>○</td>
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<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Prior discouragement from making this diagnosis by a colleague or supervisor</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

You are called to the bedside of the following patients. Based on your knowledge of the pediatric criteria, please indicate if each should be diagnosed with sepsis.

A 2 week old male admitted to the General Pediatrics floors with 1 day of poor feeding and lethargy. He is receiving ampicillin and cefotaxime, all cultures are pending.

Temperature: 35.9°C orally
Heart rate: 90 beats/min
Respiratory rate: 35 breaths/min
Blood pressure: 74/30
Capillary refill: 3 seconds
Pulses: 2+, central and peripheral
WBC count: 10.6, with 60% neutrophils and 15% immature neutrophils

- Yes - this patient has sepsis
- No - this patient does not have sepsis
11 year old female admitted to the pediatric ICU with newly diagnosed brain tumor, altered mental status, and lethargy. An external ventricular drain (EVD) was placed by the Neurosurgery team two days ago with improvement in symptoms. Patient has no pain and has been afebrile. She is on prophylactic antibiotics while the drain is in place.

Temperature: 38.2°C orally
Heart rate: 135 beats/min
Respiratory rate: 16
Blood pressure: 115/70
Capillary refill: < 2 seconds
Pulses: 2+, peripheral and central
WBC count: 13.1, with 80% neutrophils, 2% immature neutrophils
- Yes - this patient has sepsis
- No - this patient does not have sepsis

14 year old male with influenza diagnosed on viral screening. All bacterial cultures negative, on no antibiotics. Currently stable, in no distress and on no additional support, awake and alert, admitted to the General Pediatrics floors for dehydration.

Temperature: 39.0°C orally
Heart rate: 165 beats/min
Respiratory rate: 18 breaths/min
Blood pressure: 110/65
Capillary refills: < 2 seconds
Pulses: 2+, central and peripheral
WBC count: 7.4, with 70% lymphocytes, 20% neutrophils
- Yes - this patient has sepsis
- No - this patient does not have sepsis

You are called to the bedside of the following patients. Each has already received two 20mL/kg boluses of normal saline in the last hour for concerns of poor tissue perfusion. Based on your knowledge of pediatric criteria, please indicate if each should be diagnosed with septic shock.

3 year old male being treated for pneumococcal pneumonia, admitted to General Pediatrics floors on high-flow nasal cannula. Appears in mild distress, with minimal accessory muscle use/retractions. Tired and irritable but not lethargic

Temperature: 38.8°C orally, 38.5°C axillary
Heart rate: 110 beats/min
Respiratory rate: 20 breaths/min
Blood pressure: 110/50, on no vasoactive medications
WBC count: 18.1, with 85% neutrophils, 12% immature neutrophils
Urine output of 1.5mL/kg/hr over last 12 hours
Arterial blood gas shows pH of 7.39, CO2 of 40, base deficit of -0.5
Platelets: 75,000/mm3
Serum creatinine: 1.2 mg/dL (baseline 0.5 mg/dL)
- Yes - this patient is in septic shock
- No - this patient is not in septic shock
6 year old female with a history of ALL (acute lymphoblastic leukemia), receiving chemotherapy, admitted with one day of fever and vomiting. Appears sleepy but answers questions appropriately.

Temperature: 39.7°C orally, 36.5°C axillary
Heart rate: 120 beats/min
Respiratory rate: 18 breaths/min
Blood pressure: 108/60
WBC count: 0.4
Urine output of 0.4mL/kg/hr over last 12 hours
Arterial blood gas shows pH of 7.30, CO2 of 32, base deficit of -6
Platelets of 100,000/mm3
Serum creatinine normal
- Yes - this patient is in septic shock
- No - this patient is not in septic shock

1 year old male with MRSA (methicillin-resistant Staphylococcus aureus) bacteremia, admitted to the Pediatric ICU. Currently in no distress, no respiratory support required. PICC line in place, receiving IV antibiotics.

Temperature: 38.6°C orally, 38.3°C axillary
Heart rate: 185 beats/min
Respiratory rate: 30 breaths/min
Blood pressure: 75/40, on dopamine infusion at 6mcg/kg/min
WBC count: 18.6, with 77% neutrophils, 4% immature neutrophils
Urine output of 3 mL/kg/hr over last 12 hours
Arterial blood gas shows pH of 7.36, CO2 of 34, base deficit of -1
Platelets: 280,000/mm3
Serum creatinine normal
- Yes - this patient is in septic shock
- No - this patient is not in septic shock

4 year old female with a history of liver transplant, now with CMV (cytomegalovirus) infection, admitted for IV ganciclovir. Drowsy, becomes irritable with stimulation but answers questions appropriately, in no distress.

Temperature: 38.8°C orally, 38.8° axillary
Heart rate: 160 beats/min
Respiratory rate: 25 breaths/min
Blood pressure: 80/55
WBC count: 4.2, with 2% neutrophils
Urine output of 0.7mL/kg/hr over last 12 hours
Arterial blood gas shows pH of 7.29, CO2 of 28, base deficit of -5
Platelets: 35,000/mm3
Serum creatinine: 0.9mg/dL (baseline 0.6mg/dL)
- Yes - this patient is in septic shock
- No - this patient is not in septic shock

Please indicate your level of agreement with the following statements regarding sepsis education:

<table>
<thead>
<tr>
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<th>Strongly Disagree</th>
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<td>Limit education to residents and fellows only, since they are the providers who primarily manage these patients</td>
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<tr>
<td>Limit education to the ED and PICU teams only, since they are</td>
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<table>
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<th>Every provider with a role in patient care should be able to recognize a patient with sepsis</th>
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### If sepsis education were to become mandatory for all WCHOB providers, which of the following teaching platforms do you feel would be most effective (Select all that apply)?

- □ Grand rounds
- □ Large group lecture series
- □ Small discussion groups
- □ Online workshops/modules
- □ Simulation sessions
- □ Newsletters/bulletins sent electronically, with quizzes/links to online resources
- □ Other

### If sepsis education were to become mandatory for all WCHOB providers, which of the following do you feel would be the most important attribute of the program?

- □ Specific - Targets my specific role/responsibilities as a provider
- □ Efficient - Respects my time as valuable, information is delivered in a timely manner
- □ Comprehensive - Reviews all aspects of sepsis and shock, including physiology and new medical literature
- □ Universal - Extends to all providers equally, so we can all learn together
- □ Regular - Continues year-round, so we can stay up to date and informed
- □ Other

### Please rank the following, in order of their relative importance to a hospital-wide sepsis education program: ("1" signifies the most important aspect, "5" the least important)

#### Early Recognition
Focus on interpreting abnormal vital signs, labs, and exam findings

#### Early Intervention
Focus on studies, medications, treatments to order/administer upon sepsis recognition

#### Definitions
Focus on criteria needed to make a diagnosis of SIRS, sepsis, severe sepsis, septic shock

#### Pathophysiology
Focus on physiologic, biochemical changes that occur in SIRS, sepsis, shock

#### Evidence-based Medicine
Focus on published guidelines, clinical trials, recommendations