WCHOB Sepsis Survey

Please complete the survey below.

Thank you!

What is your role in patient care?

- [ ] Physician - Resident
- [ ] Physician - Fellow
- [ ] Physician - Attending
- [ ] Nurse
- [ ] Respiratory Therapist
- [ ] Nurse Practitioner
- [ ] Physician's Assistant

Did you take the original PRESS (sepsis) survey?

- [ ] Yes
- [ ] No

Attending Physicians Please indicate your division:

- [ ] Emergency Medicine
- [ ] General Pediatrics
- [ ] Critical Care

Resident Physicians Please indicate your division:

- [ ] Emergency Medicine
- [ ] General Pediatrics

Fellow Physicians Please indicate your division:

- [ ] Emergency Medicine
- [ ] Critical Care

Residents and Fellows What is your current level of training?

- [ ] PGY-1
- [ ] PGY-2
- [ ] PGY-3
- [ ] PGY-4
- [ ] PGY-5
- [ ] PGY-6
- [ ] PGY-7 or greater

Nurses What is your primary care team/area? *If you split time, choose where you spend the majority*

- [ ] Emergency Department
- [ ] Inpatient General Pediatrics wards
- [ ] PICU
- [ ] STAT team
- [ ] Other

Respiratory Therapists What is your primary care team/area? *If you split time, choose where you spend the majority*

- [ ] Emergency Department
- [ ] Inpatient General Pediatrics wards
- [ ] PICU
- [ ] STAT team
- [ ] Other

Nurse Practitioners and Physician’s Assistants What is your primary care team/area?

- [ ] Emergency Department
- [ ] PICU
- [ ] Other
- [ ] Other:

How many years have you been in practice (out of school/training)?

- [ ] Less than 3
- [ ] 3-6
- [ ] 7-9
- [ ] 10 or more
| Question                                                                 | Options                                                                 |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
| How many years have you been at Women and Children's Hospital of Buffalo (training and/or in practice)? | Less than 3, 3-6, 7-9, 10 or more                                       |
| How do you think Women and Children's Hospital of Buffalo compares to other U.S. pediatric centers in sepsis care? | Among the best (top 10%), Above average (upper 25%), Average, Below average (lower 25%), Among the worst (bottom 10%) |
| How do you think Women and Children's Hospital of Buffalo compares to other U.S. pediatric centers in septic shock care? | Among the best (top 10%), Above average (upper 25%), Average, Below average (lower 25%), Among the worst (bottom 10%) |
| Does Women and Children's Hospital of Buffalo have a protocol for care of patients with severe sepsis or septic shock? | Yes, No, Not sure                                                      |
| Does Women and Children's Hospital of Buffalo have a specialized order set for patients with severe sepsis or septic shock? | Yes, No, Not sure                                                      |
| How often have you used the severe sepsis order set in the care of your patients? | Never, Rarely, Sometimes, Frequently, Always                           |
| Which are some reasons you have not used the severe sepsis order set in the past? Select all that apply | What's a sepsis order set?, I forget, Not easy to find the order set in the EMR, Not easy to find what I need when I open the order set, Already doing most/all of what it says already, My patients, though technically "septic," are not sick enough to warrant all those labs/meds/interventions, Other |
| Which of the following do you think make it difficult to recognize sepsis and/or septic shock in children? Choose all that apply | Viral infection, Lack of a positive culture, Developmental delay, Complex medical history, Many previous admissions for similar issues, Kids have a wide range of "normal" vitals, labs, Coworker discouragement, Easy to dismiss signs/symptoms (e.g. fever 'not real' in a bundled neonate), Diagnostic fatigue ("Everything looks like sepsis"), Lack of familiarity with the diagnostic criteria, Other |

Other:

____________________________________

Other:

____________________________________
| Statement                                                                 | Strongly Disagree | Somewhat Disagree | Neither agree nor disagree | Somewhat Agree | Strongly Agree |
|---------------------------------------------------------------------------|-------------------|-------------------|----------------------------|---------------|---------------|
| Women and Children's Hospital of Buffalo excels at diagnosing sepsis     | ○                 | ○                 | ○                          | ○             | ○             |
| Women and Children's Hospital of Buffalo excels at diagnosing septic shock | ○                 | ○                 | ○                          | ○             | ○             |
| Women and Children's Hospital of Buffalo excels at treating sepsis       | ○                 | ○                 | ○                          | ○             | ○             |
| Women and Children's Hospital of Buffalo excels at treating septic shock | ○                 | ○                 | ○                          | ○             | ○             |
| Providers in Women and Children's Hospital of Buffalo use clear and consistent definitions of sepsis/septic shock | ○                 | ○                 | ○                          | ○             | ○             |
| Reason                                                                 | Never | Rarely | Sometimes | Frequently | Very frequently/Always |
|-----------------------------------------------------------------------|-------|--------|-----------|------------|------------------------|
| Concerns over a negative response from coworkers                      |       |        |           |            |                        |
| Prior discouragement from making these diagnoses                      |       |        |           |            |                        |
| Worries about alarming patients, families, or co-workers              |       |        |           |            |                        |
| Worries about making "too big a deal" in case you are mistaken        |       |        |           |            |                        |
| Wish to avoid using these "labels"                                    |       |        |           |            |                        |
| Reason                                                                  | Never | Rarely | Sometimes | Frequently | Very Frequently/Always |
|------------------------------------------------------------------------|-------|--------|-----------|------------|------------------------|
| Concern over a negative response from coworkers                        | ○     | ○      | ○         | ○          | ○                      |
| Prior discouragement from making these diagnoses                        | ○     | ○      | ○         | ○          | ○                      |
| Worry about alarming patients, families, or co-workers                  | ○     | ○      | ○         | ○          | ○                      |
| Worry about making "too big a deal" in case you are mistaken            | ○     | ○      | ○         | ○          | ○                      |
| Wish to avoid using these "labels"                                     | ○     | ○      | ○         | ○          | ○                      |
| Statement                                                                 | Strongly Disagree | Somewhat Disagree | Neither Agree or Disagree | Somewhat Agree | Strongly Agree |
|--------------------------------------------------------------------------|-------------------|-------------------|---------------------------|----------------|----------------|
| ...alerting a COWORKER my patient might be septic"                       | o                 | o                 | o                         | o              | o              |
| ...alerting a SUPERVISOR or ATTENDING PHYSICIAN my patient might be septic" | o                 | o                 | o                         | o              | o              |
| ...alerting a COWORKER my patient might be in septic shock"              | o                 | o                 | o                         | o              | o              |
| ...alerting a SUPERVISOR or ATTENDING PHYSICIAN my patient might be in septic shock" | o                 | o                 | o                         | o              | o              |
| ...identifying septic shock in my patient when their blood pressure is NORMAL" | o                 | o                 | o                         | o              | o              |
| ...identifying septic shock in my patient when their blood pressure is ABNORMAL" | o                 | o                 | o                         | o              | o              |
You are called to the bedside of each of the following patients. Based on your understanding of the pediatric criteria, please indicate whether each has sepsis.

| Patient Description                                                                 | Temperature | Heart Rate | Respiratory Rate | Blood Pressure | Capillary Refill | Pulses | WBC Count | Sepsis Criteria |
|-------------------------------------------------------------------------------------|-------------|------------|------------------|----------------|-----------------|--------|-----------|----------------|
| 3 y/o male with nephrotic syndrome admitted for worsening edema, acute on chronic renal failure secondary to medication non-compliance. Temperature: 38.7°C orally Heart rate: 150 beats/min Respiratory rate: 50 breaths/min Blood pressure: 140/95 Capillary refill: 4-5 seconds, mottled with pitting edema Pulses: 2+ central, 1+ peripheral WBC count: 14.4, with 70% neutrophils, 20% lymphocytes Urinalysis: 3+ protein, 3+ hemoglobin, many WBC, + leuk esterase, + nitrites, many bacteria |             |            |                  |                |                 |        |           | Yes, this patient has sepsis |
| 6 year old male s/p MVA (motor vehicle accident), pedestrian vs. car. Admitted with liver laceration to the ICU for serial blood counts. No other injuries. Temperature: 38.1°C orally Heart rate: 175 beats/min Respiratory rate: 36 breaths/min Blood pressure: 132/60 Capillary refill: 3 seconds Pulses: 3+, central and peripheral WBC count: 5.7, with 88% neutrophils, 10% lymphocytes Hemoglobin: 6.3 |             |            |                  |                |                 |        |           | Yes, this patient has sepsis |
| 14 year old male with influenza A on viral screening. Bacterial cultures negative, no antibiotics. Temperature: 39.0°C orally Heart rate: 165 beats/min Respiratory rate: 18 breaths/min Blood pressure: 110/65 Capillary refill: < 2 seconds Pulses: 2+, central and peripheral WBC count: 7.4, with 70% lymphocytes, 20% neutrophils |             |            |                  |                |                 |        |           | Yes, this patient has sepsis |
| 12 y/o male with global developmental delay and autism, admitted for "trouble breathing" and hypoxemia. Improved on nasal cannula, now on 2L/min. Temperature: 39.1°C orally Heart rate: 155 beats/min Respiratory rate: 32 breaths/min, SpO2: 95% Blood pressure: 122/94 Capillary refill: 5 seconds Pulses: 1+, central and peripheral WBC count: 19.2, with 80% lymphocytes, 16% neutrophils |             |            |                  |                |                 |        |           | Yes, this patient has sepsis |
You are called to the bedside to evaluate the following patients. If all have received 40ml/kg of intravenous fluids in the last hour, would they meet the criteria for SEPTIC SHOCK based on the information provided?

| Patient Description                                                                 | Temperature | Heart Rate | Respiratory Rate | Blood Pressure | Capillary Refill | WBC Count | Neutrophils | Lymphocytes | Platelets | Creatinine |
|-------------------------------------------------------------------------------------|-------------|------------|------------------|----------------|-----------------|-----------|-------------|-------------|-----------|------------|
| 3 y/o male with pneumococcal pneumonia on high-flow nasal cannula. Appears in mild distress, minimal accessory muscle use and substernal retractions. Tired and cranky but appropriately interactive. Temperature: 38.8°C rectally, 38.5°C axillary. Heart rate: 110 beats/min. Respiratory rate: 20 breaths/min. Blood pressure: 110/50. Urine output of 1.5mL/kg/hr over last 12 hours. WBC count: 18.1, with 85% neutrophils, 12% immature neutrophils (bands). Arterial blood gas: 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). | 38.8°C rectally, 38.5°C axillary. Heart rate: 110 beats/min. Respiratory rate: 20 breaths/min. Blood pressure: 110/50. Urine output of 1.5mL/kg/hr over last 12 hours. WBC count: 18.1, with 85% neutrophils, 12% immature neutrophils (bands). Arterial blood gas: 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). | 110 beats/min | 20 breaths/min | 110/50 | > 6 seconds | 1.5mL/kg/hr | 18.1 | 85% | 12% | 75,000/mm3 | 1.2 mg/dL |
| 6 year old female with a history of ALL (acute lymphoblastic leukemia), receiving chemotherapy. Admitted with one day of fever and vomiting. 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. Capillary refill: 6 seconds. Urine output of 0.4mL/kg/hr over last 12 hours. WBC count: 0.4. Arterial blood gas: pH of 7.30, CO2 of 32, base deficit of -6. Platelets: 100,000/mm3. Serum creatinine: normal. | 39.7°C orally, 36.5°C axillary. Heart rate: 120 beats/min. Respiratory rate: 18 breaths/min. Blood pressure: 108/60. Capillary refill: 6 seconds. Urine output of 0.4mL/kg/hr over last 12 hours. WBC count: 0.4. Arterial blood gas: pH of 7.30, CO2 of 32, base deficit of -6. Platelets: 100,000/mm3. Serum creatinine: normal. | 120 beats/min | 18 breaths/min | 108/60 | 6 seconds | 0.4mL/kg/hr | 0.4 | 100% | 100% | 100,000/mm3 | normal |
| 19 day old female with RSV, on ampicillin and cefotaxime while blood, urine, and CSF cultures pending. Temperature: 38.7°C rectally. Heart rate: 190 beats/min. Respiratory rate: 48 breaths/min. Blood pressure: 90/44. Capillary refill: > 5 seconds. Pulses: 1+, central and peripheral, mottled skin. Urine output of 0.2mL/kg/hr over last 12 hours. WBC count: 32.6. Arterial blood gas: pH of 7.33, CO2 of 22, base deficit of -9. Platelets: 280,000/mm3. Serum creatinine: 0.7. | 38.7°C rectally. Heart rate: 190 beats/min. Respiratory rate: 48 breaths/min. Blood pressure: 90/44. Capillary refill: > 5 seconds. Pulses: 1+, central and peripheral, mottled skin. Urine output of 0.2mL/kg/hr over last 12 hours. WBC count: 32.6. Arterial blood gas: pH of 7.33, CO2 of 22, base deficit of -9. Platelets: 280,000/mm3. Serum creatinine: 0.7. | 190 beats/min | 48 breaths/min | 90/44 | > 5 seconds | 0.2mL/kg/hr | 32.6 | 82% | 10% | 280,000/mm3 | 0.7 |

- Yes, this patient has septic shock
- No, this patient does not meet criteria for septic shock
- Unsure
Please answer the next few questions about sepsis drills and our efforts to date so we can better serve you and our patients:

| Question                                                                 | Options                                    |
|-------------------------------------------------------------------------|--------------------------------------------|
| Have you participated in any sepsis drills in the past year?             | Yes, No                                    |
| Approximately how many?                                                 | 1 or 2, 3-5, 6 or more                    |
| How valuable do you feel sepsis drills are to our education?             | Very much, Moderately, Somewhat, Little, Not at all |
| What have you learned from your participation in sepsis drills? Choose all that apply | Definitions for sepsis, severe sepsis and septic shock, That we have a severe sepsis protocol at WCHOB, What the severe sepsis protocol contains, How to recognize early signs of severe sepsis or septic shock, How to treat patients with severe sepsis or septic shock, Nothing, I already knew everything discussed, Other |
| Which of the following would be helpful educational platforms? Choose all that apply | Grand Rounds, Online modules/quizzes, Talent Management, Small-group discussions, More sepsis drills!, Simulation/Mock code sessions, Other |

Other:

Other:
In your experience, how have the following aspects of the sepsis "culture" at Women and Children's Hospital of Buffalo changed over the past year?

| Aspect                                                                 | Improved significantly | Improved somewhat | No change | Gotten somewhat worse | Gotten significantly worse |
|------------------------------------------------------------------------|------------------------|-------------------|-----------|-----------------------|---------------------------|
| Sepsis and shock awareness                                             | 0                      | 0                 | 0         | 0                     | 0                         |
| Prompt sepsis recognition                                              | 0                      | 0                 | 0         | 0                     | 0                         |
| Prompt shock recognition                                               | 0                      | 0                 | 0         | 0                     | 0                         |
| Prompt sepsis treatment                                                | 0                      | 0                 | 0         | 0                     | 0                         |
| Prompt shock treatment                                                 | 0                      | 0                 | 0         | 0                     | 0                         |
| Collaboration and communication about sepsis between providers          | 0                      | 0                 | 0         | 0                     | 0                         |
| Staff education                                                        | 0                      | 0                 | 0         | 0                     | 0                         |
| Overall quality of care of patients with sepsis                        | 0                      | 0                 | 0         | 0                     | 0                         |