SEPSIS CLINICAL PATHWAY
ENDPOINTS / TARGETS FOR RESUSCITATION
3 & 6 HOUR TARGETS (version 2: 6/8/18)

START (Time)
3-Hour Goal Time
6-Hour Goal Time

(ED/Sepsis triage time or time symptoms evident)
Search for source, source control, antibiotics, volume resuscitation

**Consider RRT/transfer for non-ICU patients not responding to 3-hr. bundle**

Resuscitation Bundle: 3-Hour Bundle Goal
To be accomplished within an hour if possible, but at least within 3 hours

<table>
<thead>
<tr>
<th>Time Met</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum lactate:</td>
<td>Measured</td>
</tr>
<tr>
<td>Blood cultures:</td>
<td>Obtained prior to antibiotic administration.</td>
</tr>
<tr>
<td>Antibiotics:</td>
<td>Broad-spectrum antibiotics administered within 1 hour if possible (at least within 3 hrs.)</td>
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<tr>
<td>Fluids (for any hypotension or lactate &gt; 4 mmol/L):</td>
<td>Deliver an initial minimum of 30 mL/kg of crystalloid.</td>
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**Resuscitation Bundle: 6-Hour Bundle Goal**
To be accomplished as soon as possible but at least within 6 hours

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<tr>
<th>Time Met</th>
<th>Indicator</th>
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<tr>
<td>Re-measure lactate if initial lactate elevated (&gt; 2 mmol/L)</td>
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(Below Interventions done in ED or ICU)

| Vasopressors | For hypotension not responding to initial fluid resuscitation (30 mL/kg within 3 hrs.) to maintain mean arterial pressure (MAP) > 65 and SBP >90 mm Hg. |
| (Remaining interventions done in ED or ICU) |

For persistent hypotension after fluids (30 mL/kg) OR lactate > 4 mmol/L
reassess volume status and tissue perfusion by using one of the following strategies

**Strategy A:** Documentation of repeat focused exam of tissue perfusion (after initial fluid resuscitation) by licensed independent practitioner (MD/Nurse Practitioner)

**OR**

**Strategy B:** Reassessment using two of the following

- Measure CVP (goal 8-12 mmHg / fluids)
- Measure ScvO₂ (goal ≥ 70%)
- Bedside cardiovascular ultrasound
- Dynamic assessment of fluid responsiveness with passive leg raise or fluid challenge

*Refer to Sepsis Guidelines for complete information [http://survivingsepsis.org/Guidelines/Pages/default.aspx]*

Notes:
- Sepsis Screening Tools & automated E.H.R. alerts are excellent tools to discover presence of severe sepsis, but may not capture all patients. Use clinical judgement & notify MD for concerns for sepsis even if screening tools are negative.

- **ANY hypotension** (while in ED) counts as hypotension*
  *Hypotension = MAP < 65 mmHg, SBP < 90 mmHg or SBP decrease ≥ 40 mm Hg

- **Septic Shock:** Sepsis characterized by unresponsive hypotension and lactic acidosis (serum lactate > 2 mmol/L) requiring vasopressor therapy to maintain MAP > 65 mmHg, despite adequate fluid resuscitation*
  - ICU required for patients requiring vasopressors
  - Consider ICU placement for sepsis patients with lactates ≥ 4 mmol/L upon presentation (mortality risk)

- **CVP or ScvO₂** if appropriate catheter is present
  - CVP & ScvO₂ can be monitored intermittently through IJ, subclavian or PICC line. ScvO₂ can also be monitored continuously through special ScvO₂ catheters.
  - CVP & ScvO₂ have not demonstrated mortality benefits, but are still part of CMS core measure. Monitoring trends might be helpful.

**qSOFA:** Score > 2 criteria suggests greater mortality risk: Hypotension < 100 mgHg / Altered mental status / Tachypnea > 22/min

4/9/18 ph Resuscitation Targets/Clinical Excellence/AW Sepsis Rev. 6/81/8