Transition to Version 4 From Version 3

Emergency Severity Index
Why the change to version 4?

- 2 levels of ESI Level 2 patients
  - Physiologically UNSTABLE - Critically ill, but still has a pulse, is breathing and is conscious
  - Physiologically STABLE - High risk patients, severe pain or distress, or new onset mental status change (but can wait for a short period of time)
1. **patient dying?**
   - yes
   - no
     1. **shouldn’t wait?**
        - yes
        - no
          2. **how many resources?**
             - none
             - one
             - many
               3. **vital signs**
                  - no

2. **Consider**
ESI Level 1 Criteria

- Intubated
- Apneic
- Pulseless
- Non-Responsive
Research Project

• Multi-site project (five EDs)
• Sites used ESI for a minimum of 3 years
• Over 500 Level 2 patients were prospectively enrolled
• Patients were divided into 2 groups
  – Those that received immediate life-saving interventions
  – Those that did NOT receive immediate life-saving interventions
Definition: NOT Life-Saving Interventions

- Diagnostic Tests
  - ECG
  - Lab Studies
- Oxygen
- Monitor
- IV access

- Medications
  - ASA
  - Nitroglycerine
  - Pain Medications
  - Antibiotics
  - Heparin
Life-Saving Interventions

- Intubation
- Vasoactive medications
- Cardioversion
- Pacer pads
Predictors of Immediate Life-Saving Interventions

- Triage nurses’ prediction of the need for immediate interventions
- Severe respiratory distress
- SpO$_2$ less than 90%
Decision Point A
Immediate life-saving intervention required

Airway
Emergency medications
Other hemodynamic interventions
(IV, supplemental $O_2$, monitor, ECG or labs DO NOT count)
**Decision Point A**

Immediate life-saving intervention required

Clinical conditions: intubated, apneic, pulseless, severe respiratory distress, SpO₂<90, acute mental status changes, or unresponsive

**Unresponsiveness:** a patient that is either

1. nonverbal and not following commands (acutely); or
2. requires noxious stimulus (PU on AVPU) scale.
Decision Point A

A. Immediate life-saving intervention required:
   airway, medication, other hemodynamic interventions; or the following clinical conditions
   intubated, apneic, pulseless, severe respiratory distress, $\text{SpO}_2<90$, acute mental status changes, unresponsive

B. Unresponsiveness is defined as a patient that is either:
   (1) Nonverbal & not following commands (acutely)
   (2) Requires noxious stimulus (P) or unresponsive (U) on AVPU scale
Was that the only change?

- Pediatric fever criteria were updated
- ACEP Pediatric Fever Guidelines
  - Annals of Emergency Medicine, October 2003
Pediatric Fever Criteria

1 to 28 days of age: Assign at least ESI 2 if temp >38.0°C (100.4°F)

1 to 3 months of age: Consider assigning ESI 2 if temp >38.0°C (100.4°F)

3 months to 3 yrs of age: Consider assigning ESI 3 if temp >39.0°C (102.2°F), or incomplete immunizations or no obvious source of fever
patient dying? A

shouldn’t wait? B

how many resources? C
none one many

vital signs D

consider

yes

no

yes

no

consider

none

one

many

no
Notes:

A. **Immediate life-saving intervention required:** airway, medications, other hemodynamic interventions; any of the following clinical conditions: intubated, apneic, pulseless, severe respiratory distress, \( \text{SpO}_2 < 90 \), acute mental status changes, or unresponsive.

**Unresponsiveness:** a patient that is either: (1) nonverbal and not following commands (acutely) (2) requires noxious stimulus (P) or unresponsive (U) on AVPU scale.

B. High risk situation is a patient you would put in your last bed.

Severe pain/distress is determined by clinical observation and/or patient rating pain of \( \geq 7/10 \).
D. **Danger Zone Vital signs**

Consider uptriage to ESI 2 if any vital sign criterion is exceeded.

**Pediatric Fever Considerations**

1 to 28 days of age: assign at least ESI 2 if temp >38.0°C (100.4°F)

1-3 months: consider assigning ESI 2 if temp >38.0°C (100.4°F)

3 months to 3 yrs: consider assigning ESI 3 if temp >39.0°C (102.2°F), or incomplete immunizations, or no obvious source of fever.