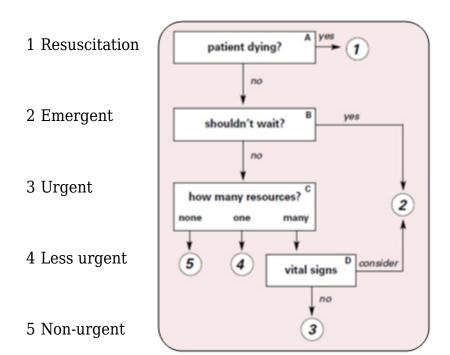


## **Introduction:**

The purpose of triage in the emergency department (ED) is to prioritize incoming patients and to identify those who cannot wait to be seen. The triage nurse performs a brief, focused assessment and assigns the patient a triage acuity level, which is a proxy measure of how long an individual patient can safely wait for a medical screening examination and treatment. There are various triage system adopted across the world and in this article we have highlighted the "Emergency Severity Index (ESI)".

## **Method:**

The Emergency Severity Index (ESI) is a simple to use, five-level triage instrument that categorizes emergency department patients by evaluating both *patient acuity* and *resources*. The levels are:



Initially the triage nurse assesses only acuity level. If a patient does not meet high acuity level criteria (ESI level 1 or 2), the triage nurse then evaluates expected resource needs to help determine a triage level (ESI level 3, 4, or 5). Acuity is determined by the stability of vital functions and potential for life, limb, or organ threat. Resource needs are defined as the number of resources a patient is expected to consume in order for a disposition decision to be reached.



## **Step 1: Four leading questions:**

- Is this patient dying?
- Is this a patient who shouldn't wait?
- How many resources will this patient need?
- What are the patient's vital signs?

## **Decision Point A: Is the Patient Dying?**

- Does the patient require an immediate airway, medication, or other hemodynamicintervention?
- Does the patient meet any of the following criteria: already intubated, apneic, pulseless, severe respiratory distress, SpO2 < 90 percent, acute mental status changes, or unresponsive?

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

The ESI level-1 patient always presents to the emergency department with an unstable condition. Because the patient could die without immediate care a team response is initiated; the physician is at the bedside, and nursing is providing intensive care. ESI level-1 patients are seen immediately because timeliness of interventions can affect morbidity and mortality.

# **Immediate life-saving interventions:**



## Airway/breathing:

- BVM ventilation
- Intubation
- Surgical airway
- Emergent CPAP
- Emergent BiPAP

## **Electrical Therapy**

- Defibrillation Cardiac Monitor
- Emergent cardioversion
- External pacing

#### Medications:

- Naloxone
- D50
- IV nitroglycerin
- Dopa/Adr/NorAdr
- Atropine
- Adenosine
- Calcium gluconate
- Sodium bicarbonate

## Hemodynamic:

- IV fluid resuscitation
- Blood administration
- Control of major bleeding

#### Procedures:

- Chest needle decompression
- Pericardiocentesis
- Open thoracotomy
- · Intraosseous access

#### **Decision Point B: Should the Patient Wait?**

At decision point B the nurse needs to decide whether this patient should wait to be seen. If the patient should not wait; the patient is triaged as ESI level 2. Once the triage nurse has determined that the patient does not meet the criteria for ESI level 1, the triage nurse moves to decision point B. Immediate physician involvement in the care of the patient is a key difference between ESI level-1 and 2 patients. Level-1 patients are critically ill and require immediate physician evaluation and interventions. Conversely, while level-2 patients are also very ill, the emergency nurse can initiate care through protocols without a physician at the bedside. Thenurse recognizes that the patient needs interventions but isconfident that the patient'sclinical condition will not deteriorate. The emergency nurse can initiate intravenous access, administer supplemental oxygen, obtain an ECG, and place the patient on a cardiac monitor, allbefore a physician presence is needed.

Three broad questions are used to determine whether the patient meets level-2 criteria.

- Is this a high-risk situation?
- Is the patient confused, lethargic or disoriented?
- Is the patient in severe pain or distress?

#### **Decision Point C: Resource Needs?**

If the answers to the questions at the first two decision points are "**no**" then the triage nursemoves to decision point C. Resources include man power; Labs (blood, urine),



Radiological (X- ray/CT Scan/USG etc.) and specialist involvement with intended endpoint for physician disposition decision. The disposition decision could be to send the patient home, admit to the observation unit, admit to the hospital, or even to transfer to another institution.

Resources

Labs (blood, urine)

ECG, X-rays CT-MRI-ultrasound

angiography

IV fluids (hydration)

IV, IM or nebulized

Specialty consultation

SIMPLE PROCEDURE = 1

**Not Resources** 

History & physical(including pelvic)

Point-of-care testing

Saline or heplock

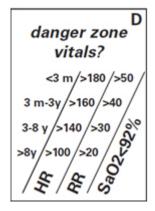
PO medications, medications Tetanus immunization, Prescription refills

Phone call to PCP

COMPLEX PROCEDURE = 2

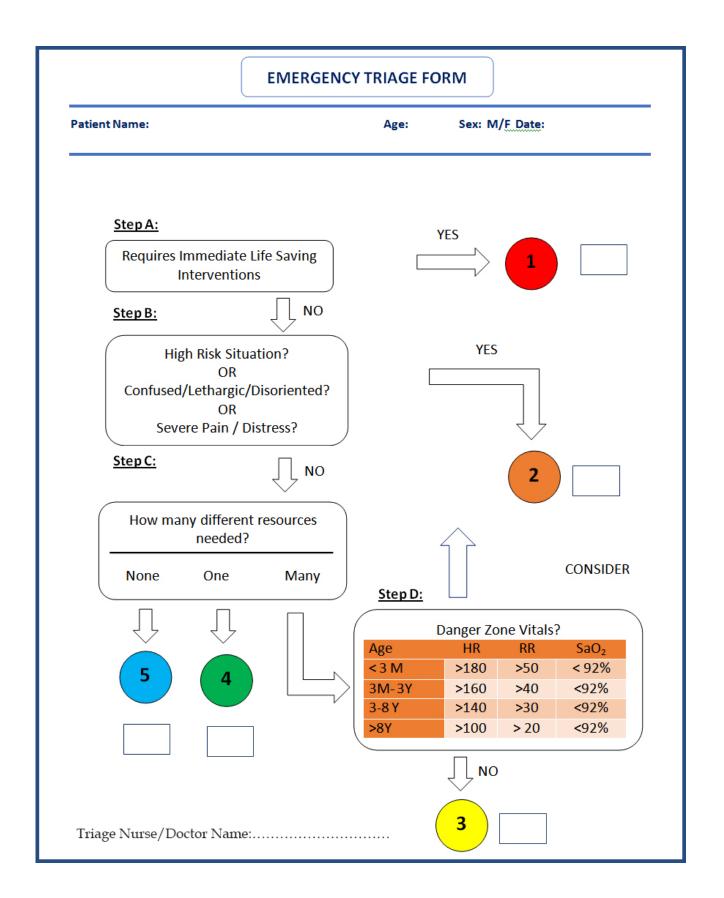
## **Decision Point D: The Patient's Vital Signs:**

The vital signs used are pulse, respiratory rate, and oxygen saturation and, for any child under age three, body temperature. Using the vital sign criteria, the triage nurse can upgrade any patient to higher ESI level.



## **Emergency Triage Form:**







# **Author:**

**Dr. Soumar Dutta**, Consultant & Coordinator, Department of Emergency Medicine Narayana Superspeciality Hospital, Guwahati, Assam.

# **Author**



View all posts