

# TITLE: TRIAGE PROTOCOL

## INTRODUCTION

Triage is considered as one method of enhancing the business of an operationally healthy medical Centre. Emergency nurses should all be able to identify life-threatening conditions quickly and prioritize patients to provide safe emergency care. This article is adopted from the South African Triage Scale, a tool researched and validated in South Africa, and demonstrates the simplicity of the instrument with practical examples.

Triage is derived from the French word “trier” and is defined as “putting the patient in the right place at the right time to receive the right level of care..... the allocation of appropriate resources to meet the patient’s medical needs.” Rendering the most appropriate type of care within the shortest time possible is one of the most important aspects in the prevention of death and disability in an emergency.

The use of triage is recommended for several reasons, including:

- Emergency treatment delivery is accelerated for patients with life-threatening conditions or injuries.
- All patients requiring emergency care are categorized according to their clinical status.
- Patient flow through emergency centers improves (thus decreasing overcrowding).
- Patient satisfaction increases (and aggression may be prevented).
- Patients’ length of stay decreases.
- Allowance is made for streaming of less urgent patients.
- Improved infection control (e.g. through management of blood spills, as well as patients with potential infectious diseases)
- Improved personnel satisfaction (reduction of stress, particularly in frontline reception personnel)
- Prediction of potential hospital admissions

## **The South African Triage Scale (SATS)**

The SATS consists of three age-specific tools that are used to assist the health care provider during the triage process:

- Adult tool (age over 12 years or length over 150cm
- Child tool (age

three to 12 years or length 96–150cm) •Infant tool (age under three years or length under 95cm)

Figure 1 demonstrates the adult triage tool.

Each tool consists of a Triage Early Warning Score (TEWS) and a discriminator list.

The TEWS assesses the patient's: •Mobility •Respiratory rate •Heart rate •Systolic blood pressure •Temperature •Level of consciousness using the AVPU (alert, responds to voice, responds to pain, unresponsive) scale •History of trauma

The TEWS however, has also been amended so as to consider the trauma patient.

The discriminator list below the TEWS table consists of: •TEWS colour classification •Target time to treat •Symptom list •Pain classification

### **Step 1: Obtain a brief history**

•A brief history should be obtained regarding the main complaint. •The nurse should try to get to the essence of the emergency as soon as possible by asking “What is your emergency?” or, “Why are you here today?”

### **Step 2: Measure vital signs**

•Assess the patient's vital signs including heart rate, respiratory rate, temperature and blood pressure. •Determine the patient's level of consciousness by using the AVPU scale. The patient's best response should be noted. AVPU is determined by observing the patient, speaking to him/her or providing a painful stimulus. The patient is then noted to be alert (A), responsive to verbal stimulus (V), responsive to pain (P) or unconscious (U). •Document the patient's mobility as being either walking, on a stretcher or requires assistance (“with help”).

### **Step 3: Calculate the Triage Early Warning Score**

- Score the findings in Step 2 against the TEWS scoring sheet (Figure 1).
- The range in which the patient's vitals fall is matched to the score and a total TEWS score is calculated.
- The presence of trauma is also considered in the TEWS calculations

### **Step 4: Match TEWS score to discriminator list and search for any other relevant discriminators**

- The calculated TEWS score is matched to the colour allocation in the discriminator list (Figure 1) and the patient is allocated a triage colour.
- Once the initial colour has been identified based on the TEWS score, a nurse should assess for any discriminator which is applicable to the patient's situation.
- The discriminators which should be assessed should lie to the left of the colour selected. These discriminators may also act as prompting questions for the nurse in assessing the patient accurately.
- It should be noted that the TEWS will categorise a patient accordingly if the patient displays abnormal physiology. However, there are specific situations (listed in the discriminator list) where the TEWS may not identify such situations safely and so the discriminator list acts as a "safety net."

**Intervention to be carried out at triage**

<b><i>Problem</i></b>	<b><i>intervention</i></b>
Respiratory rate scores $\geq 1$ point  Pulse	Pulse oximetry (saturation) Finger prick glucotest if patient is diabetic Refer to anteroom and give oxygen
Temperature $\geq 38.5^{\circ}$  Temperature $\geq 35^{\circ}$	Paracetamol 1g orally stat (document in notes) Children - discuss with sister or doctor  Blankets
Altered level of consciousness (AVPU score other than A)	Refer to consulting room and hand patient over to doctor. Finger prick glucotest
Unable to sit up/needs to lie down	Refer to anteroom and hand patient over to a senior health care professional Finger prick glucotest
Chest pain	Report Immediately to Doctor
Active bleeding	Apply pressure to site of trauma with a dry dressing

			ADULT TRIAGE SCORE					
	3	2	1	0	1	2	3	
Mobility				Walking	With Help	Stretcher/ Immobile		
Respiratory Rate		Less than 9		9 to 14	15 to 20	21 to 29	more than 29	
Heart Rate		Less than 41	41 to 50	51 to 100	101 to 110	111 to 129	more than 129	
Systolic BP	Less than 71	71 to 80	81 to 100	101 to 199		more than 199		
Temp						Hot OR Over 38.4		
Level of consciousness								
Trauma				No	Yes			
over 12 years/taller than 150cm								

Fig 1

Colour	RED	ORANGE	YELLOW	GREEN	BLUE
TEW	7 or more	5 to 6	3 to 4	0 to 2	DEAD
Target the time to treat	Immediate	Less than 10 mins	Less than 60 mins	Less than 240 mins	DEAD
Mechanism of injury		High energy transfer			
		Shortness of breath-acute			
		Coughing blood			
		Heamorrhage-Uncontrolled			
	Seizure-current	Seizure-post ictal	Heamorrhage		
	Presentation	Focal neurology-acute			
		Level of consciousness reduced			
		Psychosis/Aggression			
		Threatened limb			
		Dislocation-other joint	Dislocation-finger or toe	ALL OTHER PATIENTS	
		Fracture-compound	Fracture-closed		
		Burn- face/ Inhalation			
		Burn over 20percent			
		Burn-electrical	Burn-other		

		Burn-circumferential			
		Burn-chemical			
		Poisoning/ Overdose	Abdominal pain		
	Hypoglycaemia- glucose less than 3	Diabetic- glucose over 11 & ketonuria	Diabetic- glucose over 17 (no ketonuria		
		Vomiting- fresh blood	Vomiting- persistent		
		Pregnancy & abdominal trauma or pain	Pregnancy & trauma		
Pain		Severe	Moderate	Mild	

Fig 2

Finally, the management recommended by the SATG is as follows:

- Red patients should be referred to the resuscitation room for emergency immediate management.
- Orange patients should be referred to the treatment area for urgent management.
- Yellow patients should be referred to the treatment area for medical management within one hour at most.
- Green patients may be streamed (depending on the facility's policy).
- Blue patients require certification by the attending doctor