Australasian College for Emergency Medicine

Guidelines on the Implementation of the Australasian Triage Scale in Emergency Departments

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Document Review

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Version	Date	Pages revised / Brief Explanation of Revision
V1	Nov 00	Approved by Council
V2	Nov 05	Approved by Council
V4	Nov 13	Approved by Council
V5	Jul 16	Section 1.6: Addition of recommended triage colours Section 5: Additional clinical descriptors added to Category 2 and Category 3
V6	Nov 23	New sub-sections for geriatric patients and pregnant patients have been included under the Specific Conventions heading

1. Purpose and background

Triage is an essential function in Emergency Departments (EDs), where many patients may present simultaneously. The Australasian Triage Scale (ATS) is a clinical tool for ensuring that presenting patients are prioritised according to clinical urgency.

This guideline details the clinical descriptors for each of the five ATS categories, and describes the overarching principles and minimum standards for the implementation of the ATS.

This document should be read in conjunction with the Australasian College for Emergency Medicine (ACEM) *P06 Policy on the Australasian Triage Scale* and the *Emergency Triage Education Kit (ETEK)*.

2. Terminology

Triage

A triage system is a standardised method of rapidly determining clinical urgency of all incoming patients to assist staff to identify and prioritise those who are critically ill or injured.

Arrival Time

The arrival time is the first recorded time of contact between the patient and the ED staff. Triage assessment should occur at this point.

Time of Medical Assessment and Treatment

Although important assessment and treatment may occur during the triage process, this time presents the start of the care for which the patient is presented.

- Commonly, it is the time of first contact between the patient and the doctor initially responsible for their care. This is often recorded as 'Time seen by doctor'
- Where a patient in the ED has contact exclusively with nursing staff acting under the clinical supervision of a doctor, it is time of first nursing contact. This is often recorded as 'Time seen by nurse'
- Where a patient is treated according to a documented, problem-specific clinical pathway, protocol or guideline approved by the Director of Emergency Medicine (DEM), it is the earliest time of contact between the patient and staff implementing this protocol. This is often recorded as the earlier of 'Time seen by nurse', 'Time seen by nurse practitioner', or 'Time seen by doctor'

Waiting Time

This is the difference between the time of arrival and the time of initial medical assessment and treatment. A recording accuracy to within the nearest minute is appropriate.

3. General Principles

3.1 Function of Triage

Triage aims to ensure that patients are treated in the order of their clinical urgency which refers to the need for time-critical intervention. Triage also allows for the allocation of the patient to the most appropriate assessment and treatment area, and contributes information that helps to describe the departmental case-mix. Changing models of care in some EDs (for example streaming, clinical initiatives nurses, triage liaison physicians) do not preclude the need for triage.

3.2 The Triage Assessment

The triage assessment generally should take no more than two to five minutes with a balanced aim of speed and thoroughness being the essence. The triage assessment is not intended to make a diagnosis.

The triage assessment involves a combination of the presenting problem and general appearance of the patient, and may be combined with pertinent physiological observations.

- Any patient identified as ATS Category 1 or 2 should be taken immediately into an appropriate assessment and treatment area
- Vital signs are required for all emergency department patients, except for asymptomatic patients presenting with non-acute, non-emergent conditions
- A more complete nursing assessment should be done by the treatment nurse receiving the patient
- The initiation of investigations or referrals from triage is not precluded if time permits
- The triage system should be applied in a clear, consistent, and non-discriminatory manner

3.3 Time to Treatment

The maximum waiting time for medical assessment and treatment described for each ATS Category refers to the recommended maximum time a patient in that category should wait for medical assessment and treatment. In the more urgent categories, assessment and treatment should occur simultaneously.

Ideally, patients should be seen within the recommended timeframes. Implicit in the descriptors of Categories 1 to 4 is the assumption that the clinical outcome may be affected by delays to assessment and treatment beyond the recommended times. The recommended waiting time for Category 5 represents a standard for service provision.

3.4 Re-triage

If a patient's condition changes whilst waiting for treatment, or if additional relevant information becomes available that impacts on the patient's urgency, the patient should be re-triaged. If a patient's condition has deteriorated necessitating re-triage to a more urgent triage category, the senior medical officer in charge of the ED, or their delegate, should be notified immediately.

3.5 Safety at Triage

Jurisdictional health system managers and hospitals must plan for the potential risk of aggressive behaviour of patients, families/carers at triage, as part of their broader obligation to ensure that the ED is a safe workplace for all employees. Hospital administrators must ensure that policies, procedures, staffing models, preventative training and education, verbal de-escalation and safe restraint training and education, ED design and incident reporting system contribute to the prevention, minimisation and effective management of aggression and violence.

3.6 Triage Colours

EDs throughout Australia and Aotearoa New Zealand utilise a range of ED Information Systems (EDIS) in order to provide key functions, such as triage management and assessment. Using these systems, EDs can choose to identify each ATS Category using a specific colour.

Red (Category 1), Orange (Category 2), Green (Category 3), Blue (Category 4) and White (Category 5), are commonly utilised by EDs in order to identify each ATS Category, and are recommended to be the standard colours used throughout Australia and Aotearoa New Zealand. However, colour designations should only be used as an adjunct to the numerical designations identifying each triage category.

4. Quality Standards

4.1 Documentation Standards

Patient data that is collected and retained must be accurate and reliable. The documentation of the triage assessment should include at least the following essential details:

- Date and time of assessment
- Chief presenting problem(s)
- Limited, relevant history
- Relevant assessment findings
- Initial triage category allocated
- Re-triage category with time and reason
- Assessment and treatment area allocated
- Any diagnostic, first aid or treatment measures initiated

4.2 Training Processes

In Australasia, triage is carried out by staff members who are both specifically trained and experienced. The *Emergency Triage Education Kit (ETEK)* is the nationally recognised educational resource to prepare healthcare workers for the triage role and to promote the consistent application of the ATS, and has been developed in collaboration with clinicians, experts and consumers.

4.3 Audit Processes

Triage accuracy and system evaluation may be undertaken in part by reviewing the triage allocation against guidelines, triage category 'footprint' of example diagnoses, average waiting time, admission rates and mortality rates in each triage category with peer hospitals of the same role delineation. EDs should audit several possible triage quality indicators – particularly, high-risk outcomes, deterioration prior to medical assessment/treatment, equity of triage scores across populations and patient experience measures to ensure that the ATS is identifying those requiring time critical intervention.

5. Specific Conventions

There are additional indicators of clinical urgency and patient safety that should be observed at triage. In addition to the sub-sections below, readers should refer to the ETEK for further information on specific conventions.

5.1 Paediatrics

The same standards for triage categorisation should apply to all ED settings where children are seen – whether purely paediatric or mixed departments. All five triage categories should be used in all settings. Individual departmental policies such as 'fast-tracking' of specific patient populations should be separated

from the objective allocation of a triage category.

Please see ACEM's *P11 Hospital emergency department services for children and young persons* for further information.

5.2 Geriatrics

Older persons often have complex medical needs which should be accounted for in all aspects of their care. The potential impact of physiological, behavioural, and physical changes of ageing on presentation should be accounted for. Individual departmental policies such as 'fast-tracking' of specific patient populations should be separated from the objective allocation of a triage category.

Please see ACEM's *P51 Care of older persons in the emergency department* for further information.

5.3 Pregnancy

Assessing urgency of this patient cohort must factor in both the person who is pregnant and the foetus. People who are pregnant are at increased risk of pregnancy related conditions and/or may have atypical presentations of general conditions. The use of pregnancy specific vital signs should be included in triage considerations. Presentations may include concerns about normal manifestations or progression of pregnancy.

5.4 Behavioural Disturbance

Where physical and behavioural problems co-exist, the highest appropriate triage category should be applied based on the combined presentation. Individual departments may have procedures and assessment tools to assist with identifying at risk mental health patients. These are considered as supportive to initial triage and may be applied following formal triage assessment.

Please see ACEM's *P41 Access to care for patients with acute mental and behavioural conditions* for further information.

6. Clinical Descriptors

6.1 Source

The listed clinical descriptors for each category are based on available research data where possible, as well as expert consensus. However, the list is not intended to be exhaustive nor absolute and must be regarded as indicative only – please refer to the ETEK for detailed descriptors. Absolute physiological measurements must not be taken as the sole criterion for allocation to an ATS category. Senior clinicians should exercise their judgement, and where there is doubt, take a cautious approach.

6.2 Most Urgent Features Determine Category

The most urgent clinical feature identified, determines the ATS category. Once a high-risk feature is identified, a response commensurate with the urgency of that feature should be initiated.

Australasian Triage Scale: Descriptors for Categories

ATS Category	Response	Description of Category	Clinical Descriptors (Indicative only)
Category 1	Immediate simultaneous assessment and	Immediately Life-Threatening Conditions that are threats to life (or imminent risk of	Cardiac arrest Respiratory arrest Immediate risk to airway – impending arrest

ATS Category	Response	Description of Category	Clinical Descriptors (Indicative only)
	treatment	deterioration) and require immediate aggressive intervention.	Respiratory rate <10/min Extreme respiratory distress BP< 80 (adult) or severely shocked child/infant Unresponsive or responds to pain only (GCS < 9) Ongoing/prolonged seizure IV overdose and unresponsive or hypoventilation Severe behavioural disorder with immediate threat of dangerous violence
Category 2	Assessment and treatment within 10 minutes (assessment and treatment often simultaneous)	Imminently life-threatening The patient's condition is serious enough or deteriorating so rapidly that there is the potential of threat to life, or organ system failure, if not treated within ten minutes of arrival or Important time-critical treatment The potential for time-critical treatment (e.g. thrombolysis, antidote) to make a significant effect on clinical outcome depends on treatment commencing within a few minutes of the patient's arrival in the ED or Very severe pain Humane practice mandates the relief of very severe pain or distress within 10 minutes	Airway risk – severe stridor or drooling with distress Severe respiratory distress Circulatory compromise Clammy or mottled skin, poor perfusion HR<50 or >150 (adult) Hypotension with haemodynamic effects Severe blood loss Chest pain of likely cardiac nature Very severe pain - any cause Suspected sepsis (physiologically unstable) Fever with signs of lethargy (any age) Febrile neutropenia BSL < 3 mmol/l Drowsy, decreased responsiveness any cause (GCS< 13) Acute stroke Acid or alkali splash to eye – requiring irrigation Suspected endophthalmitis post-eye procedure (post-cataract, post-intravitreal injection), sudden onset pain, blurred vision and red eye. Major multi trauma (requiring rapid organised team response) Severe localised trauma – major fracture, amputation Suspected testicular torsion High-risk history: Significant sedative or other toxic ingestion Significant/dangerous envenomation Significant pain or other feature suggesting PE, aortic dissection/AAA or ectopic pregnancy

ATS Category	Response	Description of Category	Clinical Descriptors (Indicative only)
			Behavioural/Psychiatric: violent or aggressive immediate threat to self or others requires or has required restraint severe agitation or aggression

ATS Category	Response	Description of Category	Clinical Descriptors (indicative only)
Category 3	Assessment and treatment start within 30 mins	Potentially Life-Threatening The patient's condition may progress to life or limb threatening, or may lead to significant morbidity, if assessment and treatment are not commenced within thirty minutes of arrival or Situational Urgency There is potential for adverse outcome if time-critical treatment is not commenced within thirty minutes or Humane practice mandates the relief of severe discomfort or distress within thirty minutes	Severe hypertension Moderately severe blood loss – any cause Moderate shortness of breath Seizure (now alert) Persistent vomiting Dehydration Head injury with short LOC- now alert Suspected sepsis (physiologically stable) Moderately severe pain – any cause – requiring analgesia Chest pain likely non-cardiac and moderate severity Abdominal pain without high risk features – moderately severe or patient age >65 years Moderate limb injury – deformity, severe laceration, crush Limb – altered sensation, acutely absent pulse Trauma - high-risk history with no other high-risk features Stable neonate Child at risk of abuse/suspected non-accidental injury Behavioural/Psychiatric:

ATS Category	Response	Description of Category	Clinical Descriptors (Indicative only)
			very distressed, risk of self-harm acutely psychotic or thought disordered situational crisis, deliberate self-harm agitated / withdrawn potentially aggressive
ATS Category	**Response**	**Description of Category**	**Clinical Descriptors (indicative only)**
Category 4	Assessment and treatment start within 60 mins	**Potentially serious** The patient's condition may deteriorate, or adverse outcome may result, if assessment and treatment is not commenced within one hour of arrival in ED. Symptoms moderate or prolonged **or** **Situational Urgency** There is potential for adverse outcome if time-critical treatment is not commenced within hour **or** **Significant complexity or Severity** Likely to require complex work-up and consultation and/or inpatient management **or** Humane practice mandates the relief of discomfort or distress within one hour	Mild haemorrhage Foreign body aspiration, no respiratory distress Chest injury without rib pain or respiratory distress Difficulty swallowing, no respiratory distress Minor head injury, no loss of consciousness Moderate pain, some risk features Vomiting or diarrhoea without dehydration Eye inflammation or foreign body – normal vision Minor limb trauma – sprained ankle, possible fracture, uncomplicated laceration requiring investigation or intervention – Normal vital signs, low/moderate pain Tight cast, no neurovascular impairment Swollen "hot" joint Non-specific abdominal pain Behavioural/Psychiatric: Semi-urgent mental health problem Under observation and/or no immediate risk to self or others
ATS Category	**Response**	**Description of Category**	**Clinical Descriptors (indicative only)**
Category 5	Assessment and treatment start within 120 minutes	**Less Urgent** The patient's condition is chronic or minor enough that symptoms or clinical outcome will not be significantly affected if assessment and treatment are delayed up to two hours from arrival **or** **Clinico-administrative problems** Results review, medical certificates, prescriptions only	Minimal pain with no high risk features Low-risk history and now asymptomatic Minor symptoms of existing stable illness Minor symptoms of low-risk conditions Minor wounds - small abrasions, minor lacerations (not requiring sutures) Scheduled revisit e.g. wound review, complex dressings Immunisation only Behavioural/Psychiatric: Known patient with chronic symptoms Social crisis, clinically well patient

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