Australian Government

Department of Health and Ageing

EMERGENCY
TRIAGE
EDUCATION
KIT

EMERGENCY TRIAGE EDUCATION KIT

CONTENTS

FOREWORD

In 2005–06, nearly 4.8 million people presented to emergency departments in larger Australian hospitals. Only 12 per cent were non-urgent cases. Sixty nine per cent of people were seen within the time recommended for their triage category, with half of this number seen in less than 24 minutes.

Despite the pressure on triage staff working, the figures show that they mostly get it right. Providing accurate and timely assessments of seriously ill patients, based on urgency, is what makes the triage system work.

A clinically based system of triaging ensures that patients needing priority medical care get it. The Emergency Triage Education Kit aims to provide further support to Triage Nurses. This revised edition includes more than 150 scenarios designed to strengthen Triage Nurses' assessment skills. It also covers complex areas such as mental health, paediatrics, obstetrics and rural/remote triage. It aims to help nurses provide better assistance to people presenting to emergency departments.

The kit was funded by the Commonwealth Government and developed in collaboration with the Australasian College of Emergency Medicine, the Australasian College of Emergency Nursing, the College of Emergency Nursing Australasia and the Council of Remote Area Nurses of Australia.

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Tony Abbott MP
Minister for Health and Ageing

ACKNOWLEDGEMENTS

INTRODUCTION

In November 2001, the then Department of Health and Aged Care funded the development of a resource book for nurse educators to promote the consistent application of the Australasian Triage Scale (ATS).

This resource is founded on the original fieldwork of Whitby, Leraci, Johnson and Mohsin (1997) that described the clinical features used by Triage Nurses to assess urgency in relation to patient presentations to emergency departments. The ATS (formerly known as the National Triage Scale) has been shown to be both a reliable and valid instrument for sorting patients according to their care requirements in order to optimise clinical outcomes in emergency departments (FitzGerald 1989; Whitby, Leraci S et al. 1997).

In the past decade, a number of researchers have documented acceptable levels of inter-rater reliability among Triage Nurses using the ATS and confirmed its utility in practice (FitzGerald 1989; Jelinek 1996; Dilley 1998; Whitby, et al. 1997). Throughout Australia, triage standards regarding time-to-treatment and performance thresholds are now uniformly employed to quantify both the quality of emergency care and to measure emergency department casemix (FitzGerald 2000).

Enhancing the consistency of the application of the ATS is a shared goal for emergency nursing, the Australasian College for Emergency Medicine (ACEM) and the Australian Government Department of Health and Ageing.

The first edition of the Emergency Triage Education Kit (ETEK) was published in April 2002 as the Triage Education Resource Book (TERB). This revised edition is the result of a collaborative effort between the Australasian College for Emergency Medicine, the Australian College of Emergency Nursing, the College of Emergency Nursing Australasia and the Council of Remote Area Nurses of Australia.

Emergency care is recognised as a nursing specialty of the National Specialisation Framework for Nursing and Midwifery (2006). Additionally, an outcome of the National Health Workforce Strategic Framework (2004) is to build a suitably trained, competent and sustainable health workforce. To underpin this, a single national accreditation scheme for health education and training is to be put in place by 1 July 2008. The Department believes the content of this revised education kit will provide valuable input to the development of emergency triage training materials to support the national accreditation scheme for the emergency care nursing speciality.

CHAPTER 1: INTRODUCTION

Statement of purpose

The purposes of this chapter are to:
* Provide an overview of the triage education program and emphasise its role in optimising triage consistency throughout Australia; and
* Discuss the purpose of triage systems in the context of acute health care delivery.

Learning outcomes

After completing this chapter, participants will have a clear understanding of the triage education program's purpose and structure and how the content may be applied in their work environment.

Participants will also develop an appreciation of the national and international developments that form the basis of emergency department (ED) triage in Australia. They will also be able to identify factors influencing consistency of triage in that context.

Learning objectives

* State the aims and purpose of ED triage systems.
* Differentiate the purpose of military and disaster triage systems from ED triage systems.
* Define 'urgency'.
* Make a distinction between the concepts of urgency, severity and complexity of illness and injury.
* Compare and contrast the basic categories of the Australasian Triage Scale (ATS) with the Canadian Triage and Acuity Scale (CTAS), the Manchester Triage Scale (MTS), and the Emergency Severity Index (ESI).
* Identify the four essential features of a robust triage scale and discuss these with respect to the ATS.

Key points
* A triage system is the essential structure by which all incoming emergency patients are prioritised using a standard rating scale. The purpose of a triage system is to ensure that the level of emergency care provided is commensurate with clinical criteria.
* 'Urgency' is determined according to the patient's condition on arrival at the ED.
* A five-tier triage scale is a valid and reliable method for categorising ED patients.
* This program forms part of a national strategy aimed at optimising consistency of triage using the ATS.

Content

The program aims to provide a nationally consistent approach to the educational preparation of nurses for the triage role, particularly the consistent application of the Australasian Triage Scale (ATS).[1,2]

The program's educational strategy integrates available evidence into a valid set of training tools. These tools are used by clinicians* performing triage in hospital EDs and those working in rural and remote area health services who make triage decisions as part of their role.

The program provides teaching strategies to assist educators in the delivery of specific triage training to suitably qualified and experienced emergency nurses.

In the context of rural and remote environments, the program can be used as a self-directed learning package because the core principles for consistent application of the ATS still apply.

Program structure

The course content has been designed to allow for the inclusion of locally based policies and protocols to optimise consistency of triage or reduce ED transit time.
The program comprises the following 10 individual learning units.

- Chapter 1:   Introduction
- Chapter 2:   The Australasian Triage Scale
- Chapter 3:   Communication issues at triage
- Chapter 4:   Triage basics
- Chapter 5:   Mental health triage
- Chapter 6:   Rural and remote triage
- Chapter 7:   Pain assessment at triage
- Chapter 8:   Paediatric triage
- Chapter 9:   Obstetric triage
- Chapter 10: Medico–legal issues at triage.

Each chapter comprises a summary of the key points related to the topic, lesson plans, learning activities and resource materials, including web-based materials, evidence-based reviews, research articles and opinion papers. A summary of each available resource is also provided, stating how the information can be used for training and/or practice.

* A clinician is defined as a registered nurse or medical practitioner who is performing triage.

Program implementation

The process for implementing the program involves the following steps:

1. **Selection of appropriate participants.**
   The selection of participants to undertake the program will be informed by local policy. Individual organisations will be responsible for setting criteria with respect to the level of emergency experience and qualifications required for entry into the program. Importantly, there is no minimum number of participants required; however it is desirable for participants to have opportunities for group discussions with their peers during the program.

2. **Implementation of the lesson plans.**
   The implementation of the lesson plans involves the completion of a series of structured learning activities. Each of the 10 lesson plans comprises learning objectives, a synopsis of the literature relevant to the topics discussed, teaching strategies including learning activities, multiple-choice questions, discussion points and/or patient scenarios, and a list of additional resources for use by participants. The final two chapters consolidate and test the participant's knowledge.

Successful completion of the program is at the discretion of the instructor[*]. In settings where there is no infrastructure for triage training, the program can be used as a self-paced learning resource, with participants working through the readings and learning activities in a structured way.

Definitions

Triage system: The process by which a clinician assesses a patient's clinical urgency.

Triage: A triage system is the basic structure in which all incoming patients are categorised into groups using a standard urgency rating scale or structure.[3]

Re-triage: Clinical status is a dynamic state for all patients. If clinical status changes in a way that will impact upon the triage category, or if additional information becomes available that will influence urgency (see below), then re-triage must occur. When a patient is re-triaged, the initial triage code and any subsequent triage code must be documented. The reason for re-triaging must also be documented.[2,6]

Urgency: Urgency is determined according to the patient's clinical condition and is used to 'determine the speed of intervention that is necessary to achieve an optimal outcome'.[4] Urgency is independent of the severity or complexity of an illness or injury.[5] For example, patients may be triaged to a lower urgency rating because it is safe for them to wait for an emergency assessment, even though they may still eventually require a hospital admission for their condition or have significant morbidity and attendant mortality.[2]

[*] The instructor will be the nominated person within the organisation who is responsible for clinical development of nurses providing emergency care.

A brief history of triage

The term 'triage' is derived from the French work *trier*, meaning to pick or to sort.[7] Triage systems were first used to prioritise medical care during the Napoleonic wars of the late 18th century.[8] Subsequent wars have led to the refinement of systems for the rapid removal of the injured from the battlefield to places providing definitive care. Mass Casualty Incident (MCI) triaging has also been developed and continues to evolve. The underlying principle of MCI triage is to achieve the greatest good for the greatest number of casualties in a setting where clinical demand overwhelms the available resources.

In civilian medicine, triage systems have been refined and adapted for use within a range of settings. In all health care environments, the triage process is underpinned by the premise that a reduction in the time taken to access definitive medical care will improve patient outcomes.

Emergency department triage

Australia is experiencing increased public demand for emergency medical care. Current trends indicate a growth in the number of ED presentations in many locations; the reasons for this growth are varied and complex.[9]

Standardised triage scales are useful in developing strategies to manage ED demand. In this context they can also be used to inform clinical service development, clinical risk management and patient safety.[10]

Purpose of a triage system

The purpose of a triage system is to ensure that the level and quality of care that is delivered to the community is commensurate with objective clinical criteria, rather than administrative or organisational need. In this way, standardised triage systems aim to optimise the safety and the efficiency of hospital-based emergency services and to ensure equity of access to health services across the population.

The use of a standard triage system facilitates quality improvement in EDs, because it allows for comparisons of key performance indicators (i.e. time-to-treatment by triage category) both within and between EDs. Since the early 1990s the use of computerised information systems in Australian EDs has permitted the precise calculation of time-to-treatment against a variety of patient outcomes, including triage code, chief complaint, diagnosis and discharge destination.

Function of triage

Triage is an essential function underpinning the delivery of care in all EDs, where any number of people with a range of conditions may present at the same time. Although triage systems may function in slightly different ways according to a number of local factors, effective triage systems share the following important features:[5]

- A single entry point for all incoming patients (ambulant and non-ambulant), so that all patients are subjected to the same assessment process.
- A physical environment that is suitable for undertaking a brief assessment. It needs to include easy access to patients which balances clinical, security and administrative requirements, and the availability of first aid equipment and hand-washing facilities.
- An organised patient processing system that enables easy flow of patient information from point of triage through to ED assessment, treatment and disposition.
- Timely data on ED activity levels, including systems for notifying the department of incoming patients from ambulance and other emergency services.

Emergency triage scales

Internationally, five-tier triage scales have been shown to be a valid and reliable method for categorising people who are seeking assessment and treatment in hospital EDs.[11-22] These scales show a greater degree of precision and reliability when compared with either three-tier[23] or four-tier triage systems.[3]

The features of a robust triage system can be evaluated according to the following four criteria:

- **Utility:** The scale must be relatively easy to understand and simple to apply by emergency nurses and physicians.
- **Validity:** The scale should measure what it is designed to measure; that is, it should measure clinical urgency as opposed to severity or complexity of illness or some other aspect of the presentation or of the emergency environment.
- **Reliability:** The application of the scale must be independent of the nurse or physician performing the role, that is, it should be consistent. 'Inter-rater reliability' is the term used for the statistical measure of agreement that is achieved by two or more raters using the same scale.[24]
- **Safety:** Triage decisions must be commensurate with objective clinical criteria and must optimise time to medical intervention. In addition, triage scales must be sensitive enough to capture novel presentations of high acuity.[3]

The Australasian Triage Scale (ATS), formerly the National Triage Scale (NTS)

The National Triage Scale (NTS) was implemented in 1993, becoming the first triage system to be used in all publicly funded EDs throughout Australia. In the late 1990s, the NTS underwent refinement and was subsequently renamed the Australasian Triage Scale (ATS).

The ATS has five levels of acuity:[2]
- Immediately life-threatening (category 1)
- Imminently life-threatening (category 2)
- Potentially life-threatening or important time-critical treatment or severe pain (category 3)
- Potentially life-serious or situational urgency or significant complexity (category 4)
- Less urgent (category 5).

The ATS has been endorsed by the Australasian College for Emergency Medicine[1] and adopted in performance indicators by the Australian Council on Healthcare Standards.[25]

Canadian Triage and Acuity Scale (CTAS)

The Canadian Triage and Acuity Scale (CTAS) was officially included in policy throughout Canada in 1997.

The CTAS has been endorsed by the Canadian Association of Emergency Physicians and the National Emergency Nurses Affiliation of Canada.

This scale is very similar to the ATS in terms of time-to-treatment objectives, with the exception of category 2, which is <15 minutes rather <10 minutes as in the ATS.

Manchester Triage Scale (MTS)

The Manchester Triage Scale (MTS) was jointly developed by the Royal College of Nursing Accident and Emergency Association and the British Association for Accident and Emergency Medicine.

The MTS differs from both the ATS and the CTAS in that it is an algorithm-based approach to decision-making.[3] The MTS involves the use of 52 separate flow charts that require the decision-maker to select the appropriate algorithm on the basis of the presenting complaint, and then gather and analyse information according to life threat, pain, haemorrhage, consciousness level, temperature, and the duration of signs and symptoms.

The MTS requires standard documentation, and this streamlined approach is believed to save time as the documentation is simplified. In addition, the approach is thought to be particularly beneficial for novice nurses because the decision-making process occurs within very well-defined parameters.

Emergency Severity Index (ESI)

The Emergency Severity Index (ESI) is a system of triage categorisation that is based on both treatment acuity (*How soon should a patient be seen?*) and resource consumption (*What resources is the patient likely to require?*). The ESI has been refined on a number of occasions.[21,22,26] It has been found to be reliable when tested using written case scenarios,[21] and is currently being considered for use across the United States of America.[24]

The triage role

Triage decision-making is an inherently complex and dynamic process. Decisions are made within a time-sensitive environment, with limited information, for patients who generally do not have a medical diagnosis. Due to the multifaceted nature of the triage role, nurses are required to possess specialised knowledge as well as experience with a wide range of illness and injuries. Triage decisions can be divided into primary and secondary categories according to the aims of the triage system. Understanding these decision types is helpful in describing the roles and responsibilities of the Triage Nurse in actual practice.

'Primary triage decisions' relate to the establishment of a chief complaint and the allocation of urgency. When a triage code is selected there are three possible outcomes:

- 'Under-triage' in which the patient receives a triage code that is lower than their true level of urgency (as determined by objective clinical and physiological indicators). This decision has the potential to result in a prolonged waiting time to medical intervention for the patient and risks an adverse outcome.[24,27]
- 'Correct (or expected) triage decision' in which the patient receives a triage code that is commensurate with their true level of urgency (as determined by objective clinical and physiological indicators). This decision optimises time to medical intervention for the patient and limits the risk of an adverse outcome.[24,27]
- 'Over-triage' in which the patient receives a triage code that is higher than their true level of urgency. This decision has the potential to result in a shortened waiting time to medical intervention for the patient, however, it risks an adverse outcome for other patients waiting to be seen in the ED because they have to wait longer.

The Triage Nurse makes urgency decisions using clinical and historical information to avoid systematic under- or over-triage. 'Secondary triage decisions' are concerned with expediting emergency care and disposition.[28,29] The Triage Nurse employs locally based policies and procedure to expedite care for all patients where appropriate.

All patients in the waiting room must be reassessed by the Triage Nurse once the triage time has expired. This second assessment should always be documented in the patient's notes.[6]

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The role of education in optimising triage outcomes

The ability of any triage system to achieve its aims is based on the assumption that decision-making is consistent over time and among the clinicians who use the scale.

The successful implementation of this program forms part of a longstanding national commitment among peak emergency nursing, medicine and government bodies to achieve consistency of triage using the ATS by providing a coherent approach to preparing clinicians for practice.

CHAPTER 2: THE AUSTRALASIAN TRIAGE SCALE

Statement of purpose

This chapter focuses on the research evidence that has supported the implementation of the ATS.

The purposes of this chapter are to:
*   Provide an overview of the ATS and its expected outcomes;
*   Discuss factors that influence the validity and the reliability of the ATS; and
*   Identify how the ATS is used as a quality indicator in Australian EDs.

Learning outcomes

After completing this chapter, participants will have developed knowledge of the outcomes of the ATS.

Learning objectives

*   Describe the five categories of the ATS in terms of time-to-treatment and clinical descriptors.
*   Consider how triage decisions are used to assess ED performance.
*   Discuss the major environmental factors that threaten consistency of triage.

Key points
*   The ATS aims to provide a timely assessment of all people who present to the ED on the basis of clinical criteria.
*   The time-to-treatment criteria attached to the ATS categories describe the maximum time a patient can safely wait for medical assessment and treatment.
*   The decision to allocate a triage code using the ATS should take no more than five minutes.
*   Each ED presentation must be assessed as a unique episode of illness/injury that is independent of chronicity and frequency of presentation.

Content

Philosophy

The philosophy underpinning the use of the ATS is based on the values of justice and efficiency in health service delivery.[4, 17] The ATS has been designed to provide a timely assessment and medical intervention for all people who present to an ED. Implicit within this framework is the principle that it is neither clinically or ethically appropriate to expect any group of people to routinely wait longer than two hours for medical care in an ED.[1]

Development

FitzGerald (1989) first tested the validity and reliability of the Ipswich Triage Scale (ITS), which was an adaptation of the Box Hill Hospital System. He examined correlations between triage codes and outcome measures, including in-hospital mortality and admission rates. Informed by this original work, the development and implementation of the National Triage Scale (NTS) throughout Australia occurred in 1993.

The subsequent implementation of the ATS was supported by a process of consultation by the Commonwealth Department of Health and Family Services with clinicians and key professional bodies throughout Australasia. Research by Whitby, Leraci et al. (1997) was used in the ATS to describe the clinical features associated with urgency and to develop more comprehensive descriptions of each of the five triage categories.

Within the ATS framework, urgency is a function of both the patient's clinical risk and the severity of their symptoms. The strength of the ATS lies in its use of physiological descriptors to tier common complaints into the appropriate triage category. This approach can enhance decision-making by reducing the time taken to determine a triage code.[3]

A comprehensive explanation of the ATS, and the descriptors for each of the ATS categories, are provided in Appendix B.

Application

The application of the ATS is underpinned by the formulation of a chief complaint, which is identified from a brief history of the presenting illness or injury. Triage decisions using the scale are made on the basis of observation of general appearance, focused clinical history and physiological data. Clinicians who undertake the role must have experience in the assessment of a wide range of illness and injury. They must also meet organisational requirements to undertake the role. An assessment of their suitability for the role should also be judged on the individual's ability to consistently and independently make sound clinical decisions in a time-pressured environment.[32]

Outcomes

Time-to-treatment

The time-to-treatment criteria attached to the ATS categories describe the ideal maximum time a patient can safely wait for medical assessment and treatment. The extent to which these criteria can be met is routinely evaluated against nationally recommended performance standards for each of the five ATS categories. These performance indicator thresholds are outlined in the Australasian College for Emergency Medicine's policy document for the ATS[1] and are detailed in Table 2.1.

Table 2.1: ATS categories for treatment acuity and performance thresholds[1]

ATS category	Treatment acuity (maximum waiting time)	Performance indicator (%)
1	Immediate	100
2	10 minutes	80
3	30 minutes	75
4	60 minutes	70
5	120 minutes	70

The performance indicators describe the minimum percentage of presentations per ATS category that are expected to achieve the ideal time-to-treatment criteria. In situations where achievement of a performance indicator is at risk, organisational strategies should be implemented to satisfy demand and meet clinical needs.[1]

Consistency of triage

The degree to which clinicians agree on the allocation of a triage code across populations is a marker of the reliability of the ATS.

For more than a decade, research has been conducted to assess the consistency of triage achieved using the ATS.[17,19,20,33] While these studies have been helpful in understanding the ways in which groups of nurses use the ATS, they have also repeatedly highlighted the difficulties associated with measuring triage consistency in clinical practice.

For this reason, evaluation of consistency of triage is carried out at a macro, rather than a micro level*. For example, the distribution of presentations across the five categories of the ATS, commonly referred to as 'footprints', is helpful in assessing consistency. These can be compared between EDs with similar demographic profiles to detect systemic under- or over-triage.

* See http://www.aihw.gov.au/hospitals

Factors that influence triage decision-making using the ATS

A number of non-clinical factors are known to threaten the reliability and utility of five-tier triage scales. These factors relate to patient and environmental influences.[19.34]

Environmental factors such as staffing, skill-mix and ED activity level must not influence urgency allocation.

The potential for a person to leave the ED without medical treatment is not considered a valid reason for upgrading a triage code. Additionally, caution must be exercised when a person has had multiple presentations to the ED with the same or similar complaints. In such situations it is essential that each presentation be assessed and triaged as a new episode. Frequency of presentations to the ED must not influence the allocation of a triage code.

CHAPTER 3: COMMUNICATION ISSUES

Statement of purpose

The purpose of this chapter is to emphasise the importance of communication in enhancing the effectiveness and accuracy of the triage process.

Learning outcomes

After completing this chapter, participants will be able to identify barriers to effective communication at triage. Awareness of these barriers will inform the development of strategies to optimise communication within their own triage environments.

Participants are encouraged to reflect upon their own communication style and to develop strategies to manage communication situations that they find challenging.

Learning objectives

- Appreciate the importance of communication at triage.
- Identify and discuss factors that may influence the communication process at triage.
- Discuss how quality of communication impacts upon assessment of urgency using the ATS.
- Discuss strategies to enhance the communication process within own triage environment.
- Analyse and reflect on specific strategies to manage challenging communication encounters at triage.

Key points
- Patient actions and reactions at triage will be influenced by the nurse's ability to manage the communication process.
- Communication is a two-way process that involves both verbal and non-verbal components equally.
- The better the communication, the more data gained and the more informed and accurate the triage assessment.
- Never underestimate the effect of environment and influencing factors on communication.
- Remain calm. Listen, interpret, explain with care, and check for understanding.
- Be aware of your own reactions, triggers and need for support.

Content

Emergency departments are often areas of high activity, excitement and emotion, and this commences at triage.[131] Imagine a busy department: patients lining up at the desk; ambulances bringing in more patients on trolleys; relatives, crying children and other staff seeking advice and information. The Triage Nurse is often the common link in all this activity, and must be able to communicate effectively with relatives, ambulance officers, medical and other nursing staff, and clerical staff and visitors, as well as establish a functional communication process to allow effective patient assessment.

As the triage clinician, you must make a needs-based assessment based on the information you obtain during the triage encounter. Effective communication is **essential** to obtaining accurate information, and therefore making an accurate assessment, at this time. When problems occur within the communication process, the ability of the Triage Nurse to gather the required information may be compromised. It is **vital** for the Triage Nurse to be aware of the potential barriers to effective communication in the triage environment[131] and to minimise their impact upon the triage encounter.

So, what do we do if verbal communication is impossible, as in the case of a patient who is unconscious? In such instances, having a sound skill base in physical assessment is paramount, as the collection of data by which to identify physiological predictors and thus determine urgency becomes our primary triage method. Remember, too, that in some instances communication through a third person, such as a relative, caregiver or interpreter, may contribute to the assessment process. In such cases communication may also be challenging, as the message sent from the third person is their own interpretation of events, which provides another potential barrier.

Communication is a process of sending and receiving messages between individuals within a dynamic context. Each individual carries responsibilities as both sender and receiver of messages. The entire communication encounter is influenced by a range of factors and stimuli.[132]

There are important issues related to the patient, the nurse and the environment that may impact upon the complexity of the communication process. Communication literature commonly refers to such influencing factors as 'noise': external or physical noise, internal or psychological noise, and semantic or interpretational noise.[133-5] One of the most important considerations here is that the patient may experience difficulty fulfilling their responsibilities as a sender and receiver of communication, due to the 'noise' that is inherent within triage. This means that the Triage Nurse will often carry the responsibility of recognising and managing the influencing factors for both themself and the patient.
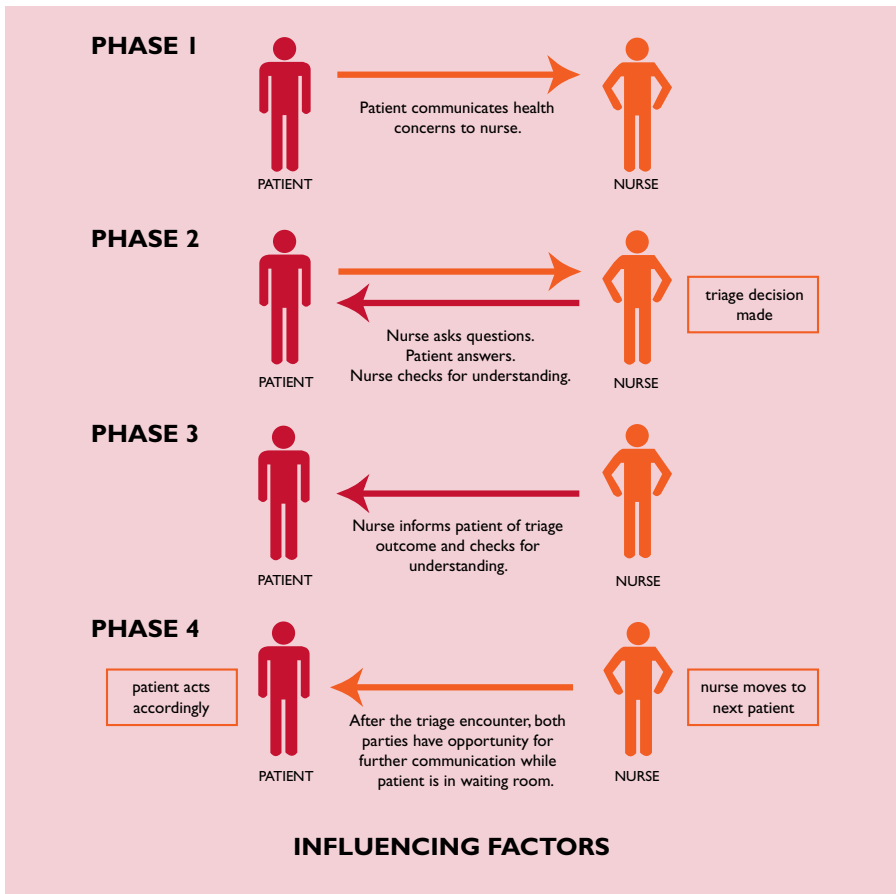
Factors that impact upon the communication process at triage

The complex process of communication always occurs within a range of influencing factors, as illustrated in Diagram 3.1. The more the Triage Nurse understands these factors that influence the effectiveness of communication, the better the communication and the quality of data gathered.

Diagram 3.1: Simplified image of communication at triage

PHASE 1

PATIENT → Patient communicates health concerns to nurse. → NURSE

PHASE 2

PATIENT → Nurse asks questions. Patient answers. Nurse checks for understanding. → NURSE

triage decision made

PHASE 3

PATIENT ← Nurse informs patient of triage outcome and checks for understanding. ← NURSE

PHASE 4

patient acts accordingly

PATIENT ← After the triage encounter, both parties have opportunity for further communication while patient is in waiting room. ← NURSE

nurse moves to next patient

INFLUENCING FACTORS

Factors to be aware of include:

- **Physical environment:** The presence of barriers such as bullet-proof glass, desks, lack of privacy, distracting noise and movement of people throughout the area all impact on the triage communication process. It is often the effort displayed by the Triage Nurse that will overcome these barriers, and reassure the patient that their communication with the nurse is private, thorough and confidential.

- **Time constraints:** The triage assessment generally should take no more than two to five minutes with a balanced aim of speed and thoroughness being the essence.[2]

- **Language use:** The use of jargon, be it medical jargon or 'street talk', can result in misinterpretation as profound as that which would occur between two people actually speaking different languages.
  For example, 'voiding' is a term commonly used in medicine, but may mean something completely different to a layperson, whereas 'doing a wee' would be understood by most people.

- **Non-verbal behaviours:** Body language, facial expressions and tone of voice in both the patient and the nurse during the encounter are equally significant aspects of communication.

- **Cultural diversity:** These include differences in age, gender, ethnicity, language, religion, socioeconomic status and life experience. For example, an elderly man may be reluctant to discuss some issues with 'a lass who looks younger than his granddaughter', so effort must be put into building a professional rapport.

- **Nature of the health concern:** Health concerns that are highly sensitive, embarrassing or anxiety-producing will influence the way in which the information is communicated by both the patient and the Triage Nurse. The avoidance of key terms and the use of euphemisms may lead to distortion of the messages sent and received.

- **Expectations and assumptions:** Individuals present to triage with expectations of what will happen. These expectations are influenced by their perception of the urgency of the health concern and by their past health care experiences, and may at times be unrealistic. The Triage Nurse's familiarity with the triage environment and with patients, together with the attitudes and behaviours of other emergency staff, can all have both positive and negative influences. Although such influences can aid in early symptom recognition, they can also potentially lead to inappropriate assumptions and bias.

- **Emotions:** Individuals – including both patients and nurses – react to stress and anxiety in different ways and with varying intensity. These reactions can impact upon the person's ability to provide coherent information and their ability to answer questions clearly. The Triage Nurse's ability to remain calm and achieve effective communication within this environment is paramount.

Challenging communication encounters

Often, people presenting with challenging communication behaviour are unwittingly expressing an unmet basic human need.[135] Understanding what underpins challenging communication behaviours, together with being aware of the behaviours that trigger an emotional response within them,[131] can assist the Triage Nurse to respond to the issue behind the behaviour rather than to the behaviour itself.

Developing a basic strategy to interpret communication behaviour quickly may assist in minimising the effects of challenging communication behaviours upon the triage assessment. Table 3.1 outlines the four basic human needs, common signals that may indicate that a need is not being met, and some basic strategies to overcome this, as suggested by Martin (2001).[135]

Table 3.1: Identifying and dealing with the four basic human needs[135]

Basic human need	Common signals that this need is not being met	Suggested strategies to fulfil this need
To be understood	Repeating the same message; speaking slowly and/or loudly; getting angry; bringing a support person to speak for them.	Separate emotions from content. Ask questions, shifting the focus from the emotion to exploring the health concern. Acknowledge their feelings; empathise with their concerns. Reflect back your understanding. Inform them of what will happen and why. Do not take expressions of anger personally. Check your own reactions.
To feel welcome	Looking around before entering; looking lost or unsure.	Provide a warm and friendly welcome. Use appropriate language. At the end of the triage encounter, keep communication lines open.
To feel important – one's self-concept	Drawing attention to themself; getting angry; appearing helpless; loss of control.	Call the person by their name; acknowledge their concerns; tune into their individual needs. Allow anger to diffuse – listen; say nothing; allow the person to release their emotions. Try not to react to the emotion.
Need for comfort – psychological and physical	Appearing ill at ease, nervous or unsure; requesting assistance/help.	Explain the procedures carefully and calmly; reassure.

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CHAPTER 4: TRIAGE BASICS

Statement of purpose

The purpose of this chapter is to provide a comprehensive outline of the physiological predictors underpinning the allocation of urgency using the Australasian Triage Scale (ATS).

Learning outcomes

After completing this chapter, participants will be able to describe the process of triage assessment and identify the clinically important factors influencing the allocation of a triage code using the ATS.

Learning objectives

1. Describe triage assessment techniques under the following headings:
    (a) Environmental hazards
    (b) General appearance
    (c) Airway
    (d) Breathing
    (e) Circulation
    (f) Disability
    (g) Environment.

2. Differentiate predictors of poor outcome from other data collected during the triage assessment.

3. Identify patients who have evidence of or are at high risk of physiological instability.

4. Assign an appropriate ATS category in response to clinical assessment data.

Key points
- Identifying and managing risks to self, patients and the environment is the first principle of safe triage practice.
- First impressions of general appearance should always be considered when making a triage decision.
- Always ask the question 'Does this person look sick?'
- The primary survey approach is used to identify and correct life-threatening conditions at triage.
- Other conditions in which timely intervention may significantly influence outcomes (such as thrombolysis, an antidote or management of acid or alkali splash to eye) must also be detected at triage.
- Timely access to emergency care can improve patient outcomes.
- Early identification of physiological abnormality at triage can inform focused ongoing medical assessment and investigation.

Content

Background

The presence of a physiological abnormality, failure to recognise and treat it, and age greater than 65 years are known risk factors for poor outcomes. Timely responses to abnormal clinical findings have been shown to reduce morbidity and mortality in critically ill patients.

The ATS clinical descriptors are informed by research into predictors of outcome in critical illness/injury and clinically relevant assessment criteria. The correct application of this information is also critical to the timely recognition and treatment of patients who have deteriorated and thus warrant re-triage.

The primary survey approach is recommended to identify and correct life-threatening conditions at triage. Table 4.1 provides a summary of adult physiological discriminators for the ATS, using the primary survey format.

Table 4.1: Summary of adult physiological predictors for the ATS

	Category 1 Immediate	Category 2 10 minutes	Category 3 30 minutes	Category 4 60 minutes	Category 5 120 minutes
Airway	Obstructed/ partially obstructed	Patent	Patent	Patent	Patent
Breathing	Severe respiratory distress/absent respiration/ hypoventilation	Moderate respiratory distress	Mild respiratory distress	No respiratory distress	No respiratory distress
Circulation	Severe haemodynamic compromise/ absent circulation Uncontrolled haemorrhage	Moderate haemodynamic compromise	Mild haemodynamic compromise	No haemodynamic compromise	No haemodynamic compromise
Disability	GCS <9	GCS 9–12	GCS >12	Normal GCS	Normal GCS

Risk factors for serious illness/injury – age, high risk history, high risk mechanism of injury, cardiac risk factors, effects of drugs or alcohol, rash and alterations in body temperature – should be considered in the light of history of events and physiological data. Multiple risk factors = increased risk of serious injury/illness. Presence of one or more risk factors may result in allocation to a triage category of higher acuity.
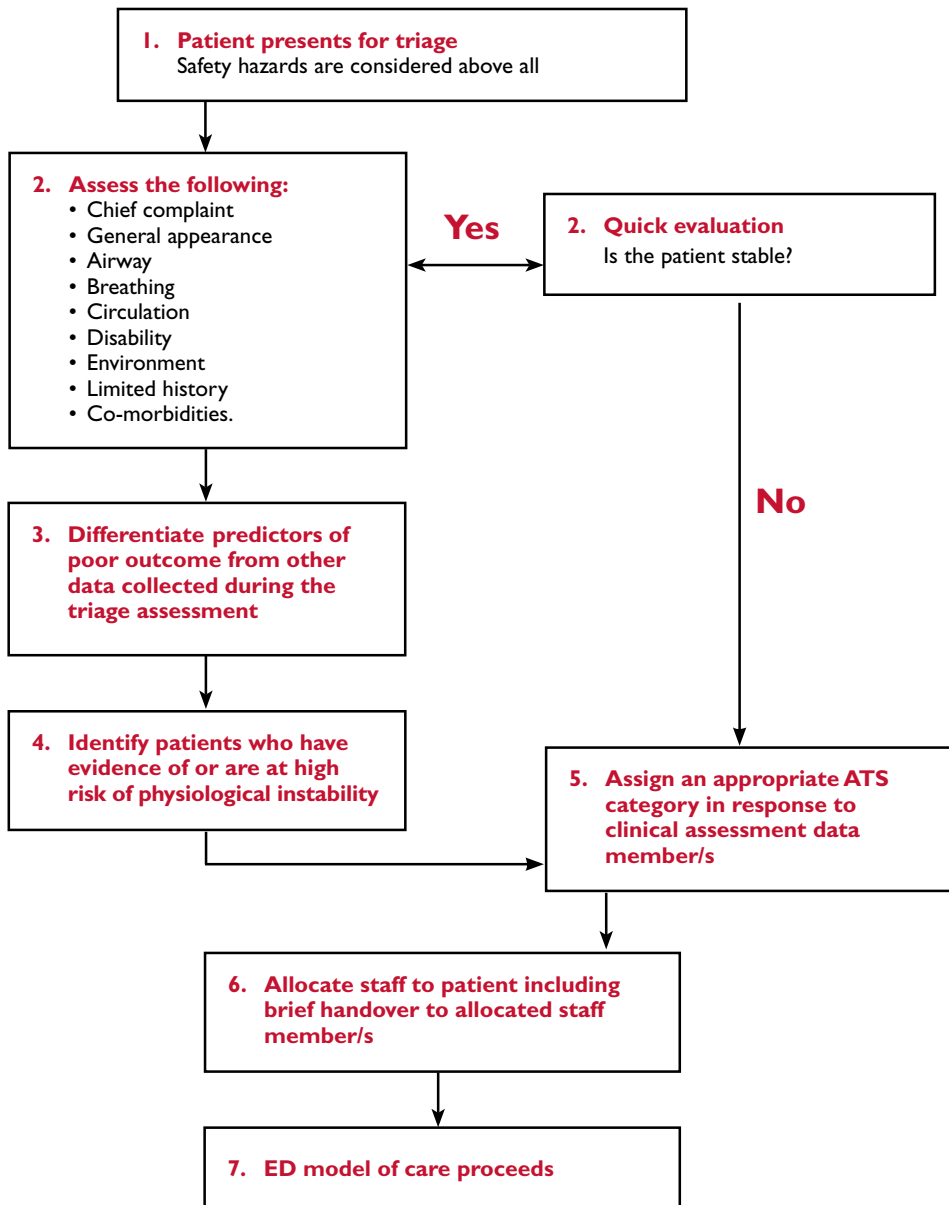
The collection of physiological parameters at triage requires the clinician to make the best use of their senses to detect abnormalities (i.e. look, listen, feel and smell).

Triage Nurses must ensure that patients with physiological abnormalities are not delayed by the triage process and are allocated to a clinical area that is equipped to provide ongoing assessment and treatment of their condition.

Diagram 4.1 illustrates the recommended triage method.

Diagram 4.1: Recommended triage method

1. **Patient presents for triage**
   Safety hazards are considered above all

2. **Assess the following:**
   • Chief complaint
   • General appearance
   • Airway
   • Breathing
   • Circulation
   • Disability
   • Environment
   • Limited history
   • Co-morbidities.

Yes

2. **Quick evaluation**
   Is the patient stable?

No

3. **Differentiate predictors of poor outcome from other data collected during the triage assessment**

4. **Identify patients who have evidence of or are at high risk of physiological instability**

5. **Assign an appropriate ATS category in response to clinical assessment data member/s**

6. **Allocate staff to patient including brief handover to allocated staff member/s**

7. **ED model of care proceeds**

Assessment techniques for safe triage

Assessment of environmental hazards

This is the first step to safe practice at triage. The Triage Nurse must be aware of internal security response protocols. In addition, the Triage Nurse should observe standard precautions whenever there is potential for exposure to blood or other body fluids. The Triage Nurse should be aware of the risks associated with leaving the triage area to retrieve patients from vehicles or reception areas of the hospital. Local policy will determine practice in this regard, but a general principle is that the triage desk should never be left unattended and that staff members should never place themselves in a situation in which additional help cannot be mobilised.

As part of maintaining a safe environment, the Triage Nurse must ensure that equipment for basic life support (bag-valve mask and oxygen supply) is available at triage. Likewise, equipment which complies with standard precautions is required. At the beginning of each shift, the Triage Nurse should conduct a basic safety and environment check of the work area to optimise environmental and patient safety.

General appearance

This is an essential component of the triage assessment. Observation of the patient's appearance and behaviour when they arrive tells us much about the patient's physiological and psychological status. Take particular notice of the following:

- Observe the patient's mobility as they approach the reception area. Is it normal or restricted? If it is restricted, in what way?
- Ask yourself the question 'Does this patient look sick?'
- Observe how the patient is behaving.

The primary survey underpins safe practice in the ED. When an assessment of the environment and general appearance is complete (this should take seconds), the primary survey should begin.

Airway

Always check the airway for patency, and consider cervical spine precautions where indicated.

An occluded airway or an immediate risk to airway must be allocated ATS category 1 (this includes unresponsiveness with GCS of <9 and ongoing or prolonged seizure).

In adults, stridor occurs when in excess of 75 per cent of the airway lumen has been obstructed: these patients have failed their primary survey and require definitive airway management, so warrant allocation to a high triage category (ATS 1).

Breathing

Assessment of breathing includes determination of respiratory rate and work of breathing. Patients with evidence of respiratory dysfunction during the triage assessment warrant allocation to a high triage category (see Table 4.1).

Patients allocated to lower triage categories (ATS 4 or 5) should have normal respiratory function.

It is important to detect hypoxaemia. This can be detected using pulse oximetry.

Circulation

Assessment of circulation includes determining heart rate, pulse and pulse characteristics, skin indicators, oral intake and output. It is important that hypotension be detected during the triage assessment to facilitate early and aggressive intervention. Although it may not be possible to measure blood pressure at triage, other indicators of haemodynamic status should be considered, including peripheral pulses, skin status, conscious state and alterations in heart rate.

Patients with evidence of haemodynamic compromise (hypotension, severe hypertension, tachycardia or bradycardia) during the triage assessment warrant allocation to a high triage category (see Diagram 4.1).

Patients allocated to lower triage categories (ATS 4 or 5) should have normal circulatory function.

Disability

This assessment includes determining AVPU (see Figure 4.1) GCS and/or activity level, assessing for loss of consciousness, and pain assessment. Altered level of consciousness is an important indicator of risk for serious illness or injury. Patients with conscious-state abnormalities should be allocated to a high triage category (Diagram 4.1).

Figure 4.1: AVPU scale[143]

A = Alert
V = Responds to voice
P = Responds to pain
• Purposefully
• Non-purposefully
– Withdrawal/flexor response
– Extensor response
U = Unresponsive

Eye injuries warrant careful assessment and are based on the mechanism of injury and the potential for ongoing visual impairment. Table 4.2 shows considerations for triaging eye injury using the ATS descriptors.

Table 4.2: Summary of ophthalmic emergency predictors for the ATS

Category 1 Immediate	Category 2 10 minutes	Category 3 30 minutes	Category 4 60 minutes	Category 5 120 minutes

	• Penetrating eye injury
	• Chemical injury
	• Sudden loss of vision with or without injury
	• Sudden onset severe eye pain
		• Sudden abnormal vision with or without injury
		• Moderate eye pain, e.g.
		  – blunt eye injury
		  – flash burns
		  – foreign body
			• Normal vision
			• Mild eye pain, e.g.
			  – blunt eye injury
			  – flash burns
			  – foreign body
				• Normal vision
				• No eye pain

Environment

Assess temperature. Hypothermia and hyperthermia are important clinical indicators and need to be identified at triage.

Other considerations

Other risk factors should be considered during the triage assessment. In the patient who has normal physiological parameters at triage, these include the following:

- Extremes of age (very young or very old) entail physiological differences that increase the risk of serious illness and injury, as such patients have decreased physiological reserve and altered physiological responses, and may present with non-specific signs and symptoms.
- High-risk features including chronic illness, cognitive impairment, communication deficit, multiple co-morbidities, poisoning or severe pain may warrant allocation to a high ATS category.
- Patients with high risk alerts, such as a history of violence.
- Trauma patients should be allocated an ATS category based on clinical urgency. There are specific mechanisms of injury associated with risk of life-threatening injury that need to be incorporated in triage decisions. Examples include vehicle rollover, death of same-vehicle occupant, ejection from a vehicle, and fall from a height greater than three metres.
- The presence of a rash may also alert the Triage Nurse to the possibility of serious illness such as anaphylaxis or meningococcal disease; however, these types of presentations will usually have concurrent primary-survey abnormality.
- Re-triage – see definition in Chapter 1.

The Challenge of Triage

Case Number: *1829/02*
Case Precis Author: *A. Charles*

A previously well 18-year-old male presented to a peripheral suburban ED in the early hours of the morning with a 24 hour history of being generally unwell with lethargy, headache and vomiting. He was triaged as a category 4. After waiting for approximately four hours later he 'felt a bit better' so he left the ED without being assessed by a medical practitioner. He had, however, been reviewed by the triage nurse on three separate occasions.

Five hours after arriving home he was found by his family to be agitated with an altered conscious state and to be developing a purpuric rash. He was returned to the same emergency department by ambulance where advanced life support was commenced, including endotracheal intubation and ventilation. He was thereafter transferred to a tertiary hospital Intensive Care Unit. Meningococcal septicaemia was diagnosed and despite aggressive treatment he deteriorated and died 4 days later.

Coronial Investigation
The issues raised by the patient's family were:
(1) a perceived deficiency in the triage process and
(2) the delay in being seen by a doctor during the first presentation.

Coronial Findings
The Coroner found that the emergency department was particularly busy on the evening that the patient first presented.
The triage nurse's assessment of the patient indicated non-specific flu like symptoms and therefore an appropriate triage category allocation had been given. Neck stiffness and photophobia had been examined for. The delay in the patient being seen could not be definitively connected to his death.

Recommendation
The Coroner recommended that consideration be given to formalising a process where a patient is always reassessed by the triage nurse once the triage time has expired. In this case that would mean a formal nurse review one hour after initial assessment, it was noted that this was in fact performed informally on three occasions in this case.

Hospital Response
The hospital reviewed its triage processes and procedures and concluded that any patient who presented with similar symptoms should be triaged as a ATS Category 3 (to be seen within 30 minutes of presentation).

Note: Triage category allocation is independent of local policies dictating activation of response teams, such as trauma team activation.

Prioritisation of multiple patients at triage

Although there is no research relating to triage of multiple patients who present simultaneously, a primary-survey approach theoretically prioritises patients in order of life threat. This approach means that patients with airway problems should take precedence over patients with breathing problems, who take precedence over patients with circulation problems. Table 4.1 outlines such a primary survey approach to prioritising patients.

CHAPTER 5: MENTAL HEALTH TRIAGE

Statement of purpose

The purposes of this chapter are to:
- Describe the clinical indicators for mental illness in the context of a generalist ED; and
- Discuss the clinical descriptors for each of the five ATS categories for patients presenting to the ED with acute behavioural disturbance and/or mental illness.

Learning outcomes

After completing this chapter, participants will be able to describe the rapid assessment of mental illness related problems at triage, identify mental illness risk factors pertinent to triage, and apply an ATS category that reflects the person's need for emergency intervention.

Learning objectives

- Describe common mental health related presentations for different life stages (youth, adult, elderly) that may be seen at triage in a generalist ED.
- Identify specific risk factors associated with mental illness for ED triage.
- Apply the principles of mental health assessment in this context.
- Relate common types of mental health presentations with the descriptors provided within the ATS.
- Analyse approaches to mental health assessment in terms of strengths and weaknesses.
- Consider strategies that may improve mental health assessment at triage in your workplace.

Key points
- The usual primary-survey approach to assessing all incoming patients should be complete prior to commencing mental health assessment.
- Mental health triage is based on assessment of appearance, behaviour and conversation.
- The allocation of a triage code must be based on clinical criteria that are consistent with the ATS descriptors for acute behavioural disturbances and risk of harm to self or others.

Content

Background

Since the late 1990s a number of tools have been developed and refined to optimise consistency of triage for patients presenting to EDs with acute behavioural disturbance or primary mental illness. For example, in New South Wales, Sutherland Hospital developed mental health triage guidelines for EDs.[42] In Tasmania, Smart, Pollard and Walpole (1999)[43] introduced a four-point mental health triage rating scale to be used in conjunction with the ATS. In Victoria, further evaluation of the Tasmania tool found differences in use according to specialist training, and suggested that further education was needed to improve the utilisation of the tool.[35] Later, the New South Wales Department of Health implemented guidelines for the management of mental health presentations to the ED.[36] South Eastern Sydney Area Health Services (SESAHS) went on to develop a five-point mental health triage tool to enhance consistency of triage in EDs for mental health presentations.[37] Referenced as best practice by the National Institute of Clinical Excellence, the SESAHS tool has been further refined by Broadbent et al.[47-49] and was recently implemented in all Victorian EDs.[41]

Approach

There are two steps that are vital in determining time to treatment for people with mental health illness: obtaining accurate assessment data and applying an appropriate ATS code. These two steps should be conducted with an awareness of risk factors for harm (self-harm and harm to others).[43] In particular, high risk is attached to those with pre-existing impairment from either severe or acute mental illness.[44]

Assessment

Patients may be brought to the ED by police, ambulance, community mental health workers or family members, as well as coming in by themselves.

The usual primary-survey approach to assessing all incoming patients should be completed prior to commencing a mental health assessment. This involves asking the patient why they are in the ED today, and who brought them. It is important to be open, listen for verbal cues, clarify, and not be judgemental. The assessment is not intended to make a diagnosis, but to determine urgency and identify immediate needs for treatment.

Psychotic illness, depressive illness, attempted suicide, suicidal thoughts, anxiety, acute situational crisis, substance-induced disorders, and physical symptoms in the absence of illness are the most common mental health presentations at triage.

Always maintain your safety and the safety of others. If a patient's behaviour escalates, withdraw and seek assistance immediately.

Be aware also that not all aggressive behaviour is associated with mental illness. Some aggressive behaviour is associated with organic illnesses such as hypoglycaemia, delirium, acquired brain injury or intoxication. These organic causes of unusual or disturbing behaviour may look like mental illness when in fact they are not. The interplay of biological, psychological and socio-cultural factors related to ageing sometimes makes it difficult to clearly identify mental health problems.

The ABCs of mental health assessment[44]

The ABCs of a mental health assessment are as follows.

Appearance
What does the patient look like?
- Are they dishevelled, unkempt or well presented?
- Are they wearing clothing appropriate for the weather?
- Do they look malnourished or dehydrated?
- Are they showing any visible injuries?
- Do they appear intoxicated, flushed, with dilated or pinpoint pupils?
- Are they tense, slumped over, displaying bizarre postures or facial grimaces?

This information provides cues when assessing the person's mood, thoughts and ability to self-care.

Affect
What is your observation of the patient's current emotional state?
- Are they flat, downcast, tearful, distressed or anxious?
- Is their expression of emotion changing rapidly?
- Is their emotion inconsistent with what they are talking about?
- Are they excessively happy?

This information provides cues when assessing the person's mood.

Behaviour
How is the patient behaving?
- Are they restless, agitated, hyperventilating or tremulous?
- Are they displaying bizarre, odd or unpredictable actions?
- Are they orientated?

How is the patient reacting?
- Are they angry, hostile, uncooperative, over-familiar, suspicious, guarded, withdrawn, inappropriate or fearful?
- Are they responding to unheard voices or sounds, or unseen people or objects?
- Are they attentive or refusing to talk?

Possible questions:
- 'This must be distressing for you. Can you tell me what is happening?'
- 'I can see that you are very anxious. Do you feel safe?'
- 'I can see that you are angry.   Can you tell me why?'
- 'Are your thoughts making sense to you?'
- 'Are you taking any medication?'

Conversation and mood
- What language is being spoken?
- Is an interpreter needed?

Conversation
How is the patient talking?
Does their conversation make sense?
- Is it rapid, repetitive, slow or uninterruptible, or are they mute?
- Are they speaking loudly, quietly or whispering?
- Are they speaking clearly or slurring?
- Are they speaking with anger?
- Are they using obscene language?
- Do they stop in the middle of a sentence?
- Do you think the patient's speech is being interrupted because they are hearing voices?
- Do they know what day and time it is and how they got to the ED?

Mood
How does the patient describe their mood? Do they say they feel:
- Down, worthless, depressed or sad?
- Angry or irritable?
- Anxious, fearful or scared?
- Sad, really happy or high?
- Like they cannot stop crying all the time?

What do you think is the risk of suicide/homicide?

For example, does the patient tell you that they are thinking about suicide, wanting to hurt others, worrying about what people think about them, worrying that their thoughts don't make sense, afraid that they are losing control, feeling that something dreadful is going to happen to them, and/or feeling unable to cope with everything that has happened to them lately in relation to recent stressors?

Possible questions:
- 'Do you feel hopeless about everything?'
- 'Do you feel that someone or something is making you think these things?'
- 'Are you being told to harm yourself and/or others?'
- 'Do you feel that life is not worth living?'

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Presentations to the ED for self-harm or risk of self-harm are very common and are increasing, in all age groups. Regardless of the motivation or intent, these behaviours are associated with a high risk of death. Consider the use of the Mental Health Act 2000 and risk assessments (such as removal of weapons and close observation).

Possible questions:
- 'How often do you have these thoughts?'
- 'Do you have a plan of what you might do?'
- 'Do you have access to tablets/a gun?'

Presentations to the ED for self-harm or risk of self-harm are very common and are increasing, in all age groups. Regardless of the motivation or intent, these behaviours are associated with a high risk of death. Consider the use of the Mental Health Act 2000 and risk assessments (such as removal of weapons and close observation).

Other Considerations

Other considerations within the mental health assessment include the following:

Dementia
Dementia is a common problem. It is not a diagnosis rather a cluster of progressive symptoms, the most common being:
- memory loss and confusion
- intellectual decline
- personality changes.

Subtypes include:
- vascular dementia
- Alzheimer's disease
- alcoholic dementia.

Complications of dementia include:
- delirium
- physical illness
- depression
- psychotic symptoms.

Delirium
Delirium is not a disorder but a clinical syndrome. It is the cause of much distress and disability and contributes greatly to morbidity and mortality. It is a reversible organic condition characterised by:
- fluctuations in conscious state
- psychomotor agitation
- disorganised thinking
- perceptual disturbances, for example, hallucinations.

Youth

Depression is the most common mental health problem for young people and is a well-recognised risk factor for suicidal behaviour.

Young people with depression may:
- Feel worthless
- Cry a lot
- Stop enjoying their life
- Feel miserable all the time
- Become very irritable
- Be secretive
- Take risks that are out of character (such as binge drinking and/or substance abuse)
- Drop out of school or quit their job.

Psychostimulants

Psychostimulants are a group of drugs that stimulate the central nervous system, causing feelings of false confidence, euphoria, alertness and energy. Common psychostimulants include methamphetamines (meth, crystal meth, ice, base), which are amphetamine (speed) derivatives.

Psychostimulants may produce symptoms similar to paranoid psychosis, including delusions of persecution, ideas of reference, bizarre visual and auditory hallucinations, and violent outbursts. Symptoms are not related to the time of ingestion or the dose taken.

Assessment and rapid and safe management of **acute behavioural disturbance** and medical complications is the priority.

Applying the ATS

The evidenced-based guidelines presented in Table 5.1 extend on those provided in the ATS, and should be used in conjunction with the ATS.[47]

Table 5.1: Mental health triage tool[50]

Triage code – Treatment acuity	Description	Typical presentation	General management principles*
1 – Immediate	**Definite danger to life (self or others)** **Australasian Triage Scale**[1] **states:** – Severe behavioural disorder with immediate threat of dangerous violence	**Observed** – Violent behaviour – Possession of weapon – Self-destruction in ED – Extreme agitation or restlessness – Bizarre/disoriented behaviour **Reported** – Verbal commands to do harm to self or others, that the person is unable to resist (command hallucinations) – Recent violent behaviour	**Supervision** Continuous visual surveillance 1:1 ratio (see definition below) **Action** – Alert ED medical staff immediately – Alert mental health triage or equivalent – Provide safe environment for patient and others – Ensure adequate personnel to provide restraint/detention based on industry standards **Consider** – Calling security +/- police if staff or patient safety compromised. May require several staff to contain patient – 1:1 observation – Intoxication by drugs and alcohol may cause an escalation in behaviour that requires management.
2 – Emergency Within 10 minutes	**Probable risk of danger to self or others** *AND/OR* **Client is physically restrained in emergency department** *AND/OR* **Severe behavioural disturbance** **Australasian Triage Scale**[1] **states:** Violent or aggressive (if): – Immediate threat to self or others – Requires or has required restraint – Severe agitation or aggression	**Observed** – Extreme agitation/restlessness – Physically/verbally aggressive – Confused/unable to cooperate – Hallucinations/delusions/paranoia – Requires restraint/containment – High risk of absconding and not waiting for treatment **Reported** – Attempt at self-harm/threat of self-harm – Threat of harm to others – Unable to wait safely	**Supervision** Continuous visual supervision (see definition below) **Action** – Alert ED medical staff immediately – Alert mental health triage – Provide safe environment for patient and others – Use defusing techniques (oral medication, time in quieter area) – Ensure adequate personnel to provide restraint/detention – Prompt assessment for patient recommended under Section 9 or apprehended under Section 10 of Mental Health Act 2000. **Consider** – If defusing techniques ineffective, re-triage to category 1 (see above) – Security in attendance until patient sedated if necessary – Intoxication by drugs and alcohol may cause an escalation in behaviour that requires management

Table 5.1: Mental health triage tool [50] (cont)

Triage code – Treatment acuity	Description	Typical presentation	General management principles*

3 – Urgent
Within 30 minutes
	Possible danger to self or others
	– Moderate behaviour disturbance
	– Severe distress
	
	Australasian Triage Scale[1] states:
	– Very distressed, risk of self-harm
	– Acutely psychotic or thought-disordered
	– Situational crisis, deliberate self-harm
	– Agitated/withdrawn
		Observed
		– Agitation/Restlessness
		– Intrusive behaviour
		– Confused
		– Ambivalence about treatment
		– Not likely to wait for treatment
		
		Reported
		– Suicidal ideation
		– Situational crisis
		
		Presence of psychotic symptoms
		– Hallucinations
		– Delusions
		– Paranoid ideas
		– Thought disordered
		– Bizarre/agitated behaviour
		
		Presence of mood disturbance
		– Severe symptoms of depression
		– Withdrawn/uncommunicative and/or anxiety
		– Elevated or irritable mood
			Supervision
			Close observation (see definition below)
			– Do not leave patient in waiting room without support person
			
			Action
			– Alert mental health triage
			– Ensure safe environment for patient and others
			
			Consider
			– Re-triage if evidence of increasing behavioural disturbance i.e.
			  – Restlessness
			  – Intrusiveness
			  – Agitation
			  – Aggressiveness
			  – Increasing distress
			– Inform security that patient is in department
			– Intoxication by drugs and alcohol may cause an escalation in behaviour that requires management

4 – Semi-urgent
Within 60 minutes
	Moderate distress Australasian Triage Scale[1] states:
	– Semi-urgent mental health problem
	– Under observation and/or no immediate risk to self or others
		Observed
		– No agitation/restlessness
		– Irritable without aggression
		– Cooperative
		– Gives coherent history
		
		Reported
		– Pre-existing mental health disorder
		– Symptoms of anxiety or depression without suicidal ideation
		– Willing to wait
			Supervision
			Intermittent observation (see definition below)
			
			Action
			Discuss with mental health Triage Nurse
			
			Consider
			– Re-triage if evidence of increasing behavioural disturbance i.e.
			  – Restlessness
			  – Intrusiveness
			  – Agitation
			  – Aggressiveness
			  – Increasing distress
			– Intoxication by drugs and alcohol may cause an escalation in behaviour that requires management

Table 5.1: Mental health triage tool[50] (cont)

Triage code – Treatment acuity	Description	Typical presentation	General management principles*
5 – Non-urgent Within 120 minutes	**No danger to self or others** – No acute distress – No behavioural disturbance **Australasian Triage Scale[1] states:** – Known patient with chronic symptoms – Social crisis, clinically well patient	**Observed** – Cooperative – Communicative and able to engage in developing management plan – Able to discuss concerns – Compliant with instructions **Reported** – Known patient with chronic psychotic symptoms – Pre-existing non-acute mental health disorder – Known patient with chronic unexplained somatic symptoms – Request for medication – Minor adverse effect of medication – Financial, social, accommodation, or relationship problems	**Supervision** General observation (see definition below) **Action** – Discuss with mental health triage – Refer to treating team if case-managed

Management Definitions[2]
Continuous visual surveillance = person is under direct visual observation at all times
Close observation = regular observation at a maximum of 10 minute intervals
Intermittent observation = regular observation at a maximum of 30 minute intervals
General observation = routine waiting room check at a maximum of 1 hour intervals

* Management principles may differ according to individual health service protocols and facilities.
[1] Australasian College of Emergency Medicine (2000). Guidelines for the implementation of the Australasian Triage Scale (ATS) in Emergency Departments.
[2] South Eastern Sydney Area Health Service Mental Health Triage guidelines for Emergency Departments

Acknowledgements
NICS acknowledges existing triage tools provided by Barwon Health

CHAPTER 6: RURAL AND REMOTE TRIAGING

Statement of purpose

The purpose of this chapter is to examine the unique characteristics of the rural and remote emergency nursing environment and discuss how these characteristics may impact upon the assessment of clinical urgency in triage practice. Through reading the content and participating in the learning activities, nurses will identify strategies to promote accurate and consistent use of the ATS within the rural context.

Learning outcomes

After completing this chapter, participants will have enhanced knowledge of the rural and remote emergency nursing environment and of how this environment differs from the urban context, as well as an ability to perform accurate and consistent assessment of clinical urgency using the ATS within the rural and remote context.

Learning objectives

- Identify unique differences between urban and rural triage practices.
- Discuss how these differences and challenges may impact, negatively or positively, on the performance of triage in a rural environment.
- Identify and discuss strategies to support the rural triage practitioner in the accurate and consistent use of the ATS in their environment.
- Demonstrate accurate and consistent application of the ATS within the rural and remote context.

Key points
- The triage process always involves the same skills and decision-making processes, regardless of where it is performed.
- The contextual factors of rural or remote nursing practice may influence or impact upon the triage assessment process.
- The ATS 'time-to-treatment' recommendations refer to the ideal maximum time that a patient in that category should wait for assessment and treatment. Local inability to meet these recommendations does not change the patient's triage category, which is allocated according to the need for, not the availability of, emergency care.
- Rural triage is often a role undertaken as part of the general responsibilities of the rural nurse.
- Although the numbers and the casemix of patients that present to rural and remote EDs may be smaller than those in urban EDs, the full range of conditions and urgency may present.

Content

The terms 'rural' and 'remote' refer to the 34 per cent of Australians who live outside a major city. The core difference between rural and remote nursing practice and its urban equivalent is the generalist advanced-practice role.[136]

Bushy & Bushy (2001)[137] describe the role of the rural nurse as an 'expert generalist' who is often expected to be a Geriatric Nurse, a Trauma Nurse and an Acute Care Nurse simultaneously, and who often functions without the immediate support of a medical practitioner.

Rural and remote emergency departments/services

It is appreciated that rural and remote triage may occur with very different levels of available resources from those available to an urban ED. Despite this, the principles of triage still apply. It may be, however, that the rural and remote Triage Nurse has a greater reliance on local practice and treatment guidelines.

Within major urban EDs there is a multidisciplinary team available to provide the skill-mix required to ensure that each patient receives adequate assessment and care, and to support the novice Triage Nurse. In rural and remote areas, such support may not exist, and the Triage Nurse may need to provide immediate assessment and care without any support from other health professionals.

One way to define a rural or remote ED is to describe it as one without on-site medical staff.[138-40] Current practice within rural facilities often involves patient care initiated by nurses. Therefore, a number of work practices have developed in response to local circumstances. These may include extension of the nursing role to initiate patient management while the doctor is en route. Some rural EDs have an arrangement with the local doctor whereby patients with non-urgent problems are asked to return at a later time. These practices rely heavily on the assessment skills, judgement and experience of the nurses in the rural facility. Some rural and remote EDs have developed local clinical guidelines for such situations; however, this is still the exception rather than the rule.[139]

It is important to note that while the volume of patients in a rural ED is generally lower than that of an urban setting, and the caseload also varies, the range of presenting complaints is the same as that seen in urban EDs.[141]

The ATS is applicable in rural and remote settings; however, the emphasis is on time until treatment is initiated, rather than time until seen by a doctor.[139]

Triage in the rural context, therefore, does not just involve assessment of acuity; it may also involve early management decisions and treatment. The important principle to remember, however, is that although the boundaries or scope of triage practice may be different between rural and urban triage environments, these differences should not impact upon the consistent and accurate application of the ATS.

Rural and remote nursing issues

Although the ATS is applicable in the rural and remote triage contexts, and the expectation is of consistent and accurate application Australia wide, many factors impacting upon rural and remote nursing practice must be understood in order to ensure that this occurs. These factors may include access to continuing education, recruitment and retention issues, isolation and educational preparation for the generalist role.

Rural Triage Nurses face unique issues that need to be recognised and considered. Features of the rural environment, and of the community and small local hospital services, may exacerbate these issues, and need to be considered as influencing factors for rural triage. Some of the issues confronting rural Triage Nurses are listed below.[30]

- **Multiple jobs:** Due to the spasmodic nature of the need for triage, rural Triage Nurses often have other jobs as well. Unlike their metropolitan counterparts, rural nurses do not dedicate their time to the triage desk. This can impact upon their opportunities for learning and maintaining skills through consistent practice.

- **Lack of a 'safety net':** The Triage Nurse in a rural or remote environment may well be alone in the facility, with no one around to provide support or advice.

- **Lack of other options for care:** Patients in this environment cannot easily be triaged elsewhere in the immediate term. When the decision to triage elsewhere is made, consideration must include the distance, and the safest way for the patient to travel.

- **Time issues:** The initial 'wait' time for patients is often not the key issue in this environment; rather, it may be the time it takes to get them to the hospital, and, once they have arrived, how to get them the most appropriate care in the fastest possible time.

- **Delivery of initial emergency care:** This can be a source of anxiety for staff. Dealing with the unexpected, with limited support or specialised back-up, means that the rural Triage Nurse needs a broad range of knowledge and skills.

- **Personal and departmental safety:** This can be a potential problem. Triaging without security, often without even another nurse, or a local police station, is a major source of anxiety in rural and remote triage practice.

- **The triage process may occur outside the hospital setting:** For example, the triage process may occur as part of a district nursing community health care role, or via telephone, as patients try to avoid the inconvenience of travelling long distances to access health care advice or treatment. However, it must be emphasised here that the ATS is a face-to-face tool, and local protocols must guide other triage types.

- **Lack of anonymity within the community:** This may result in a nurse being contacted at home, or within a social setting, to perform a triage assessment, and can present issues related to confidentiality. It may result in a nurse caring for a friend, acquaintance or relative. Personal relationships can also be unwittingly abused by patients seeking special treatment, which may make triage decisions more difficult to make.

- **Decisions may carry enormous financial or social ramifications for patients and their families:** This may be the case especially when a decision is made to triage away from the local health facility.

- **Decisions may carry collegial ramifications:** This may be the case especially if a decision concerns the local doctor in a one-GP town, as a working relationship must still be maintained.

- **Awareness of budgetary pressures:** Within a small facility this can be heightened, due to there being fewer buffers between hospital administration and the nurse.

- **Knowledge of the community:** It can be easy to make assumptions when you know the community and the individual community members well. The Triage Nurse needs to be very careful to obtain detailed and clear information concerning the patients that they are triaging and the history of their current complaint.

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It is vital that Triage Nurses in rural and remote emergency service areas are aware of the difficulties that these differences may present when assessing a patient using the ATS scale. Identifying strategies to preserve privacy, enhance communication and facilitate provision of appropriate emergency care are as important as ensuring that the nurse is supported in the role by having access to education and support. The latter may not be provided locally, but may be addressed through national initiatives such as this guide or through professional collegial memberships.

CHAPTER 7: PAIN ASSESSMENT AT TRIAGE

Statement of purpose

The purposes of this chapter are to:
- Provide a description of the physiological and behavioural indicators related to pain and pain assessment at triage; and
- Identify the importance of providing early assessment of pain.

Learning outcomes

After completing this chapter, participants will be able to describe the assessment and measurement of pain, and to discuss how this informs triage decision-making.

Learning objectives

- Describe the factors influencing the perception and expression of pain.
- Analyse the application of commonly used and validated pain assessment strategies in a triage setting.
- Correlate possible pain assessment findings to the physiological discriminators used to guide triage acuity classification.
- Construct and evaluate strategies to improve pain assessment and pain management from a triage perspective.

Key points
- Humane practice mandates the prompt assessment and relief of pain.
- Pain is the reason most people present to the ED.
- Pain is as severe as the patient reports.
- Severity of pain influences triage category.

Content

Pain is the most common symptom reported by patients who present to the ED. Early assessment of pain enables effective management and relief of suffering.

Pain is the response to actual or potential tissue damage, and involves physiological, behavioural and emotional responses. The patient's self-report is regarded as the gold standard for measuring pain.[57]

The experience of pain is recognised as being subjective, personal and as severe as the patient reports. However, this recognition does not currently extend into clinical practice, particularly in EDs, with numerous studies demonstrating that pain is often under-recognised, poorly assessed, and inappropriately treated.[59]

Pain can be acute or chronic. Chronic pain differs from acute pain in that it has usually been present for more than three months. Chronic pain has a potential for under-treatment.[58] The incidence of chronic pain is increasing in Western populations, with an estimated one-third of the Australian population experiencing chronic pain, and is commonly associated with the elderly.

The ATS has included the severity of pain as a factor in determining the triage code. The inclusion of pain severity as a physiological discriminator in triage assessment is in recognition both of the humane factors associated with providing care to members of the community, and of the physiological effects of pain.[61] These latter effects include increased risk of infection, delayed healing, and increased stress on cellular function and on organ-system stability.

Assessment of pain

Assessment should attempt to determine the mechanisms producing the pain, other factors influencing the pain experience, and how pain has affected physical capacity, emotions and behaviour.

As with the experience of pain itself, the assessment of pain requires a multifaceted approach, with no single tool able to provide an objective measurement of pain. Elements to be included in assessing pain include:
- Descriptors and verbal expressions used by the patient
- Information obtained from the patient relating to location, intensity, time factors such as onset and duration, and alleviating and aggravating factors
- Heart rate, respiratory rate, blood pressure and other physiological parameters
- Facial expressions and body language displayed by the patient
- Pain severity scales.

Self-reporting is considered the most reliable method of determining the severity of pain. Several tools have been created to assist with measuring a patient's pain through self-report. However, no single tool is appropriate for the assessment of all patients, and nurses should have knowledge and skills in using a range of pain tools that can be applied as required, depending on age and cultural factors such as language.

Suitable pain severity scales for use in a triage setting include a numerical rating scale (NRS), which is also known as a verbal pain score (VPS), and a visual analogue scale (VAS). These tools provide either a 100-point scale (NRS/VPS), or a 100-mm scale (VAS). For some patients, a verbal descriptor scale may be more suitable, using terms such as 'no pain', 'mild pain', 'moderate pain' and 'severe pain', or other appropriate descriptors as identified by the patient.

For young children, the Wong-Baker FACES Rating Scale is a commonly used tool.[62] This scale has also been adapted for use in other populations, for example in patients with limited ability to communicate in English; however, this practice has attracted criticism as it may be construed as being demeaning to the adult patient. Several culture-specific tools for both adult and paediatric patients have been developed with the recognition that care should be sensitive and responsive to cultural issues. Indeed, cultural variations need to be considered in the application of pain assessment tools.[63,64]

The Abbey Pain Scale ('the Abbey') is an Australian tool that has been designed to measure the severity of pain in people who have dementia and cannot verbalise their experience.[65] This tool provides a systematic approach to measuring the severity of pain at triage. A total score is calculated from responses to six items, each with a maximum score of three points (absent pain = 0; severe pain = 3). From a possible total of 18 points, a score of 0–2 is rated 'no pain', 3–7 is rated 'mild', 8–13 is rated 'moderate', and >14 is rated 'severe'.[66]

Pain severity scales can also be used to categorise self-reported pain into mild, moderate or severe pain. These categorisations can assist in determining an appropriate analgesia through the development of analgesic algorithms for paediatric and adult patients.[67]

Application of a triage category

The descriptive terms listed in Table 7.1 should be used as a guide to acuity for the ATS.

Table 7.1: Determining a triage category[2]

Descriptor	ATS category
Very severe	2
Moderately severe	3
Moderate	4
Minimal	5

Validated methods for quantitative assessment of pain[71]

Visual analogue scale
Use a 100 mm line as shown below.

0	100
No pain	Maximum pain

Ask the patient to mark their level of pain on the line.

Numerical rating scale
The patient is asked to state a number that equates to their level of pain, where 0 = no pain, and 10 = the most severe pain, as shown in Table 7.2. (This scale is also known as the verbal analogue scale.)

Table 7.2: The numerical rating scale

Descriptive term	Quantitative value
Severe pain	7–10
Moderate pain	4–6
Mild pain	1–3
No pain	0

Effective management of pain

In a triage setting, musculoskeletal pain can be effectively reduced through simple measures such as rest, ice, compression and elevation (RICE).[23,61,63] The administration of pharmacological agents within the triage area can be problematic. This practice needs to be supported by institutional policies and procedures, and should be considered by individual departments, taking into account the physical organisation of the triage area and the ability to reassess, monitor and evaluate patients.

CHAPTER 8: PAEDIATRIC TRIAGE

Statement of purpose

The purpose of this chapter is to provide a framework for applying the ATS to infants, children and adolescents.

Learning outcomes

After completing this chapter, participants will be able to identify the physiological and behavioural factors that inform the diagnosis of urgency in this population.

Learning objectives

- Discuss the application of the ATS to a paediatric population.
- Identify the features of serious illness in children.
- Compare available assessment tools and consider their value to triage decision-making for this population.
- Use a physiological approach to define clinical urgency and to apply the ATS to children presenting to the ED.

Key points
- The clinical priorities and the principles of urgency for infants, children and adolescents are the same as those for adults.
- Determining urgency will require recognition of serious illness, some features of which may be different in infants and children.
- The value of parents and their capacity to identify deviations from normal in their child's level of function should not be underestimated.

Content

Infants and small children differ from adults physiologically and psychologically. Children and adolescents are also developmentally different from adults. The principles of paediatric assessment are the same as those for adult assessment; however, age influences the pattern of presentation, assessment and management, as children are prone to rapid deterioration.

Consistency of triage is optimised for this population when age, historical data and clinical presentation are all included in the triage assessment.[2]

History-taking in paediatrics relies on information provided by primary carers and sometimes by the child or young person. It is important to develop a rapport with the patient and the carer in order to elicit the maximum amount of information in a relatively short timeframe.

Interpreting the meaning of the information provided by carers is an additional challenge when triaging children, as the information that is given in this context will be influenced by the carer's own knowledge and experience.[80]

The importance of privacy for parents, children and young people at triage should not be ignored. Simple health problems may be an opportunity for parents to seek assistance regarding more sensitive issues.

Young people have high mental and emotional needs and require greater privacy. They may wish to discuss their health concerns without the presence of their parents. (Refer to Chapter 5 for triage guidelines relating to mental health issues.)

Clinical urgency

A number of clinical features have been found to be significantly predictive of serious illness in infants and young children.[81-89]

Hewson et al.[90] demonstrated the value of several easily assessed parameters in positively identifying infants with serious illness, including activity levels, alertness, skin temperature, feeding patterns and fluid output. In particular, the following parameters were predictive of serious illness:
- Decreased feeding (<½ normal intake in preceding 24 hours)
- Breathing difficulty
- Having fewer than four wet nappies in the preceding 24 hours
- Decreased activity
- Drowsiness
- Being pale and hot
- Febrile illness in a child under three months old.

Several assessment tools use these known markers of serious illness in infants and young children as the basis for triage decision-making. These include the Triage Observation Tool[91] and SAVE A CHILD.[92] The Yale Observation Scale is another tool that may be helpful in detecting occult bacteraemia in infants.[92-94] A brief summary of each of these tools is provided in the 'Teaching resources' section of this chapter.

Physiological approach to triage assessment and decision-making

General appearance

Clinical data to contribute to the assessment of urgency can be gained from observing the general appearance of a child presenting to the ED. This is particularly significant in cases in which examination is likely to upset the infant or young child, making further examination difficult.

Airway

Evaluation of the airway will concentrate on determining airway patency.

Stridor is an indicator of airway obstruction, and therefore implies a high level of urgency.

Evaluation of the extent of the airway obstruction in infants and young children should be made by assessing work of breathing.

Cervical spine management forms a component of airway evaluation where the presentation is the result of trauma.

Assessment and management of likely cervical injury in children is particularly challenging and may increase the relative urgency of the presentation.

Breathing

It is widely recognised that infants and young children tolerate respiratory distress poorly, and increased work of breathing has been shown to be an indicator of serious illness in infants.[82,95]

Work of breathing and mental status are the most useful indicators of the severity of asthma. These parameters are also thought to be predictive of severity for most respiratory presentations in infants and young children.[96,97]

Although the presence of elevated respiratory rate, retraction, nasal flaring and a range of other clinical signs are an indication of significant illness, their absence may not always be a negative predictor of serious illness.[88,98,99]

Triage nurses are encouraged to use a number of parameters to make a respiratory assessment.

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Circulation

Hypotension is a very late sign of haemodynamic compromise in infants and children. Initial assessment should be dependent upon general appearance, pulse and central capillary refill.

- Onset of pallor in infants is a significant finding and an indicator of serious illness.
- Capillary refill time is an indicator of central perfusion and therefore an indirect measure of cardiovascular function.
- Estimation of the level of dehydration is important – see Table 8.1.

Table 8.1: Assessment of dehydration levels in infants[142]

Signs	Severity		
	Mild	**Moderate**	**Severe**
General condition	Thirsty, restless, agitated	Thirsty, restless, irritable	Withdrawn, somnolent or comatose; rapid deep breathing
Pulse	Normal	Rapid, weak	Rapid, weak
Anterior fontanelle	Normal	Sunken	Very sunken
Eyes	Normal	Sunken	Very sunken
Tears	Present	Absent	Absent
Mucous membranes	Slightly dry	Dry	Dry
Skin turgor	Normal	Decreased	Decreased with tenting
Urine	Normal	Reduced, concentrated	None for several hours
Weight loss	4–5%	6–9%	>10%

Disability

An abnormal conscious level always requires urgent assessment. An alteration in the level of activity can be an indicator of serious illness in infants and children.[82,95]

Decreased conscious level can be a result of serious derangement of oxygenation or circulation.

The different developmental levels of children will complicate conscious state and neurological assessment. The AVPU scale is a good method to assess level of consciousness at triage.

Never underestimate the contribution of the parents or carer. They will often be able to identify subtle deviations from normal which you may not be able to detect clinically.

Pain assessment should also form a component of the neurological assessment. Assessment of pain in children may require adaptation of pain measurement tools, and will be dependent on the child's age. For example, behavioural tools would be appropriate for pre-verbal children, faces scales for early verbal children and visual analogue scales for older children.[113,114]

History of presenting complaint

History can be gathered from a number of sources, including the child and/or the caregiver.

Children suffer different patterns of injury from adults in trauma. Mechanism of injury is an important part of assessment, as it is in adults, and can be used to predict patterns of injury. For example, a greenstick fracture is typical in a young child suffering from a fall. Child protection issues must be a consideration (see Chapter 10 – Mandatory reporting).

It is important to ascertain recent potential contact with infectious diseases, such as chicken pox.

Past history

Co-morbid factors should be evaluated for the likely effect on their acute condition and therefore clinical urgency. For example, premature infants or children with congenital heart or lung disease have a greater propensity to developing significant cardiorespiratory dysfunction from respiratory infections.

Paediatric past history should also consider perinatal and immunisation history.

Table 8.2 shows paediatric physiological discriminators for the ATS using the primary survey method.

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Table 8.2: Paediatric physiological discriminators[118]

	Category 1 Immediate	Category 2 Emergency Within 10 minutes	Category 3 Urgent Within 30 minutes	Category 4 Semi urgent Within 60 minutes	Category 5 Non urgent Within 120 minutes
Airway	Obstructed Partially obstructed with severe respiratory distress	Patent Partially obstructed with moderate respiratory distress	Patent Partially obstructed with mild respiratory distress	Patent	Patent
Breathing	Absent respiration or hypoventilation	Respiration present	Respiration present	Respiration present	Respiration present
Circulation s/s dehydration ↓LOC/activity cap refill <2 sec dry oral mucosa sunken eyes ↓tissue turgor absent tears deep respirations thready/weak pulse tachycardia ↓urine output	Severe respiratory distress, e.g. – severe use accessory muscles – severe retraction – acute cyanosis.	Moderate respiratory distress, e.g. – moderate use accessory muscles – moderate retraction – skin pale.	Mild respiratory distress, e.g. – mild use accessory muscles – mild retraction – skin pink.	No respiratory distress – no use accessory muscles – no retraction.	No respiratory distress – no use accessory muscles – no retraction.
	Absent circulation Significant bradycardia, e.g. HR <60 in an infant	Circulation present	Circulation present	Circulation present	Circulation present
	Severe haemodynamic compromise, e.g. – absent peripheral pulses – skin pale, cold, moist, mottled – significant tachycardia – capillary refill >4 secs.	Moderate haemodynamic compromise, e.g. – weak/thready brachial pulse – skin pale, cool, – moderate tachycardia – capillary refill 2–4 secs.	Mild haemodynamic compromise, e.g. – palpable peripheral pulses – skin pale, warm – mild tachycardia.	No haemodynamic compromise, e.g. – palpable peripheral pulses – skin pink, warm, dry.	No haemodynamic compromise, e.g. – palpable peripheral pulses – skin pink, warm, dry.
	Uncontrolled haemorrhage	>6 s/s dehydration	3–6 s/s dehydration	<3 s/s dehydration	No s/s dehydration
Disability	GCS<8	GCS 9–12 Severe decrease in activity, e.g. – no eye contact, – decreased muscle tone.	GCS >13 Moderate decrease in activity, e.g. – lethargic – eye contact when disturbed.	Normal GCS or no acute change to usual GCS. Mild decrease in activity, e.g. – quiet but eye contact – interacts with parents.	Normal GCS or no acute change to usual GCS. No alteration to activity, e.g. – playing – smiling.

Table 8.2: Paediatric physiological discriminators[118] (cont)

Category 1 Immediate	Category 2 Emergency Within 10 minutes	Category 3 – Urgent Within 30 minutes	Category 4 – Semi-urgent Within 60 minutes	Category 5 Non urgent Within 120 minutes
	Severe pain, e.g. – patient/parents report severe pain – skin, pale, cool – alteration in vital signs – requests analgesia.	Moderate pain, e.g. – patient/parents report moderate pain – skin, pale, warm – alteration in vital signs – requests analgesia.	Mild pain, e.g. – patient/parents report mild pain – skin, pink, warm – no alteration in vital signs – requests analgesia.	No or mild pain, e.g. – patient/parents report mild pain – skin, pink, warm – no alteration in vital signs – declines analgesia.
	Severe neurovascular compromise, e.g. – pulseless – cold – nil sensation – nil movement – ↓capillary refill.	Moderate neurovascular compromise, e.g. – pulse present – cool – sensation – movement – ↓capillary refill.	Mild neurovascular compromise, e.g. – pulse present – normal/↓sensation – normal/↓movement – normal capillary refill.	No neurovascular compromise

Risk factors for serious illness or injury

These should be considered in the light of history of events and physiological data.
Multiple risk factors = increased risk of serious injury.
The presence of one or more risk factors may result in allocation of triage category of higher acuity.

Mechanism of injury, e.g.	Co morbidities, e.g. Hx prematurity	Age <3 months and	Historical variables, e.g. events preceding presentation to ED	Other, e.g.
• penetrating injury • fall >2 – height • MCA >60 kph • MBA/cyclist >30 kph • pedestrian • ejection/rollover • prolonged extrication (>30 minutes) • death same car occupant • explosion.	• respiratory disease • cardiovascular disease • renal disease • carcinoma • diabetes • substance abuse • immuno-compromised • congenital disease • complex medical Hx.	• febrile • acute change to feeding pattern • acute change to sleeping pattern Victims of violence, e.g. • child at risk • sexual assault • neglect.	• apnoeic/cyanotic episode • seizure activity • decreased intake • decreased output • red current jelly stool • bile stained vomiting. Parental concern	• rash • actual/potential effects of drugs/alcohol • chemical exposure • envenomation • immersion • alteration in body temperature.

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CHAPTER 9: PREGNANCY AND TRIAGE

Statement of purpose

The purpose of this chapter is to:
- Provide an outline of the physiological adaptations that occur in pregnancy; and
- Discuss the factors that influence the triage code allocation for pregnant women.

Learning outcomes

After completing this chapter, participants will be able to state the main physiological changes that occur in pregnancy and explain how these adaptations will influence the allocation of a triage code. Participants will also be able to identify common and life-threatening complications that present to triage and discuss how urgency is determined for these conditions.

Learning objectives

- Outline the physiological changes in pregnancy that may modify triage decision-making.
- Describe the relevant questions to ask about a woman's obstetric history.
- Discuss common non-obstetric conditions that may adversely impact on a pregnant woman and the unborn child.
- Explain the maternal factors that may alert the Triage Nurse that urgent foetal assessment is required.
- Discuss significant obstetric complications of pregnancy that impact on the pregnant woman and the unborn child.

Key points
- All women of child-bearing age should be considered to be pregnant until proven otherwise.
- An assessment of urgency must be made on the basis of both the woman and the foetus.
- An elevated BP is an ominous sign: the higher the BP the more urgent the review.
- Pregnant women are at an increased risk of a number of conditions, including cerebral haemorrhage, cerebral thrombosis, severe pneumonia, atrial arrhythmias, venous thrombosis and embolus, spontaneous arterial dissection, cholelithiasis and pyelonephritis, than non-pregnant women of child-bearing age.
- Presentations may include concerns about normal manifestations or progression of pregnancy.

Content

Triage and the pregnant patient

A pregnant woman presenting to an ED raises a number of unique challenges to the Triage Nurse.

- The Triage Nurse needs to be aware of the normal physiological and anatomical adaptations of pregnancy because these will influence assessment.
- Triaging should consider the wellbeing of both the mother and the foetus and potential threats to either.
- The pregnant woman may present with any disease.

The presentation of some diseases is modified by pregnancy and some diseases only occur in pregnancy.

Pregnancy and the primary survey

Airway
Any pregnant women presenting to the ED with a potentially compromised airway needs urgent medical attention. Pregnant women are often difficult intubations due to patient size, patient positioning and different induction agent requirements due to cardiovascular physiological changes.

Breathing
Progesterone is thought to be responsible for altering the sensitivity of the respiratory centre and increasing the drive to breathe.[119]

- Pregnant women commonly experience increased nasal and airway vascularisation and mucosal oedema. This presents as an increase in complaints about nasal congestion.
- About one-third of women with asthma suffer a deterioration of their illness during pregnancy.[120]

Circulation
Pregnancy is described as a hyperdynamic state and physiological changes occur as early as 6–8 weeks gestation. Progesterone causes widespread vasodilatation and oestrogen is thought to contribute to a 40–50 per cent increase of blood volume. The diastolic blood pressure falls on average 6–17 mmHg, with BP lowest during the second trimester. Cardiac output (CO) increases by 30–50 per cent.

At 20 weeks gestation, the weight of the uterus compresses the inferior vena cava if the woman is lying on her back. The subsequent reduction in placental flow is enough to compromise foetal wellbeing and the drop in venous return reduces maternal CO and BP. Unspecified changes occur to blood vessels that predispose pregnant women to spontaneous arterial dissections.

The splenic artery, subclavian artery and aorta, for example, have an increased tendency to spontaneous dissection, even in women with no previous medical history.

Domestic violence is more common during pregnancy and is associated with an increase in obstetric complications for the mother and adverse neonatal outcomes.[123]

Important points to note:
- Pregnant women often describe palpitations during pregnancy, which is usually due to the hyperdynamic flow.
- The high volume and dynamic blood flow is thought to contribute to the increased likelihood of cerebral haemorrhage (especially sub-arachnoid haemorrhage (SAH)) in pregnancy.
- It is not uncommon for pregnant women to experience a sudden and serious deterioration of their condition therefore pregnant women showing signs of haemodynamic de-compensation require urgent medical assessment.[124]
- All pregnant women >20 weeks gestation should have a left lateral tilt (wedge under their right hip, or whole bed tilted if wedge is contraindicated) if they are lying down.
- Pulmonary embolus is relatively common during pregnancy due to the changes in the coagulation system associated with pregnancy.
- In the setting of trauma, all usual trauma criteria should be considered. Additional considerations include trauma to the uterus, placenta or foetus, particularly in the third trimester when the foetus is viable. The maternal vital signs may remain stable even when loss of one-third of blood volume may have occurred.[125]
- 'The best initial treatment for the foetus is the optimum resuscitation of the mother.'[125]

Common conditions that present to ED according to gestational age

Problems occurring prior to 20 weeks

Pregnant women frequently present to the ED with vaginal bleeding. Common causes include the various types of miscarriage (i.e. threatened, inevitable, complete, incomplete and septic).

- Knowledge of the volume and colour of per vaginal (PV) loss will assist the Triage Nurse with categorising the urgency of the case.
- Bright red blood loss is usually indicative of active bleeding, while brownish red blood loss is usually old.
- Many women may also complain of associated abdominal pain that may be likened to severe period pain.
- Shoulder tip pain can be indicative of a bleeding ectopic pregnancy.
- The first and foremost diagnosis to exclude in the female of child-bearing age, including those who have undergone sterilisation procedures presenting with vaginal bleeding, is an ectopic pregnancy.[126]

Abdominal pain is the most common symptom in ruptured ectopic pregnancy.[127]
Non-ruptured ectopic pregnancies generally present with bleeding (brown being the most common) due to low progesterone and consequent shedding of the decidua.

Regardless of the diagnosis, vital signs that deviate from normal and severe pain (such as torsion or ruptured cysts) warrant prompt medical assessment.

Problems occurring from 20 weeks onwards

Pregnant women from 20 weeks gestation may present with the following obstetric conditions:
- Antepartum haemorrhage
- Preeclampsia (including eclampsia)
- Pre-term rupture of the membranes and labour.

Hypertension (>140/90) is a particularly important sign to alert the Triage Nurse to a more serious problem. The presence of the associated symptoms of severe preeclampsia warrant urgent medical assessment. These include:
- Headache
- Visual disturbances
- Epigastric pain
- Right upper quadrant (RUQ) pain
- Non-dependent oedema.

These women are at risk of fitting and placental abruption, and the foetus has a higher risk of placental insufficiency.

There is a correlation between the degree of hypertension and complications such as cerebral haemorrhage.

- Antepartum haemorrhage is defined as >15 mL of blood loss from the vagina from 20 weeks gestation.
- Common causes include placenta praevia and placental abruption.
- In placenta praevia, blood loss is usually visible PV and is not usually accompanied by pain.
- In placental abruption, the primary symptom is abdominal pain. The associated blood loss may be concealed between the placenta and uterus. Haemodynamic changes are only seen with big bleeds, smaller bleeds may be difficult to detect or more easily detected with an abnormal cardiotocograph (CTG). The main signs and symptoms are haemodynamic changes associated with hypovolaemic shock and abdominal pain.

Postnatal women may present with the following:
- Secondary postpartum haemorrhage ± puerperal sepsis
- Mastitis
- Wound infection
- Eclampsia
- Postpartum cardiomyopathy
- Postnatal depression.

Urgent threats to foetal wellbeing

- Changes in oxygen saturations in the mother are of direct relevance to foetal wellbeing. A small reduction in maternal oxygenation can severely impact on foetal oxygenation because of the left shift in the oxyhaemoglobin dissociation curve associated with foetal haemoglobin.[129] Consider oxygen saturation at triage on all pregnant women.

- Major alterations in blood pressure (whether high or low) are not well tolerated by the foetus.

- Active vaginal bleeding at any gestation presents a risk to the foetus.

- Abdominal pain during pregnancy may represent a pathological process threatening the foetus.

- Pregnant women normally feel foetal movement from 18–20 weeks gestation. A regular pattern of foetal movement is a reassuring sign of foetal wellbeing. Absent or diminished foetal movements require prompt assessment.

CHAPTER 10: MEDICO–LEGAL ISSUES

Statement of purpose

The purpose of this chapter is to outline the legal responsibilities associated with the professional practice of triage.

Learning outcomes

After completing this chapter, participants will be able to apply medico–legal concepts to triage practice.

Learning objectives

- Discuss the role of education and supervised practice in relation to triaging; and
- Describe the medico–legal responsibilities of the nurse performing the triage role including:
  - Informed consent
  - Duty of care
  - Negligence
  - Documentation
  - Confidentiality
  - Preservation of forensic evidence.

Key points
- Nurses performing the role of triage must have appropriate education and supervised practice prior to practicing independent triage.
- Documentation must be accurate and contemporaneous.
- There should be a clear understanding of duty of care.
- Nurses must appreciate the importance of re-triaging.
- Policies and protocols should be readily accessible for the nurse performing the triage role.

Content

Role of the Triage Nurse

A nurse performing triage must have an appropriate level of knowledge and skills to perform the role. Nurses have a legal and professional duty to perform the role of Triage Nurse utilising a systematic approach.

Emergency Nurses, as professionals, are accountable for their practice. The accountability comes from the utilisation of available protocols, the completion of the correct documentation, and adherence to standards and quality guidelines. Protocols ideally help in the maintenance of a consistently high standard of care at the institution and can be utilised if necessary to provide evidence of the clinical practice encouraged at the health care facility.

The physiological discriminators and Australasian Triage Scale (ATS) are examples of the guidelines that are available for the nurse to utilise. It is not assumed that following protocols blindly will protect the nurse from any legal liability. With this in mind, consideration should also be given to the autonomy of the role, with use made of the Triage Nurses' independent judgement for each triage episode, and the ability to utilise his or her expertise to individualise the assessment of the patient.

Protocols should be viewed as the minimum standard of care required to be delivered. Position statements that describe the roles and responsibilities of the Triage Nurse including the minimum practice standard have been produced by the professional bodies.

All nurses should know some basic legal principles, which include consent, the elements of negligence, definition and sources of the standards of care, and how policies and guidelines can influence practice. There is an expectation that the nurse performing the role of the Triage Nurse will have had adequate experience, training and supervision to perform the role. The employing institution also has a responsibility to ensure that the staff are adequately prepared to perform the role.

Consent

The five elements of consent are as follows:

1. Consent must be given voluntarily.

2. A person must have the legal capacity to give consent.

3. Consent should be informed.

4. Consent must be specific.

5. Consent must cover what is actually done.

The absence of any one element renders the consent invalid. Consent may be given in several ways:

- Implied consent: Implied consent is the most straightforward. With implied consent, by virtue of the patient presenting at the triage area to be assessed does not necessarily imply consent, but consent is often implied by the patient's behaviour. This implied consent becomes less defined if the patient is confused or unable to communicate for any other reason.
- Verbal consent: This form of consent is more valid than implied consent. For example, if the Triage Nurse states that he or she is going to ask the patient a couple of questions, and the patient agrees to this, this implies verbal consent.
- Written consent: This form of consent is not something that is necessarily obtained by the Triage Nurse during his or her assessment, however there should be awareness of the local policies and procedures regarding obtaining of written consent.

Duty of care

By engaging with a patient as they present to the ED, the Triage Nurse enters into a health professional–patient relationship. The nurse shares the responsibility of the hospital to ensure that patients who present to the ED are offered an appropriate assessment of their treatment needs.

A 'duty' is an obligation that is recognised by law, and the nurse's duty to a patient is to provide the same level or degree of care that would be employed by a nurse practising under similar or the same circumstances. The Triage Nurse then has an obligation to try to protect the patient from any foreseeable harm or injury ensuring a reasonable standard of care. This reasonable standard of care may be informed by policies such as the Minimum Standards for Triage and other documents such as the Australian Nursing and Midwifery Council (ANMC) competencies.

Scales such as the ATS are also utilised to guide decision-making, remembering that the ATS are guidelines for care.

There are certain circumstances when the Triage Nurse may be forced to rapidly detain a patient because if they leave they pose a risk of harming themselves or others in the community. Such action is covered by legislation (which is different in different jurisdictions) and may be initiated under the principle of necessity under common law. It is important that such circumstances are immediately referred to the senior clinician on duty.

The proportion of patients who do not wait for medical treatment in EDs may be up to 20 per cent of presentations. This is regarded as representing a failure to access the health system. Patients may choose to leave the hospital without being seen by the medical staff in the ED, and if the patient is competent the Triage Nurse cannot restrain them. However, the Triage Nurse has a responsibility to warn the patient of the consequences of such a decision, and appropriate documentation recording this decision should be completed by the patient and witnessed.

However, patients who have cognitive impairment from drug use, alcohol use or mental illness are at risk from adverse events in such situations. The Triage Nurse must therefore consider their duty of care in such cases.

The Triage Nurse must be aware of his or her responsibilities with these patients and abide by any local policies or protocols.

Negligence

Negligence laws vary between states and have recently undergone significant changes. Nurses have a responsibility to behave in a reasonable manner. If there is any breach from this responsible approach which results in some type of injury to another, this breach constitutes negligence.

For negligence to be proven it requires the establishment of all of the following elements:
• Duty to meet the standard of care
• Breach of the duty to meet the standard of care
• Breach of that duty which causes foreseeable harm
• Causing actual harm and injury
• Causing loss.

Documentation requirements

Communication with and by the staff leads to increased information shared and clear advice given. Medical records are a method of communication for health care team members and are a contemporaneous record of events. They must be accurate, clear and succinct. It is also expected that the records will be easily accessible and able to be understood.

Documentation of each interaction between the nurse performing triage and the patient and/or significant others are another area of accountability for practice. The Australasian College for Emergency Medicine (ACEM) is clear in its guidelines about the minimum information that is required to be recorded for any triage episode.

Documentation standards that are required by ACEM are:
• Date and time of triage assessment
• Name of the Triage Nurse
• Chief complaint/presenting problem
• Limited relevant history
• Relevant assessment findings
• Initial triage category allocated
• Re-triage category with time and reason
• Assessment and treatment area allocated
• Diagnostic, first aid or treatment initiated at triage.

Any change in the patient's condition should be documented clearly. This documentation should include the time of the re-triage, the reason for the re-triage and who was responsible for the performance of the re-triage. (See 'The Challenge of Triage' on page 25 of Chapter 4.)

The Triage Nurse should be aware of the management systems in place at the individual institutions to facilitate this documentation.

Similarly, if it is the practice of the institution to transfer the care of patients to other health care providers such as general practitioners, accurate and concise documentation of any treatment administered and any recommended course of action should be made.

Some patients choose to leave prior to medical assessment. If such a patient advises the Triage Nurse they are not waiting, the Triage Nurse should document this decision, as well as any advice given to the patient, including possible adverse outcomes.

Confidentiality

Health professionals must maintain any information that has been provided in-confidence to them. It is also expected that the patient is in receipt of privacy from health professionals. Safeguards are in place to protect patient's information. These include health legislation at both federal and state level.

The Triage Nurse also has a responsibility to ensure the patient's privacy is respected both during the triage assessment and while the patient waits in the waiting room. The hospital policy regarding patient's privacy and rights should also be readily accessible to the Triage Nurse.

A health care professional is obliged to treat the patient's medical information as private and confidential. However, in certain circumstances there is a legal requirement to override a patient's privacy and confidentiality; for example, children at risk. Otherwise, a breach of a patient's privacy constitutes a breach of the duty of care.

Mandatory reporting responsibilities

If there is any suspicion that a child or children may be in need of care or may be being maltreated, the nurse has a legal responsibility to report it to the relevant authorities and refer to their jurisdiction.

Although this reporting may not occur from the triage desk, the nurse needs to be aware of the legal requirements and of the procedures and documentation requirements of the hospital, in order to fulfil these obligations.

Preservation of forensic evidence

Nurses performing the triage role must be familiar with the hospital's procedures for dealing with the preservation of forensic evidence involving a patient who is a possible victim of crime (e.g. rape or assault). These procedures should include liaison with police officers as appropriate, with the patient's consent.

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