

# ***Section 2— Concept and Derived Item Definitions***



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# ***Introduction***

This section provides definitions of the concepts underlying the VEMD and the items derived from the data collected by the Department.

The definitions contained in this section are based, wherever possible, on the *National Health Data Dictionary*.

# Concept & Derived Items (Alphabetical Order)

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## Age

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*Classification*      Derived Item

*Definition*            The patient's age on presentation at the Emergency Department.

*Guide for Use*        Age can be measured in years, months or days and is calculated as:

- Arrival Date minus Date of Birth.

### Age In Years

#### Calculation

If months and days of Date of Birth are less than the months and days of Arrival Date, then Age is number of years between Date of Birth and Arrival Date.

If months and days of Date of Birth are greater than the months and days of Arrival Date, then Age is the number of years between Date of Birth and Arrival Date minus 1.

#### Example

Date of Birth:            12 Jul 1970

Arrival Date:            5 Aug 2005

Age in Years:            34

(2005 - 1970)

Date of Birth:            12 Dec 1970

Arrival Date:            5 Aug 2005

Age in Years:            33

(2005 - 1970) - 1

### **Age In Months**

#### Calculation

If days of Date of Birth are less than days of Arrival Date, then Age is the number of months between Date of Birth and Arrival Date

If days of Date of Birth are greater than days of Arrival Date, then Age is the number of months between Date of Birth and Arrival Date minus 1.

#### Example

Date of Birth: 9 Oct 2003  
Arrival Date: 12 Oct 2005  
Age in Months: 12

Date of Birth: 19 Oct 2003  
Arrival Date: 12 Oct 2005  
Age in Months: 11

### **Age In Days**

#### Calculation

Number of days between Date of Birth and Arrival Date.

#### Example

Date of Birth: 1 Jun 2005  
Arrival Date: 1 Dec 2005  
Age in Days: 183

Note: Age for reporting purposes is not addressed here and is not necessarily calculated the same way.

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# Campus

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*Classification*      Concept

*Definition*            A physically distinct site owned or occupied by a health service/hospital, where treatment and/or care is regularly provided to patients.

*Guide for Use*        For the purposes of reporting to the VEMD:

A **single campus hospital** provides emergency and admitted patient services at one location, through a combination of emergency, overnight stay beds and day stay facilities.

A **multi-campus hospital** has two or more locations providing emergency and admitted services, where the locations:

- Are separated by land (other than public road) not owned, leased or used by that hospital.
- Has the same management at the health service/hospital level.
- Each has overnight stay facilities – a separate location (see first dot point) providing day only services, such as satellite dialysis unit, is considered to be part of a campus.
- Are not private homes. Private homes, where Hospital in the Home services are provided, are considered to be part of a campus.

The Department holds that, as a general principle, VEMD reporting should identify activity at each campus. Any multi-campus hospital not currently reporting on this basis, or a hospital intending to change from a single to multi-campus or vice versa, should discuss this with DHS.

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# Date/Time Fields

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*Classification*      Concept

**Definition**              With the exception of Date Of Birth, all Date fields in VEMD have a related Time field. Although date and time fields are submitted as two separate fields, they should be viewed as a single "Date/Time" entity. To accommodate this, date and time fields are converted to a single "Date/Time" value before being edited.

**Guide for Use**              Using date without time or vice versa is problematic.

For instance, calculating a Length of Stay of 1 hour, only using arrival time of 11:00 and departure time of 12:00, will be incorrect if the times fall on different days.

Similarly if a patient commences treatment on 2/5/2005 and ceased on 3/5/2005 it may not be appropriate to say that the duration of treatment was one day if it commenced just before midnight and ceased just after.

If the date and time fields fail the conversion process, they are not a valid date/time. For example submitting a date string of 31092005 with a time string of 1153 will fail to convert to a date/time because there are only 30 days in September. Submitting a date string of 30092005 and no (or a null) time string will also fail the conversion.

When correcting "Date/Time" errors, check both the date and the time fields as the error may occur in either or both.

**Date Formats:**

Valid              DDMCCYY  
(Century (CC) must be 20 for all Date fields excluding the Date of Birth)  
An Estimate of Date of Birth should be given as 0000CCYY.

Invalid            Zero-filled

**Time Formats:**

Valid              HHMM (Must be in 24-hour format)

Invalid            0000 or 2400

Following international convention midnight is reported as either 2359 of preceding date or 0001 of the following date.

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# Diagnosis

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*Classification*      Concept

*Definition*            A Diagnosis is a decision reached, following patient assessment, about the nature and identity of the disease or condition of a patient.

*Guide for Use*        When determining the patient's diagnosis consideration should be given not only to the physical examination but also to the history of the present illness, based on a description of symptoms and signs, a past medical history, a family medical history and a social history.

It is acknowledged that diagnosis in an emergency setting is based on the best information available at the conclusion of the patient's emergency presentation and therefore may not be definitive.

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# Emergency Department

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*Classification*      Concept

*Definition*            A dedicated area in a hospital that is organised and administered to provide emergency care (including reception, triage, initial assessment and management) to people who perceive the need for, or are in need of, acute or urgent care.

An ED reporting to the VEMD must be staffed on a 24 hour basis by hospital medical staff (includes staff who are on shift or on-call).

All hospitals receiving Non Admitted Emergency Services Grant funding are deemed to have an Emergency Department whose activity should be reported to VEMD.

*Guide for Use*        Where the range of care is limited (for example, to specialties such as women's health, paediatrics) pre-hospital and other policies should be in place to ensure appropriate presentation.

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# Emergency Department Presentation

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*Classification*      Concept

*Definition*              Emergency Department Presentation is the reporting unit of the VEMD. All presentations assessed to the extent that they are allocated a Triage Category should be reported.

Arrival Date/Time indicates the commencement of an Emergency Department Presentation, which concludes when the patient physically leaves the Emergency Department (Departure Date/Time).

*Guide for Use*              Some form of formal or informal triage event logically precedes the act of receiving treatment in the Emergency Department. For instance, a patient may be so critically ill that they by-pass the formal triage process to receive resuscitative intervention. However, the act of prioritising access to care according to the level of need has still occurred.

An Emergency Department Presentation should be reported even if the patient leaves the ED before the treatment has commenced or if the registration was commenced but not completed (use the appropriate Departure Status code).

If a patient attends the ED for the treatment of two or more conditions concurrently, only one episode should be reported to the VEMD.

For example: a patient attends the ED with foreign body of the eye and otitis media. Even though the two complaints are independent and may be treated as such by the clinicians, the patient has only presented at the ED once.

Up to three diagnoses and thirty procedure codes can be recorded in the VEMD, this allows sites to differentiate between different complaints and the applicable treatment.

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# Emergency Medical Unit (EMU)

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*Classification*      Concept

*Definition*            An Emergency Medical Unit (EMU) is a designated unit, often located near the Emergency Department, which concentrates admissions for general medical conditions in one geographical area to streamline the care planning processes. Planned length of stay in the EMU may be up to 48 hours prior to transfer to another ward or discharge home (majority of patients). The clinical management of these patients is jointly managed by Emergency Department physicians and general physicians.

*Context*                Institutional health care: EMU patients are admitted patients.

*Guide for Use*        Hospitals must be approved by DHS to be eligible to report Departure Status code '13 – Emergency Medical Unit (Excludes MAPU and SOU)'

Whilst EMUs tend to be located close to emergency departments to facilitate joint ED/ admitted patient management of patients, MAPUs are not necessarily located near emergency departments and are managed solely by admitted patient services.

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# Hospital

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*Classification*      Concept

*Definition*            A health care facility established under Commonwealth, State or Territory legislation as a hospital or a free-standing day procedure unit, and authorised to provide treatment and/or care to patients.

*Guide for Use*        A hospital may be located at one physical site or may be a multi-campus hospital.

For the purposes of these definitions, 'hospital' includes satellite units managed and staffed by the hospital and private homes used for service provision under the Hospital in the Home program, Rehabilitation in the Home or facilities approved under the medi-hotel program.

The definition includes public hospitals, denominational hospitals, metropolitan health services, and privately operated public hospitals as defined in the *Health Services Act 1988*, as amended.

The definition includes private hospitals and day procedure centres registered under the *Victorian Health Services Act 1988*, as amended. Private hospitals are required to maintain separate registrations for each site.

Nursing homes and hostels, which are now approved under the *Aged Care Act 1997* (Commonwealth) are excluded from the definition, as are supported residential services registered under the *Health Services Act 1988*, as amended.

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# Injury Surveillance

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*Classification*      Concept

*Definition*            A set of data items generally collected at triage, that are mandatory if an injury has occurred.

*Guide for Use*        Injury Surveillance will ordinarily be accompanied by an injury diagnosis (a Diagnosis code starting with a 'S' or 'T'). However in circumstances where a patient leaves before assessment or treatment by a definitive care provider (Departure Status equals '10 – Left after clinical advice regarding treatment options' or '11 – Left at own risk, without treatment') Injury Surveillance can be reported with no accompanying Diagnosis code.

The following Injury Surveillance data items must be completed:

- Activity When Injured
- Body Region
- Description of Injury Event
- Human Intent
- Injury Cause
- Nature of Main Injury
- Place Where Injury Occurred.

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## Length of Stay (LOS)

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*Classification*      Derived Item

*Definition*            The Length of Stay is the total time for each Emergency Department presentation.

*Guide for Use*        The LOS in minutes is calculated as:  
[Departure Date/Time] minus [Arrival Date/Time]

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# Length of Treatment

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*Classification*      Derived Item

*Definition*            The Length of Treatment is the difference between the time treatment commenced and the time the patient departed the Emergency Department.

*Guide for Use*        The Length of Treatment in minutes is calculated as:  
[Departure Date/Time] minus [the earliest of [First Seen by Doctor Date/Time] and [First Seen by Treating Nurse Date/Time] ]

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# Medical Assessment and Planning Unit

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<i>Classification</i>	Concept
<i>Definition</i>	<p>A Medical Assessment and Planning Unit (MAPU) is a designated ward, which concentrates admissions for general medical conditions in one geographical area to streamline the care planning processes. Planned length of stay in MAPU may be up to 48 hours prior to transfer to another ward, or discharge home.</p>
<i>Context</i>	<p>Institutional health care: MAPU patients are admitted patients.</p>
<i>Guide for Use</i>	<p>Hospitals must be approved by DHS to be eligible to report Departure Status code '2 –Ward (includes HITH and MAPU; Excludes EMU and SOU)'</p> <p>MAPUs are not necessarily located near emergency departments and are managed solely by admitted patient services, whereas EMUs tend to be located close to emergency departments to facilitate joint ED/ admitted patient management of patients.</p>

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# Medicare Eligibility Status - Eligible Person

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**Definition** The patient's eligibility for Medicare as specified under the Commonwealth Health Insurance Act 1973.

Persons eligible for Medicare include:

- A person who resides in Australia and whose stay in Australia is not subject to any limitation as to time imposed by law.
- Persons visiting Australia who are ordinarily resident in Finland, Italy, Malta, the Netherlands, New Zealand, the Republic of Ireland, Sweden, Norway or the United Kingdom as they are covered by Reciprocal Health Care Agreements (RHCA). However, persons from Malta and Italy are covered for six months only.
- A person or a class of persons declared eligible by the Commonwealth Minister of Health and Aged Care.

**Guide for use** This category does not include a foreign diplomat or family (except where eligibility is expressly granted to such persons by the terms of a Reciprocal Health Care Agreement).

An asylum seeker who has a valid temporary entry visa and is an applicant for a protection visa and has either work rights or a spouse, parent or child who is a permanent Australian resident, is eligible to apply for a Medicare card and is therefore an eligible person once they have their Medicare card.

It should be noted that some cases where the patient is an 'eligible person' they personally, or a third party, could be liable for the payment of charges for hospital services received; for example:

- Prisoners
- Patients with Defence Force personnel entitlements
- Compensable patients
- Department of Veterans' Affairs beneficiaries
- Nursing Home Type patients

Newborn babies take the eligibility status of the mother.

## **Categories of Eligibility**

A person eligible to receive Medicare benefits will be one of the following:

- Australian Resident
- Eligible Overseas Representative
- Person declared eligible by the Minister
- From a country with which Australia has a Reciprocal Health Care Agreement

### **Australian Resident**

A person who resides in Australia and fulfils one of the following criteria:

- Is an Australian citizen
- Holds an entry permit not being a temporary entry permit
- Holds a return endorsement or resident return visa
- Has been granted refugee status
- Is the holder of a valid temporary entry permit with an application for permanent residence, and has a spouse, parent or child who is the holder of a permanent entry permit, or has authorisation to work

Patients in this category will hold a *green* Medicare Card or (if legally eligible and entitled to all health services with no restrictions) an Interim *blue* Medicare Card (also entitled to all health services with no restrictions).

Australians lose entitlement to Medicare if they have been living out of the country for five or more years (as do others with permanent Visas for Australia). To become re-entitled to Medicare, they need to prove that they have returned to Australia to live (for example lease papers, employment statements).

### **Eligible Overseas Representative**

A member of diplomatic or consular staff or a member of their family, of a diplomatic mission of a country with which Australia has a Reciprocal Health Care Agreement (RHCA), except New Zealand.

Eligible overseas representatives have full Medicare eligibility and are not limited to immediately necessary medical treatment. Such persons are issued with a *green* Medicare Card endorsed 'Visitor RHCA'.

### **Persons Declared Eligible by the Minister**

The Commonwealth Minister for Health and Aged Care also has a discretionary power to make persons eligible for Medicare. Such persons are eligible for, and generally will hold, a Medicare card.

## Reciprocal Health Care Agreements (RHCA)

Agreements negotiated by Australian authorities with other countries which enables visitors to Australia, who are ordinarily *resident* in a country with which Australia has a RHCA, to access *immediately necessary* treatment of ill health *arising during the stay and which requires attention before the patient returns home: pre-arranged and elective treatment is not covered*. This agreement provides for admitted patient care, but only as a public patient, for such medical treatment as is clinically necessary for the diagnosis, alleviation or care of the condition requiring attention, on terms no less favourable than would apply to an Australian resident.

A RHCA patient may hold *yellow-green* RHCA Medicare Card (a lighter version of the green card). Not all persons entitled to care under a RHCA will hold a RHCA card.

The RHCA countries at June 2005 are:

- Finland
- Italy <sup>(Note 1)</sup>
- Malta <sup>(Note 1)</sup>
- New Zealand <sup>(Note 2)</sup>
- Norway
- Republic of Ireland
- Sweden
- The Netherlands
- United Kingdom <sup>(Note 3)</sup>

Note:

1. Persons from Italy and Malta are limited to the first six months of their visit only commencing on the date of arrival, except where a continuing course of treatment starts before and extends over the six-month limit.
2. New Zealand diplomats and their families are not included in the Australian/New Zealand RHCA and are therefore not eligible persons. For New Zealand residents, Medicare cover for private medical treatment was removed from September 1999. Medicare cards are no longer issued to New Zealand residents.
3. United Kingdom incorporates residents of England, Scotland, Wales, Northern Ireland, Isle of Man and the Channel Islands.

Students holding student visas from a country with which Australia has a RHCA are not eligible but should register with the Overseas Student Health Cover administered by Medibank Private.

Hospitals who are having difficulty in determining the eligibility for overseas residents should ring Medicare on 132011 (Medicare hotline) for advice between 8.30 am – 5.00 pm, Monday to Friday while the patient is still in hospital.

## **Backdating Medicare Eligibility**

In the past there has been some queries regarding the backdating of Medicare eligibility. The Health Insurance Commission (HIC) have provided the following answers for your information.

Question: Does the backdating of Medicare eligibility occur?

Answer: Yes, infrequently.

Question: What evidence should the patient present to the hospital to show that they have been given backdated eligibility?

Answer: A letter from HIC, on HIC letterhead.

Question: Is the hospital obliged to return the money paid by the patient?

Answer: Yes. Hospitals should refund the money, and change the Account Class for the episode.

Question: Should the hospital check this information with HIC prior to a refund?

Answer: No. HIC would not release this information due to Privacy legislation.

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# Medicare Eligibility Status - Ineligible Person

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**Definition** The patient's eligibility for Medicare as specified under the Commonwealth Health Insurance Act 1973.

Persons ineligible for Medicare include:

- Those who do not fit into one of the categories of eligibility.
- A visitor to Australia from a country with which Australia has a Reciprocal Health Care Agreement who elects to be treated as a private patient.
- A foreign diplomat, or a member of their family, from a country with which Australia does not have a Reciprocal Health Care Agreement.

**Guide for use** Types of Ineligible Patient:

*Exempt Patient*

- An ineligible, non-Australian resident specifically referred to Australia for hospital services not available in the patient's own country and for whom the Secretary of the Department has determined that no fee be charged; or
- A person who has been declared a safe haven resident and whose treatment is provided or arranged by a designated hospital

*Non-Exempt Patient*

An ineligible patient not exempted from fees by the Secretary of the Department of Human Services.

Under current legislation non-exempt ineligible patients cannot be categorised as Nursing Home Type. However, where a non-exempt ineligible patient would otherwise have been classed as a Nursing Home Type patient, they are deemed to be Non-Acute ineligible.

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# Metropolitan Health Service

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*Classification*      Concept

*Definition*            Metropolitan health service is a term used in the *Health Services Act 1988* to refer to a public hospital, which is listed in Schedule 5 of the Act. A metropolitan health service may consist of a number of campuses.

*Guide for Use*        Refer to:  
<http://www.health.vic.gov.au/hospitals/index.htm>

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# Patient

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*Classification*      Concept

*Definition*            A patient is a person for whom a hospital accepts responsibility for treatment and/or care.

Boarders are not patients.

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# Short Stay Observation Unit

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<i>Classification</i>	Concept
<i>Definition</i>	An approved Short Stay Observation Unit (SOU) is a designated unit that is specifically staffed and equipped to provide observation, care and treatment for emergency patients who have an expected length of stay between 4 and 24 hours. The facility may be adjacent to, within, or remote from the Emergency Department.
<i>Context</i>	Institutional health care: SOU patients are admitted patients.
<i>Guide for Use</i>	Hospitals must be approved by DHS to be eligible to report Departure Status code '3 –Short Stay Observation Unit (Excludes EMU and MAPU)'.

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# Statistical Local Area (SLA)

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*Classification*      Derived Item

*Definition*            The Statistical Local Area (SLA) of the patient's usual residence.

*Guide for Use*        DHS utilises a file to validate both the Postcode and Locality and using both of these fields derives a SLA using a lookup table.

In most cases the lookup will find a single match, however in some cases up to 5 SLA codes may be identified for a given Postcode and Locality combination.

Each SLA code combination is given a probability of more than zero and less than or equal to one hundred. The sum of the five (or less) codes for each combination must equal 100.

In cases where more than one SLA code is identified, an algorithm is performed to determine which code is to be allocated to this particular VEMD episode.

An example of how the algorithm is utilised is shown in below:

Patient Postcode:    3190                      Patient Suburb:        Highett

### SLA File Structure

Postcode	Suburb	SLA-1	SLA-2	SLA-3	SLA-4	SLA-5
3190	Highett	3411[75%]	3412[15%]	3413[10%]		
3588	Sale	4231[100%]				
3550	Bendigo	4333[50%]	4334[50%]			
3170	Mulgrave	4222[25%]	4223[25%]	4224[25%]	4225[25%]	

- Select a random number between one and one hundred
- Step through the valid SLA codes adding the probability of each subsequent code until the total equals or exceeds the random number previously selected.
- Select and allocate the SLA code.

So for the example above:

- Random Number = 93
- [3411] 75 + [3412] 15 = 90) + [3413] 10 = 100
- SLA = 3413

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# Time to Treatment

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*Classification*      Derived Item

*Definition*            Time to Treatment in minutes is the difference between Arrival Date/Time and the Date/Time Treatment Commenced.

*Guide for Use*        Time to Treatment is calculated as:  
[The earliest of [First Seen by Doctor Date/Time] and [First Seen by Treating Nurse Date/Time]] minus [Arrival Date/Time]

Time to treatment is weighed against the Triage Category for the episode to determine if the patient was treated within an acceptable timeframe.

The use of the earliest treatment time reflects changes in clinical practice such as the use of clinical pathways and role demarcation of staff within the Emergency Department.

Note:

For reporting purposes patients who leave the ED before treatment commences (Departure Status is '10 - Left after clinical advice regarding treatment options' or '1 – Left at own risk, without treatment') are excluded from the calculation.

**Examples of calculation of Time to Treatment:**

Arrival Time	First Seen by Doctor Time	First Seen by Treating Nurse Time	Time to Treatment
15:00	16:00	15:30	30
15:00	--:--	15:30	30
15:00	16:00	--:--	60
15:00	15:30	16:00	30

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# Treatment

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*Classification*      Concept

*Definition*          The medical and/or surgical care provided to a patient with a view to stabilisation, diagnosis and alleviation of their condition(s).

*Guide for Use*      It is acknowledged that treatment can commence prior to the patients' arrival at the hospital.

Hospital treatment starts when a qualified clinical staff member commences treatment.

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# Triage

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*Classification*

Concept

*Definition*

Triage is the structured screening of a patient upon presentation at the Emergency Department in order to determine the urgency of their presenting complaint (Triage Category) and thereby assist in determining their priority of care.

*Guide for Use*

The Triage Category is used to determine the urgency with which patients are investigated or treated by the ED staff.

Triage relies on expertise in the following:

1. Assessment (of)
  - Characteristics and severity of the presenting condition
  - Brief physical assessment
  - Patient's history
  - Presenting signs and symptoms
  - Vital signs
  - Overall appearance.
2. Knowledge (of)
  - Physiology and pathology
  - Resources
  - Department capabilities.
3. Intuition
  - Skill
  - Sensitivity
  - Surveillance.

It is acknowledged that treatment can commence before, during or after triage.

Information obtained during triage should be sufficient to determine the needs and urgency of emergency department treatment. This does not exclude the instigation of more detailed investigation or recommendations by the triage staff.

At or subsequent to triage, the patient may receive advice about Emergency Department and alternative treatment options. On consideration of this advice, the patient may choose to leave the Emergency Department without being treated.

Re-triage should occur if a patient's condition alters whilst they are waiting for treatment or if additional information impacting on the patient's clinical condition is received.

However, whilst changes in Triage Category may be recorded locally, only the original Triage Category should be reported to the VEMD.