

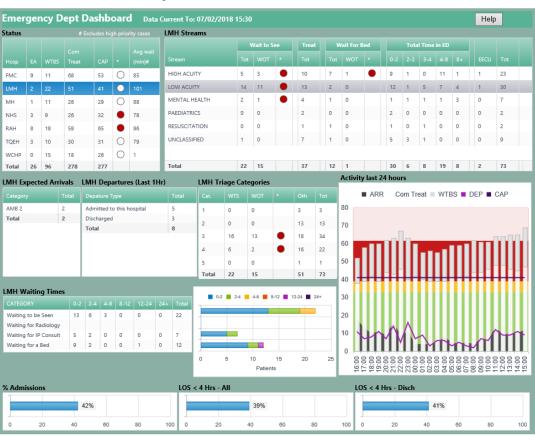
# Emergency Department Dashboard

The Emergency Department (ED) dashboard consists of eight sections, which together enable patient flow and capacity to be monitored in metropolitan Adelaide public hospital emergency departments.

# The Emergency Department dashboard at a glance

The dashboard consists of the following eight sections:

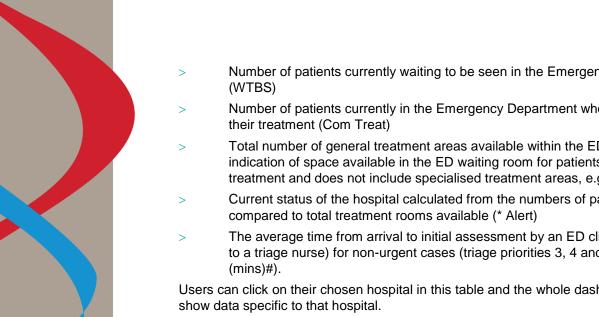
- Hospital status table
- > ED status
- > Incoming
- > Departures
- > Triage categories
- > 24 hour activity
- > Waiting times table
- ED KPIs from midnight



## Hospital status table:

This table summarises the status of metropolitan EDs and provides information about:

- > Hospital name (Hos)
- > Total no of expected arrivals, includes ambulance and other sources of notification (EA)



- Number of patients currently waiting to be seen in the Emergency Department
- Number of patients currently in the Emergency Department who have commenced
- Total number of general treatment areas available within the ED. Capacity is not an indication of space available in the ED waiting room for patients waiting for treatment and does not include specialised treatment areas, e.g. resuscitation (Cap)
- Current status of the hospital calculated from the numbers of patients in the ED.
- The average time from arrival to initial assessment by an ED clinician (as opposed to a triage nurse) for non-urgent cases (triage priorities 3, 4 and 5) (Avg wait

Users can click on their chosen hospital in this table and the whole dashboard will update to

#### ED status:

Colour coding is used to indicate the status of each hospital at any given time. Each colour represents a particular status, which is consistent across all sites.

ED status is calculated from the total number of patients in the ED (both in treatment spaces

and in the waiting room), versus the total capacity of the ED:

- Green: Total number of patients in ED is less than 80% of total beds
- Amber: Total number of patients in ED is greater than or equal to 80% of total beds, but less than 95%
- Red: Total number of patients in ED is greater than or equal to 95% of total beds, but less than 125%
- White: Total number of patients in ED is greater than or equal to 125% of total beds

#### Streams table:

This component shows the breakdown of the summarised detail for the selected hospital, and categorises patients into streams as defined by the hospital.

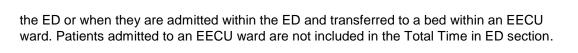
On arrival to ED patients are assessed and they are assigned to a stream of care appropriate to their needs. Each hospital operates differently and this area of the dashboard gives a breakdown of current patients in each of the clinical streams.

It also shows the breakdown for the selected hospital of the number of patients in each stage of care that they move through on their journey through the emergency department, as follows:

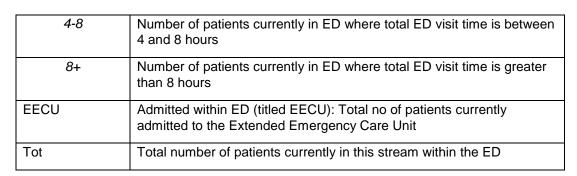
- Waiting to be Seen: When you arrive at an Emergency Department you are seen immediately by a triage nurse who will allocate an urgency for your treatment to commence (triage category) and allocate you to one of the hospital's treatment streams. You then wait to be seen by a clinician where appropriate.
- Being Treated: You are deemed to have "commenced treatment" after you are initially seen by the doctor or nurse practitioner, and no decision to admit has been made.
- Waiting for a Bed: Some patients will require admission to the hospital. These patients may spend some time "waiting for a bed" which is the time between the decision to admit and the being moved onto an inpatient ward.
- EECU: Other patients may require monitoring for up to 24 hours within the Emergency Department before being sent home. These patients are generally moved to the Extended Emergency Care Unit (EECU) which is a 24 hour ward designed for this purpose.

The dashboard in the Streams component groups numbers of current patients into time periods which reflect the total ED visit time up to the time the data is current to. Time breakdowns of '0-2 hours', '2-3 hours', '3-4 hours', '4-8 hours' and '8+ hours' can be seen by stream.

This time measurement is based on the rules associated with the 4 hour rule. It begins when the patient first presents to the ED and concludes either when the patient physically departs



Field title	What does this mean?
Stream	The name of the clinical stream into which the patient has been placed for treatment
Wait to see (Waiting to be seen)	Patient has been seen by a Triage Nurse and is now waiting to be seen by a clinician
Tot	Total no of patients 'Waiting to be seen' for the stream as at the date and time the data is current to
WOT (Waiting over threshold)	Number of patients currently waiting to be seen who have exceeded the national clinically recommended waiting time for their urgency category as follows:
,	1 – Resuscitation Immediate (seconds)
	2 – Emergency 10 Minutes
	3 – Urgent 30 Minutes
	4 – Semi-urgent 60 Minutes
	5 – Non-urgent 120 Minutes
*Alert	Alert – Indicates 1 or more patients are over the wait time threshold for the triage category. Normal state is blank. Where there is one or more patients with a wait time over the defined threshold, a red alert icon is displayed
Treat (Being treated)	Patient has been seen by a clinician and no decision to admit has been made
Tot	Total number of patients with current status 'being treated' for the stream
Wait for bed (Waiting for a bed)	A decision to admit the patient to an inpatient ward in the hospital has been made and the patient is in the ED waiting for a bed to become available
Tot	Total number of patients with a current status of 'waiting for a bed'
WOT (Waiting over threshold)	Number 'waiting for a bed' patients that are over the wait time threshold
*Alert	Alert – indicates 1 or more patients are over the wait time threshold as defined in the Department of Health Hospital Escalation Directive (D0176). Normal state is blank. Where there is one patient with a wait time over the defined threshold an alert is displayed:
	General patients over 8 hours - amber, over 12 hours - red
	Mental health patients over 18 hours- amber, over 12 hours - red
Total time in ED	Number of patients currently in ED excluding those admitted to EECU. The dashboard in the Streams component groups numbers of current patients into time periods which reflect the length of time their ED visit as at the date and time that the data is current to
0-2	Number of patients currently in ED where total ED visit time is less than 2 hours
2-3	Number of patients currently in ED where total ED visit time is between 2 and 3 hours
3-4	Number of patients currently in ED where total ED visit time is between 3 and 4 hours



## Incoming:

This table displays the total number of patients that are understood to be inbound via ambulance to the selected hospital. This data is sourced from SA Ambulance Service.

Field title	What does this mean?
AMB 1	Immediately life threatening
AMB 2	Serious
AMB 3	Neither life threatening or serious
AMB 4	Patient considered to require treatment at scene or en-route to the hospital, and assessed as not at risk of increased morbidity due to a delay in response
AMB 5	Patient is assessed as not requiring active treatment during transport but requiring monitoring of their clinical condition
AMB 6	Patient assessed as not requiring treatment or clinical monitoring during transport

It also shows patients that have transferred from another hospital, or from another service to a hospital, via ambulance. The transfer information is displayed in addition to the urgency category but as a separate record. The transfer categories are all prefaced with TFR:

Field title	What does this mean?
Tfr. Admit	Admission to a health care facility
Tfr. Balloon Pump	Transfer of a balloon pump (equipment only)
Tfr. Blood/ Organ	Transfer of blood or organ products
Tfr. Cas	Transfer into Emergency Department for review or treatment
Tfr. Cas Return	Return from a Tfr. Cas  Always from ambulance transport back to residential care facility or nursing home, not usually to a home address
Tfr. Commercial Airline	Transfer of patient from airport from a commercial flight (not RFDS)
Tfr. Country Rv	Transfer of patient with either start or finish in a regional area and where 2 crews are used for transfer
Tfr. Discharge	Transfer of a patient who has been discharged from a hospital to a nursing home, care facility or residential address
Tfr. Opd	Transfer of patient for an Outpatient appointment
Tfr. Opd Return	Return from a Tfr. Opd
Tfr. Rfds	Transfer to or from a health care facility where RFDS has been used

	as transport medium
Tfr. Rt	Transfer of a patient to Radiotherapy appointment
Tfr. Rt Return	Return from a Tfr. Rt
Tfr. Transfer	Generic transfer code used when no other transfer codes suit
	E.g. from nursing home to nursing home, or change of residential address from private home to supported care facility
Tfr. Transplant Team	Transfer of transplant team, normally staff only not with a patient

# **Departures (last 1 hour):**

This shows the number of patients who have departed from the ED within the last 60 minutes and the reason for their departure. This information is updated every 30 minutes and will synchronise with the total number of departures in the 24 Hour Activity chart at every whole hour. Departure types shown are:

- > Discharged
- > Admitted to this hospital
- > Transferred to another hospital
- > Did not wait
- > Left before treatment completed
- > Other (a combination of all departure types not otherwise listed)

## **Triage categories:**

This table displays by triage category the current number of patients waiting to be seen in the ED. Each triage category is split into the number of patients with a status of 'waiting to be seen' and those with a status other than 'waiting to be seen'.

Field title	What does this mean?
Cat	Triage category number
1	Resuscitation
2	Emergency
3	Urgent
4	Semi-urgent Semi-urgent
5	Non-urgent
WTS (Waiting to be seen)	Total number of patients with current status 'Waiting To Be Seen' for the triage category
WOT (Waiting over threshold)	Number of 'Waiting To Be Seen' patients that are over the wait time threshold for the assigned triage category
*Alert	Alert - Indicates 1 or more patients are over the wait time threshold for the triage category. Normal state is blank. Where there is one patient with a wait time over the defined threshold for the triage category a red alert icon is displayed
Oth (Other)	Other - Total number of patients with current status not equal to 'Waiting To Be Seen' for the triage category
Tot	Total number of patients currently in ED for the triage category



#### 1. Resuscitation:

Immediately life threatening – conditions that are threats to life (or imminent risk of deterioration) and require immediate aggressive intervention

## 2. Emergency:

- > Imminently life threatening the patient's condition is serious enough or deteriorating so rapidly that there is the potential of threat to life, or organ system failure if not treated to within ten minutes of arrival; OR
- Important time-critical treatment the potential for time-critical treatment to make a significant effect on clinical outcome depends on treatment commencing within a few minutes of the patient's arrival in the ED; OR
- Very severe pain human practice mandates the relief of very severe pain or distress within 10 minutes

#### 3. Urgent:

- Potentially life-threatening the patient's condition may progress to life or limb threatening, or may lead to significant morbidity, if assessment and treatment are not commenced within 30 minutes of arrival; OR
- Situational urgency there is potential for an adverse outcome if time-critical treatment is not commenced within 30 minutes; OR
- > Humane practice mandates the relief of severe discomfort or distress within 30 minutes

## 4. Semi-urgent:

- Potentially serious the patient's condition may deteriorate, or adverse outcome may result, if assessment and treatment has not commenced within 1 hour of arrival in ED. Symptoms moderate and prolonged; OR
- > Situational urgency there is potential for adverse outcome if time-critical treatment has not commenced within 1 hour; OR
- Significant complexity or severity likely to require complex work-up and consultation and/ or inpatient management; OR
- > Humane practice mandates the relief of discomfort or distress within 1 hour

## 5. Non-urgent:

- Less urgent the patient's condition is chronic or minor enough that symptoms or clinical outcome will not be affected if assessment and treatment are delayed up to 2 hours from arrival; OR
- Clinico-administrative problems results review, medical certificates, prescriptions only

## 24 hour activity:

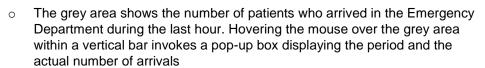
Focussing on patient flow, this component is a graphical object showing the last rolling 24 hours activity in the ED taken as a summary at the end of each hour. It shows the number of patients physically in the ED at the end of the hour broken into those who were waiting to be seen and patients who had commenced treatment, as well as the number of arrivals and departures in each hour.

It displays this information against a backdrop of the capacity threshold colours used in the Hospital Status component:

#### > Patients:

- The white vertical bars represent the number of patients in the Emergency Department at the end of the hour who had commenced treatment.
   Hovering the mouse over the bars invokes a popup box displaying the period and the actual number of patients
- The grey stack at the top of the white vertical bar shows the number of patients in the Emergency Department who were waiting to be seen at the end of the hour

#### > Arrivals:



#### > Departures:

 Represented by the gold line, this shows the number of patients who departed from the Emergency Department during the last hour. Hovering the mouse over the gold line within a vertical bar invokes a pop-up box displaying the period and the actual number of departures

## > Capacity:

 Capacity for each hour is displayed as a black line across the graph. It is usually a static number

# > Capacity Threshold Indicator:

 The backdrop of the graph is the capacity threshold colours first mentioned in the Hospital Status component

ED status is the current status of the hospital calculated from the numbers of patients in the ED, compared to total treatment rooms available:

- Green means that the ED has at least 20% of their treatment rooms available
- > Amber means that the ED has 5% to 20% of their treatment rooms available
- > Red means that the ED has 5% of their treatment rooms available
- White means that the ED currently has all of their treatment rooms being used

## Waiting times table:

This table shows a breakdown of the wait times being experienced by the patients as they move through the various stages of the ED process. Each stage shows the number of patients that are currently waiting within the defined time periods. The same information is shown graphically in the chart beside the table where each time period is colour coded.

Users will notice the total number of 'Waiting to be Seen' patients in the Waiting Times component will be the same as the number in the Streams and Triage Category components.

Field title	What does this mean?
Waiting to be Seen	Shows the number of patients waiting to be seen by a doctor/nurse split by waiting time
Waiting for Radiology	Currently not populated, this will show those patients who are waiting for radiology results which is known to be a potential delay in progressing through ED
Waiting for IP Consult	Patients who are likely to be admitted to the hospital are required to have a consultation with a specialist before being accepted for admission. This component displays the number of patients waiting for an inpatient consultation split by waiting time
Waiting for a Bed	Shows the total number of patients waiting for an inpatient bed split by waiting time
0-2	Wait time of 0 to 2 hours for the relevant waiting category
2-4	Wait time of 2 to 4 hours for the relevant waiting category
4-8	Wait time of 4 to 8 hours for the relevant waiting category
8-12	Wait time of 8 to 12 hours for the relevant waiting category
12-24	Wait time of 12 to 24 hours for the relevant waiting category
24+	Wait time of over 24 hours for the relevant waiting category
Total	Total no of patients per waiting category



# **ED KPIS's from midnight:**

Shows actual activity measured against targets for specific ED activity since midnight:

Field title	What does this mean?
% admissions	Shows the patients that were admitted into the hospital as a percentage of the total number of patients that have departed from the ED for the current date
LOS < 4 hours – all Length of stay	Shows the ED patients where the length of stay in the ED is less than 4 hours, as a percentage of the total number of patients that have departed from the ED for the current date. Target is 60%
LOS < 4 hours – Discharge Length of stay	Shows the ED patients where the length of stay in the ED is less than 4 hours, as a percentage of the total number of patients that have departed from the ED for the current date, excluding those admitted to the hospital

# System requirements

The Emergency Department dashboard system does not have any specific system requirements as long as your browser version is not greater than four years old.

From time to time, the dashboard may be unavailable due to unforeseen technical reasons or for scheduled system maintenance. If an error message is displayed, please try again at another time.

# For more information

www.sahealth.sa.gov.au



