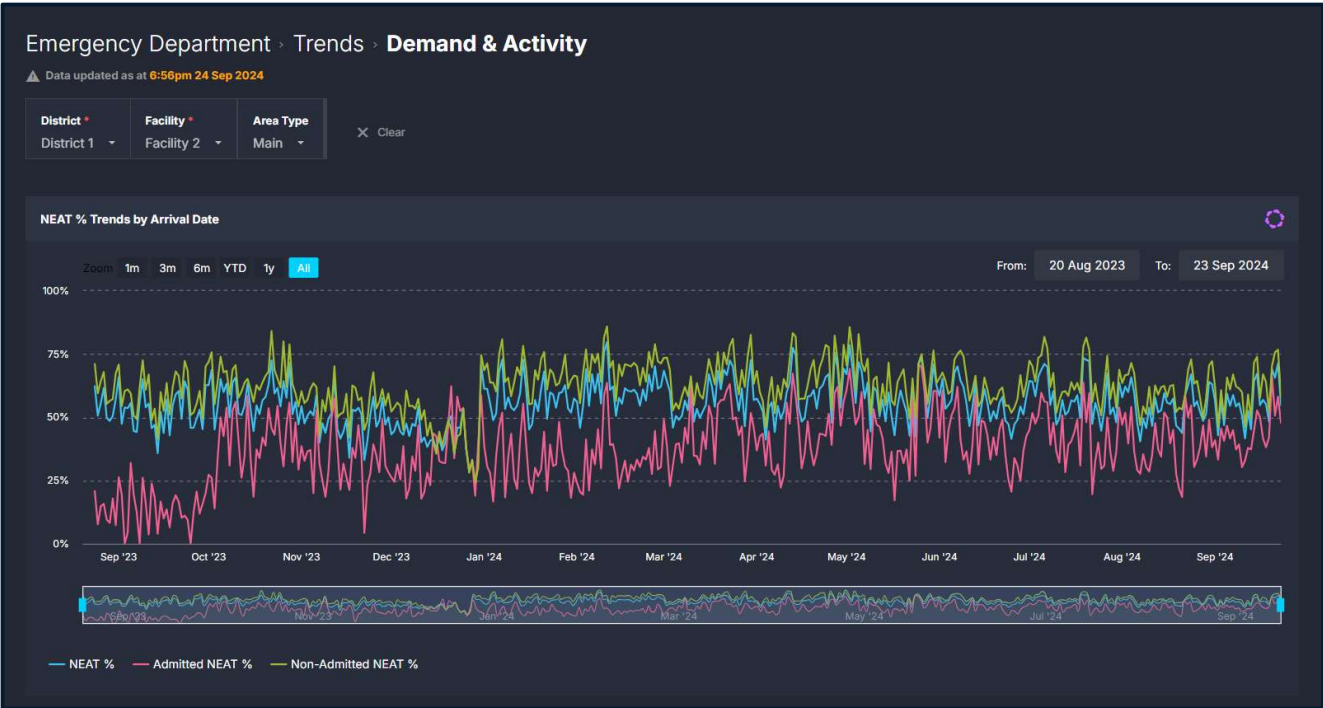


Trends

Demand & Activity

Demand & Activity provides a comprehensive set of retrospective Emergency Department metrics and analytics, including total presentations, POST % performance, NEAT % performance and the number of patients breaching 4 hours length of stay for each day over the past 13 months.



Filtering

The following noteworthy options are available in this component's **Filter Bar**:

Filter	Description
Area Type	Select between All, Main or Other mapped areas in the ED.

Interaction

The following interaction is available from the initial page of this component.

Interaction	Screenshot	Action
Click Date on Chart		Clicking a day on any of the trendlines within the charts on this initial component page will reveal further Emergency Department analytics for that specific date.

Component Tiles

Tile	Screenshot	Explanation
NEAT % Trends by Arrival Date		Displays trendlines that represent the % of ED presentations admitted, discharged or transferred within 4 hours, each day for the last 13 months. Calculations are made based on the presentations that arrived during each calendar day. The chart's timeframe can be adjusted using the slider and Zoom options. There are 3 trendlines: ■ NEAT % % of all presentations admitted, discharged or transferred within 4 hours. ■ Admitted NEAT % % of admitted presentations which were admitted within 4 hours. ■ Non-Admitted NEAT % % of non-admitted presentations which were discharged or transferred within 4 hours.
Presentations vs Expected Presentations by Arrival Date		Displays the number of Presentations by Arrival Date to the Emergency Department for each day over the past 13 months. Also displayed is a trendline which represents the number of Expected Presentations for each day. This forecasted number is produced using 2 years of historical data and is specific to the day of week and season.

Demand & Activity for Individual Date

Further date-specific analytics are revealed upon clicking a day on the **NEAT % Trends by Arrival Date** or the **Presentations vs Expected Presentations by Arrival Date** charts.



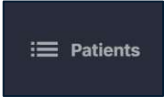
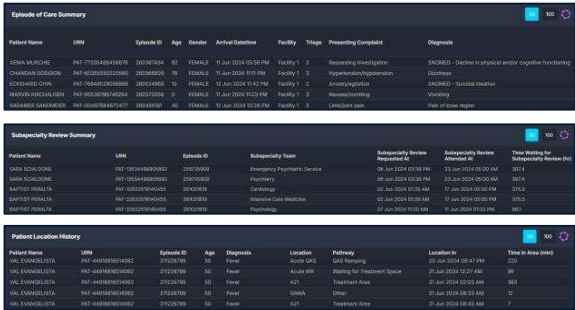
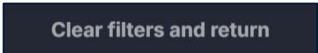
Filtering

The following noteworthy options are available in this component's **Filter Bar**:

Filter	Description	Filter	Description
Area Type	Select between All , Main or Other mapped areas in the ED.	Admission Status	Select whether to include All presentations, Admitted presentations or Not Admitted presentations in the analytics on the current page.
Age Group	Select between All , Adult or Paediatric age groups.	NEAT	Select between All , Breach (ED LoS over 4 hours) or Seen in Time cohorts.

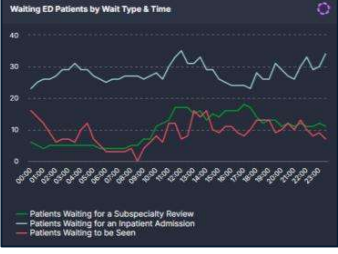
Interaction

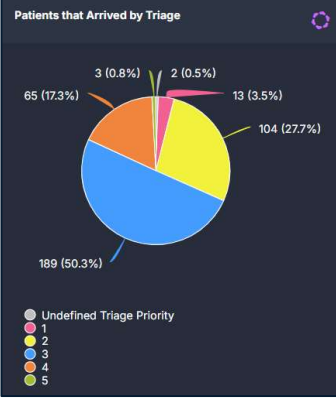
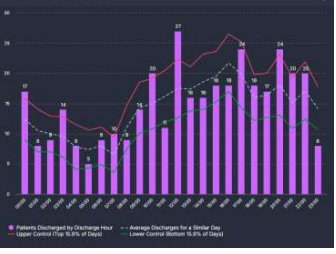
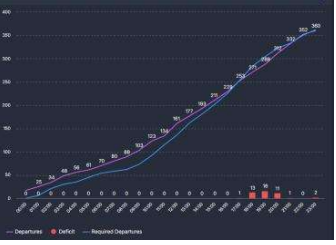
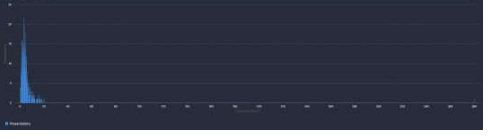
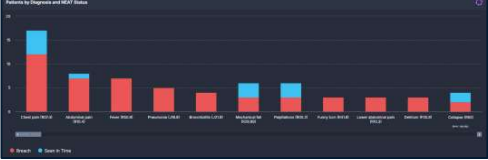
The following interaction is available in this component.

Button	Screenshot	Action
Patients		Clicking button displays these lists for the selected date: Episode of Care Summary, Subspecialty Review Summary and Patient Location History. Information in these lists includes patient demographics, ED Triage, Diagnosis, length of stay, Time Waiting for Subspecialty Review and Time in Area. 
Clear filters and return		Clicking button: Returns to the main Demand & Activity page.

Component Tiles

Tile	Screenshot	Explanation
Summary		Summary of the Number of Presentations and Maximum LoS for the selected date. Analysis is also provided for the number of Expected Presentations – based on comparison with historical data – and how this compared with actual arrivals. Also shown is the Hours with Presentations > 1 SD Above Expected, which is the number of hours that had presentation numbers greater than the top 15.9% of busiest days for that Emergency Department.

Title	Screenshot	Explanation
Presentations by Arrival Hour	 The chart displays the number of actual presentations to the Emergency Department for each hour of the day. It includes three supporting trendlines: Average Arrivals for a Similar Day (dashed blue line), Upper Control (Top 15.9% of Days) (dashed red line), and Lower Control (Bottom 15.9% of Days) (dashed green line). Hours with actual arrivals greater than the Upper Control are coloured pink.	Displays the number of actual presentations to the Emergency Department for each hour of the day. There are also 3 supporting trendlines derived from analysis of historical data: ■ Average Arrivals for a Similar Day The average number of expected hourly presentations, specific to weekday and season. ■ Upper Control (Top 15.9% of Days) The number of expected hourly presentations for the top 15.9% busiest days. ■ Lower Control (Bottom 15.9% of Days) The number of expected hourly presentations for the bottom 15.9% least busiest days. Hours with actual arrivals greater than the Upper Control are coloured pink.
Patients in ED by Pathway & Time	 The chart displays the number of patients in the Emergency Department at 30 minute intervals throughout the day. Patients are colour coded according to the area they are located within (e.g., Observation Area). The chart is overlaid with an Escalation Trigger – a measure which represents a capacity threshold specific to the individual Emergency Department.	Displays the number of patients in the Emergency Department at 30 minute intervals throughout the day. Patients are colour coded according to the area they are located within (e.g., Observation Area). The chart is overlaid with an Escalation Trigger – a measure which represents a capacity threshold specific to the individual Emergency Department.
Summary	 Summary of Ambulance Arrivals, % POST, Episodes of Care (includes patients treated on the selected date who presented on a prior day), % NEAT and number of inpatient Admissions for the selected date.	Summary of Ambulance Arrivals, % POST, Episodes of Care (includes patients treated on the selected date who presented on a prior day), % NEAT and number of inpatient Admissions for the selected date.
Breaches by Hour of Breach	 The chart displays the number of presentations breaching a length of stay of 4 hours in the Emergency Department. Breaches are tallied in the hour of day in which they exceeded a length of stay of 4 hours.	Displays the number of presentations breaching a length of stay of 4 hours in the Emergency Department. Breaches are tallied in the hour of day in which they exceeded a length of stay of 4 hours.
Waiting ED Patients by Wait Type & Time	 The chart displays the number of patients at each 30 minute interval throughout the day that were: ■ Waiting for a Subspecialty Review Patients waiting for a review by a specialty team external to the Emergency Department. ■ Waiting for an Inpatient Admission Patients waiting for admission to an inpatient bed. ■ Waiting to be Seen Patients waiting for a review by a treating clinician in the Emergency Department.	Displays the number of patients at each 30 minute interval throughout the day that were: ■ Waiting for a Subspecialty Review Patients waiting for a review by a specialty team external to the Emergency Department. ■ Waiting for an Inpatient Admission Patients waiting for admission to an inpatient bed. ■ Waiting to be Seen Patients waiting for a review by a treating clinician in the Emergency Department.

Title	Screenshot	Explanation
Patients that Arrived by Triage		Displays the number and proportion of patients that presented for the selected date by their assigned Triage Category: - Category 1 - Category 2 - Category 3 - Category 4 - Category 5 - Undefined Triage Priority (i.e., error or no data)
Discharges vs. Required by Discharge Hour		Displays the number of Emergency Department discharges for each hour. It includes three supporting trendlines based on historical analysis, showing the number of discharges typically required each hour to maintain patient flow: - Average Discharges for a Similar Day The average number of expected hourly discharges, specific to weekday and season. - Upper Control (Top 15.9% of Days) The number of expected hourly discharges for the top 15.9% busiest days. - Lower Control (Bottom 15.9% of Days) The number of expected hourly discharges for the bottom 15.9% least busiest days.
Cumulative Discharges vs. Cumulative Required Discharges to Maintain Flow by Hour		This chart shows how actual Emergency Department discharges, compared cumulatively against the number of discharges required to maintain patient flow at each hour. Any gap where actual discharges fell below required discharges indicates a deficit and may have contributed to rising inpatient demand and ED congestion.
Total Patients by LoS (excl. SSU)		Displays the total number of patients in the Emergency Department (excluding those in Short Stay Units) for the selected date, grouped by their length of stay (LoS) in hours.
Patients by Diagnosis and NEAT Status		Displays the number of presentations for the selected date by Diagnosis (e.g., Chest Pain). Patients that breached 4 hours length of the stay in the Emergency Department are coloured red.