Component Spotlight
PET Analysis component

About the component:
This component allows end users to review an analysis of performance for the patient's Emergency Department length of stay. This component explores PET with respect to demand variation and the impact each inpatient team has on ED. For the latter, this component explores subspecialty reviews and admissions for each team with respect to reasonable and excessive wait times, and impacts on ED processing times, to facilitate discussions and the setting of standards.

This component also explores the ED activities that occurred in each day with respect to the variation of demand, ED patient flow and admissions/discharges. Using hourly predictions of ED presentations, we can understand if the overall demand was higher than expected and, more importantly, how many hours of above average activity were experienced in ED, and the ED and inpatient teams' responses to this increased demand to increase flow in the department.

This component provides an analysis of Emergency Department length of stay (LoS) Performance. View PET trends and drill to specific dates to investigate the impact of the variation in demand by arrival hour and processing time, diagnoses, subspecialty referrals requests and response times, and admissions frequencies and time has on PET breaches. Drill to individual episode level pathway visualisations and details.

The Component allows end users to monitor the PET performance for all patients and + 75's at 1.5- 4-6-9-24 hours.

Who it's for: Administration Officer, Nurse Unit Managers – ED and Clinical Department Manager

Where you'll find it:
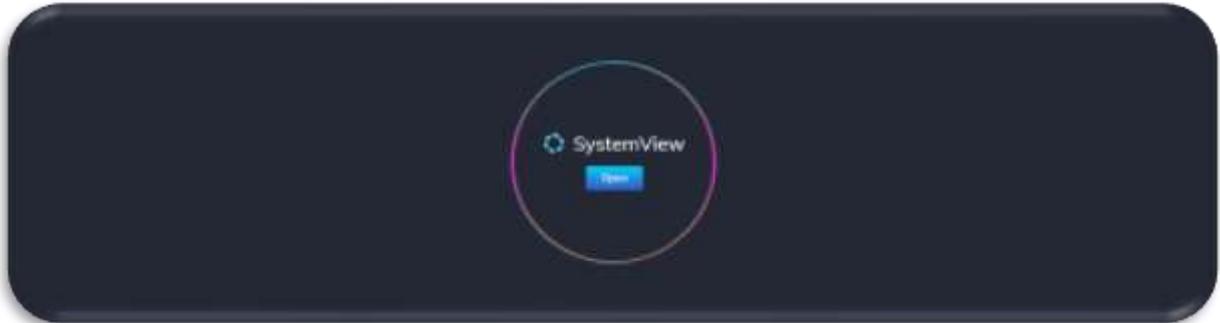SystemView > Explore > Emergency Department > PET Analysis
Data refresh rates:
The data within this component updates every 5 -10 minutes, 7 days a week.
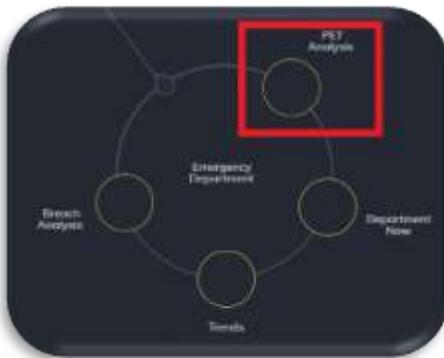
Definitions used in PET analysis:

Title	Definition
PET	Patient Experience Time
SSR	Sub Speciality Review

Step 1.

Sign in to SystemView using your current hospital credentials and password
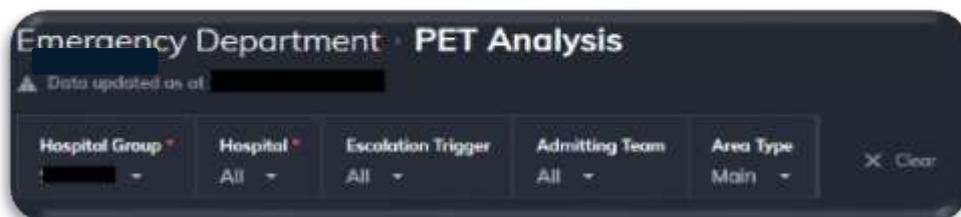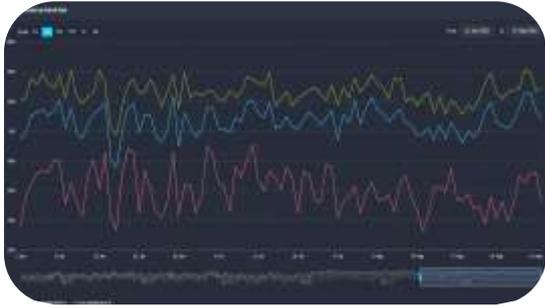

Step 2.

Navigate to Explore > Emergency Department > PET Analysis

Step 3.

Apply drop-down filters **at the top of the page to refine the data.**

Step 4.

PET % Trends by Arrival Date displays the PET trend over time with consideration to the following analysis.

- PET % - Trend of daily percentage meeting a 6-hour time target from registration to departure from the Emergency Department (ED).
- Admitted PET % - Analysis of the PET trend of patients that were admitted to an inpatient ward.
- Non-Admitted PET % - Analysis of the PET of patients discharged from ED without an admission.

Pet % Trends by Arrival date and Admission Status Displays the PET trend line by arrival date and admission status for each 1.5, 4, 6, 9, 24 hours.

The left-hand side displays this information for all presentations where the right hand side displays information for over 75's only.
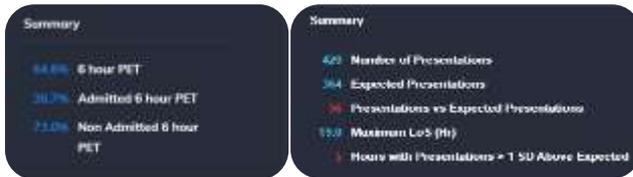
Step 5.

Selecting a data point '***PET % Trends by Arrival Date'*** will generate detailed analysis for the chosen date and choosing a series from the legend will adjust the chart graphic. Go to Summary.
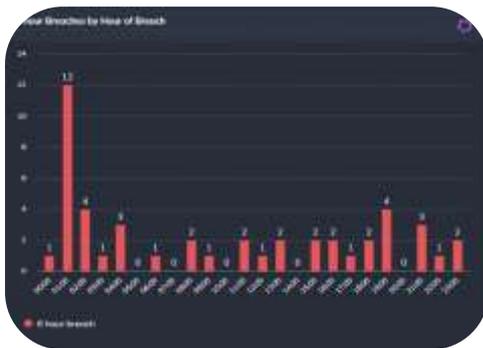

Apply drop-down filters **at the top of the page to refine the data.**

Current Waiting List Details – select the button located alongside the filters at the top of the component. Patient details includes an exportable table of elective surgery patients that updates daily and once activated, can be saved, and referenced in **Interact** - **MyLists**

Summary provides a summary of all the recorded data contributing to PET. Identifing a break down of total PET % and a break down of admitted and not admitted performance.

6-hour Breaches by Hour of Breach displays the total number of Emergency 6-hour breaches by hour of day.
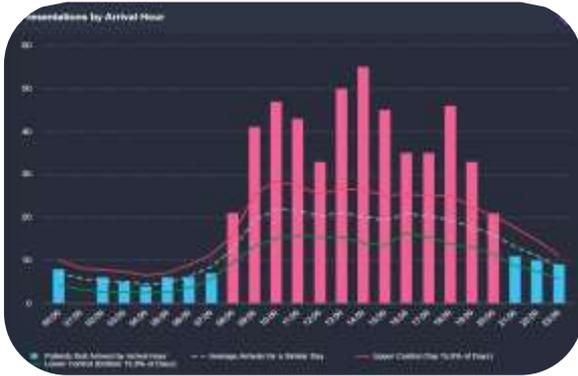

Patients in ED by Pathway & Time displays the distribution of patients within the ED by pathway and time. There is the capability to add a site specific escalation trigger which identifies an early warning of potential capacity issues.

Selecting a series from the legend will adjust the chart graphic.

Each colour represents the count of patients in this pathway, tracked every 30 minutes.

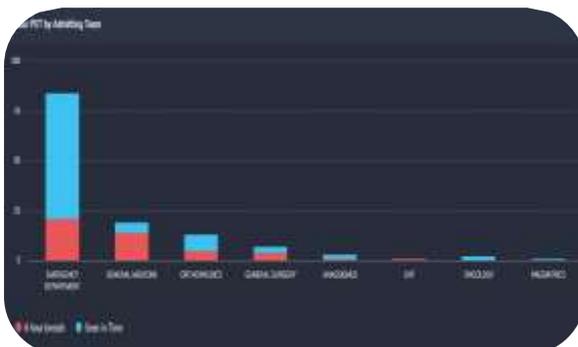**Note: the pathways are unique to each hospital site.**

Presentations by Arrival Hour displays the number of presentations to the ED hourly from midnight to midnight.

- **Dotted Trend Line**: Mean (average) presentations for that hour by hour of the day, day of the week and, is or is not winter.
  To accommodate the natural variance in presentations by hour to ED the logic applies one (1) standard deviation either side of the mean. Therefore, presentations that fall within the red and green control limits are considered a normal hour. Hours above the upper limit are indicated in pink.
- **Red Trend** - Upper Control: One standard deviation above the mean average.
- **Green Trend** – Lower Control: One standard deviation below the mean average.

Waiting ED Patients by Wait Type & Time displays the current trend of patients waiting within the ED and awaiting the following actions in order to progress:

- Patients waiting for a Subspecialty Review **(Green)**
- Patients waiting for an Inpatient Admission **(Blue)**
- Patients waiting to be Seen by the Ed team **(Red)**

Selecting a series from the legend will adjust the chart graphic.

6 hour Pet by Admitting team displays the 6 hour PET breaches or seen in time per speciality.

Select a speciality and this will open an episode of care list for all patients in that speciality.

Patients by Presenting Complaints and PET status displays the 6 hour breaches and patients seen in time by presenting complaints.

Select a presenting complaint to open a list of episodes of care for all patients under the selected complaint.