

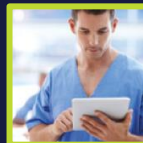
# Emergency Department Wait Times POC.



## Delivering eHealth Ireland



Office of the Chief Information Officer



# Emergency Department Wait Times P.O.C. (Why)

## **Objectives of the POC**

**Business Sponsor: Richard Corbridge**

*“Lead a rapid/agile project to create a dashboard to be live by the winter that would enable the public to see how busy an A&E is before going to it. We considered the video analytics, open data, PAS Data and Ambulance data all as sources of information for this.*

*I want us to run this as a tight, internal project until we have something to show and not go ‘public’ on us doing this until we have a first version of the solution. “*

**Patient Focus:**

**What the patient wants to know about ED before they attend: (IPOSSI Validation)**

## Emergency Department Wait Times P.O.C. (What)

### Scope:

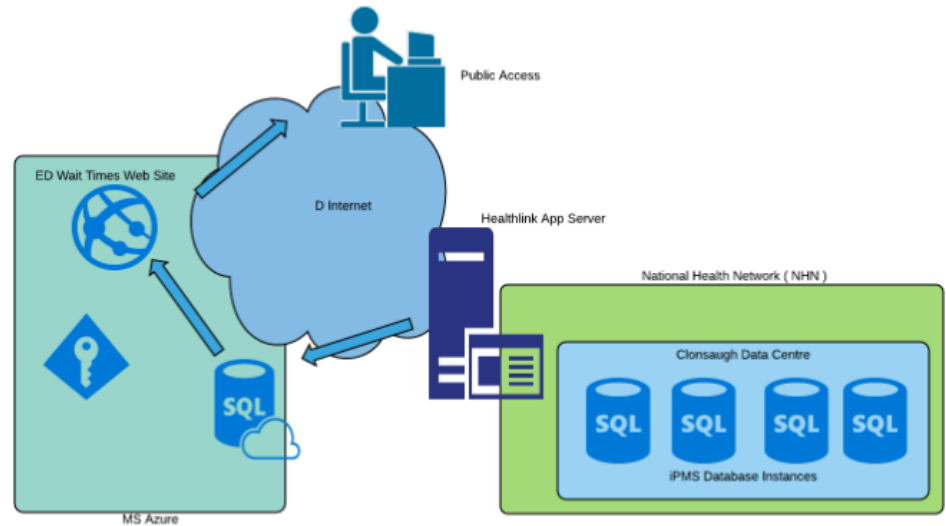
- Focus the available data from the iPMS sites available from the Clonshaugh Datacentre.
- Provide a website or component to be embedded into any of the HSE's current websites.
- Provide flexible extensible dashboard in a public facing meaningful manner.
- Interact with IPPOSI to define patient input into requirements and UI (The Irish Platform for Patient Organisations, Science and Industry – is a patient-led organisation that works with patients, government, industry, science and academia to put patients at the heart of health innovation.)

The following data should be easily accessible to the user when accessing the website.

- How long would they have to wait?
- How many people are waiting in each ED?
- What is the ED's capacity?
- How long will it take to get there?
- How many expected discharges?
- How busy is the car park?
- Directions, how do you get there?

## Emergency Department Wait Times P.O.C. (Where)

- iPMS Data Sources located in Clonshaugh Datacentre available via the NHN network
- Data processed on Healthlink Server
- Data warehoused in Azure SQL Database
- Uniform Signature To Stored PROCs on each instance
- Process running on Healthlink Server with NHN and Internet access.
- The aim was to pull as much data pertaining to the patient stay/journey as possible while keeping the SP fast and light. This allows for future expansion of the dataset & functionality, but can also provide for a simple layout with minimal processing at load time.
- Website to be developed by Evros under the sponsorship of Microsoft.



# Emergency Department Wait Times P.O.C. (How)

## Implementation Details

- 2 servers with 7 separate databases holding the ED Data for 18 ED Departments on IPMS.
- This required 7 stored procedures, some pulling data from multiple EDs.
- For example the database IPM\_DML (Dublin/Midlands) holds ED Departments in Tullamore, Portlaois and Mullingar so this SP will return 3 facilities in one area.

Data: The SP returns data relating to the location, unique data identity, demographics and Key Performance Indicators.

### Location:

Returns the Hospital Area as it's logically grouped on the database

The Facility Name

System Number for the Facility

### Unique Data Identity

Only the system number for the attendance is returned. This is unique to this facility, coupled with the facility number gives a unique attendance nationally. There is nothing in the data that identifies the patient (name, dob etc).

### Demographics

Age of patient (Integer)

Triage Category (Not Triaged, 1, 2, 3, 4, 5) 1=Immediate, 5=Non Urgent

### KPIs

Date/Time - Patient Registered → Entered Department

Date/Time - Patient Triage → First Seen by Nurse

Date/Time - Patient Seen By → First Seen by treating clinician

Date/Time - Patient Lodged → Decision to Admit Patient to Hospital overnight

Calculated Field - Registration to Triage → Wait in Hours to be Triaged (Hrs)

Calculated Field - Triage to Seen → Wait between Triage and Seeing a Dr (Hrs)

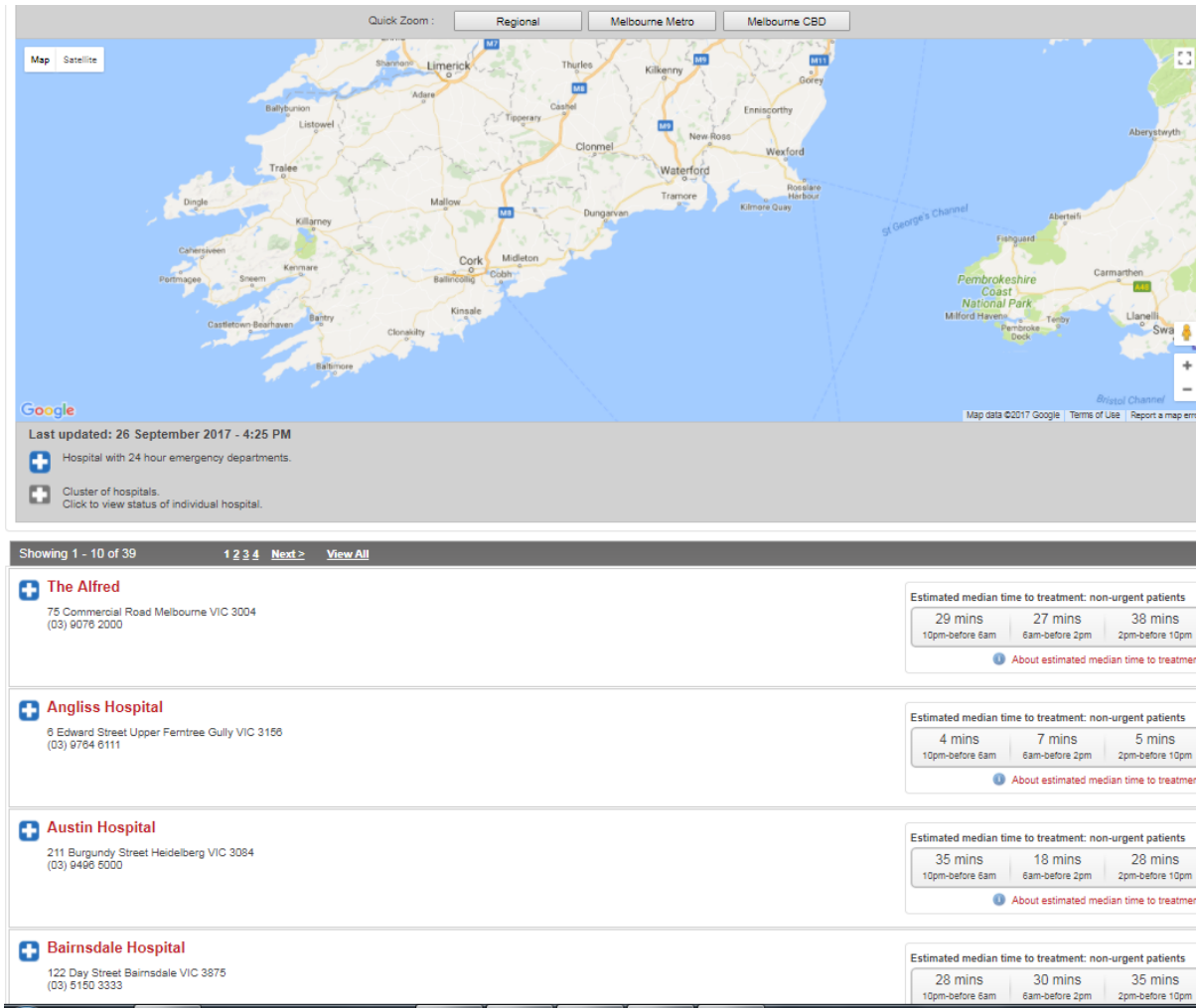
Calculated Field - Registration to Seen → Total Wait to see Dr (Hrs)

Calculated Field - Total PET → Total time patient is in ED Department (Hrs)

# Emergency Department Wait Times P.O.C. ( More What )



# Emergency Department Wait Times P.O.C.(Even More What )



## Emergency Department Wait Times P.O.C. (When and Who)

### When ?

- Project Inception August
- Initial System Design Mid September
- Data load implementation End September
- Initial POC front end release Early October
- Live : End October 2017

### Who ?

- The A<sub>21</sub> team.
- Evros ( MS Sponsored ) front end development.
- Common Time( Mobile App )