

Hospital Data Integration

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Royal Melbourne Hospital



Overview

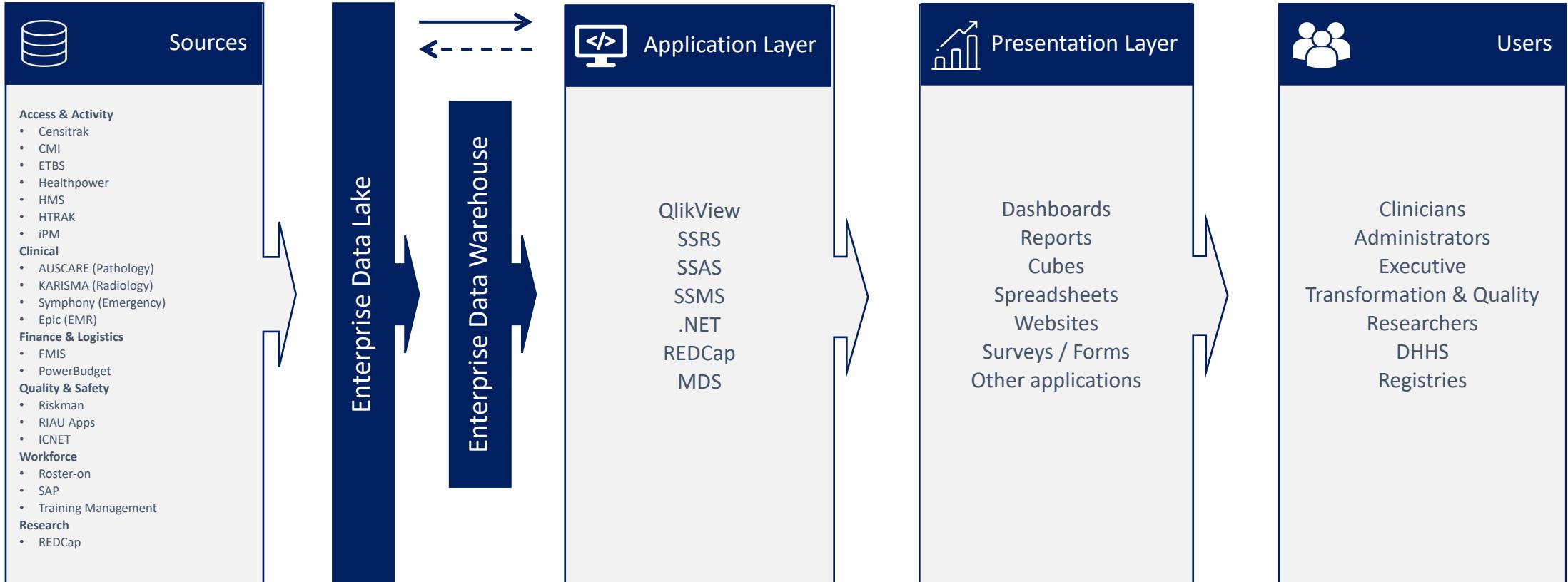
- Hospital Data Sources
- Business Intelligence Overview
- Dashboards
- COVID-19
- Data Matching







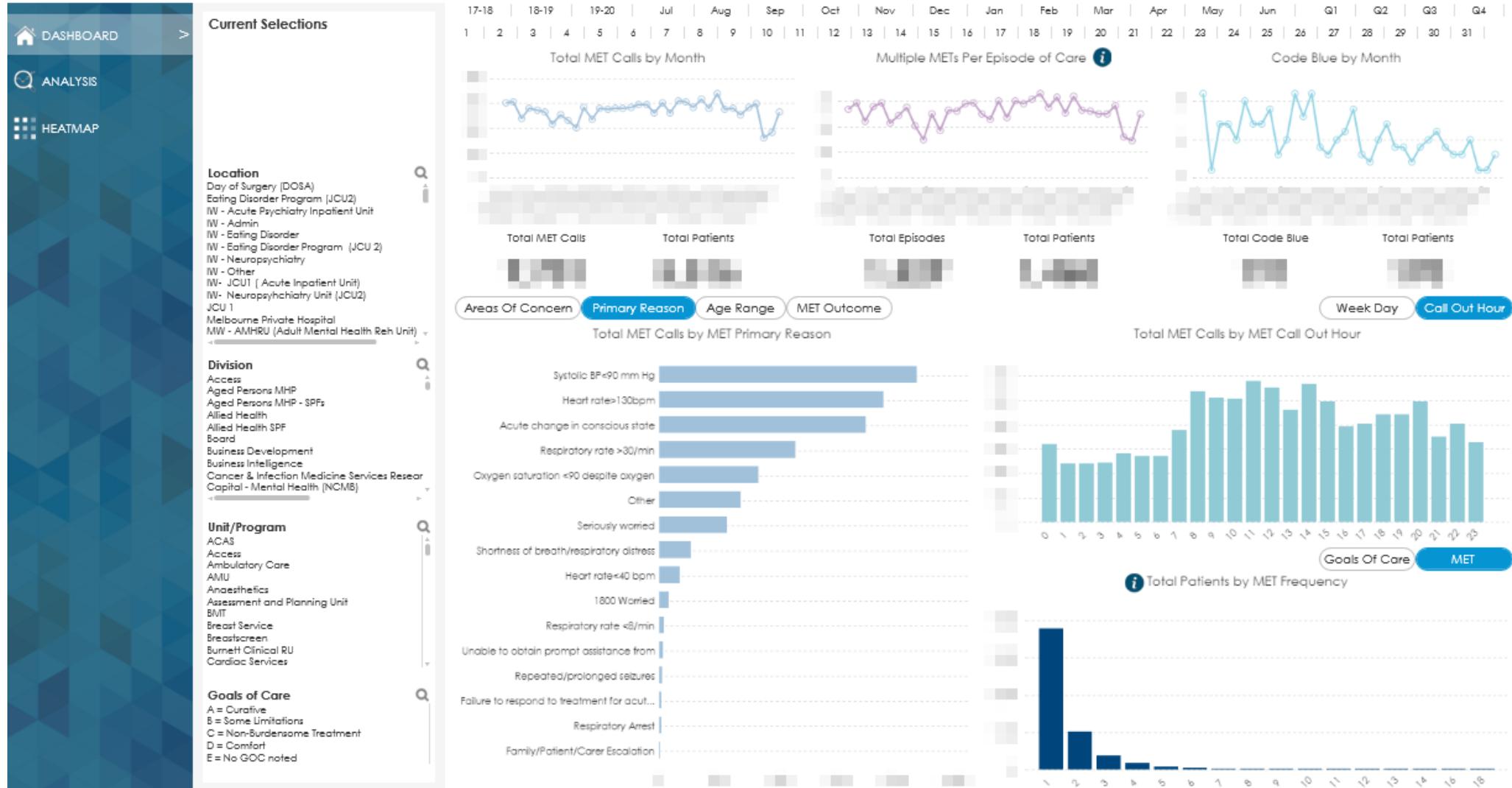
Technology



SECURITY

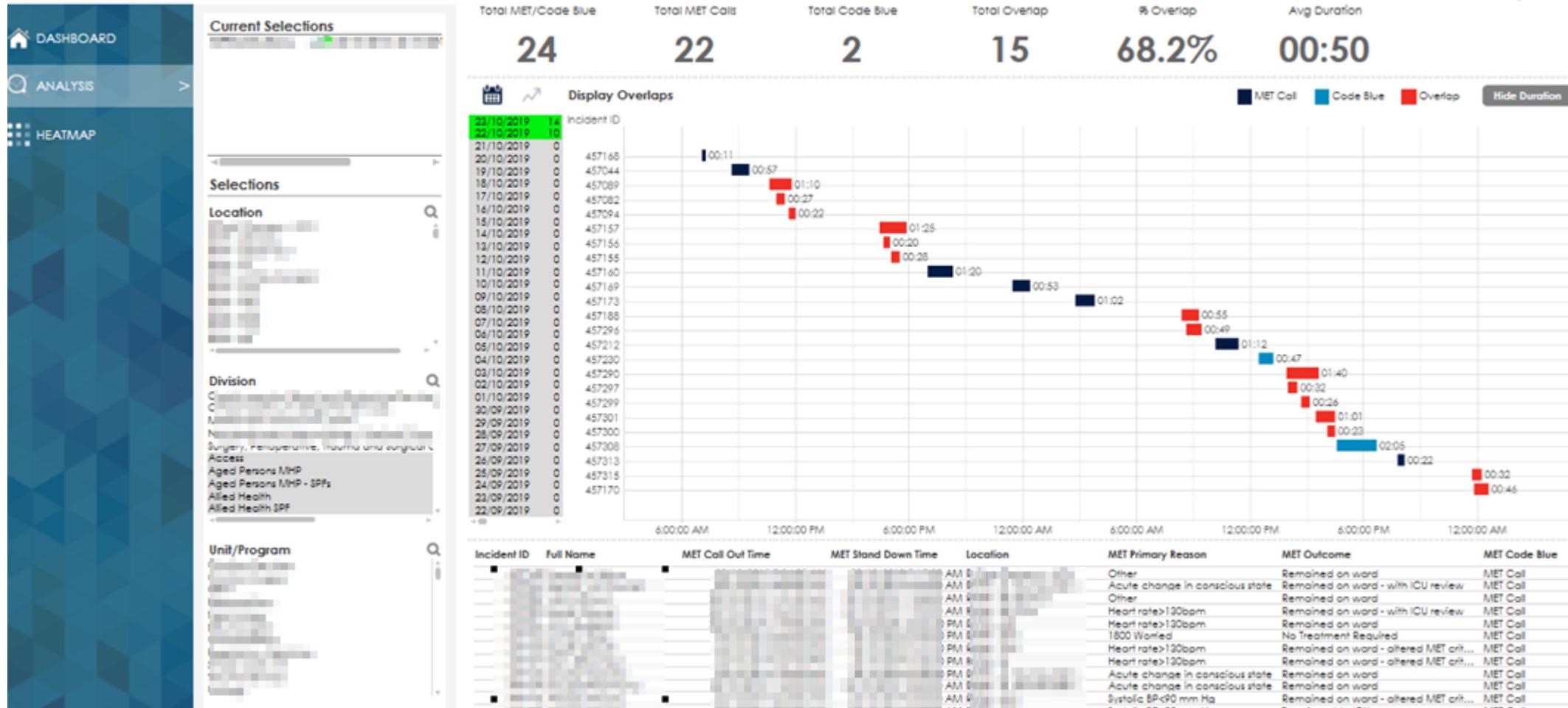
Authentication (Active Directory, other username and password)
Authorisation (Active Directory Groups, database rights, product licensing)

MET CODE BLUE



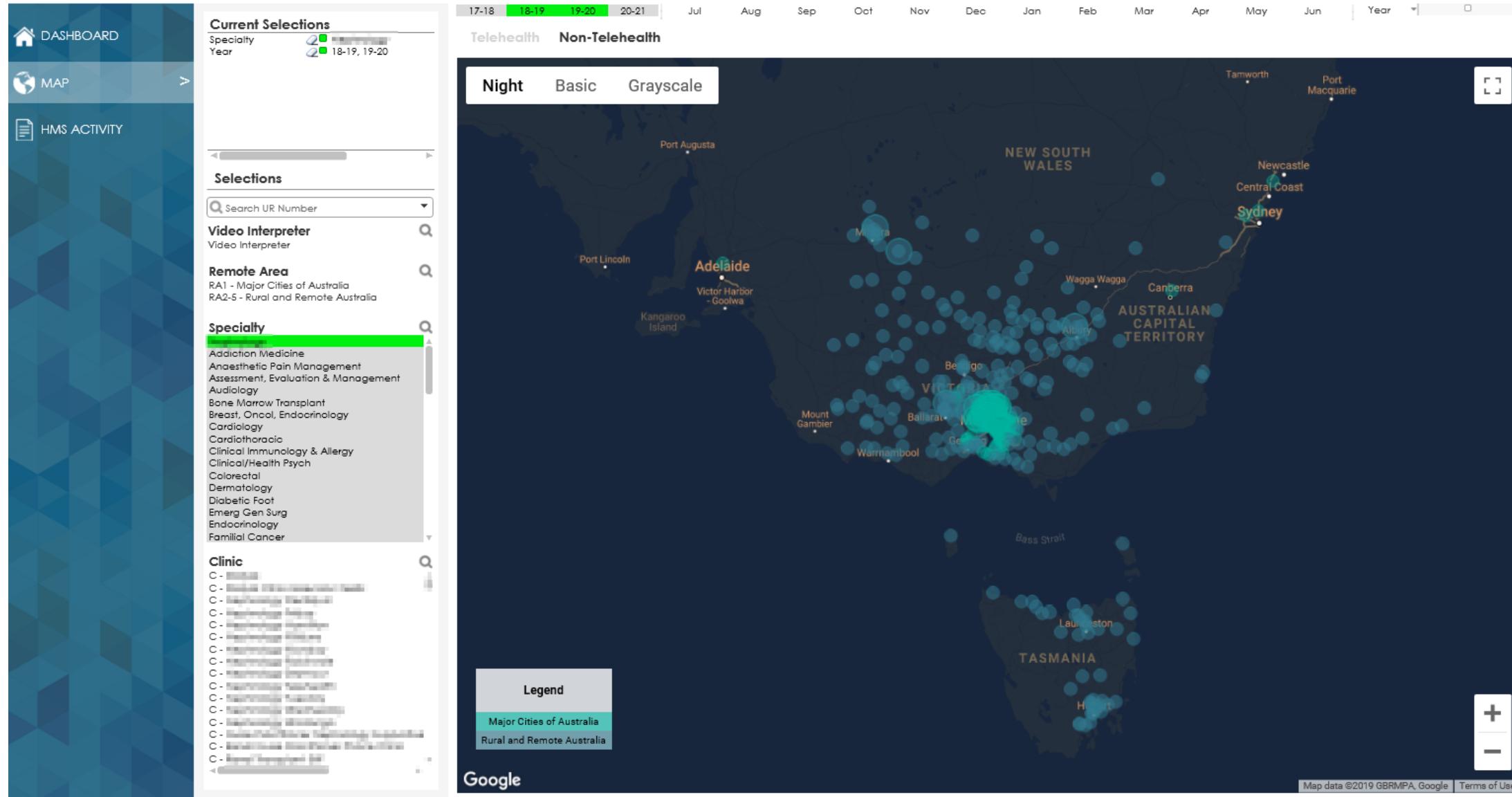
Incident ID	IP UR Number	MET Call Count per IP Episode No.	Admission Date Time	Discharge Date Time	Age	Treating Team	Full Name	MET Call Out Time	MET Stand Down Time	Location
██████████	██████████	██████████	██████████	██████████	████	██████████	██████████	██████████	██████████	██████████

MET CODE BLUE



TELEHEALTH

*Display data up until: 26/06/2020 (The latest Telehealth booking)



GEOSPATIAL PATIENT ANALYSIS

INPATIENTS

ED

OUTPATIENTS

Current Selections

KPI Name Hospital Episodes

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31

From Date: 27/02/2018 To Date: 27/02/2019

Selections

LGA

- Adelaide (C)
- Adelaide Hills (DC)
- Albany (C)
- Albury (C)
- Alexandrina (DC)
- Alice Springs (T)
- Alpine (S)
- Ararat (RC)
- Armadale (C)

Specialty

- Acute Medical Unit
- Anaesthetic Pain Management
- Assessment, Evaluation & Management
- Bone Marrow Transplant
- Breast, Oncol, Endocrinology
- Cardiology
- Cardiothoracic
- Chest Pain Evaluation
- Clinical Immunology & Allergy

LoS Category

- Multiday
- Overnight
- Sameday

A and TSI

- Aboriginal
- BOTH Aboriginal & TSI
- Did not meet client/could not ascertain
- NOT Aboriginal or TSI
- Not Specified
- Not Stated/inadequately described
- Patient refused to answer
- Question unable to be asked
- Torres Strait Islander

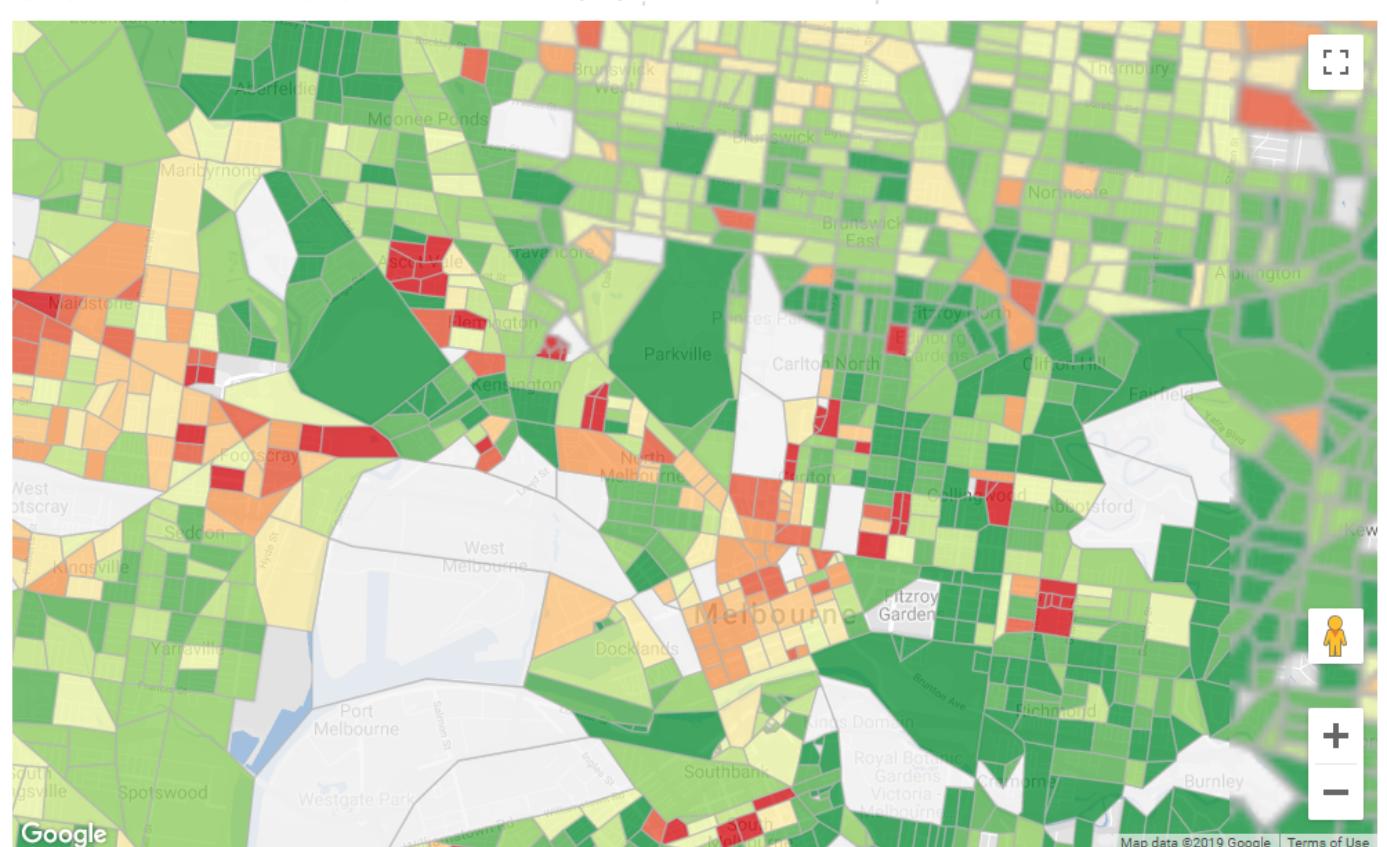
Age Group

- 0-10
- 11-20
- 21-30
- 31-40
- 41-50
- 51-60
- 61-70
- 71-80
- 81-90



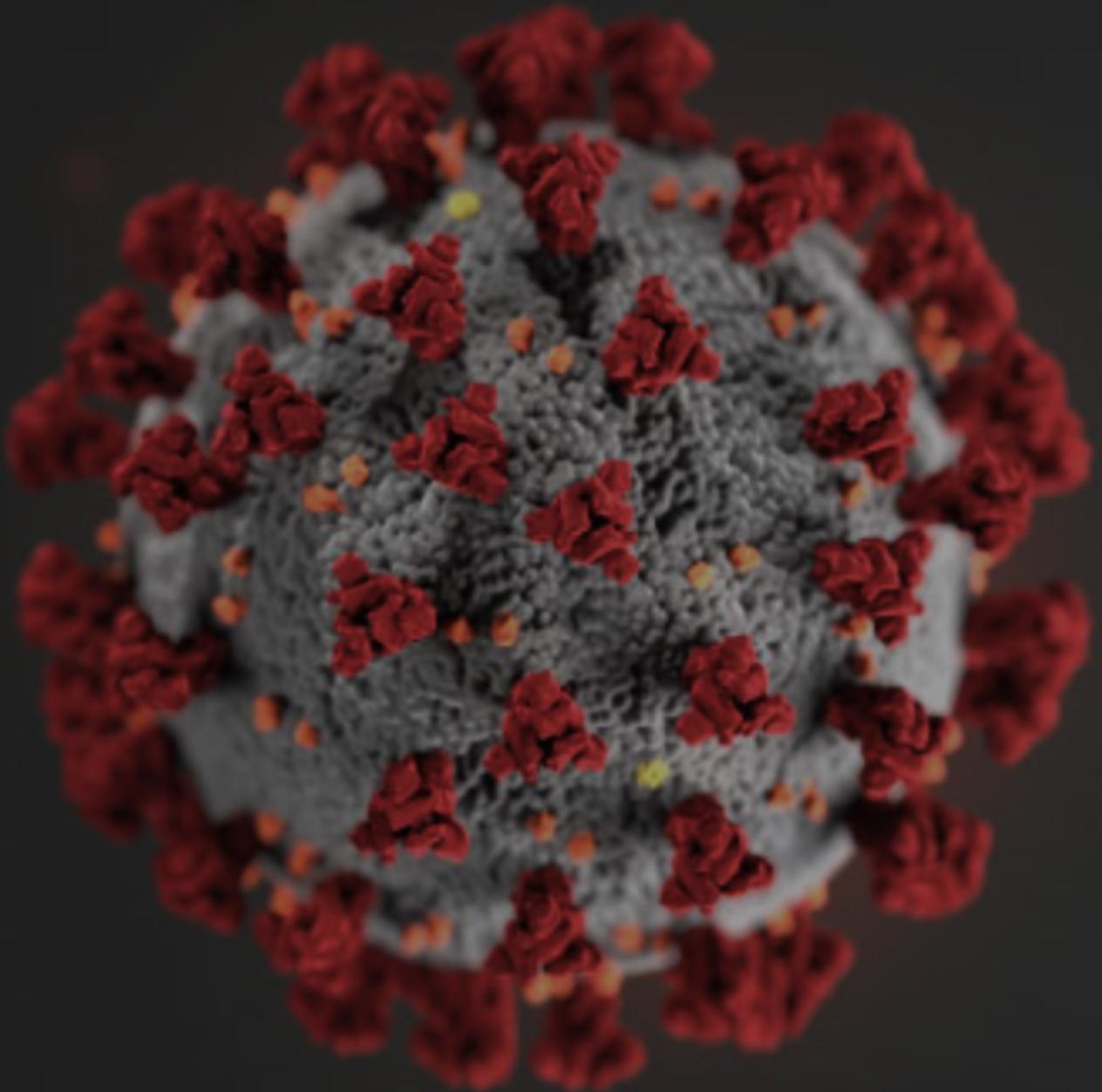
275,393

8,345



COVID-19

A BI Response



COVID 19 DASHBOARD

[In House Test](#)
[Send Away Test](#)


- [DASHBOARD >](#)
- [ALL RESULTS](#)
- [MAP](#)

Current Selections

Test Type In House

Collector Name

22 Hour Recovery
Hospital in the Home
Inpatient
MH 2 West Card/Thor Sx
MH 2B Cardiology
MH 2SE Cardiac Pre-Admission
MH 3 East Day Surgery and 23hr
MH 3 East Periop.
MH 3 South Gen Surgery
MH 3 West DPU
MH 3 West DPU/23hr
MH 3SW Gastro
MH 4 South Neurology
MH 4 South Neurosurgery
MH 5N Gastroenterology
MH 5SE General Medicine
MH 5SE Sleep Medicine
MH 5SW General Medicine
MH SWDC Medical Centre
MH 6 South East
MH 6 West Dialysis
MH 6B ICU
MH 6SW Nephrology
MH 7 West Pall. Care
MH 7B Haematology and BMT
MH 7SE Plastics
MH 7SW Orthopaedics
MH 8B Neurology
MH 9 East Inf Diseases
MH Acute Medical Unit
MH Aged Care 1
MH Aged Care 2
MH Aged Care 3
MH Aged Care 4
MH Bleuler Acute Psych
MH BMT Medicare Clinic
MH Breast Clinic
MH Cardiac Catheter Lab
MH CCU
MH Clinical Trial - internal
MH Coburg Dialysis
MH Eating Disorders
MH ED Holding Ward
MH Emergency
MH Emergency Behavioural Assess
MH Emergency Short Stay
MH Gardenview House
MH HITH
MH HITH Intensive Rehab

17-18	18-19	19-20	21	22	23	24	25	26	27	28	29	30	31
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Current Inpatients With COVID 19

Total Test Results For COVID 19

Distinct Patients With a Negative Result

Distinct Patients With a Positive Result

Collector Name Negative Positive

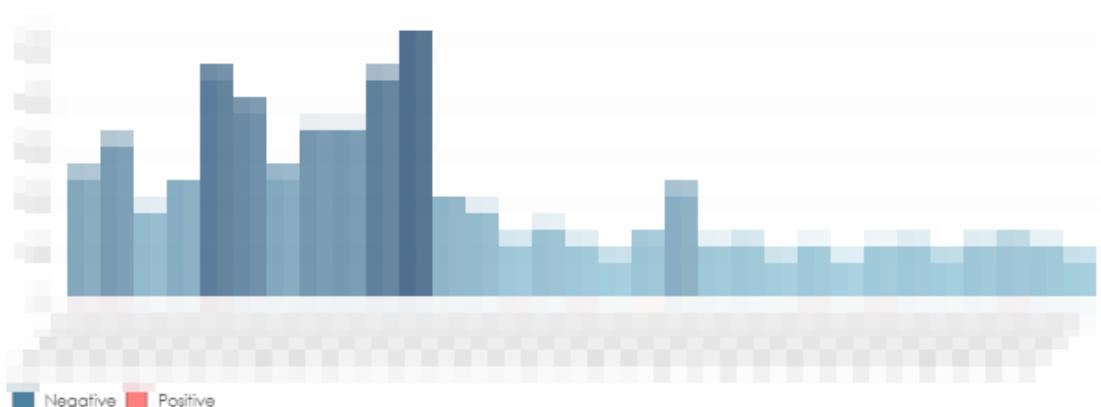
MH Emergency

Outpatient

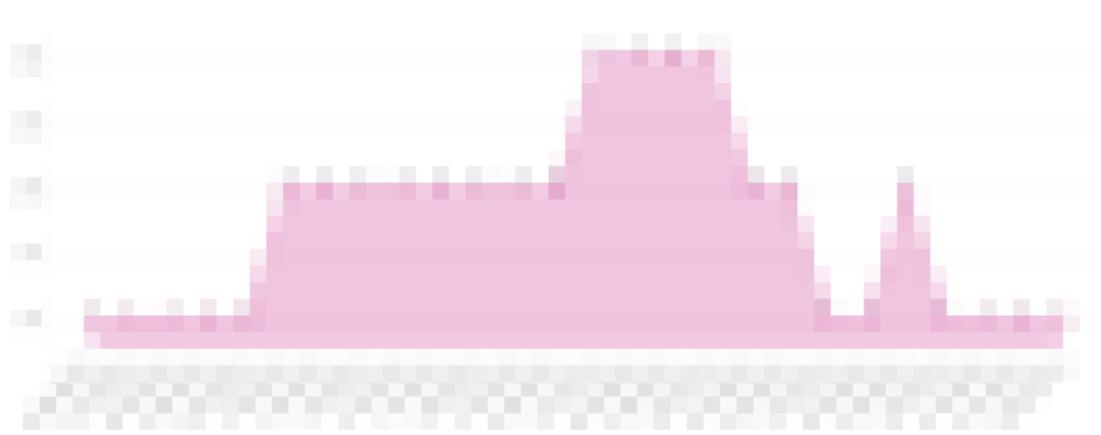
Current Inpatients With COVID 19 for

UR Number Ward Specialty A

Total COVID 19 Tested Patients By Result Date



Inpatients With COVID 19 Daily Census



First Positive Test

UR Number

Full Name

Result

Filler Order No./Lab No.

Specimen Received Date Time

Specimen Collected Date Time

Resulted Date Time

Request Description

Age

Age Group

Collector Name

THE AUSTRALIAN BUSINESS REVIEW

Sunday, June 28, 2020 | Today's Paper | Mind Games

Hi J | [plus](#)

All sections

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CORONAVIRUS

LIVE Live updates

COVID-19 statistics

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Coronavirus: Breakthrough blood monitor allows patients to be treated at home

EXCLUSIVE

By ANGELICA SNOWDEN
JOURNALIST
Follow [@ang3snowden](#)

9:18PM JUNE 2, 2020

30 COMMENTS



<https://www.mja.com.au/consequence-infectious-disease-outbreak/>

Data matching

- Send a text message to patients on negative results
 - Patient details (iPM)
 - Inpatient episodes (iPM)
 - Pathology results (AUSCARE)
- Analyse how many self-registrations resulted in an ED assessment and Sars-COV-2 swabs
 - Self-entered data (REDCap)
 - Patient details (iPM)
 - ED arrival / departure times (Epic)
 - Swabs (AUSCARE)

The hospital and the Department of Health and Human Services require the following information:

First name(s)

* must provide value

Last Name

* must provide value

DOB Today D-M-Y

Gender Male Female Other

Your email

* must provide value

Your street address in Australia

Suburb

Postcode

Home phone number

Mobile phone number
(used to communicate important information with you)
NO SPACES: Australian (04XXXXXXXX) or International (+61XXXXXXXXXX)

* must provide value

Amend Patient Details - Simpson, Homer 123456 Male 01/01/1924

Patient Details | Alias/ID | Personal Carers | GP | Insurance | Medicare Card Details | Compensables | Notifications

Patient id: 123456
Medicare Number: 32308755991
Title: Mr
Surname: Simpson
Forename: Homer
Middle name(s):
Sex: Male
Date of birth: 01/01/1924 96 years, 5 months
Estimation: Not Specified
Country of birth: Oman
Nationality: Not Specified
Multiple birth: Unknown
Residential/Home
*** Secure Address ***
Phone: 0400000000
Mobile: 0400000000
Email: DECLINED
Edit... Multiple addresses
Marital status: Married
Spoken language: English
Needs interpreter: No
ATSI status: Did not meet client/could not as...
Religion: Anglican
Occupation: Employed - Seasonal
Date registered: 28/10/1994 Staff Member
 Payee Only

OK Cancel

How to match?

- Use staff entered UR?
- First and last name?
- Mobile?
- Email?
- Date of birth?

How to match?

- Use staff entered UR?
 - Typos, previous patient
- First and last name?
 - Maiden names, short names, first and last reversed, typos
- Mobile?
 - 04? +61? Spaces or not? One for a family?
- Email?
 - Work or personal? One for a family?
- Date of birth?
 - Deliberately entering wrong DOB.
 - Entering today's date?

References

- <https://www.abc.net.au/news/2020-03-19/inside-a-coronavirus-covid-19-testing-centre/12070062>
- <https://www.mja.com.au/journal/2020/212/10/early-clinical-response-high-consequence-infectious-disease-outbreak-insights>
- <https://www.theaustralian.com.au/business/technology/coronavirus-breakthrough-blood-monitor-allows-patients-to-be-treated-at-home/news-story/9878bdf20f1ce9a25dc3ab76cac5e754>