CAVUCS Consumer-centric Hospital Avoidance Approach

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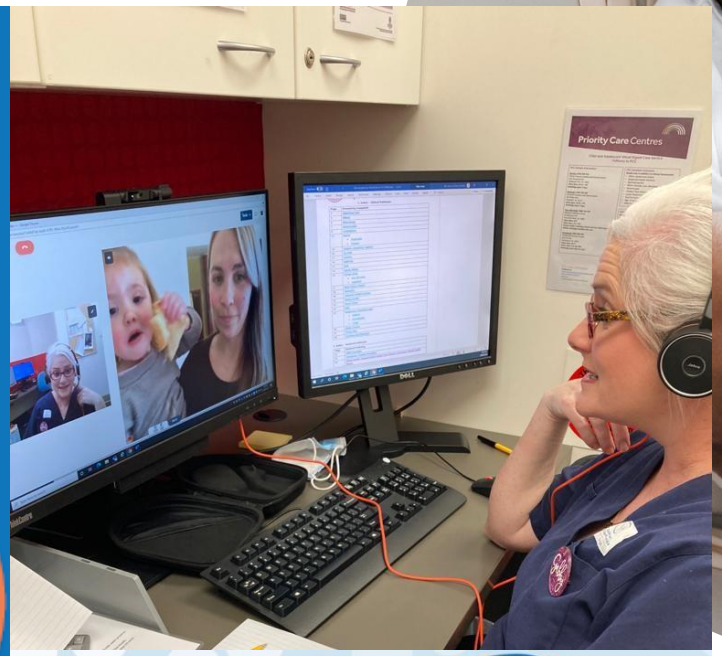
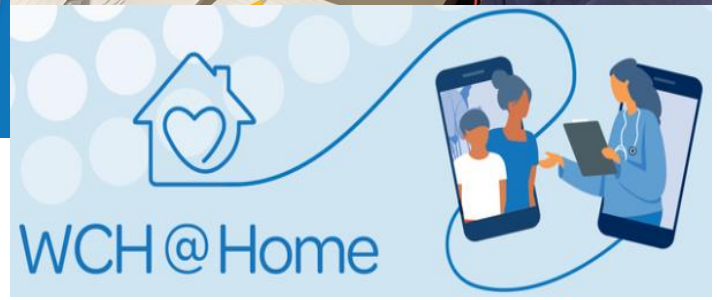
wch.sa.gov.au

Child and Adolescent Virtual Urgent Care Service





Government of South Australia
Women's and Children's Health Network

CREATE together

CAVUCS

STATEWIDE PATIENT- FACING SERVICE IN SA

56,000 ENCOUNTERS IN THE LAST 3 YEARS

Use of various Communication techniques

Real time	Store and forward	RPM

Silver lining from the pandemic

- Stretched resources
- Shrinking of work force
- Difficulty for patients to get timely health care for non urgent presentations
- Reluctance to access/provide face to face healthcare
- BOOMING OF TELE- HEALTH

Problem

ED Presentations increasing

Almost 50% of presentations triaged as P4 and P5

10.7% DNW in this cohort

Pilot project - DHW Workstream funding

'Implement an innovative and efficient model of

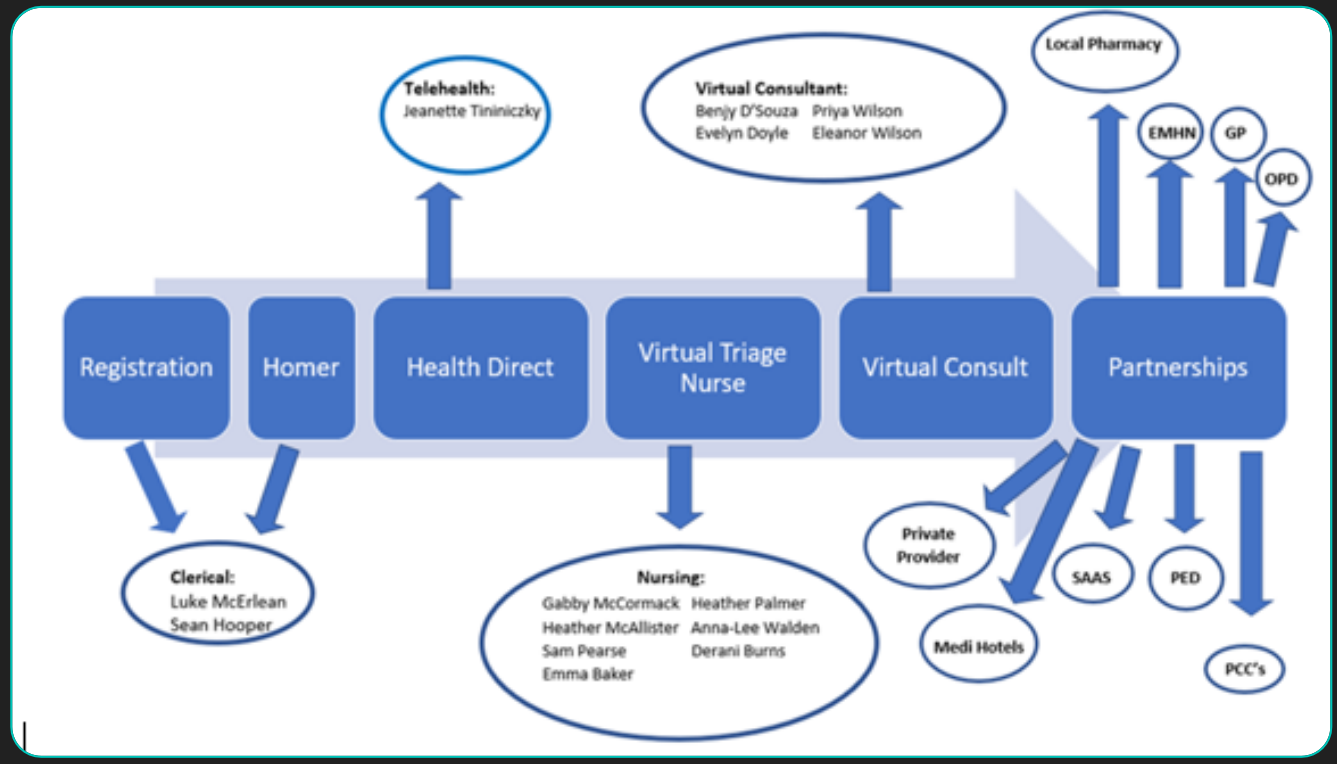
care that aims to enable the public to access high

quality and timely medical care in their home whilst

optimising resources in the PED'

What we did – designing the Solution

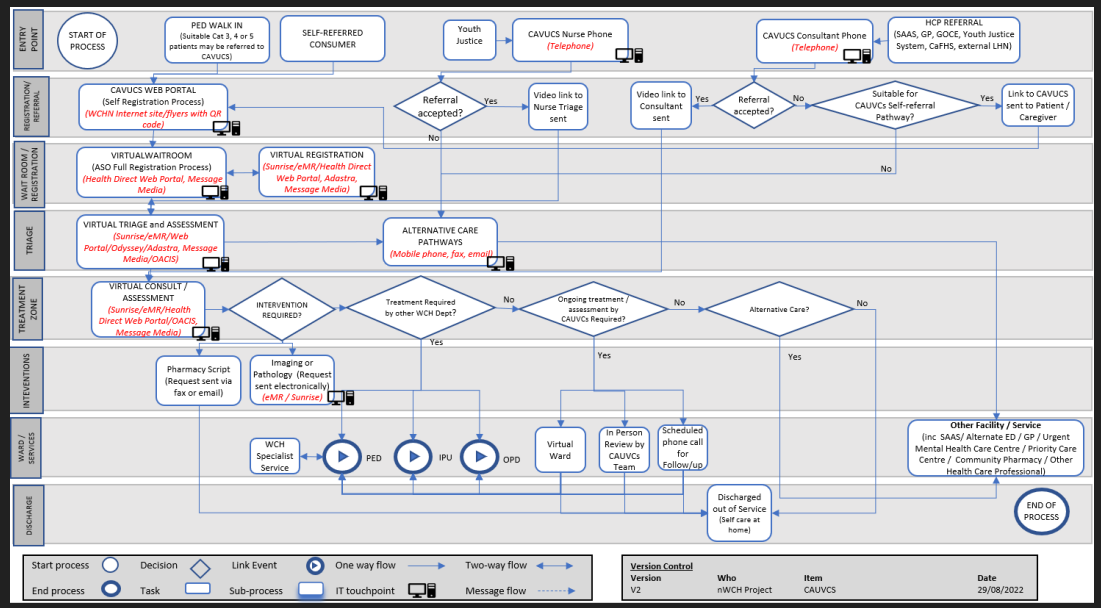
- Process mapped ED journey
- Recruited to roles – included consumer reps
- GP liaison
- Connected with like services (interstate and overseas)
- Partnered Key Stakeholders
- Risk assessment



Process Mapping

Virtualise the Emergency Department

- Replicate current process virtually
  - Patient registration
  - Pre-Triage
  - Administration
  - Clinician assessment
- Create form based on the ATS



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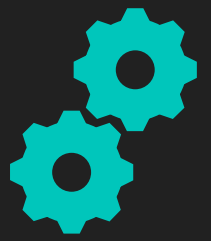
Risks identified

Risks identified- Patient facing model

Environmental Factors

Technological Factors



Operational Factors

Environmental Factors

Lack of private space for vulnerable population

Difficulty sharing sensitive health information remotely

Video consult may expose patients living conditions to the provider

Digital Equity

- Increase digital health literacy
- Workforce training in clinical telehealth
- Co-design new models of care
- Change management
- Culturally appropriate models of care
- Sustainable funding

Ethical and Legal issues in Paediatric telehealth

Authorization and accreditation	Protection of patient confidentiality	Professional liability (e.g.,: incorrect diagnosis: erroneous reading of the report or to the poor quality of transmitted images)	Absence of specific regulatory provisions	Physician–patient relationship
Privacy	Informed consent	Data sharing	Malpractice	Information security
Standardization of the practices;	Economic reimbursement.	Need of ethics code	Boundaries of competence	

Medicina 2021, 57, 1314. https://doi.org/10.3390/medicina57121314

Mark of a good telehealth service

- Make experience as close to an in person interaction
- Engaging clinicians
- Reduce medico-legal risk
- Improve communication
- Consumer satisfaction
- Reduce clinician fatigue

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Technological Factors

DATA SECURITY ISSUES

LIMITED ACCESS TO INTERNET AND TECHNOLOGY

LACK OF DIGITAL DEVICES, CELLULAR DATA, WI-FI

DIGITAL LITERACY

POOR QUALITY OF AUDIO AND VIDEO

Operational Factors

Privacy and security concerns

Reimbursement or payment issues (non Medicare)

Technological accessibility

Training and Education

Maintenance and updating devices

Pre-Triage Step in clinical safety

- iApply form
  - Exclude Priority 1 and 2
  - Major trauma
  - Severe shortness of breath
  - Acute neuro presentation
  - Chest pain
  - Head injury with LOC.
  - Prompts for specific conditions

Trial of form in PED WR

Simple language

Algorithm

Ease

Short

Safe

Scope of Child and Adolescent Virtual Urgent Care Service

- Children and Adolescents aged 6 months-18 years
- South Australia – metro, rural, regional

Exclusion criteria

- P1 and P2s
- Major trauma, excluding minor fractures
- Severe shortness of breath
- Acute neurological presentations seizures, syncope, stroke
- Mental health problem / illicit drug/alcohol problem
- Chest pain
- Head Injury with LOC

REFERRAL FROM	REFERRAL TO
• Consumers • SAAS • Health Direct • GP • PED • Youth Justice • GOCE	• Self Care • GP • ED • PCC • OPD • Admission • Virtual 'Ward' • CAVUCS booth

Training and Education

Will we be able to identify a sick child?

How will we navigate care for a sick child?

Our steps in clinical safety- unseen WR

- iApply form
  - Exclude Priority 1 and 2
  - Major trauma
  - Severe shortness of breath
  - Acute neurological presentation: seizure, stroke, syncope
  - Chest pain
  - Head injury with LOC.

CHILD & ADOLESCENT

Virtual Urgent Care Service

wch.sa.gov.au/virtualurgentcare

Scan below to access the service

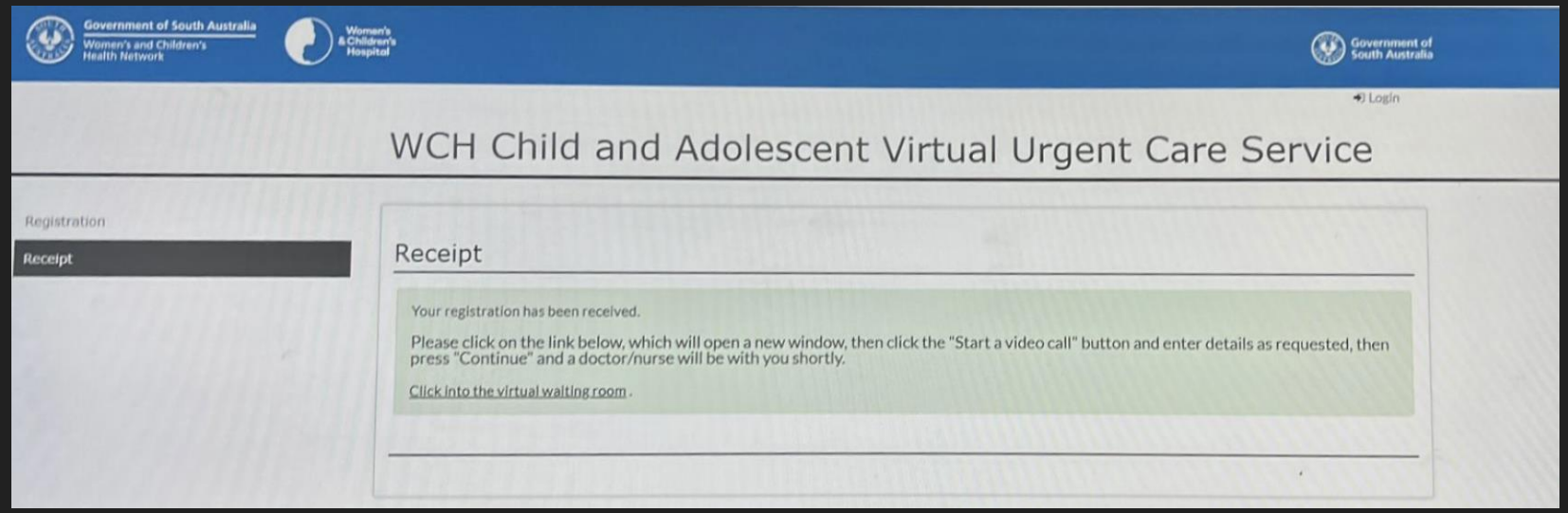
The right medical care, advice and referral for your child without having visit the Emergency Department.

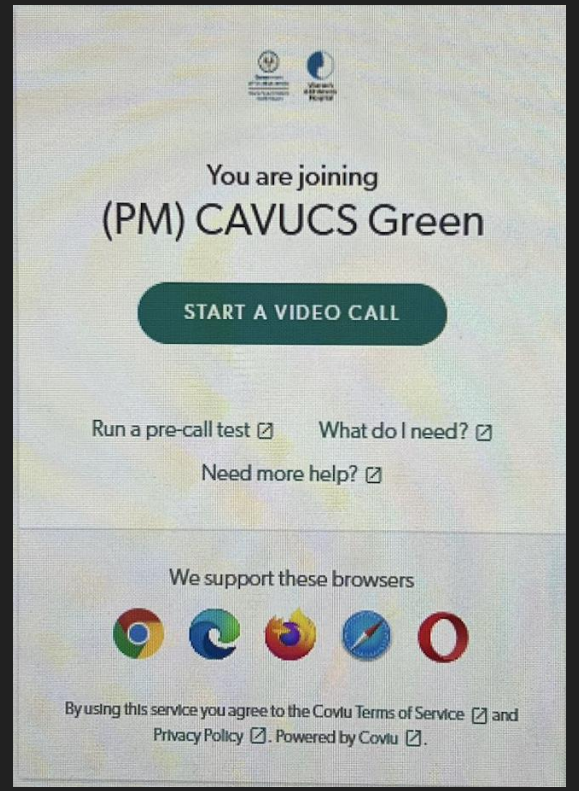
Speak with emergency nurses and doctors over video link for advice, care and, if needed, referral.

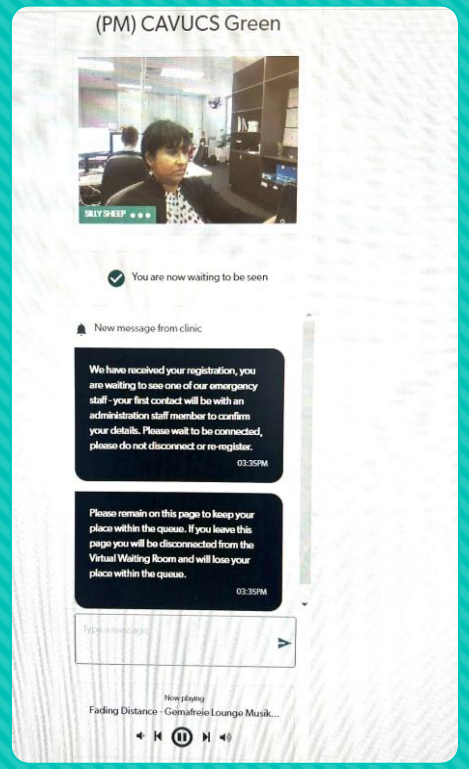
(D7764)

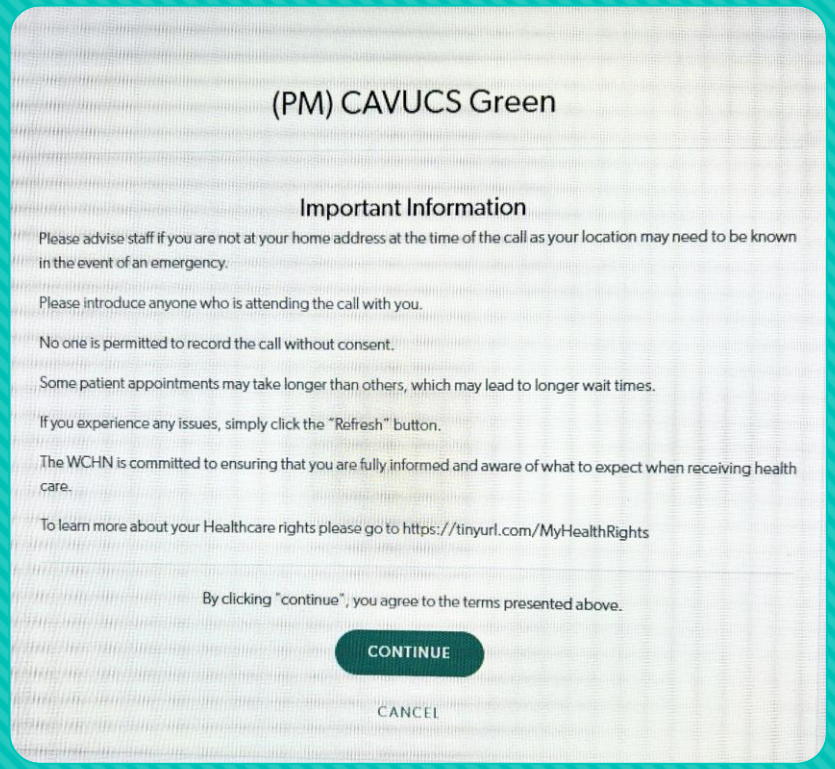
Patient Journey- Patient facing

Directs Carers to the iApply Form

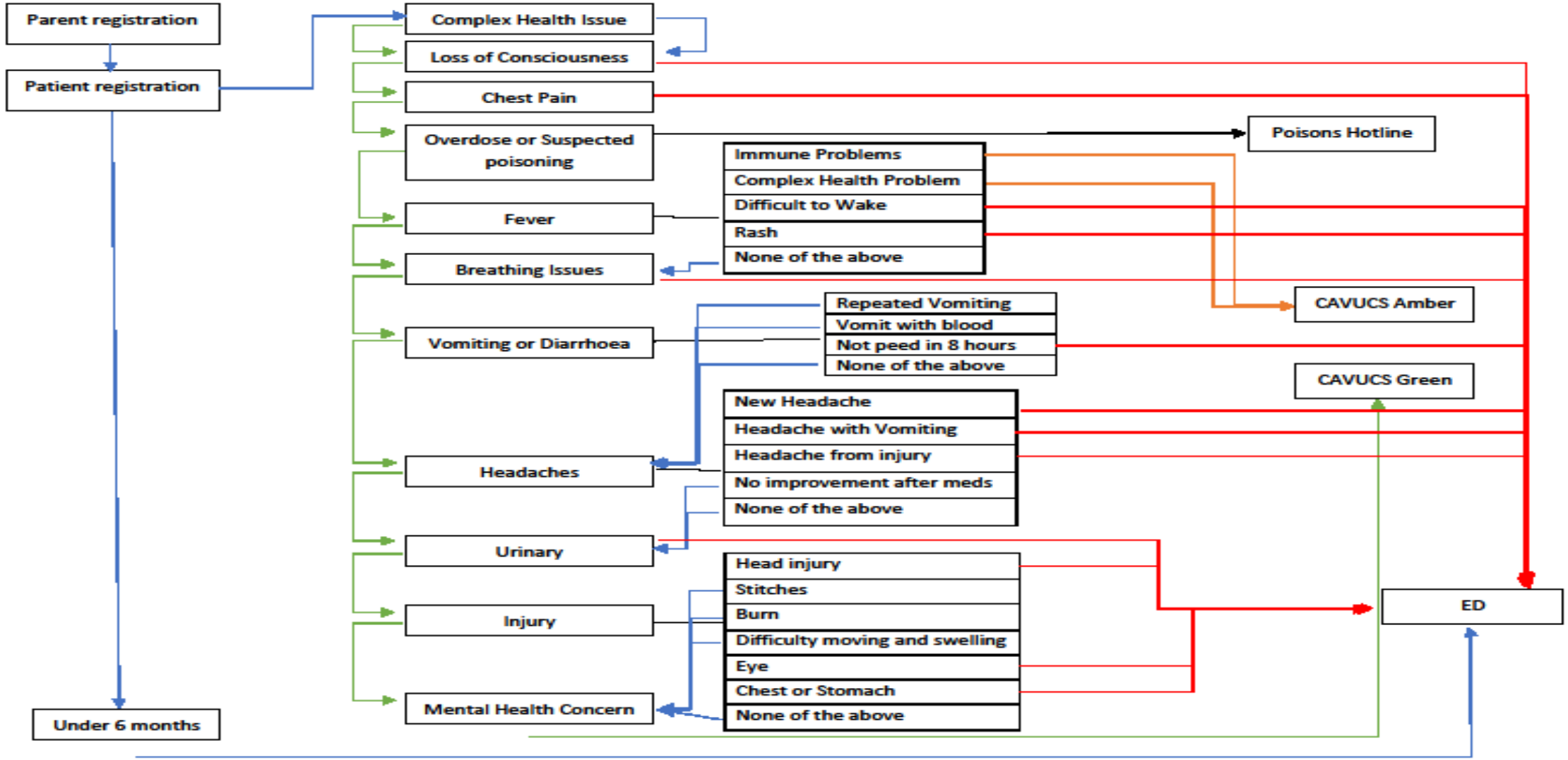






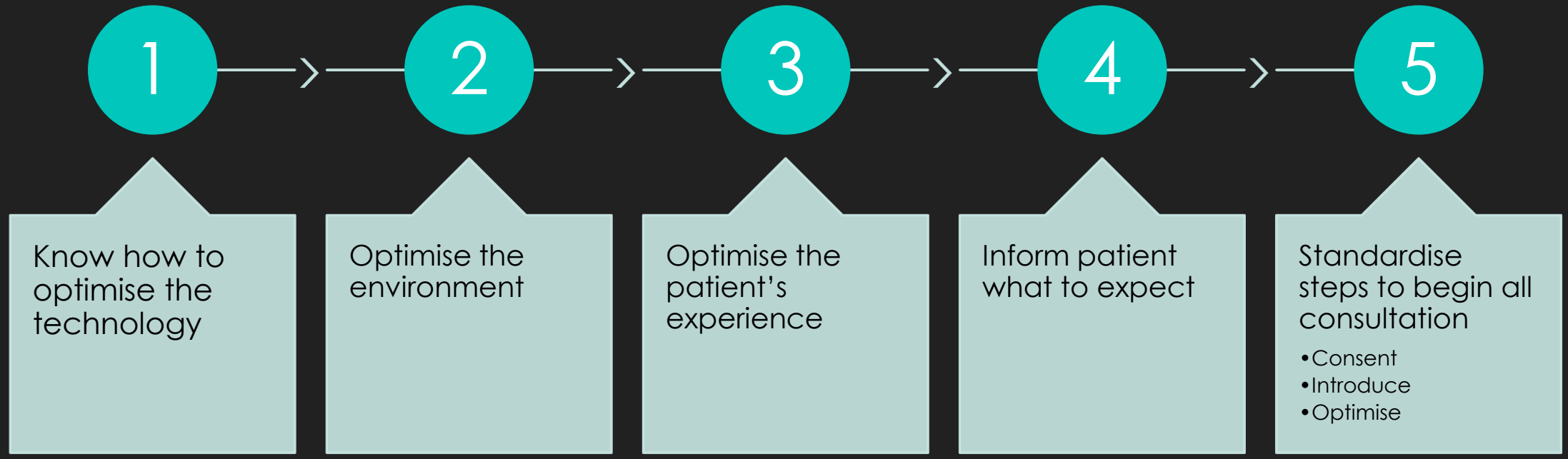


Patient Journey- Patient facing
Asked to put their complaint in 3 words



Algorithm in the background

The Consultation



Steps at start of the consult- good outcome

- Introduce yourself.
- Ensure that the carers can hear and see you.
- Confirm Name, DOB, Phone Number.
- Explaining the limitations of a virtual consult.
- Consent from all in the room and request to move into camera view
- Reassure if any technical difficulties we will call them.
- Adjust their camera, positioning, lighting.
- Once you are satisfied that you can communicate effectively, begin the consultation.

Standardize Assessment

- Acronym examinations for history
- Observations – using parents help and home devices
  - Video that explains the process
- Examination- Work of Breathing, Abdominal Exam, Rash.
  - Sharefile images or videos

Other steps in clinical safety

Initial consult with nurse – Level 2

- Triage
  - Rapid triage during times of surge.
- History and observations
- Nurses use the same template to evaluate patients
- Any abnormal vital signs must be reviewed by a consultant
- Escalation of care in T1&2
  - (1/3rd patients seen by nurse alone)

Our steps to ensure clinical safety

- Consultant review
  - Support each other and nursing staff
  - Repeated reviews in Virtual Ward
    - analgesia/antiemetic/ TOF
  - Facilitate same day reviews if required.
    - Priority Care Centers, GP, CAVUCS face to face booth
  - If requiring next day review
    - CAVUCS next day nurse or doctor follow up
    - Metropolitan Referral Unit

Disposition

- Self Care
- Priority Care Centres
- GPs
- Virtual “admission”
- ED referrals
- Next Day Reviews post Ultrasound/ Specialist review
- Direct Admissions to Ward/ WCH@Home

Clinical safety at discharge

- Discharge education
  - Discuss red flags,
  - Provide written communication and patient information sheets
  - Patient and GP receive the discharge summary on the day, with management plan

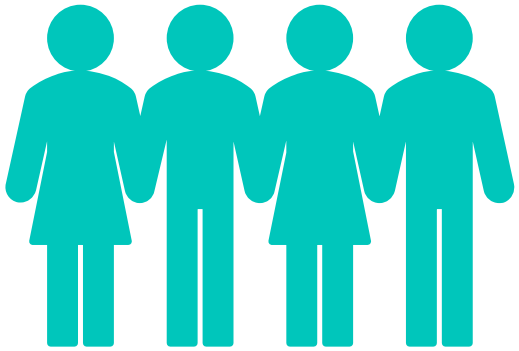
- COMMUNICATION
- COMMUNICATION
- COMMUNICATION

ADMIN STAFF

Book them and check the details

- Send Message Media links
- Share images via ShareFile
- Send Scripts to local pharmacy
- Keep track of inflow

Other Pathways of referral



Pathways to us

SAAS, GP, RLHN, Nurse led clinics phone

- Clinicians call the doctor on shift directly on our team phone.
- Paramedics, nurses, doctors from community or in rural Eds
- Together we come to a joint plan to manage the child
- Most often with a video consultation

Healthdirect

- Since October 24th 2023
- In the decision tree (while we are open and care within 2hours is needed)

Health Direct

- Since October 24th 2023 collaboration with Health Direct
- Consumer contacts Health Direct parent line
  - Assessed by Health Direct triage nurse – and put directly into our WR
- On average CAVUCS sees 250- 300 patients referred from Health Direct per month
  - Approximately 12% of those were being referred from CAVUCS to an ED.
  - Posed a new risk- we have mitigated.
  - Now decreased as we have introduced iApply for HD patients as well

PED to CAVUCS

Pulled to CAVUCS during surges

Next Day PED to CAVUCS

Examples

14yo boy

Boarder in Adelaide

Parents live interstate

Finger injury playing football

Requiring specialist intervention

Involve Mum in consult

Able to view images

Share decision making in real time

‘The Virtual Urgent Care Service provided me with the opportunity to be a part of my sons health care when he is over 3,000kms away, something that I haven't experienced before.’

Examples

- 2yo girl
- Not moving arm
- Screaming +++
- Assessed virtually
- Diagnosis of pulled elbow made
- No imaging required and treatment on side of road

"I am so thankful that this service exists, and we were able to avoid a trip to the Emergency Department."

Quality -Reassess

- Safe
- Effective
- Patient Centered
- Timely
- Efficient
- Equitable

Annual Audit Schedule

WCHN Child and Adolescent Virtual Urgent Care Service Evaluation Schedule 2022-2024

Audit/Evaluation	Scope	Resp	Method	Freq	2022												2023												2024											
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Standard 1 – WCHN Clinical Governance Framework, Culture and Safety & Quality Systems																																						
Risk Assessment/System Evaluation																																						
Strength of safety culture (1.1)	WCHN	CSQC	survey	2nd yrly																																		
Analysis effectiveness of Executive Leadership Walk-Round (1.1)	WCHN	SQU	survey	annually																																		
Evaluation of effectiveness of clinical committees (1.6)	WCHN	SQU	report	annually																																		
Evaluation of effectiveness of procedure & legislative compliance system (1.7)	WCHN	SQU	report	annually																																		
Strength of Risk Management system (1.10)	WCHN	SQU	eval	2nd yrly																																		
Assurance map of risks retired in prev 12 months (1.10)	WCHN	SQU	audit	annually																																		
Effectiveness of Incident management & Open Disclosure system (1.11& 1.12)	WCHN	SQU	report	2nd yearly																																		
Evaluation of staff feedback systems (1.1; 1.13)	WCHN	Dir SQU	report	3 yrly																																		
Child safe environment risk assessment (1.15) included in environementa	WCHN	EDNM	Self assess	3 ryl																																		
Analysis of demographic data to confirm population (1.15)	WCH	EDCS	report	Annuall y																																		
Effectiveness of WCHN Medical record system (1.16)	WCHN	IMTC	Risk assess	3yearly																																		
Evaluation of WCHN Orientation programs (1.19)	WCHN	CET	report	3 yearly																																		
Evaluation of WCHN Mandated training (1.20)	WCHN	CET	report	3 yrly																																		
Evaluation of PRD system (1.22)	WCHN	P&C	report	3 yrly																																		
Effectiveness of physical environment to minimise challenging behaviours (1.31)	WCH	WHSIM	report	3 yrly																																		
Compliance Auditing																																						
Compliance with NSQHSS Evaluation schedule (1.3)	WCHN	SQ Unit	report	6 monthly																																		
Compliance with high risk clinical procedures & SA Health Directives (1.28)	WCHN	SQU	Report to ARC	6 monthly																																		
Progress of WCHN SQ Plan (1.1)	WCHN	SQU	report	6 monthly																																		
Progress of WCHN Aboriginal Health Plan (1.2; 1.4)	WCHN	AHSC	report	6 monthly																																		
Compliance with maintenance of high risk clinical equipment & infrastructure (1.29)	WCHN	Corp Services	report	6 monthly																																		
physical environment audit	WCHN	ED PC EDNM	audit	annual																																		
Stakeholder Engagement – staff and consumers																																						
Staff understanding & use of SQ systems (1.25) staff survey	WCHN	SQU	survey	2nd yrly																																		
Way-finding signage (1.31)	WCHN	EDCS	Eval	annual																																		

Key:

Quality -Reassess

- Long Wait Times
- Sick patients slipping in
- Re-tweaking of iApply form
- Reviewing language
- Efficient
- Equitable

CAVUCS Dashboard - iapply

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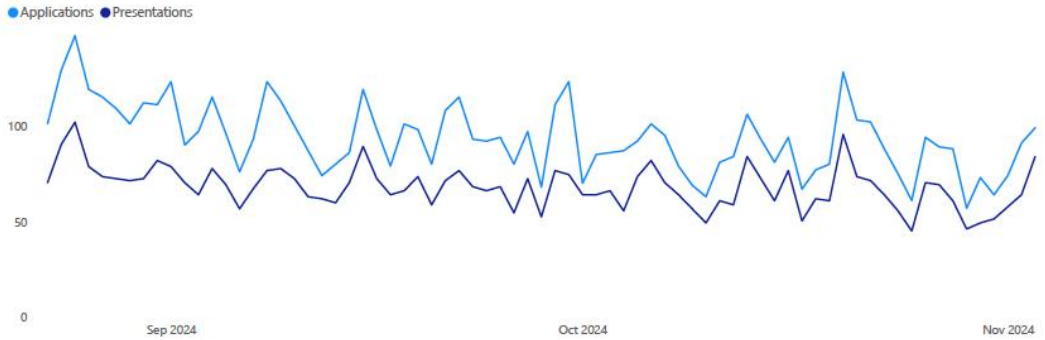
Clear all Filters | Reset Date Range

Date Range

From 23/08/2024 To 3/11/2024

6829 Applications

Applications



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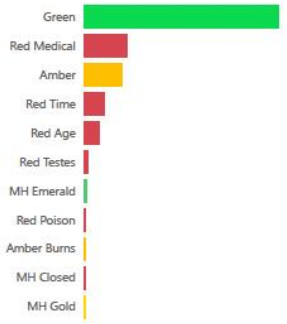
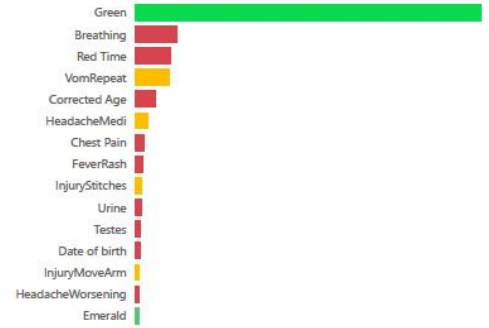


Form Outcome Reason



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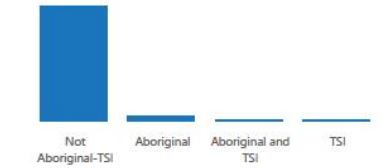

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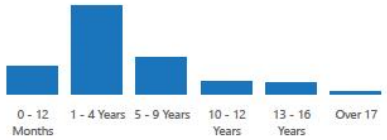
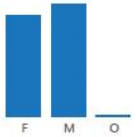
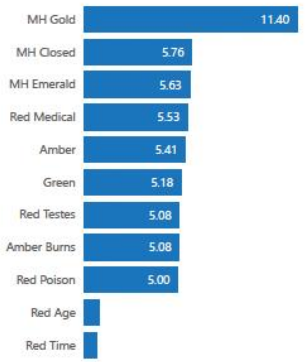


Sex



Average Time to Complete Form



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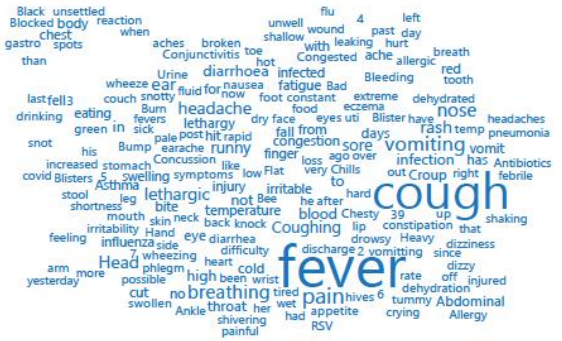
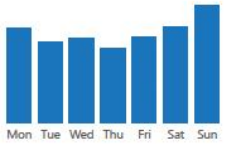


Day of Week



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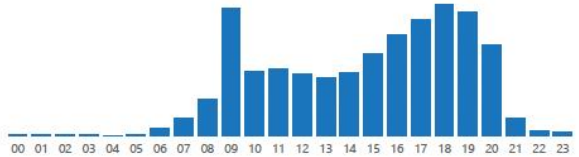

Health Direct

CAVUCS Dashboard - iapply

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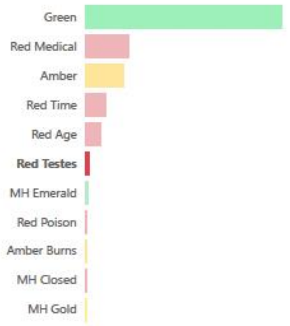
Date Range

From 23/08/2024 To 3/11/2024

63 Applications

Applications

Form Outcome



Form Outcome Reason

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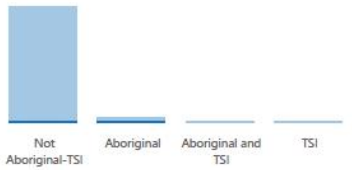

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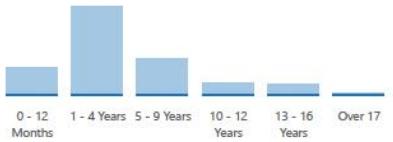

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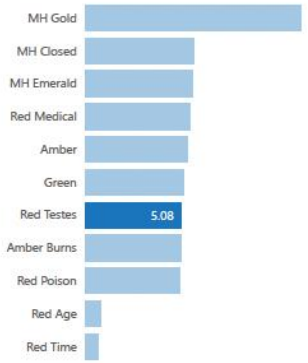

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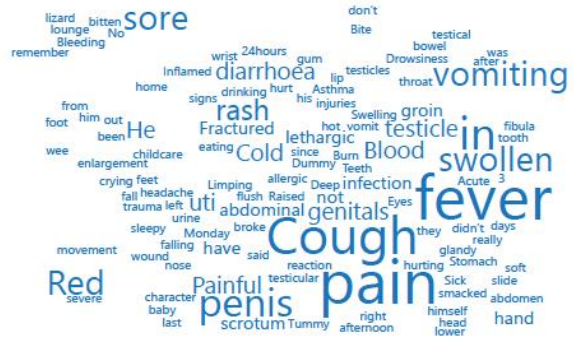

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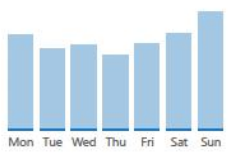

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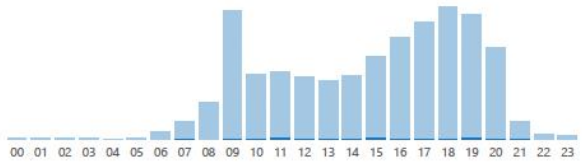


Health Direct

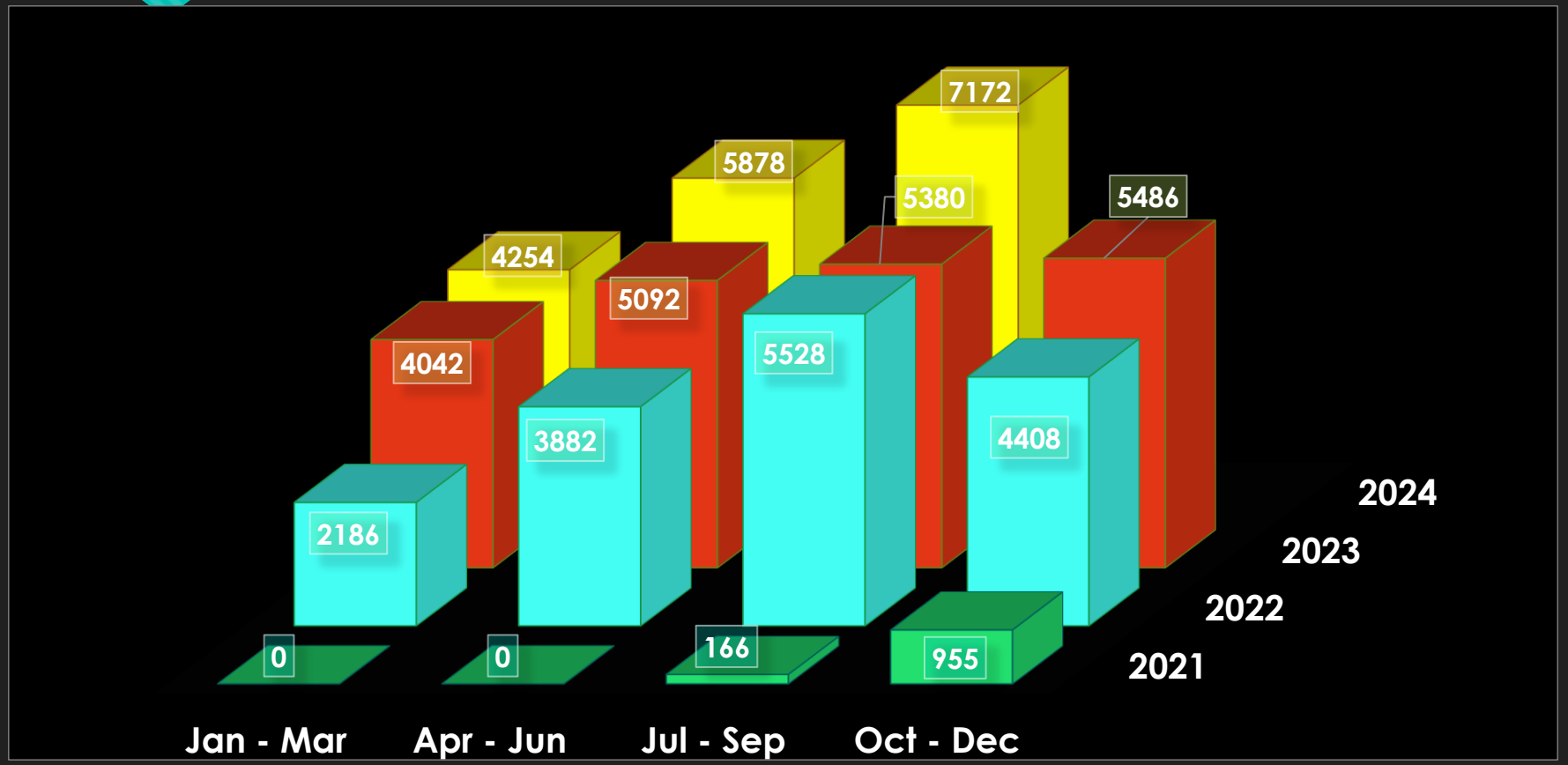
Key Outcomes to date:

54,846 consumers accessed CAVUCS	Around 50,949 able to avoid an ED
1,889 patients referred via SAAS	**1,743** able to avoid onward transport
Efficient	Average LOS **01:24 min**
16 incidents	**2 clinical, 3 Script related, 11 Breach of Privacy**
Positive consumer feedback ++	CSAT Score 91%

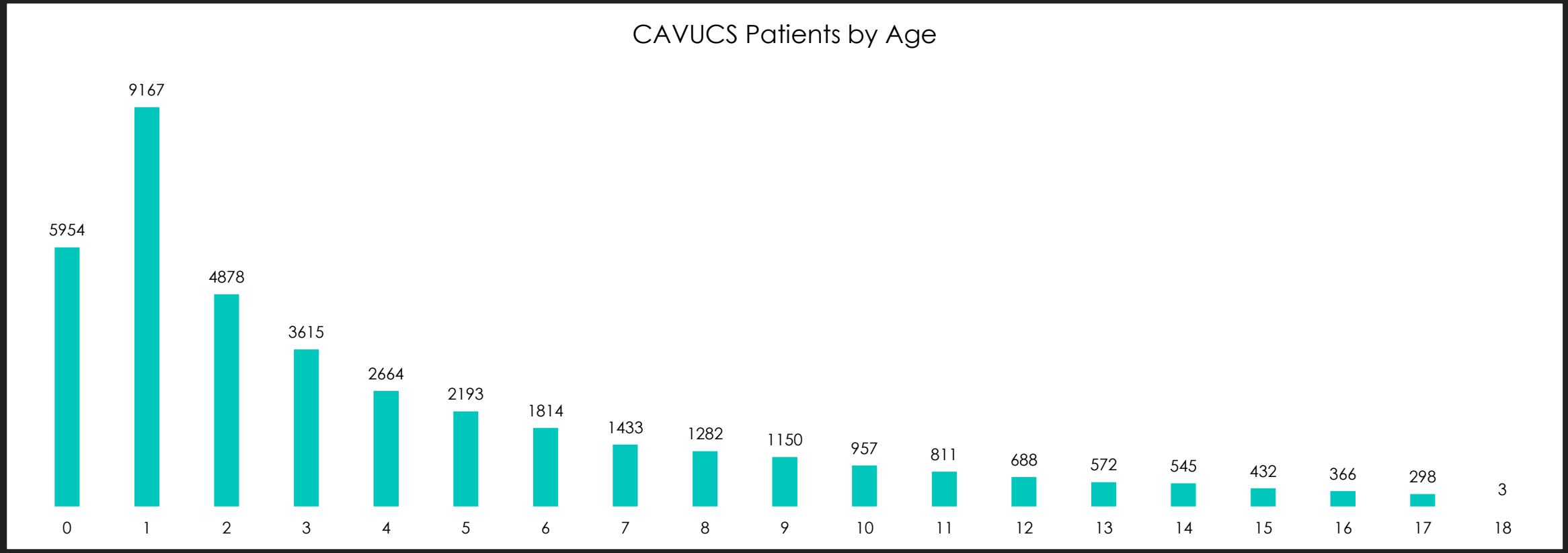
5 medication

Travel Distance saved- 6 times around the globe

CAVUCS Quaterly Presentations 2021 - 2024

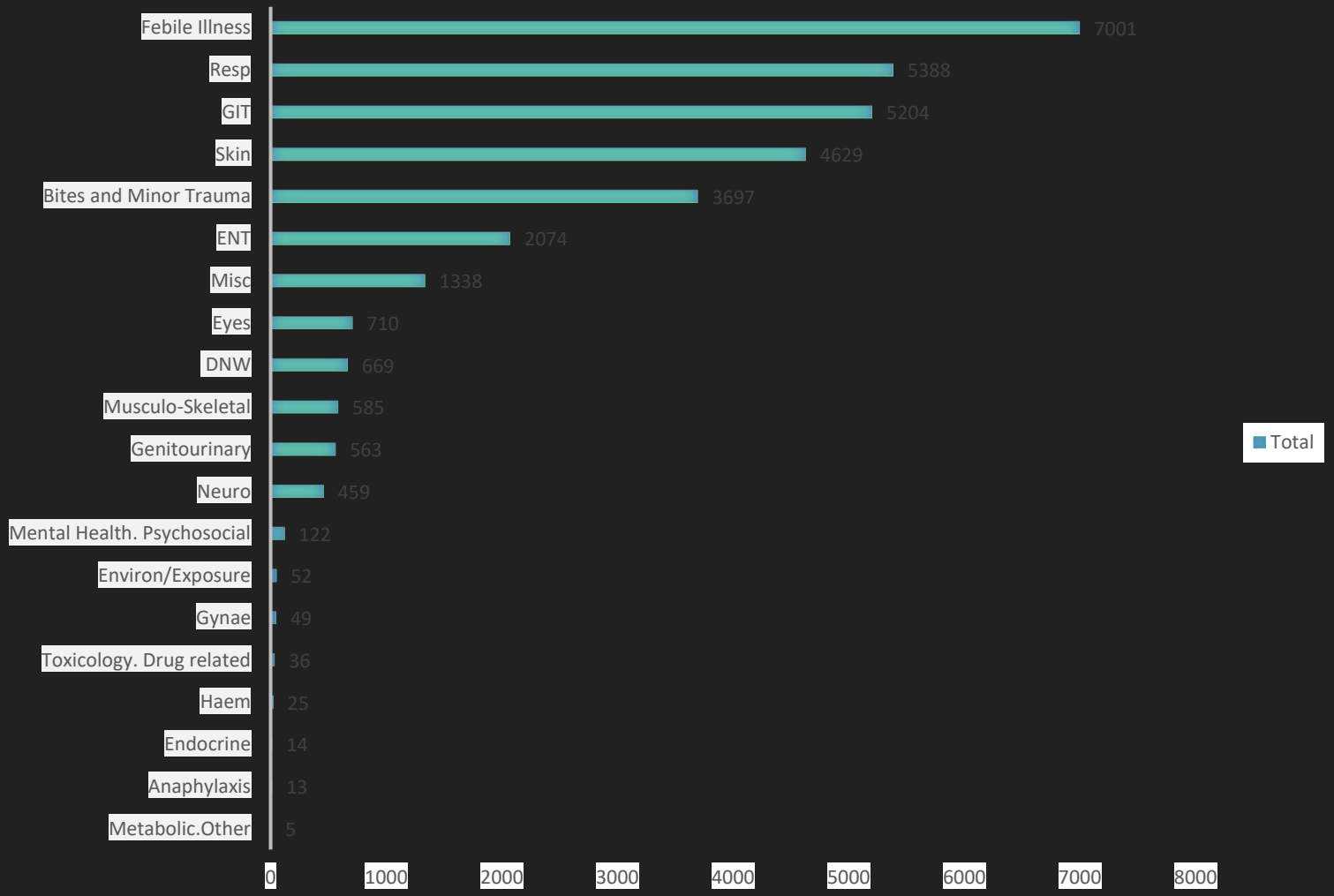


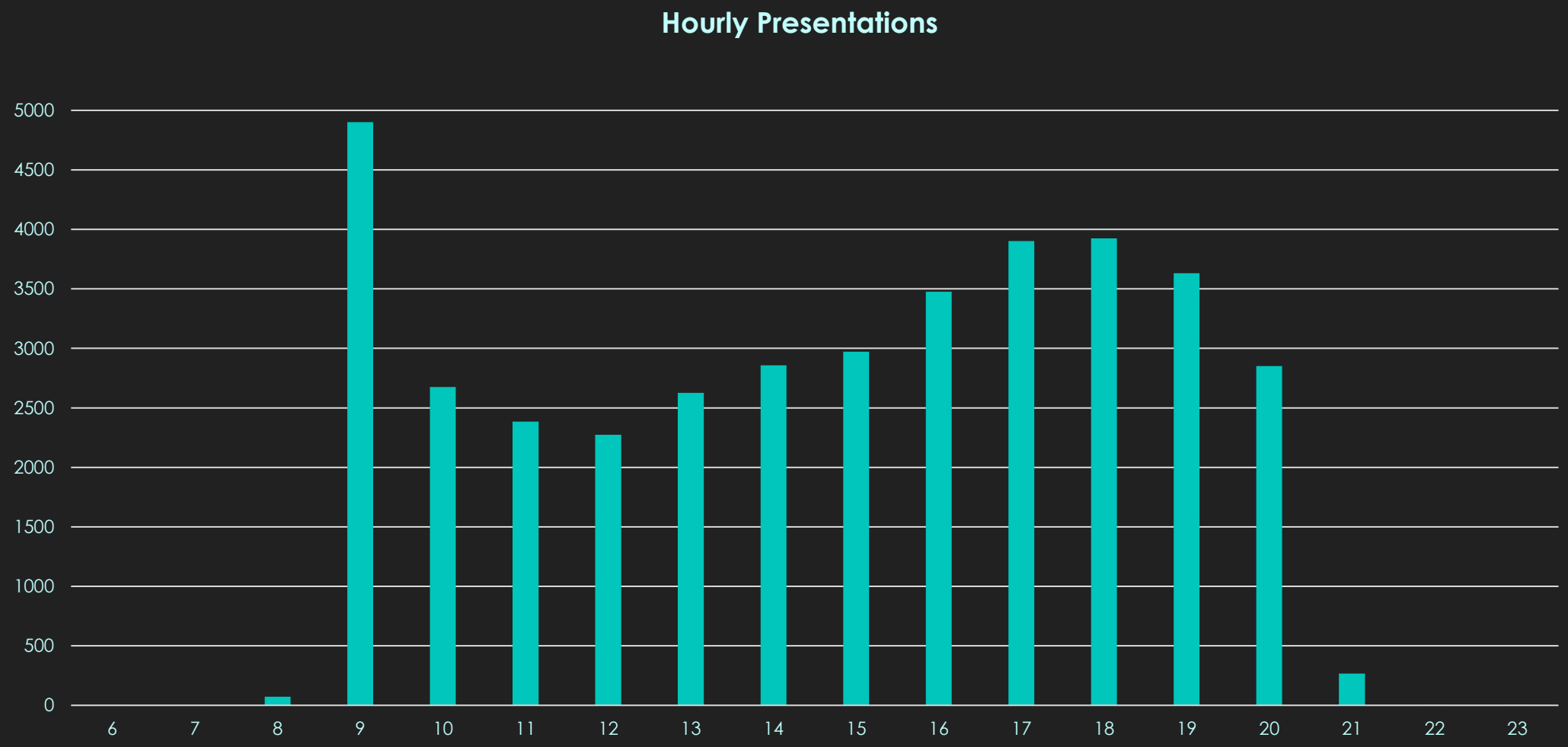
Total on 6/10/24 54,846



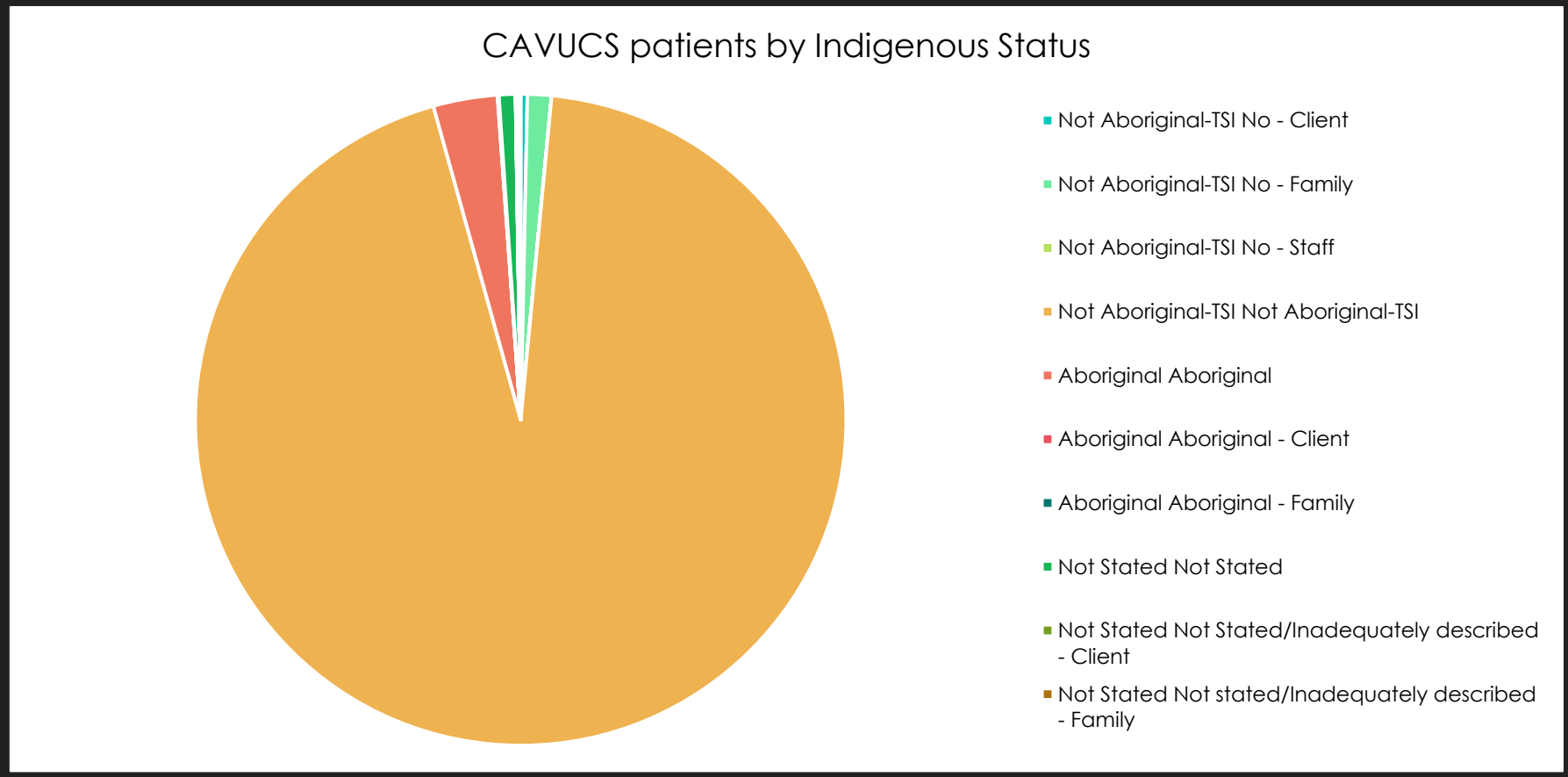
Age Distribution

CAVUCS BY PRESENTING COMPLAINT





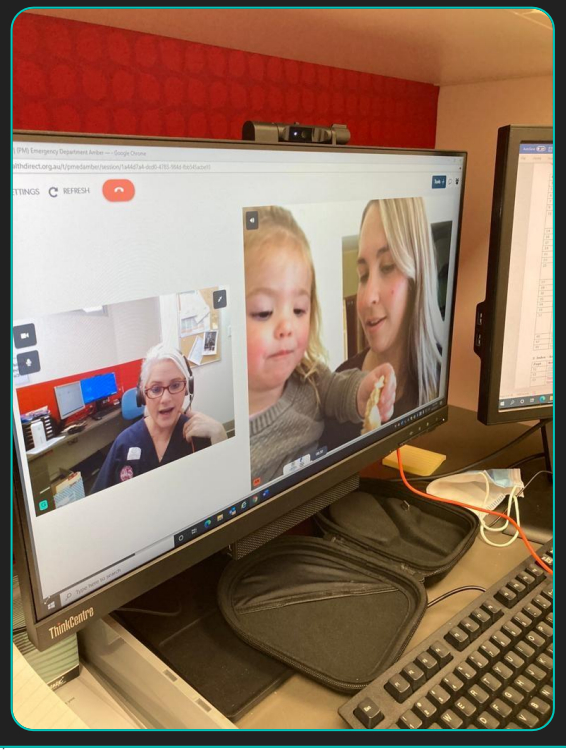
Hourly Presentations



ATSI Presentations

Since we started

- Introduced a face to face booth
- Partnership with Haem-Onc dept
- RPM through MRU and WCH@Home
- CAMHS CAVUCS pathway



CAMHS CAVUCS

- Low Acuity mental health presentations
- Direct from schools or community
- Non sectioned
- SAAS

Telehealth benefits from the consumers perspective

- Clinical support of non emergent presentations
- Reduce travel requirements
- Reduce need to present to ED
- Time saving for families
- Medical support for remote locations
- Early interventions
- Hospital avoidance
- Prevent Hospital admissions

FOR LHNS & ENVIRONMENT

- Less expensive
- Accessibility to paediatric advice
- Environment friendly- reduced carbon footprint
- Invest in RPM and Assessment methods for Nurse led clinics
- Support Hydration and Resp checks via RDNS/ MRU
- Facilitate direct admissions – bypassing ED

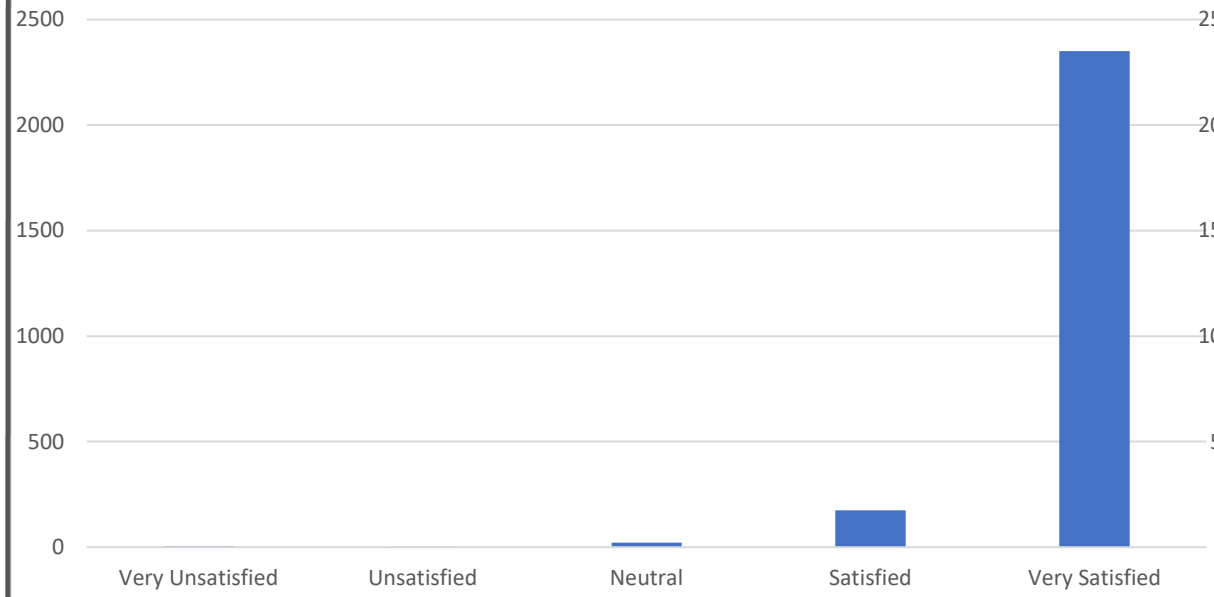
FOR HEALTH PROFESSIONALS

- Can work from home
- Longevity to career

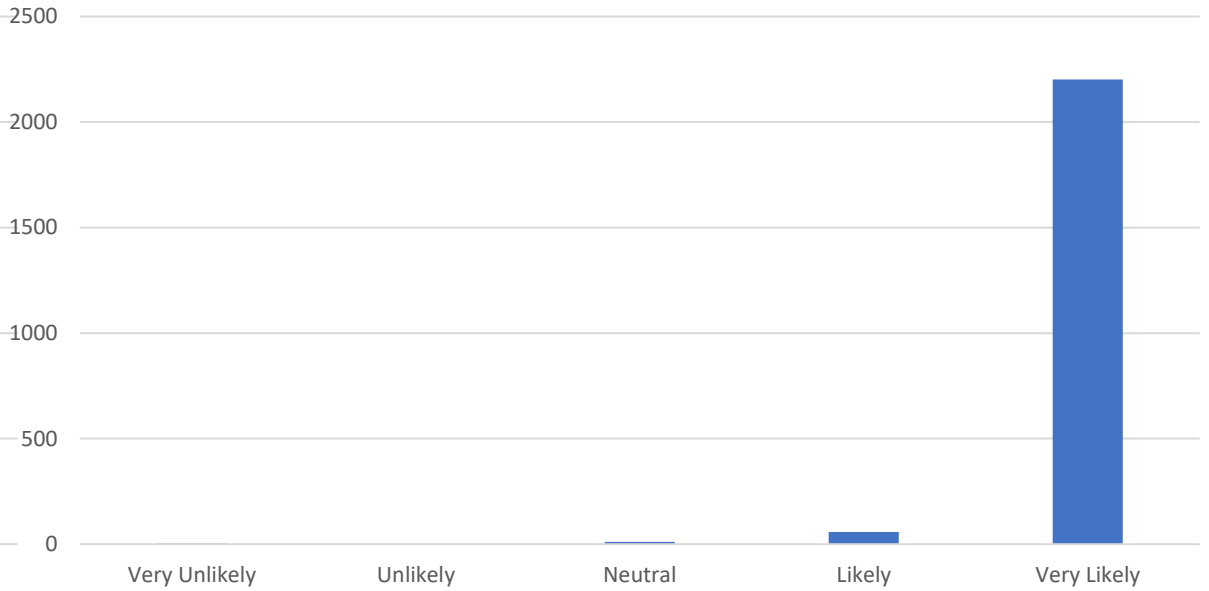
wch.sa.gov.au

Consumer Feedback Results

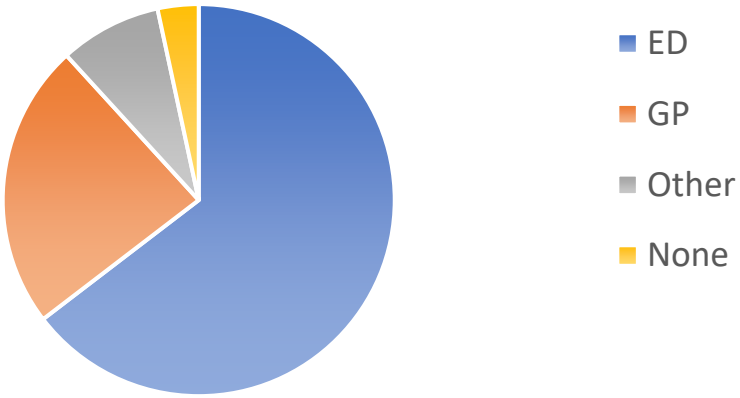
How Satisfied are you with the Virtual Service?



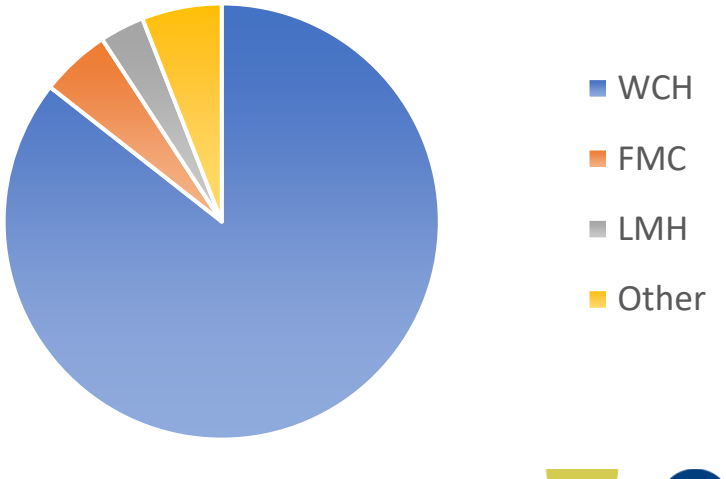
Would you use the Virtual Service again?



If you hadn't accessed the Virtual Service where would you have gone to seek help?



Which ED would you have presented to?



CSAT score 91%

SCORE 0%-40%- MAJORITY OF CONSUMERS ARE UNSATISFIED

SCORE 40% - 60% - SOME ROOM FOR IMPROVEMENT

SCORE 60%- 80% - GOOD STANDARD (>77% IS GOOD)

SCORE ABOVE 80% - HIGHLY SATISFIED CONSUMERS

WCHN benchmark is 88%

Consumer Feedback & Experience

- *'Loved it. Consider extending your hours'*
- *'Such a relief to be seen in a timely manner by a lovely nurse who put us at ease'*
- *'Great service. Saved us a trip to the city and now we know what to do with any complications. Very helpful'*
- *'We received excellent advice from the nurse'*
- *'Why wasn't this service started sooner'*
- *'Doctor was fantastic. She didn't rush me and was patient'*
- *'Great service for autistic children who cannot be in busy, loud environments'*
- *'Great for a child in home quarantine with anxiety issues – saved a trip to ED!'*
- *'Will definitely use the service again'*
- *'Fantastic experience. Very useful service for a child with immunodeficiency'*
- *'Awesome initiative'*
- *'Saved us a long night in ED'*
- *'The team went above and beyond'*
- *'So grateful for this service'*

Questions?