

Health Roundtable Imaging Innovations

20 July 2022



Acknowledgement

We acknowledge the Traditional Owners of the lands on which we are meeting today.

We pay our respects to their Elders, past, present and emerging, and any Elders from other communities who may be here today.



Health Roundtable Program Lead



Steve Bickford

Program Lead

Emergency, Surgical Journey, Imaging & Allied Health

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Email: steve.bickford@healthroundtable.org

LinkedIn: <https://www.linkedin.com/in/steve-bickford-0204b2a/>

Background

- Radiographer
- Director of Medical Imaging
- Divisional Director of Critical Care & Perioperative Services
 - Allied Health
 - Emergency
 - Imaging
 - Surgery & Perioperative
 - Intensive Care
- Consultancy
- Health Roundtable



The Health Roundtable CRMS



Charles Dinnell

New South Wales & ACT



Alex Carrasco

Queensland



Elizabeth Norman

New Zealand



Josh Gladstone

Victoria and Tasmania



Ryan Teague

South Australia



Pam O'Nions

Western Australia and Northern Territory

About the Health Roundtable



25+ Years



Not for profit



200+ Hospitals



Member Driven



Data & Analytics



**Benchmarking
for improvement**



Shared Innovations



Collaboration



Honour Code

Members agree not to distribute Health Roundtable Data or reports identifying any member to non-members without the unanimous consent of all those identified, unless required by law.

Members shall not criticise the performance of other member hospitals or use any information to the detriment of a fellow member.



About the Health Roundtable

Each hospital submits emergency, inpatient, outpatient and other Casemix data and receives a suite of benchmarked **Core** reports as follows:

- Executive Briefings
- KPI Performance Indicator Reports
- National Standards Indicator Reports
- Inpatient Briefings by Department and DRG
- Hospital Acquired Complication Reports
- Outpatient Reports

Each hospital member can additionally join several **Programs** such as:

- Finance & Costing
- Sub-acute Care
- Allied Health
- End of Life
- HITH
- **Imaging**
- Maternity
- Medical Patient Journey
- Medication Safety
- Nursing
- Paediatrics
- Surgical Journey
- Integrated Care
- Emergency Care
- Patient Blood Management
- Workforce Wellbeing
- Mental Health
- Patient Safety
- Trauma
- Organisational Culture



Programs Overview

What do the Health Roundtable Programs do?

- ✓ Flexible Analytical Dashboards
- ✓ Dashboard Onboarding
- ✓ Workshops & Webinars
- ✓ Innovation Archive
- ✓ Networking & Collaboration
- ✓ Customised Briefings



Imaging Content for 2022

Webinar 1: 20 July 1300-1430pm AEST

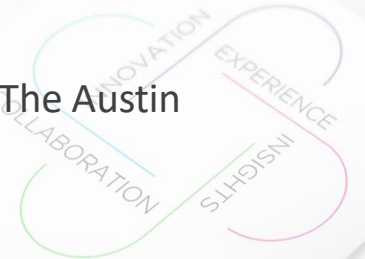
- Innovation Sharing by Members

Face to Face workshop: 18 & 19 August 2022

Themes:

- | | |
|--|------------------------------------|
| i. AI-supported radiology reporting | Prof Meng Law / Dr Warren Clements |
| ii. Managing Shortages of Critical Resources | Michael Rice / Dr Dani Ko |

The Alfred
Qld Health / The Austin





Innovation Sharing by Imaging Members

Agenda

Our presentations today are as follows:

Get well soon Mike.
Maybe at the Workshop?

- ~~Michael Neep~~ ~~Logan~~ ~~Radiographer Clinical Assessment~~ ~~Prof Development~~
- Ben Rowney PAH Urodynamics for Spinal Injuries Patients Clinical
- Michael Huynh Austin High-level Disinfection of Transducers Safety
- Ben Morgan Alfred Using PowerBI to solve problems Data Integrity
- Poonam Kumar Townsville Increase 24/7 Onsite Capacity Leadership
- Nicole Hosking Austin Role-based Communication app Hospital Quality



Health Roundtable

Imaging Program Innovation Session

20th July 2022

Solving a 40-year issue. The implementation of a radiographer clinical assessment to improve the quality of medical imaging requests

Organisation Name: Logan Hospital, Metro South Health

Presenter's Name: Michael Neep

Phone: 3299 8040

Email: Michael.neep@health.qld.gov.au

Add hospital logo



Key Problem

- Since the 1980's clinical history on request forms have been questioned (Maizlin & Somers, 2020)
- 30 - 77% of medical imaging examinations are considered inappropriate or unnecessary (Malone et al, 2012)
- Incorrect/ incomplete information on medical imaging requests causes more than half of patient safety and handover error incidents (Kruse et al, 2016)

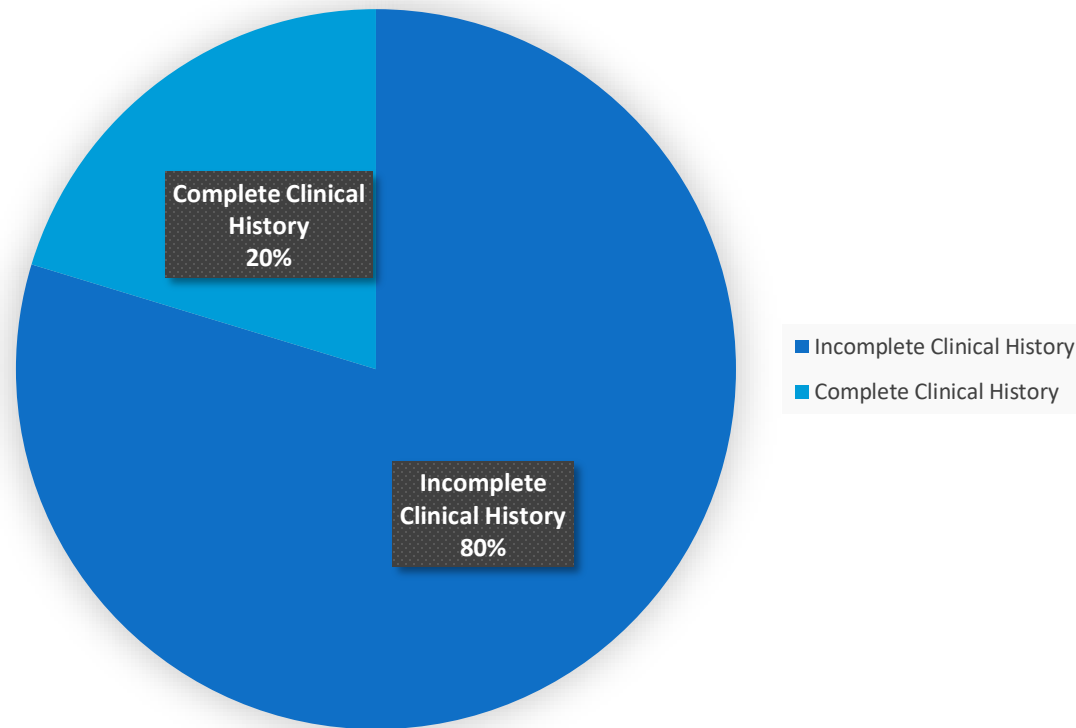


Aim of this Innovation

- To improve the quality of clinical details documented on a medical imaging request



Baseline Data / Current Situation



Percentage of requests with complete and incomplete clinical history (n=400)



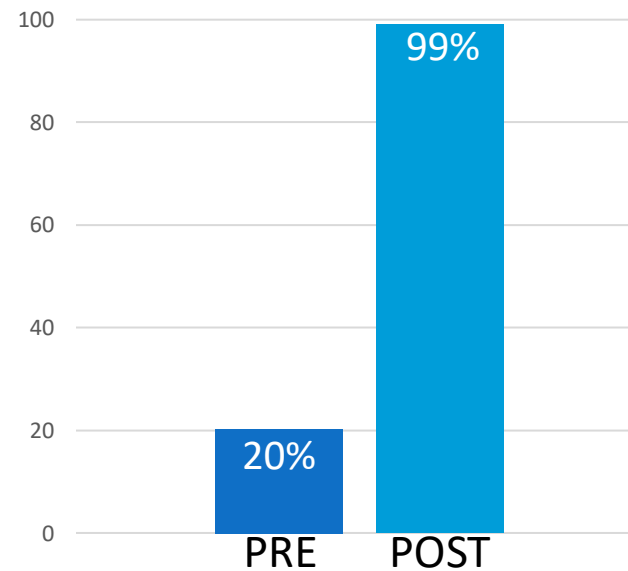
Key Changes Implemented

- Developed Work Instruction – Radiographer Clinical Assessment (RCA)
 - RCA involves the radiographer obtaining the following information from the patient immediately prior to imaging:
 - Mechanism of injury
 - Time of injury
 - Site of maximum bony tenderness
- Developed supporting education
- Implemented RCA
- Evaluated trial



Outcomes so far

Percentage of requests with complete clinical history Pre and Post RCA implementation (n=800)



- Due to the success of the trial, this quality improvement initiative was permanently implemented.



Lessons Learnt

- The implementation of an RCA improves the quality of x-ray requests.
- This is likely to have a positive impact on the patient pathway and overall patient care.



Innovation Summary Slide



Title: Solving a 40-year issue. The implementation of a radiographer clinical assessment to improve the quality of medical imaging requests

Health Service: Logan Hospital

Problem	Requests for medical imaging are the primary communication tool between clinicians and radiologists when ordering imaging studies. For the past 40 years, the quality of clinical details on request forms has been questioned. . It is not uncommon to see requests that supply insufficient clinical information, for example, “Trauma, rule out abnormality”. Such requests can have detrimental effects including diagnostic errors and reduced quality of radiology reports.
Solution	Implement a Radiographer Clinical Assessment (RCA) to improve the quality of clinical details documented on a medical imaging request. An RCA is a system of documenting necessary additional clinical information on a medical imaging request, to assist the radiologist and ensure appropriate patient imaging ensues.
Outcomes	Implementation of a Radiographer Clinical Assessment improves the quality of x-ray requests and this in turn is likely to have a positive impact on patient care. Due to the success of this trial, this quality improvement initiative was permanently implemented.



Insert image caption here



Health Roundtable

Imaging Program Innovation Session

20th July 2022

Urodynamics and Spinal Cord Injuries

**Organisation Name: Princess Alexandra Hospital
Queensland Health**

**Metro South
Health**



**Queensland
Government**

Presenter's Name: Ben Rowney

Phone: 0731762257

Email: ben.Rowney@health.qld.gov.au



Princess Alexandra Hospital



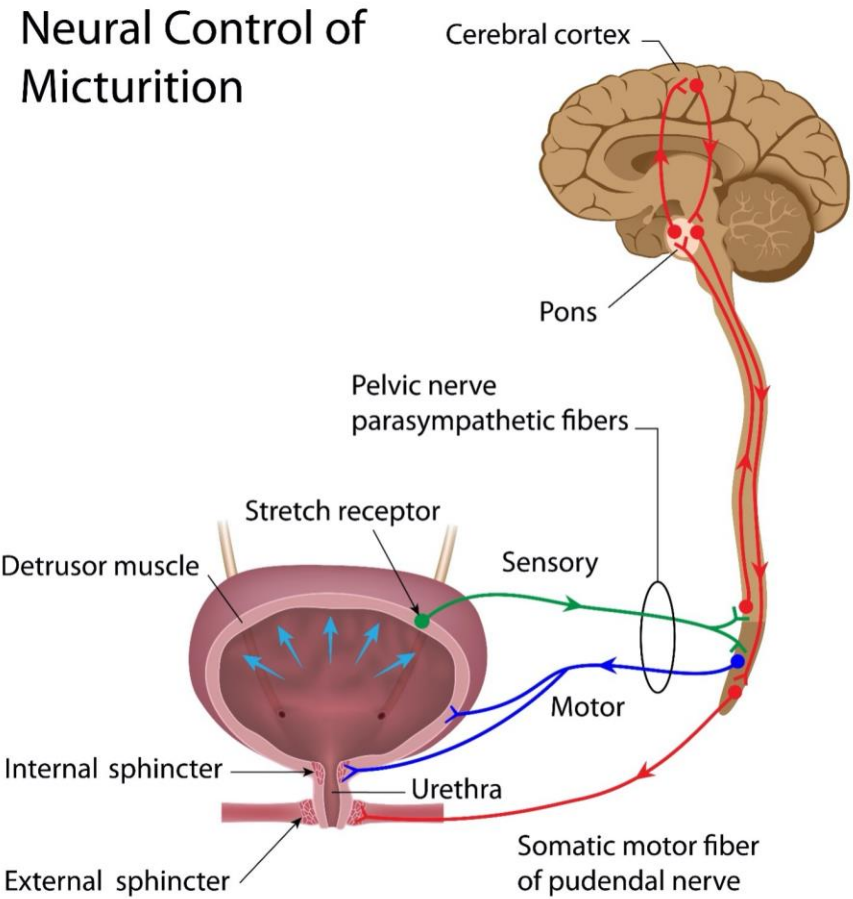
- Spinal Injuries Unit
- Urology Unit
- Medical Imaging Department



Spinal Cord Injury and Urological Pathology

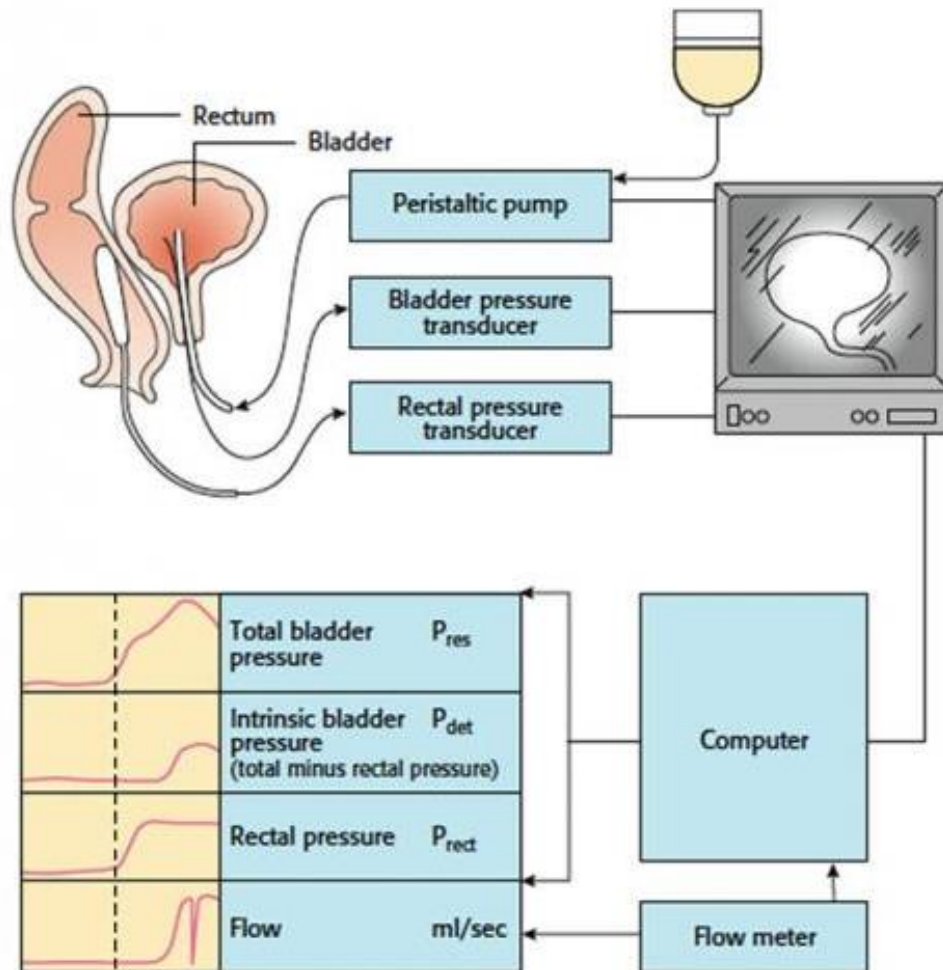
	Detrusor/-Sphincter function	Clinical symptoms	
	D; S	Urgency, urge incontinence	SSL
	D; S	Unaffected bladder function Urgency, incontinence Incomplete voiding	SL
	D; S	BCR: + AST: +	
Sacral cord Sacral roots Pelvic and Pudendal ns.	<u>D</u> ; <u>S</u>	Unaffected bladder function incontinence (stool&urine) Incomplete voiding Urinal stress incontinence	ISL
	<u>D</u> ; <u>S</u>	BCR: - AST: -	
	D ; <u>S</u>		

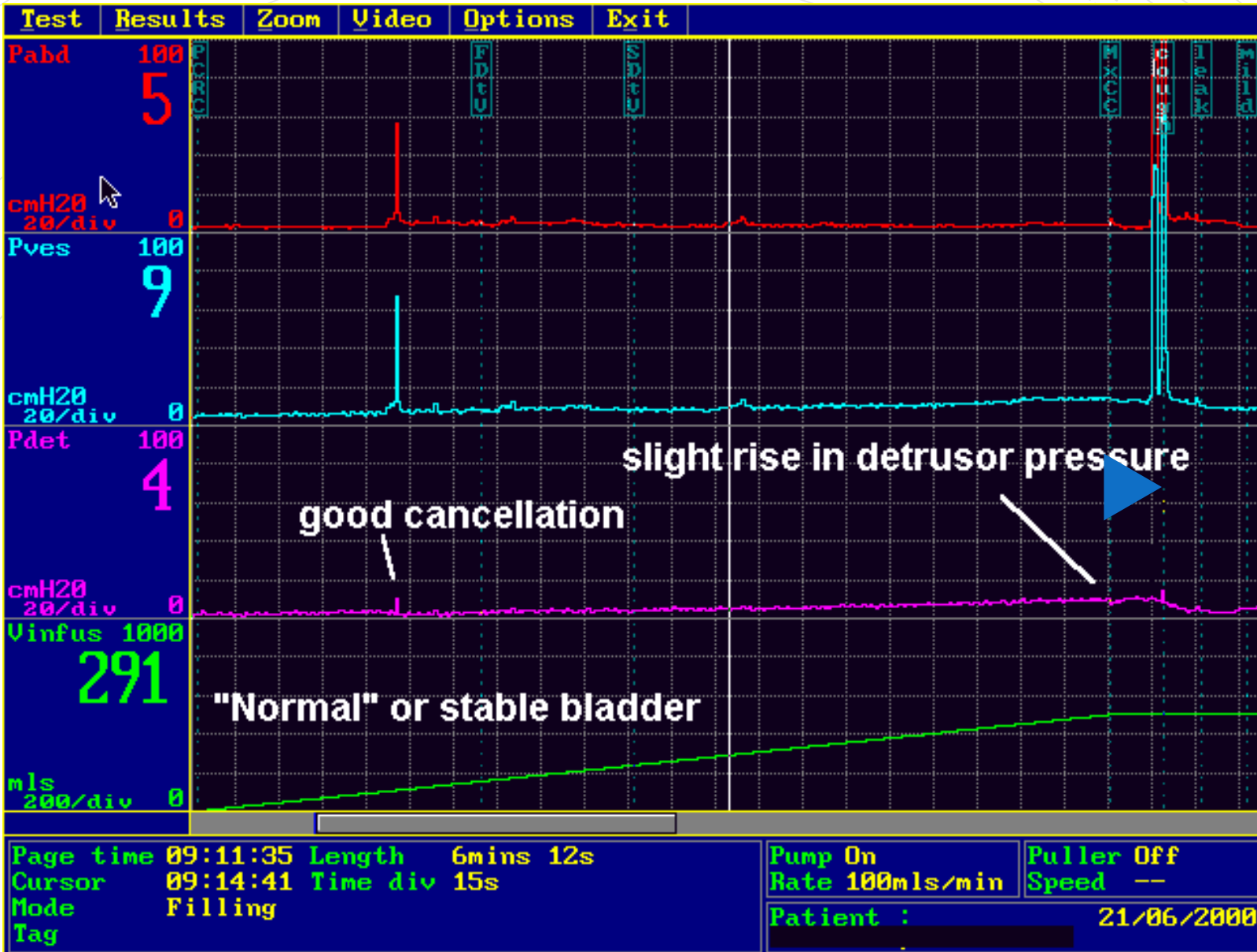
Neural Control of Micturition



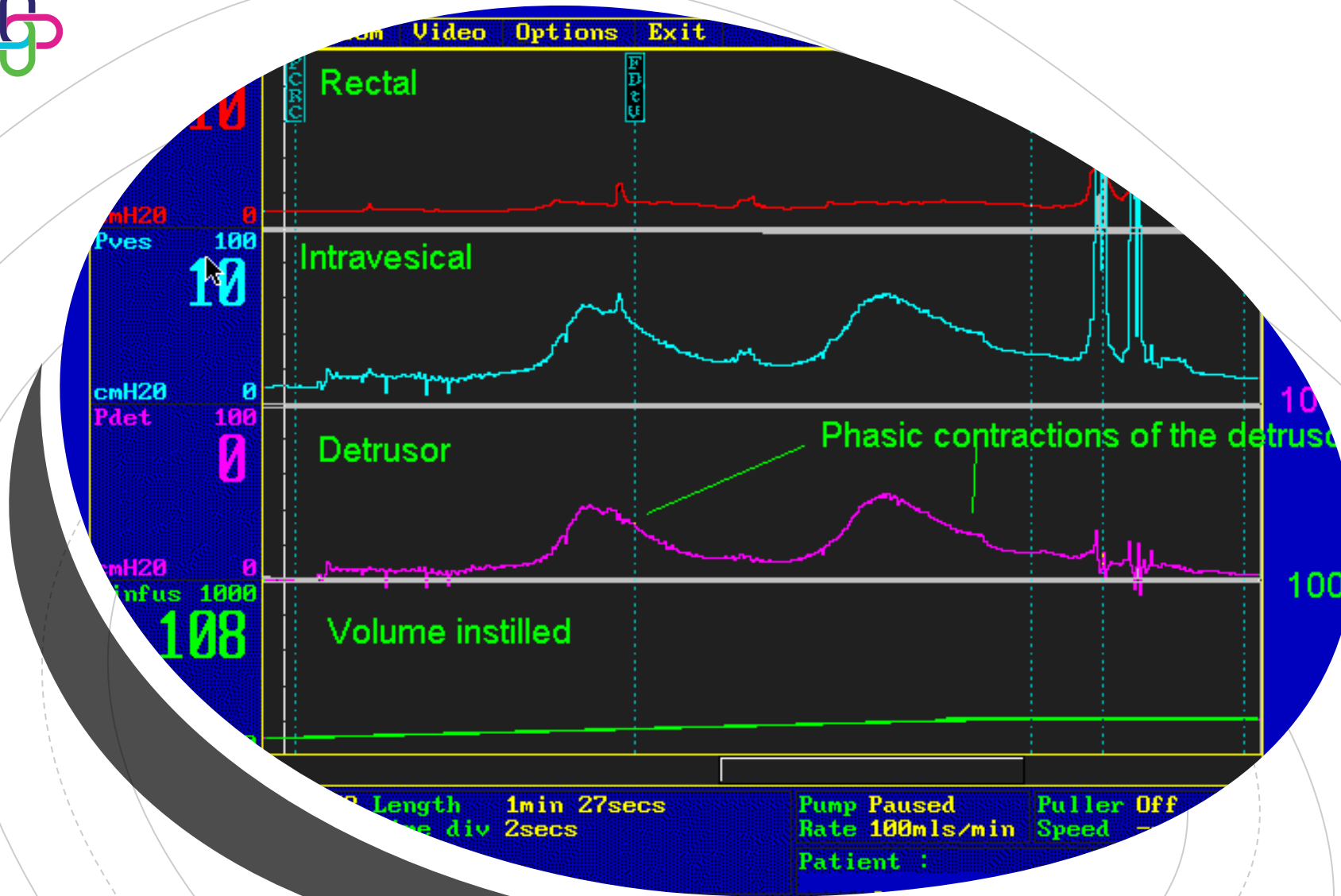


Urodynamic Test





Stable Bladder



Detrusor
Overactivity



RIGHT



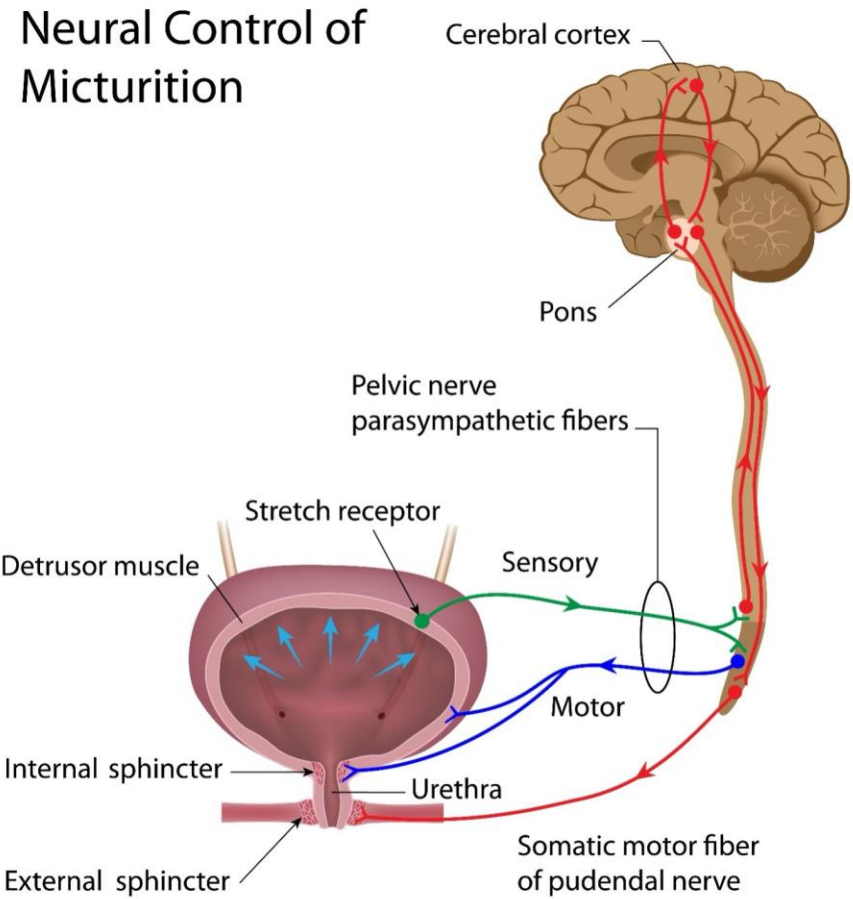
Reflux



Spinal Cord Injury and Urological Pathology

	Detrusor/-Sphincter function	Clinical symptoms	
<p>PMC</p> <p>Sacral cord</p> <p>Sacral roots</p> <p>Pelvic and Pudendal ns.</p> <p>Deterioration of the upper urinary tract</p>	D; S	Urgency, urge incontinence	SSL
	D; S	Unaffected bladder function Urgency, incontinence Incomplete voiding	SL
	D; S	BCR: + AST: +	
	<u>D</u>; <u>S</u>	Unaffected bladder function incontinence (stool&urine) Incomplete voiding Urinal stress incontinence	ISL
	<u>D</u>; <u>S</u>	BCR: - AST: -	
	D; <u>S</u>		

Neural Control of Micturition





Lessons Learnt






Innovation Summary Slide



Title: Urodynamics and Spinal Cord Injuries **Health Service:** PAH, QLD Health

Problem	Spinal Cord Injury patients have higher morbidity as a result of undiagnosed and untreated urinary tract pathologies. Spinal Cord Injuries are inherently complex and may partially allow the integration and modulation of complex micturition signals at multiple levels of the nervous system. Multiple level injuries coexisting often result in unpredictable mixed voiding dysfunction that cannot be assessed with static testing.	
Solution	Urodynamics is a valuable diagnostic tool for functional urology assessment with sensitivity to detrusor and or sphincter dysfunction. It provides valuable insight into dynamic analysis of patients with spinal cord injury, and can enable preventative medical intervention into urological dysfunction. The history and physical examination alone cannot determine the type of bladder and sphincter function in a person with a spinal cord injury. The only reliable and reproducible test is a complete urodynamic study for specific identification of dysfunction and pathological involvement.	
Outcomes	<p>New service established as a multidisciplinary partnership between Spinal Injuries Unit, Urology Department and Medical Imaging Department.</p> <p>Improved patient outcomes for a vulnerable cohort.</p>	

Metro South
Health



Queensland
Government

Health Roundtable
Imaging Program Innovation Session
20th July 2022

ETMS: Austin's Electronic Solution for AS4187 High Level Disinfection Documentation



Organisation Name: Austin Health


Presenter's Name: **Michael HUYNH**

Phone: **03 9496 2264**


Email: **Michael.huynh@austin.org.au**



Key Problem



ACIPC
Australasian College
for Infection Prevention and Control



ASUM
Promoting Ultrasound Excellence

Guidelines

Guidelines for Reprocessing Ultrasound Transducers

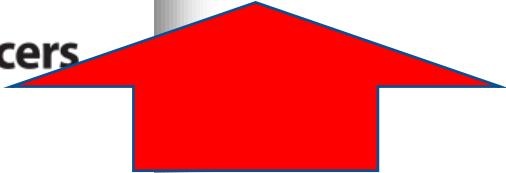
The Australasian Society for Ultrasound in Medicine (ASUM) is the leading multidisciplinary medical ultrasound society advancing the clinical practice of diagnostic medical ultrasound for the highest standards of patient care in Australia and New Zealand. The Australasian College for Infection Prevention and Control (ACIPC) is the peak body for Infection Prevention and Control professionals in the Australasian region focused on promoting education and evidence based practice outcomes for a healthy community. This document was developed collaboratively by ASUM and ACIPC to establish nationally accepted guidelines for reprocessing ultrasound transducers. The requirements in these guidelines have been based on the standards of AS/NZS4187:2014 and AS/NZS4185:2006.¹ These guidelines must be used as the minimum standard of practice for reprocessing ultrasound transducers and considered to be best practice at the time which they were issued.

1.1 Scope and target audience

The Guidelines for Reprocessing Ultrasound Transducers provides recommendations for the cleaning and disinfection of all medical ultrasound transducers and any additional equipment that may be utilised during the procedure, such as the keyboard and ultrasound gel. These guidelines are recommended for all individuals directly or indirectly involved with medical ultrasound.

Abbreviations

ACIPC	Australasian College for Infection Prevention and Control
ARTG	Australian Register of Therapeutic Goods
AS/NZS 4815:2006	Australian/New Zealand Standard for the Office-based health care facilities and the Reprocessing of reusable medical and dental instruments



8000%



Key Problem

Medical Records

Austin HEALTH

Antigermix Reprocessing Record

U/R Number: _____
Surname: _____
Given Name(s): _____
Date of Birth: _____

AFFIX PATIENT LABEL HERE

Device Type: ☐ US ☐ TOE ☐ Nasoendoscope

Serial Number of Nasoendoscope only: _____

1. Clinician using or assisting with the device

Name (print): _____ Profession: _____
Signature: _____ Date: _____ Time: _____

Location (dept) of where the device was used: _____
Prior to use an Antigermix reprocessing sticker was present on device ☐ Yes ☐ No
If yes, place sticker on the reverse side of the form.
If no, complete reprocessing prior to use and place sticker on the reverse side of the form.

2. Pre-clean / Low-level Disinfection Immediately after use

Remove and dispose of probe cover if used ☐ Yes ☐ No
Wipe off all residual gel ☐ Yes ☐ No
Wipe probe with Cintel wipe from handle to tip (TOE & Scopes) ☐ Yes ☐ No
Cil: Wipe probe with Cintel wipe from patient end to handle ☐ Yes ☐ No
Wipe handle, and where applicable ☐ Yes ☐ No
Cont. console, and probe holder with additional Cintel wipe ☐ Yes ☐ No
Clean screen with the manufacturer approved wipe ☐ Yes ☐ No

Name (print): _____ Signature: _____ Date: _____ Time: _____

3. Transport to Antigermix Reprocessing Room

Device transported to Antigermix reprocessing room: _____ Location: _____
Name(print): _____ Signature: _____ Date: _____ Arrival Time: _____

4. Reprocessing with Antigermix

Reprocessing start time: _____
Is the start time longer than 30 minutes since device transported to room? ☐ Yes ☐ No
If yes, complete Delayed Clean:

Wipe the probe with a Matrix wipe, ensuring that all surfaces are dampened ☐ Yes ☐ No
Allow to dry ☐ Yes ☐ No

Reprocessing:

Visual inspection of device for damage completed. Was there any damage? ☐ Yes ☐ No
If yes, provide details below, then report to manager after reprocessing completed:

Antigermix Cycle completed successfully ☐ Yes ☐ No
If no, attach sticker on reverse side and complete additional cycle successfully ☐ Yes ☐ No

Name(print): _____ Signature: _____ Date: _____ Time: _____

ALL reprocessing steps & form were completed by the same person, only section 4 requires a signature.



InfoMedix - Clinical Patient Folder - Internet Explorer

TEST, TESTING TEST

URNO: 1234567 (AH), Sex: M, DOB: 01-Jan-1998

Filter: ALL

Page Description Date

3 Antigermix Reprocessing R... 25-Sep-21

2 Progress Note CARD 31-Aug-18

1 Progress Note PAIN 31-Aug-18

Items 1-3 (of 3)

1 of 1

Austin HEALTH

Ultrasound Transducer Reprocessing Record

1. Staff using or assisting with the device

Name: Michael H. Topham
Profession: Sonographer
Date/Time: 25-Sep-2021 09:34 AM

Device Type: Ultrasound Transducer
Serial Number: 18000000
Location: Austin - Diagnostic US

2. Pre-Clean/Low-level Disinfection immediately after use

Have you performed the following:

Remove and dispose of probe cover ☐ Yes ☐ No
Wipe off all residual gel ☐ Yes ☐ No
Wipe probe with Cintel wipe from handle to tip (TOE & Scopes) ☐ Yes ☐ No
OK ☐ Yes ☐ No
Wipe probe with Cintel wipe from patient end to handle ☐ Yes ☐ No
Wipe cont. console and probe holder with additional Cintel wipe ☐ Yes ☐ No
Clean screen with the manufacturer approved wipe ☐ Yes ☐ No

If YES, First name and date below

Name: Michael H. Topham Date/Time: 25-Sep-2021 09:35 AM

3. Transport to Reprocessing Room

Device transported to reprocessing room: N/A

4. Reprocessing with Antigermix (DN 10020-018)

Delayed Clean: N/A

Reprocessing Start time: 25-Sep-2021 09:35 AM

Reprocessing Finish time: 25-Sep-2021 09:36 AM

Nanoquant: Batch No. A101001 / Expiry Date: Jan/2023

Chemical Indicator: Batch No. 2010421 / Expiry Date: 14-Nov-2021

Chemical Indicator: PASS / Indicator: PASS

Name: Michael H. Topham Date/Time: 25-Sep-2021 09:36 AM

Comments:

Successful reprocessing before use

AS1

Antigermix AS1 Reading

Wipe off all residual gel

Date: Hour: 25/09/2021 - 19:34:21

Probe ID: 18000000

Cycle type: Cycle 1

Disinfection: Success

Dose: 2.300 GJ

Counters: Daily - An: 18 - 2210

User:

25-Sep-2021 09:37 / AG0237_2021-09-25-09-36-25.jpg

Austin Topham (DN 10020-018)

Successful reprocessing after use

25-Sep-2021 09:37 / AG0237_2021-09-25-09-36-25.jpg

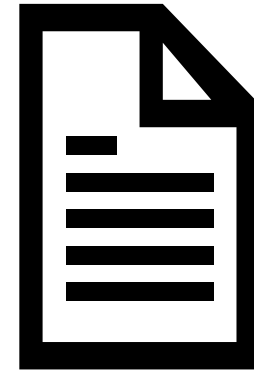
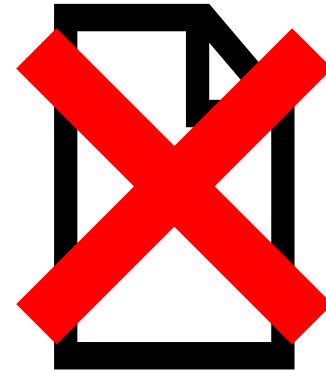
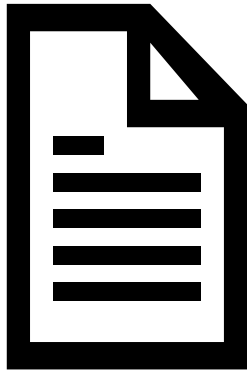
Austin Topham (DN 10020-018)

8 DAYS



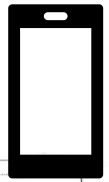


Key Problem

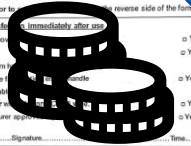




Aim of this Innovation



Digital



Low Cost



Easy



Medical Records

The screenshot shows a digital form titled "Ultrasound Transducer Reprocessing Record" from Austin Health. It includes fields for patient information (Name, DOB, Gender), device type (Ultrasound Transducer), and a detailed log of the reprocessing steps. The form is divided into sections for "Before use" and "After use", with checkboxes for various steps like "Pre-clean", "Wipe", "Rinse", and "Dry". It also includes a section for "Successful reprocessing after use" with a date and time stamp.





Key Changes Implemented

The smartphone screen shows the 'Examination Details' form. At the top, there is a blue button labeled 'Scan Bradma [1111]'. Below this, the form includes fields for 'UR' (a green search bar), 'Name' (a text input), and 'DOB' (three dropdown menus). The 'Procedure Details' section contains 'Exam Start' (a date and time picker set to November 17, 2021, 14:57), 'Location' (a dropdown menu set to 'Diagnostic US'), and 'Reason for HLD' (a green search bar). A 'Save' button is at the bottom. A QR code is overlaid on the right side of the phone, with red lines indicating its connection to the 'Scan Bradma' button. The Austin Health logo is visible in the bottom right corner of the phone's screen.

Radiology RMD

+ New Edit in grid view Share Export to CSV Automate

US Transducer Reproc...

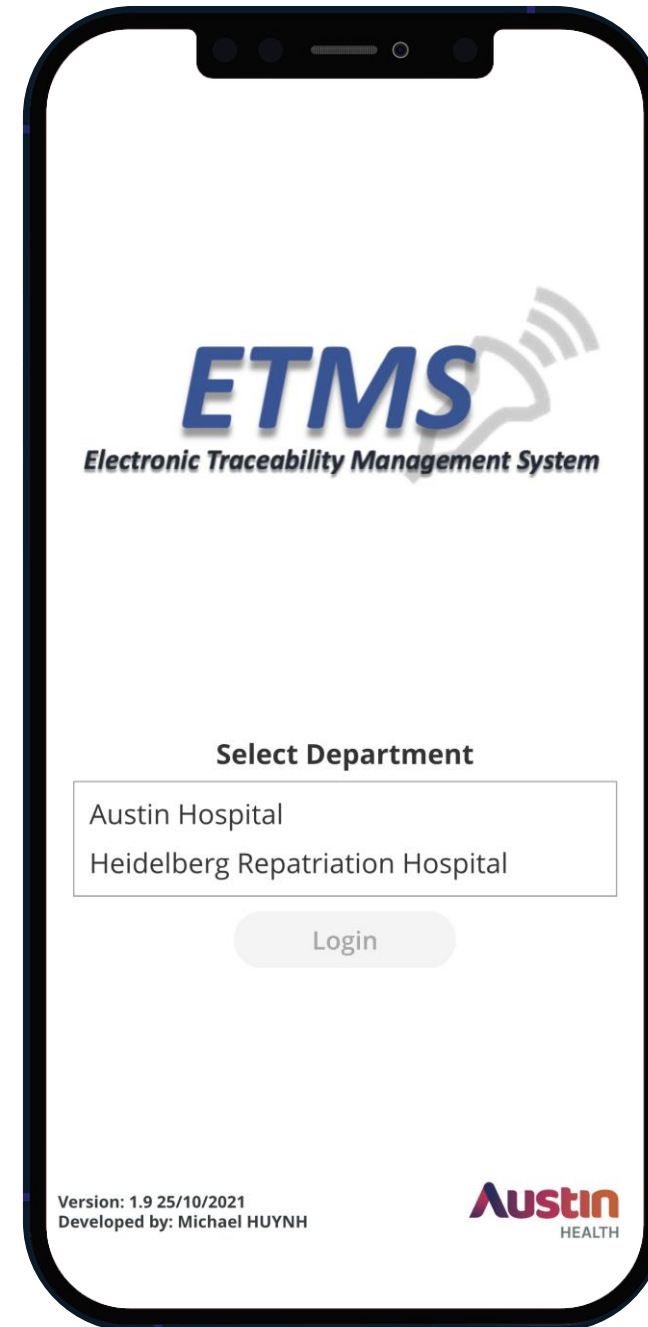
US Transducer Reprocessing Log ☆

Title	Campus	Status	UR
AG3613	Austin	Complete	
AG3612	Austin	Complete	
AG3611	Austin	Complete	
AG3610	Austin	Complete	
AG3609	Austin	Complete	
AG3608	Austin	Complete	
AG3607	Austin	Complete	



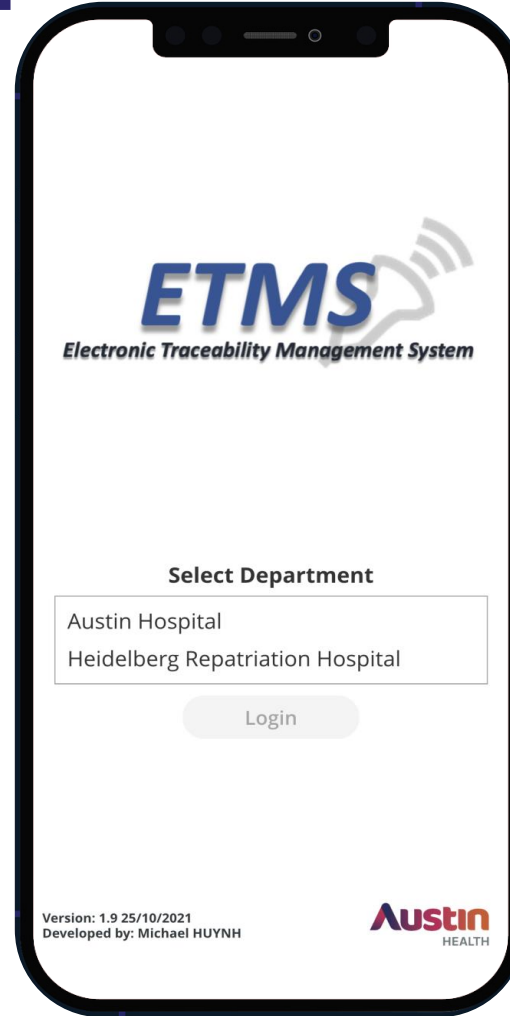
Outcomes so far

- Digital Record
- 1 min to Medical Records
- Automation
- No Mistakes
- Auditable Data
- Traceability
- Low-Cost Solution





Lessons Learnt





Innovation Summary Slide



Title: ETMS: Austin’s Electronic Solution for AS4187 High Level Disinfection Documentation

Health Service: Austin Health

Problem	Use of paper forms to document high level disinfections of Ultrasound transducer. <ul style="list-style-type: none">• 8 days turnaround time from when a form was complete to when it was available on medical records• 1 in 5 forms were lost or incorrectly filled.• No Auditable data that was immediately available• No process of Traceability (Breach of AS4187)
Solution	Introduction of a mobile app developed by Radiology to replace the paper-based system. Forms are filled using a mobile app. Easy data entry methods: <ul style="list-style-type: none">• Barcode scanning• Dropdown menus• Electronic timestamp Data is stored on a secure database and is transmitted to medical records automatically/
Outcomes	<ul style="list-style-type: none">• Complete Digital solution• Automated (1 min) turnaround)• No Mistakes from incorrectly filled forms or lost forms• Auditable data immediately available• Traceability• Low Cost Solution



20 July 2022

Using Power Bi to solve problems

- centralising information, saving time, reducing stress

Ben Morgan.

Alfred Health Radiology & Nuclear Medicine Liaison

24-06-2022



the**Alfred**

Part of **AlfredHealth**

Getting Information From Data - pitfalls

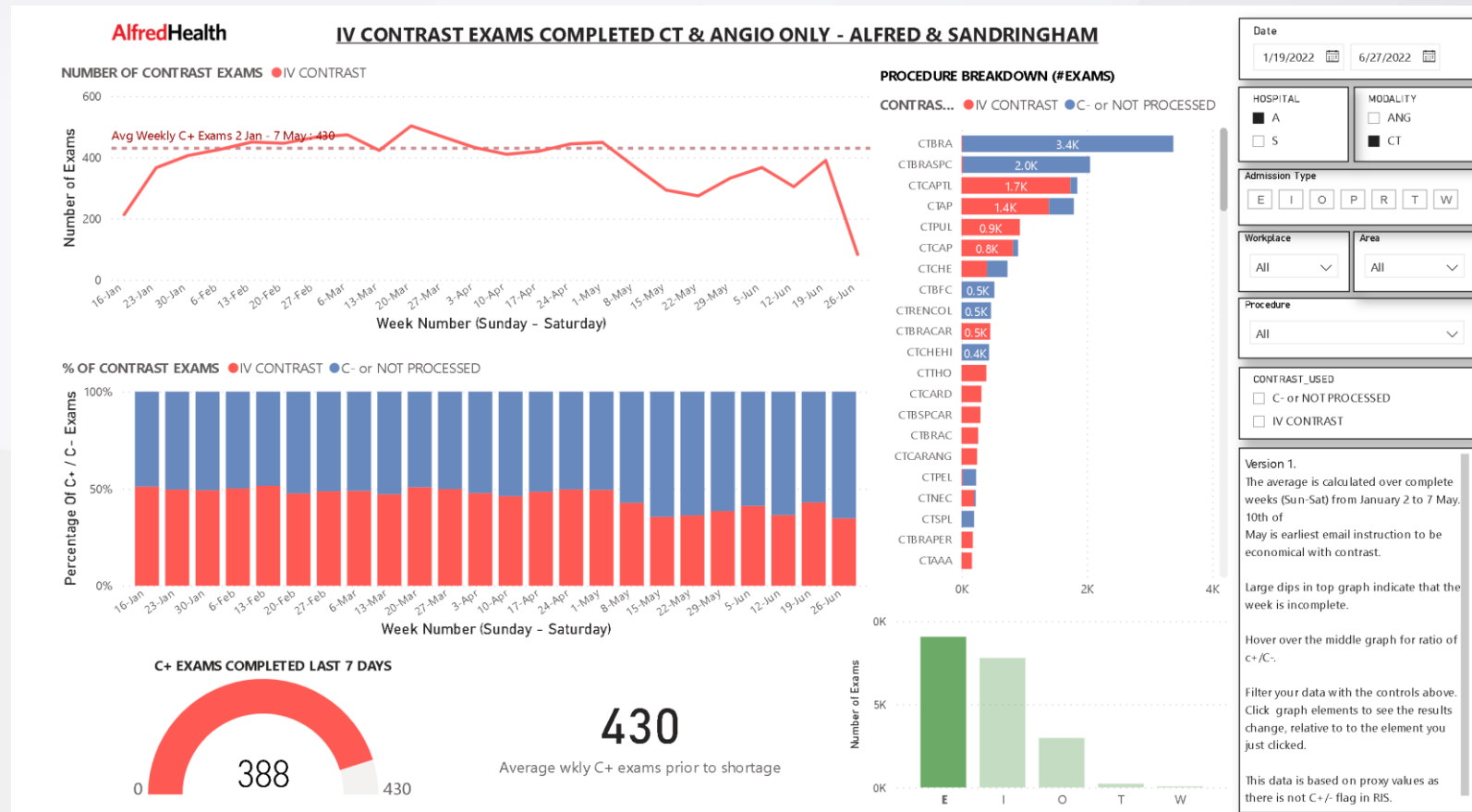
- **Data is not information**
 - Information depends on the *context* of the question
 - How well it is communicated
 - Knowledge of the person that extracts the data
 - Understanding of the person that uses it or publishes it
 - False assumptions that distort the information
 - Complex questions give complex answers - sometimes these answers are not mutually exclusive
- **Technical staff get the blame for errors - ‘*well its your data*’**
 - Technical staff appear defensive and ‘interrogate’ people that ask for data - “Why do you need this?”
 - Might get a reputation of being difficult when really they just want to make sure the right questions are being answered.
- **People will self-serve...**
 - Recycle information inappropriately
 - Get data from inappropriate sources using incorrect parameters
 - Hand count from the RIS which is risky and VERY time consuming

**We can end up with situations where the data
that is being used doesn't always line up with the
intent....**

We end up with this...

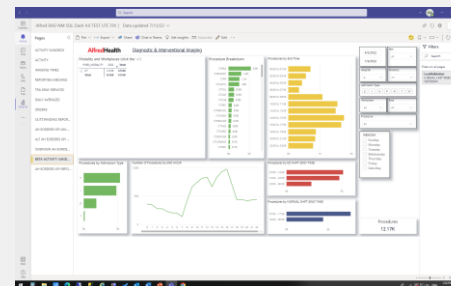
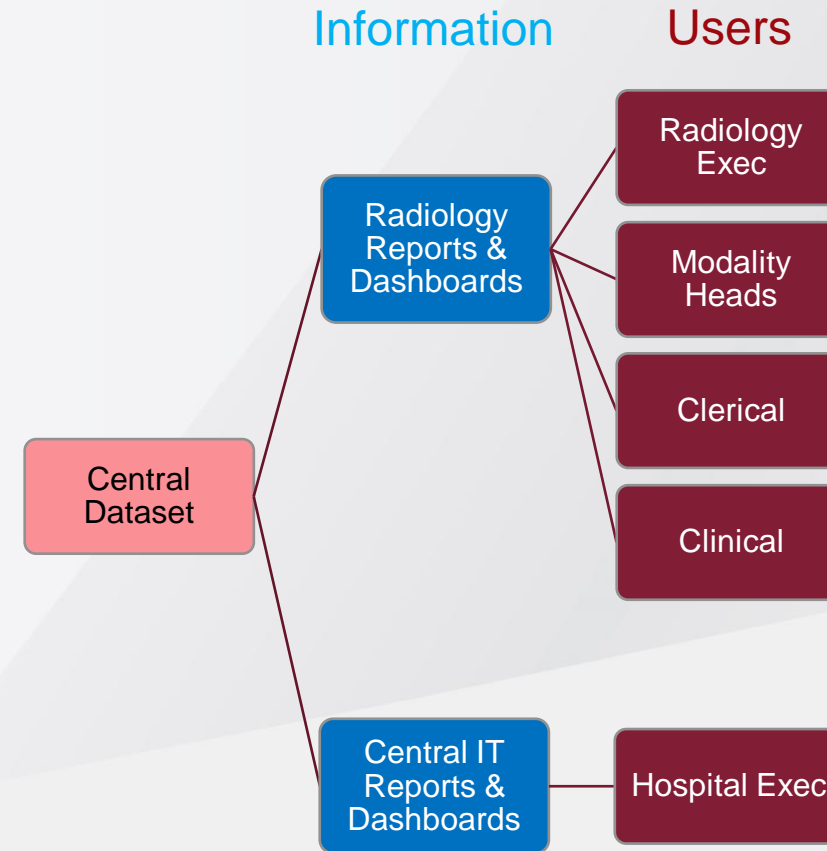


When it should look like this



To achieve this, start with *a single source of truth*

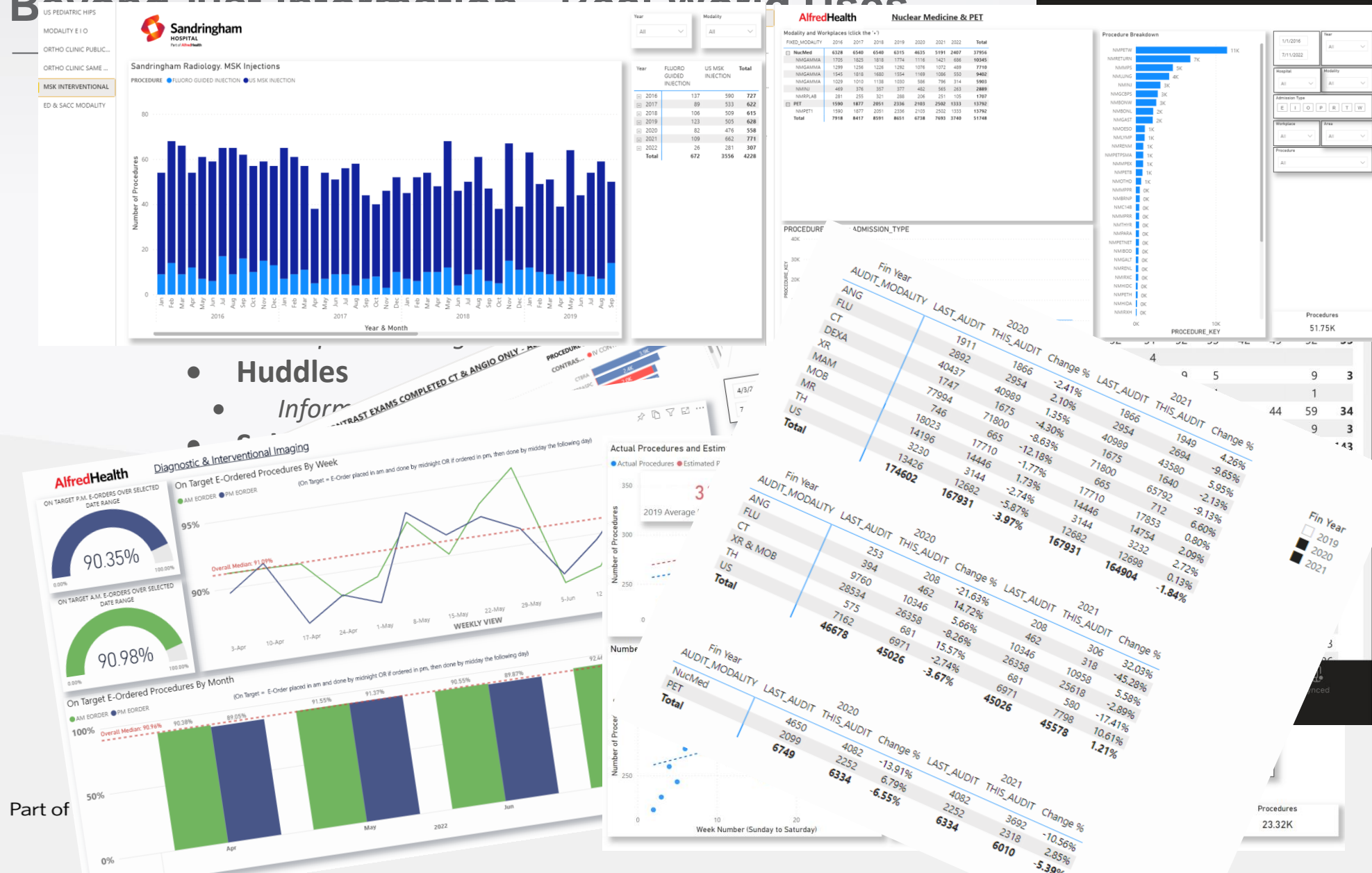
- One single, central *Dataset*
- Always on
- Autonomously updated
- Doesn't normally give *direct* access to data
- Graphical Interface to build visuals and turn data into information
 - Users only interact with the visuals
 - We use Power Bi for this
- Helped by a hospital initiative that enables *departmental* data managers.
 - *The Trusted User Program*
 - Because *department staff* are most likely to understand their departments data
 - (but will sometimes need help)



What has it given us?

- **Ownership of our data and the stories it can tell.**
- **Impacts decision making at many levels, including purchasing and capacity planning.**
 - Extensive monitoring of many aspects of our service allowing more fluid conversations about the information – instead of waiting for it.
- **No more recycling – people are responsible for their own information and can easily return to it any time**
- **Timely access to routine extracts**
- **Easier sharing**
- **It has saved at least 0.6 EFT so far**
 - Most hand-counting tasks can be automated
 - Taking pressure off clerical & clinical staff
 - Freeing me to take on other super exciting projects!

Beyond just information. Real World Uses.



Take home message

- *We live in a resource constrained world where benchmarks and the pressure to meet them is ever present.*
- *But data is complex and people make mistakes which can unintentionally generate misleading narratives.*
- *We encourage you to take ownership of your data, don't just turn it into information, **build stories with it.***
- *Make sure that it's your story that's being told.*

Health Roundtable

Imaging Program Innovation Session

20th July 2022

Business case for significant change
HP Roster Allocation- Increase 24/7 Onsite Capacity

Organisation Name: Townsville University Hospital

Presenter's Name: Poonam Kumar

Phone: 0481233143

Email: Poonam.kumar@health.qld.gov.au

**Townsville
Hospital
and Health
Service**

Key Problem

- Increasing afterhours demands (X-ray & CT) within the Medical Imaging Department
- For the CT team increase in recalls, recall rates and fatigue leave.
- Employee raised concerns over the increased workload in the afterhours setting

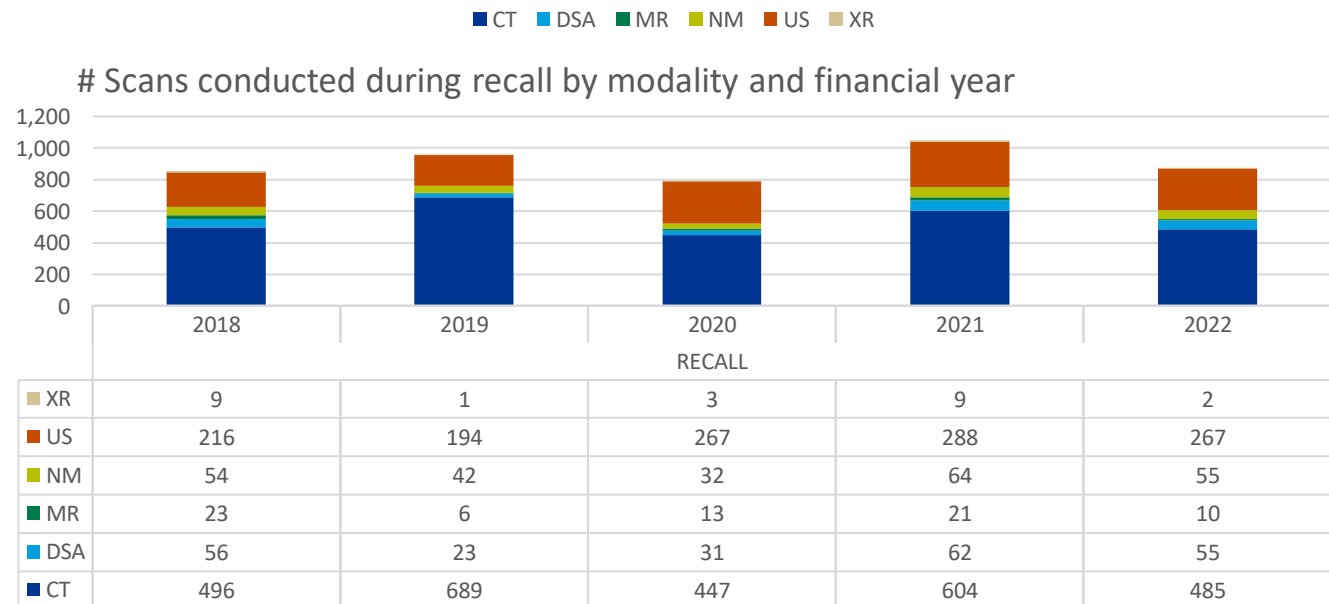
NB: only 1 radiographer was rostered to night shift with on call support

Table 1: % of work conducted after hours (18:00 - 07:00)

	Attendances	% After Hours
Total 2021-22FY	125,132	38.6%
CT	27,683	44.2%
XR/IP/THEATRE	70,044	46.6%
MR	4,991	21.9%

* % After Hours represents the proportion of scans for that modality that were conducted outside of business hours

*Weekend is all after hours



Aim of this Innovation

- Support after hours workloads improving patient care and flows from ED and Inpatients access to CT
- **Support employee**
- Reduce recall rates
- **Manage fatigue risk (work life balance)**
- Increase FTE



Table 3: Overtime by Financial year

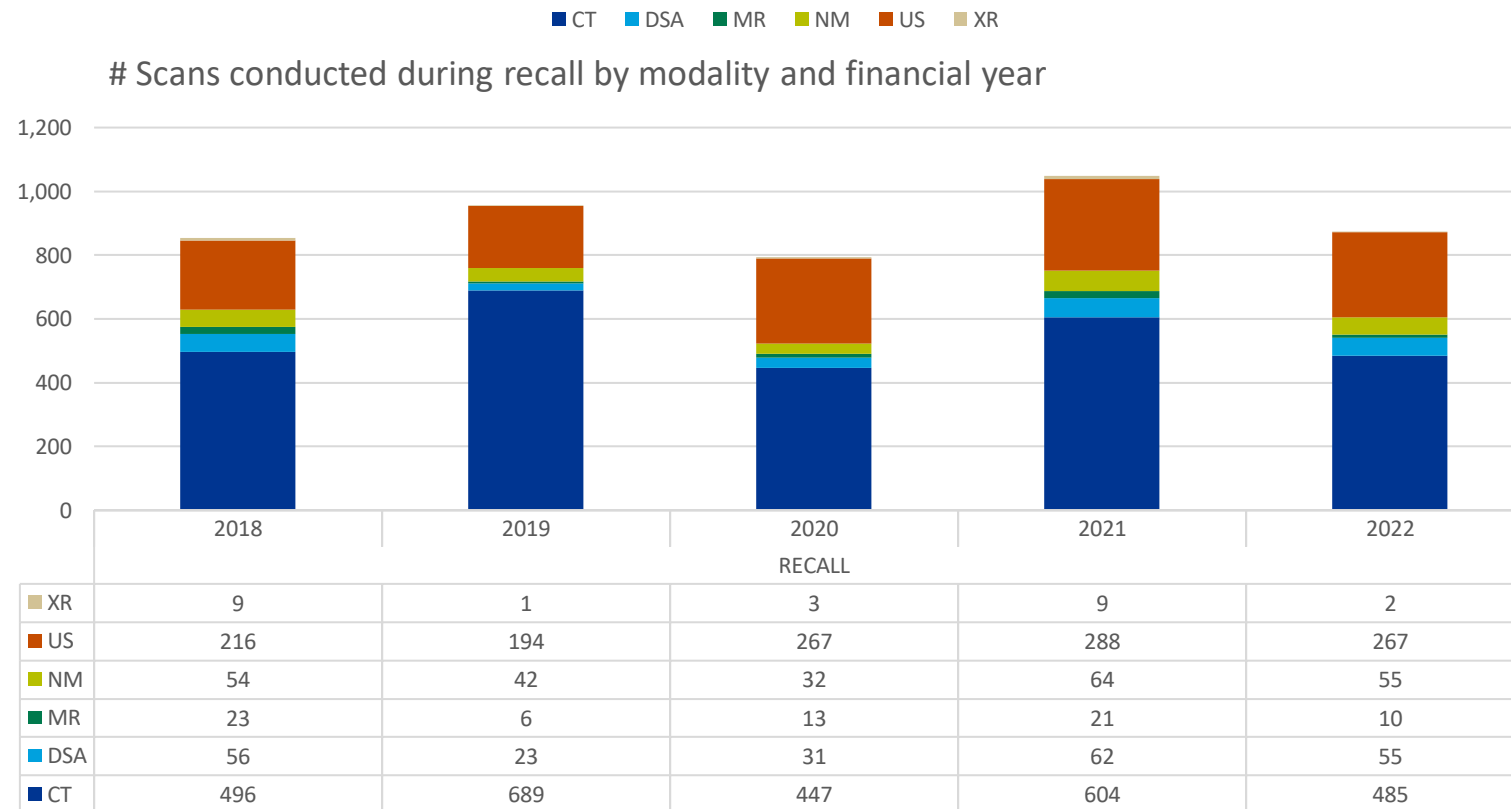
Financial Year	Overtime Hours		Overtime Cost (\$)	
	Total	Average per month	Total	Average per month
2017-18	3,796	316	\$39,403.00	\$31,143.99
2018-19	4,060	338	\$42,342.68	\$33,464.62
2019-20	3,892	324	\$25,825.22	\$32,630.38
2020-21	4,719	393	\$33,320.92	\$40,374.87
2021-22	4,602	383	\$38,725.20	\$40,412.61

*Overtime includes both Overtime- Ordinary and Overtime- Recall



Baseline Data / Current Situation

- Current – year on year increase in recalls for the CT group
 - - Increase in overtime cost





Two options Trialed over a 7-week period

Option 1: CT + XRAY radiographer Model -ran for a 7-week period

- One general x-ray night shift radiographer: 2300-0700
- One CT night shift radiographer: 2300-0700
- PM shifts: CT Radiographers 1500-2300 shift in lieu of 1300-2100 & 1600-2400

Option 2: Two radiographer model, both x-ray radiographers

This option is limited by skill sets as only one of the x-ray radiographers can perform basic CT (CT-Brain and KUB imaging)

- CT trained staff roster providing on-call for all other CT generating high level of recalls and fatigue leave
- PM Shifts CT rosters returned to 1300-2100 & 1600-2400



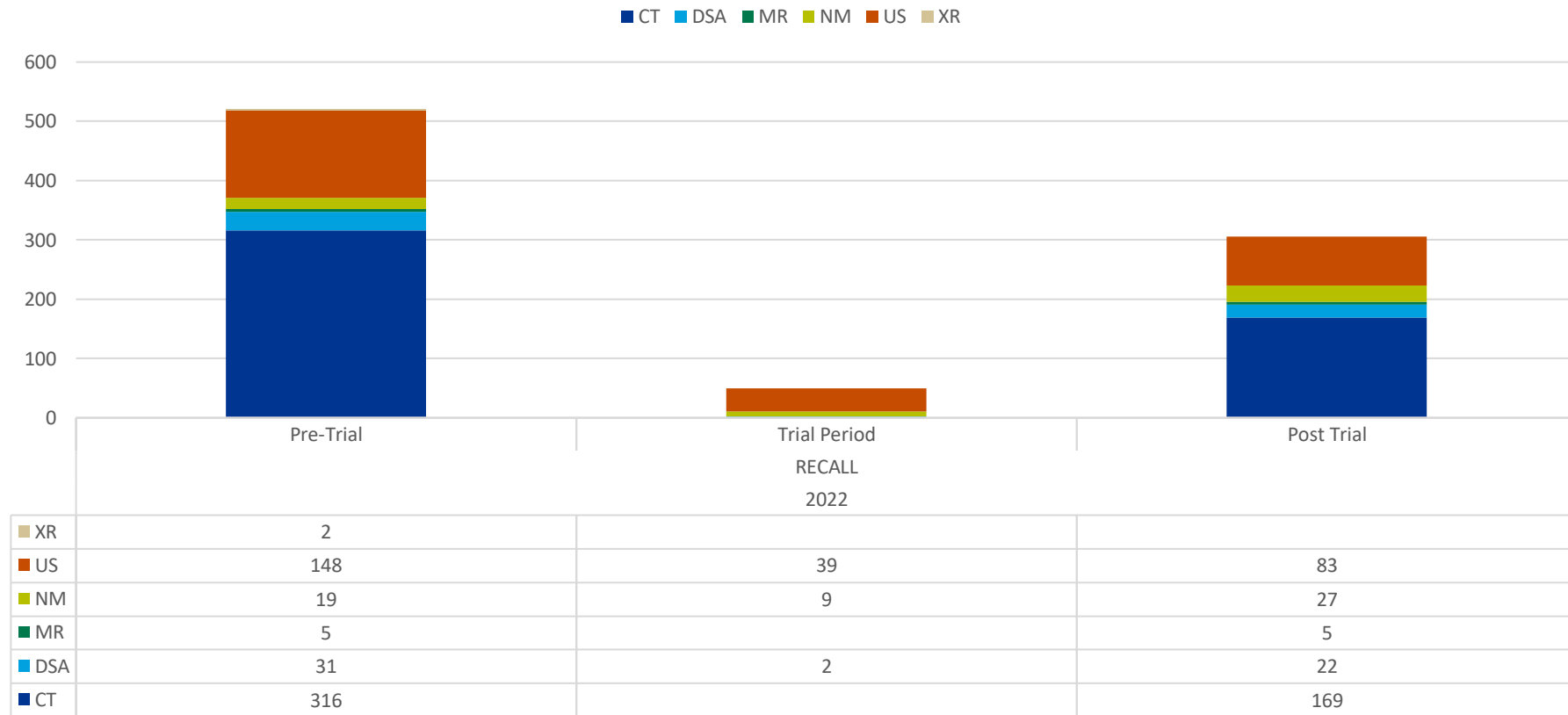
Key Changes will be Implemented

- One CT radiographer 2300-0700 with on call support
- One General radiographer 2300-0700 with on call support
- Implementation and feedback on shift strings (make change stick) Kotter's model 7&8



Outcomes so far

Scans conducted during recall by modality and period





Lessons Learnt

Kotter's change model focuses on buy-in of employees, engaging with the employees affected by change aids in the likelihood of success. Resistance to change is reduced through informing and consulting throughout. Change can be successful when all steps are well communicated (Kotter, 1995). This situation Kotter's eight steps is suitable.

8 Steps in Kotter's Change Model

1. Creating a Sense of Urgency (Covid helped)
2. Putting Together a Guiding Coalition
- 3. Developing Vision and Strategies**
- 4. Communicating the Change Vision**
- 5. Remove Barriers to Action/ obstacles**
6. Accomplish Short-Term Wins
7. Build on the Change (continuous improvement- analysis)
8. Make Change Stick




Innovation Summary



Title: HP Roster Allocation- Increase 24/7 Onsite Capacity

Townsville Hospital and Health Service

Problem	<ul style="list-style-type: none">• Increasing afterhours demands (X-ray & CT) within the Medical Imaging Department• For the CT team increase in recalls, recall rates and fatigue leave	 <p>Poonam Kumar - Acting Director Medical Imaging, TUH</p>
Solution	<ul style="list-style-type: none">• One CT radiographer 2300-0700 with on call support• One General radiographer 2300-0700 with on call support• Implement shift strings, feedback, review and allocate as part of business as usual	
Outcomes	<ul style="list-style-type: none">• Balances in-hours and after-hours allocations- this will increase the overall staff numbers thus reducing fatigue leave, its impacts and shift burdens- benefit=in return supporting recruitment and retention goals.• Improved teamwork and support for all radiographer groups thus increasing staff morale• Improve imaging support to patient flows via increased capacity thus providing patient centred care (after hours)• More effective and efficient use of medical imaging operational budget	

Presenter's Name: Poonam Kumar

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Health Roundtable
Imaging Program Innovation Session
20th July 2022

Role-based Clinical Communication App Development & Implementation

Organisation Name: Austin Health



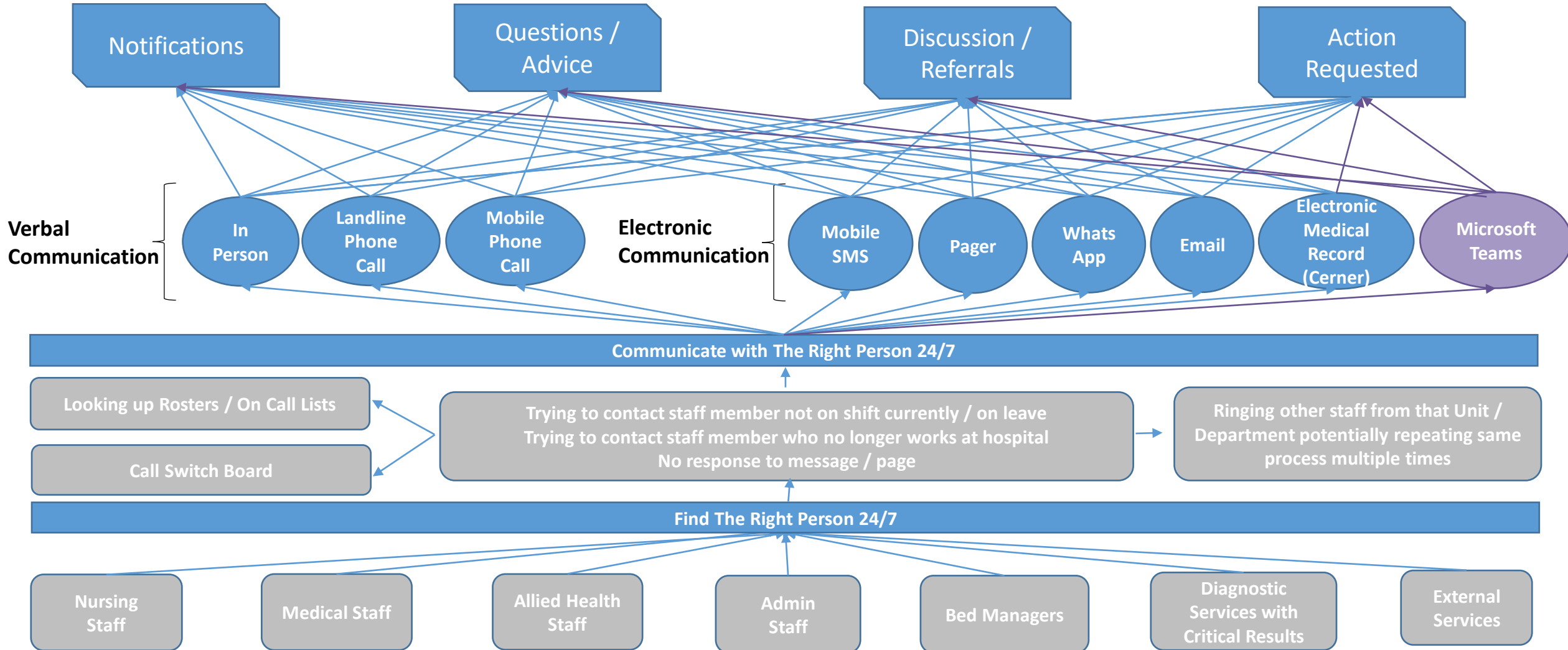
Presenter's Name: **Nicole Hosking**

Phone: **0408 361 182**

Email: **nicole.hosking@austin.org.au**



Key Problem & Current Situation





Aim of this Innovation



Replace old and non-secure technology

Significantly reduce use of disruptive and inefficient communication methods

Non-Emergency
Paging

Non-Secure
Text Messaging

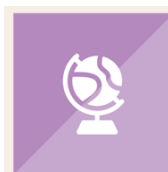
Non-Secure
Whatsapp Messaging

Multiple Individual
Teams Chats

Non-Urgent
Simple Phone Calls

Emails

Interrupting each other with
simple messages / questions



Baret.

Role-based Communicator
for Microsoft Teams.



Aim of this Innovation

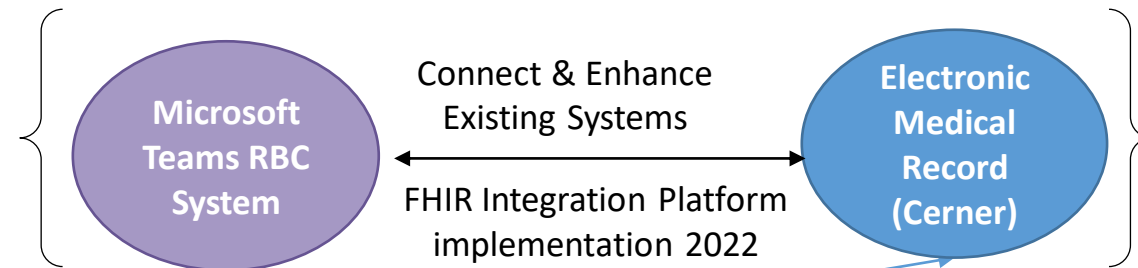


Future State

Verbal Communication



Electronic Communication



Find & Communicate with the Right Role 24/7

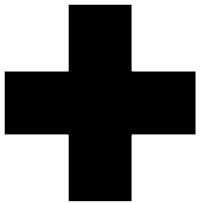




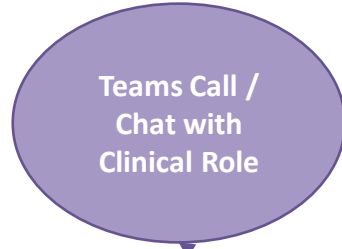
Key Changes - The Innovation Collaboration



5p



Standard Teams Functionality



Custom Built Role-Based Electronic Communication

1. Structured Electronic Messaging with a Clinical Role
2. Messaging Dashboard to manage incoming & outgoing communication
3. Messaging within a role, carries between different individuals

Select Clinical Role to communicate with

Engage with Communicator
as Individual

Engage with Communicator
as Clinical Role (Clock on)

Select Role Based Communicator

Go to Microsoft Teams Application



Baret.
Role-based Communicator
for Microsoft Teams.

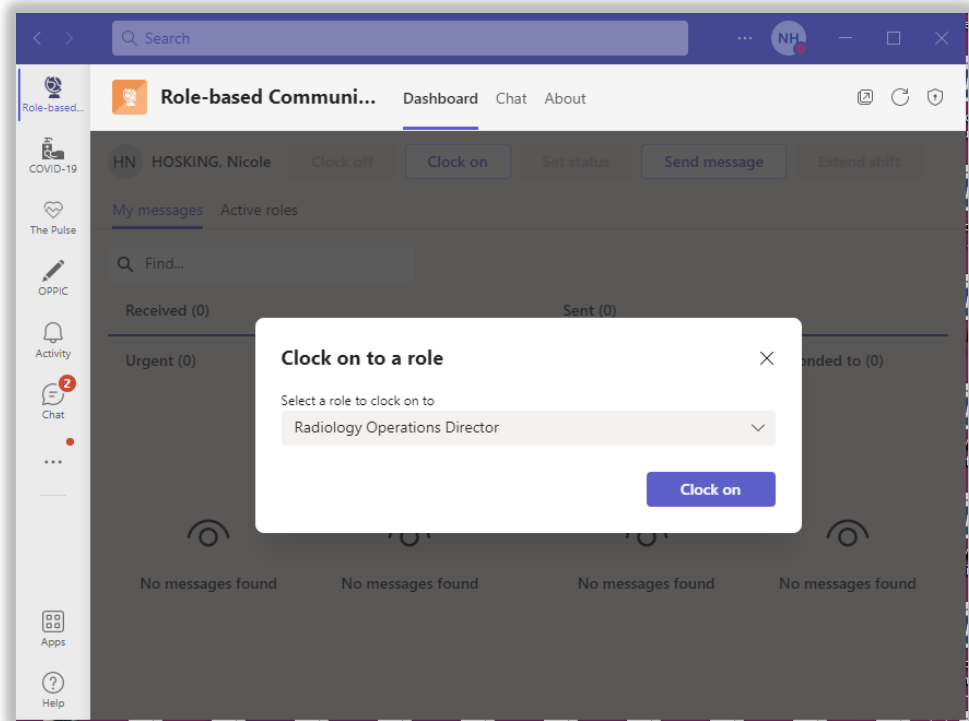


Key Changes – Implementation of Baret RBC



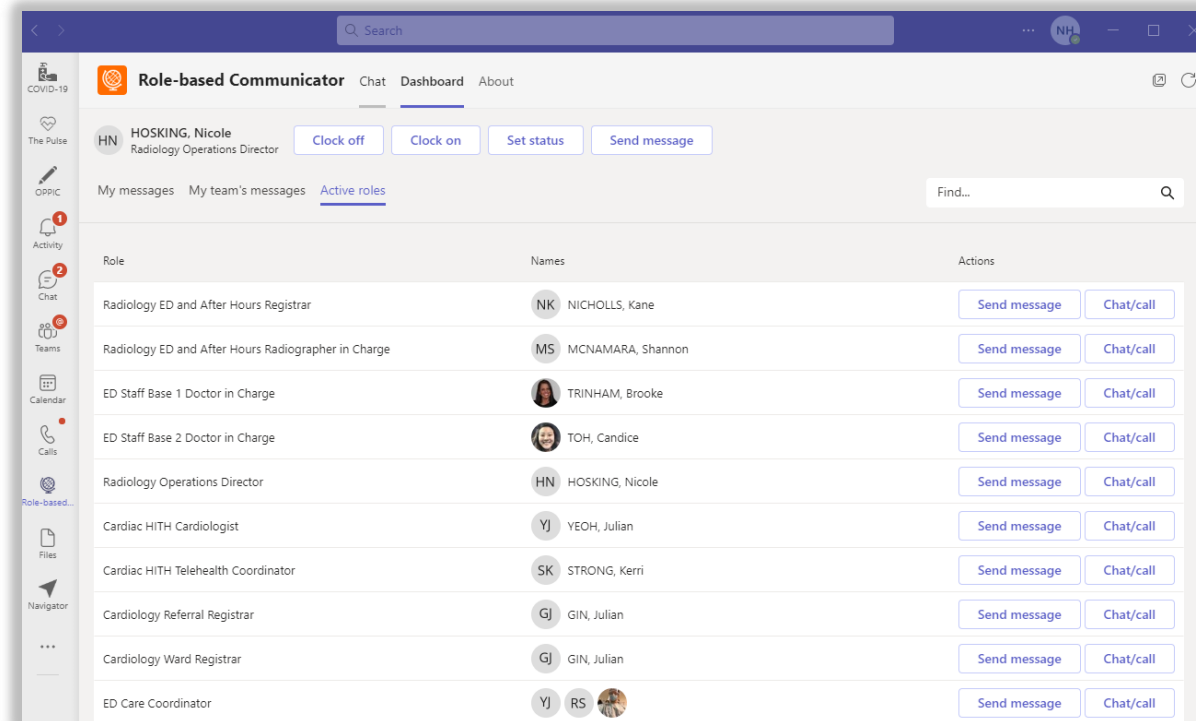
Key App Features

1. Contemporary Role-based communication



By 'Clocking On' to a clinical role within the App, electronic communication occurring automatically carries between different staff members performing the same role

2. Active Roles Directory



Rapidly find and start communication with a 'clocked on' clinical role from a single screen view



Key Changes – Implementation of Baret RBC



Key App Features

3. Secure Structured 2-way Electronic Messaging

Send a message

Type

What type of message are you sending? *

☒ Question (Routine)

☐ Notification (Routine)

☐ Action Required (Routine)

☐ Admission Acceptance (Routine)

☐ Urgent Clinical Review (Urgent)

☐ Urgent Diagnostic Results (Urgent)

☐

Is message about a specific patient?

Message

What timeframe do you need a response in? *

Select one

Details *

Send message

Replaces Non-Emergency Paging and
Non-Secure Messaging

4. My messages Dashboard

Role-based Communicator

Chat Dashboard About

HN HOSKING, Nicole
Radiology Operations Director

Clock Off Clock On Send Message

My Messages My Team's Messages Active Roles

Find

Received (0)

Urgent (0) Routine (0)

No messages found. No messages found.

Sent (2)

Unanswered (0)

Responded to (2)

SB SAWARD, Brett
Radiology Chief Radiographer

Urgent Clinical Review (Urgent)
Low Oxygen Saturation despite
supplementary oxygen
Please review: test message

SB SAWARD, Brett
Radiology Chief Radiographer

Notification/Update (Routine)
Test message

Collates and prioritises messages in a single screen view



Outcomes so far – 2022 Org Wide Rollout



2022 Staged Build of Clinical Roles into the Application

Type of Clinical Role	Stage 1: 20 th June		Stage 2: 1 st August	Stage 3: 17 th October	Stage 4: 7 th November
Large Clinical Staffing Groups	Existing Roles (Pilot Group)	New Roles Released	Senior Nursing Roles B: Clinical Education Clinical Nurse Consultants Surgical Liaison Nurses After Hours Site Mgrs NEPHU Allied Health	Medical Staff Interns Residents Registrars Fellows SMS Roles by Unit Request	Ward Bedside Nursing Staff
	Radiology Cardiology Cardiac HITH Emergency Department 5N,8N,8E,7W,7E,7N	Senior Nursing Roles A: NUMs ANUMs Ward Liaison Nurses Nursing Allocations Care Coordinators Residential In-Reach Better@Home Subacute Ward Clerks Pharmacists			
Specialty Team / Departments	Developed in collaboration with Specialty Teams / Depts across Stages 1 -4 in alignment with large Clinical Staffing Group Role Stages where applicable E.g. Pathology, Operating Suites, Specialist Clinics				



Outcomes so far – Radiology specific change



Conversion of:

**Non-Urgent
Simple Phone Calls**



RBC Messaging

Rule-based Communicator
Send Message

Type

What type of message are you sending?

☐ Question (Routine)

☒ Notification/Update (Routine)

☐ Discussion/Referral (Routine)

☐ Urgent Clinical Review (Urgent)

☐ Urgent Diagnostic Results (Urgent)

☐ Is message about a specific patient?

Message

What timeframe do you need a response in?

Within half hour

Details

Could you please protocol 6 new CT orders from EC

Send Message

Replacing phone call or in-person interruptions with electronic messaging:

Within Radiology:

- Interventional Liaison Nurses & Radiologist / Registrars
- Radiographers & Radiologists / Registrars

Between Radiology & Inpatient Wards:

- Coordinate patient transfers to Radiology
- Coordinate interventional procedure bookings and preparation requirements

Between Radiology & ED:


- Prioritisation of patients for imaging
- Coordination of imaging prep requirements eg. Hydration
- Communication of Results



Innovation Summary Slide

**Title: Role-based Clinical Communication
App development & implementation**

Health Service: Austin Health

Problem	Overly complex clinical communication framework with too many different types of clinical communication methods in use leading to: <ul style="list-style-type: none">• Confusion• Inefficiency• Staff frustration• Delayed communication, delayed clinical decision making, delayed patient care• Lack of visibility of clinical communication occurring• Communication failures	 <div>Baret. Role-based Communicator for Microsoft Teams.</div>
Solution	Introduction of a role-based clinical communication app developed by 5P in partnership with Austin Health. Within a single application: <ul style="list-style-type: none">• Contemporary role-based communication platform• Rapid access to clinical roles through the Active Roles Directory• Electronic messaging and phone communication facilitated within the same application• Electronic messaging is structured and secure• Messaging communication is coordinated and prioritized for staff within the messaging dashboard• Supervisors have visibility of communication occurring within the clinical team they are responsible for	
Outcomes	<ul style="list-style-type: none">• Pilot Completed• Org wide rollout endorsed by executive and within implementation stage• Positive improvements in clinical communication within Radiology, with multiple new change improvements being planned and implemented	

Presenter's Name: Nicole HOSKING

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Email: Nicole.hosking@austin.org.au



Thank you
Any Questions?

www.healthroundtable.org

Let's vote!

Our presentations today were as follows:

- | | | | |
|------------------|------------|--|------------------|
| • Ben Rowney | PAH | Urodynamics for Spinal Injuries Patients | Clinical |
| • Michael Huynh | Austin | High-level Disinfection of Transducers | Safety |
| • Ben Morgan | Alfred | Using PowerBI to solve problems | Data Integrity |
| • Poonam Kumar | Townsville | Increase 24/7 Onsite Capacity | Leadership |
| • Nicole Hosking | Austin | Role-based Communication app | Hospital Quality |

There is a link in the ChatBox. Vote for your favourite presentation from today.

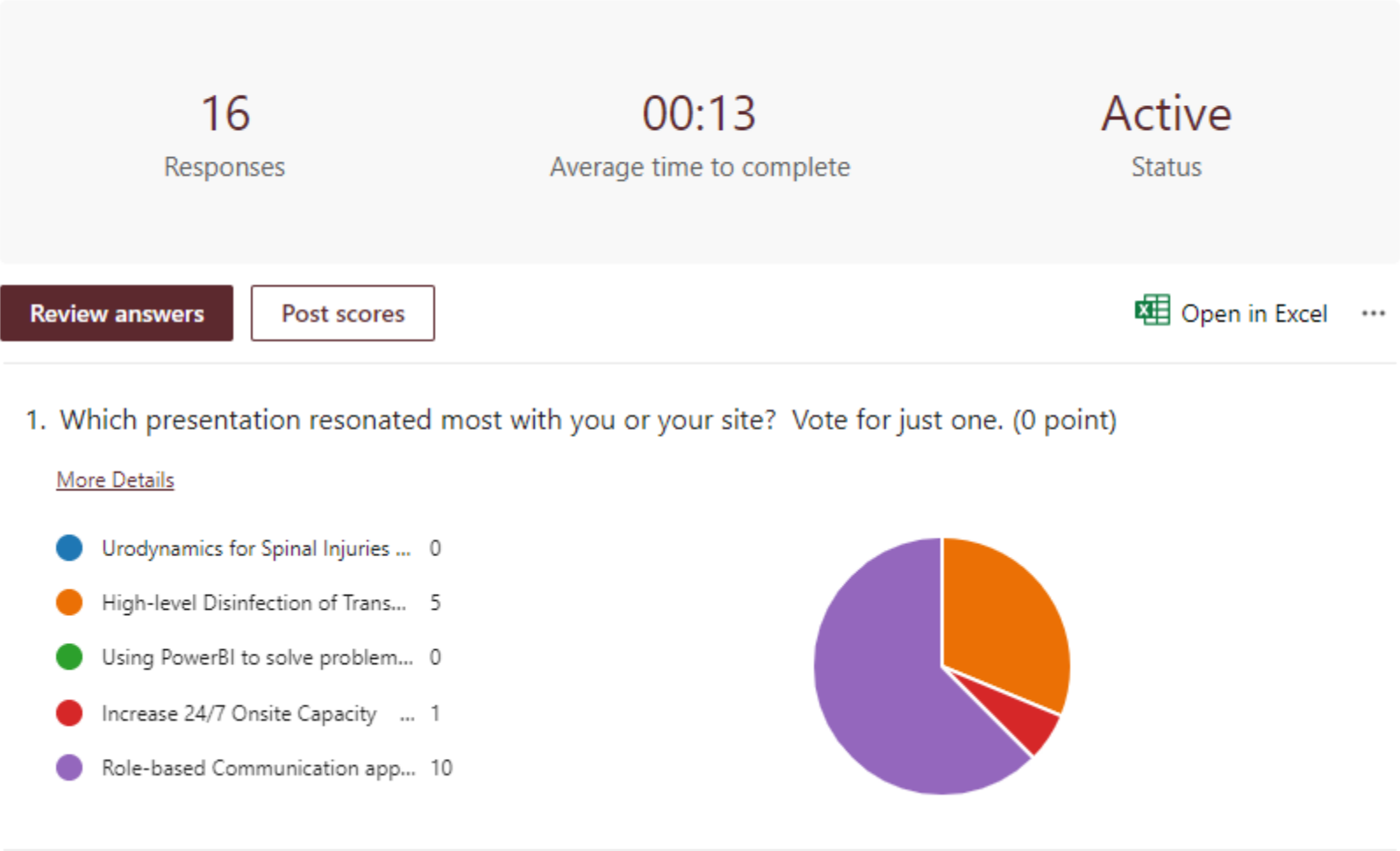


Let's vote

Health Roundtable Imaging Program - Innovations webinar 20 July 2022

Our presenter

- Ben Rowne
- Michael Hu
- Ben Morga
- Poonam Ku
- Nicole Host



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Integrity

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ital Quality

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Imaging Content for 2022

Webinar 1: 20 July 1300-1430pm AEST

- Innovation Sharing by Members



Face to Face workshop: 18 & 19 August 2022

Themes:

- | | |
|--|------------------------------------|
| i. AI-supported radiology reporting | Prof Meng Law / Dr Warren Clements |
| ii. Managing Shortages of Critical Resources | Michael Rice / Dr Dani Ko |

The Alfred
Qld Health / The Austin





2022 Imaging Workshop

- AI-supported radiology reporting
- Managing Shortages of Critical Resources

Thank you

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