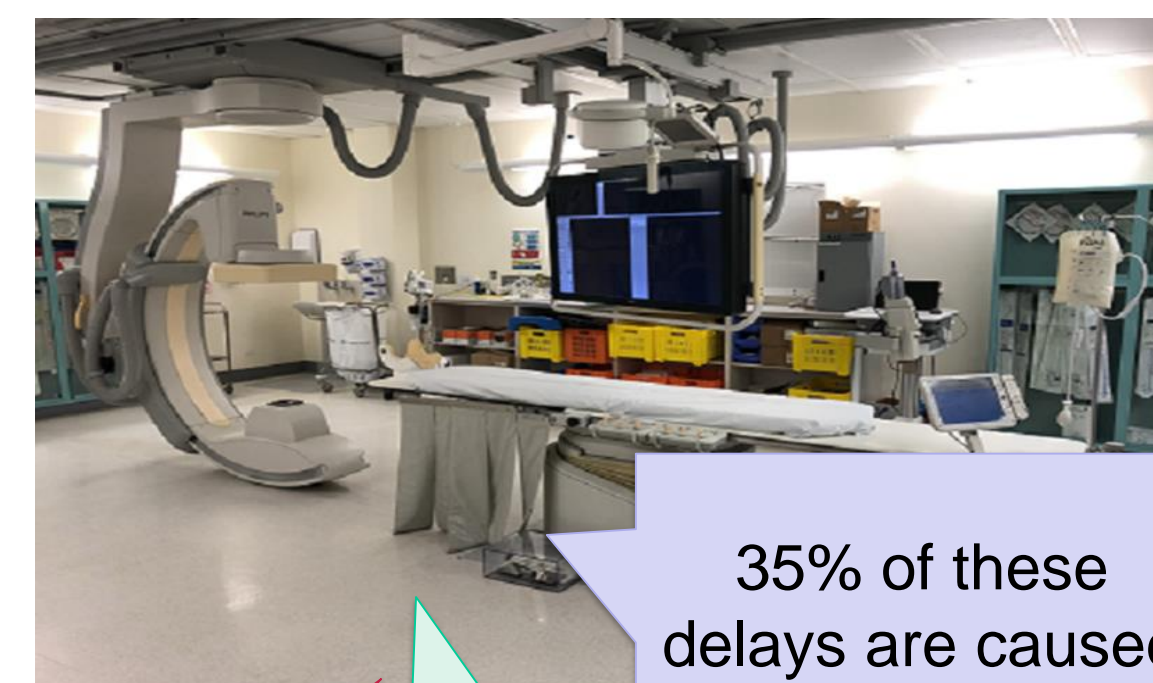


Suzanne Childs (Registered Nurse), Chris Baines (Radiographer) & Kerrie O'Leary (ISLHD Healthcare Redesign Lead)
ISLHD Medical Imaging Service

Case for change

- 10% increase interventional radiology (IR) procedures 4 years
- Scheduling practices were not reliable
- 66% interventional radiology procedures have some type of delay
- Poor Patient and Staff experience



35% of these delays are caused by inappropriate preparation

Adam's Journey

- Request lost
- Family complains day 5
- Registrar complains day 7
- Biopsy performed day 11

Staff Survey 70% Dissatisfied with Scheduling Process
"Poor organisation, cases booked regardless of Radiologist availability"

Goal

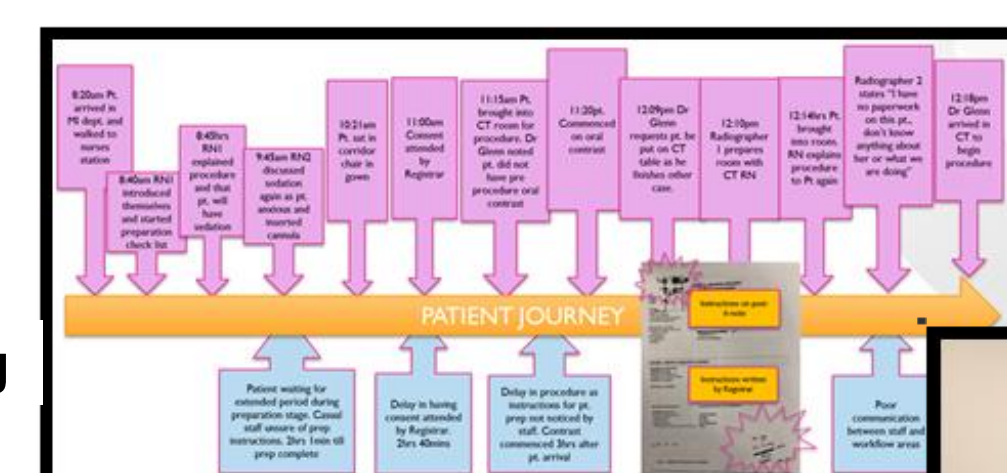
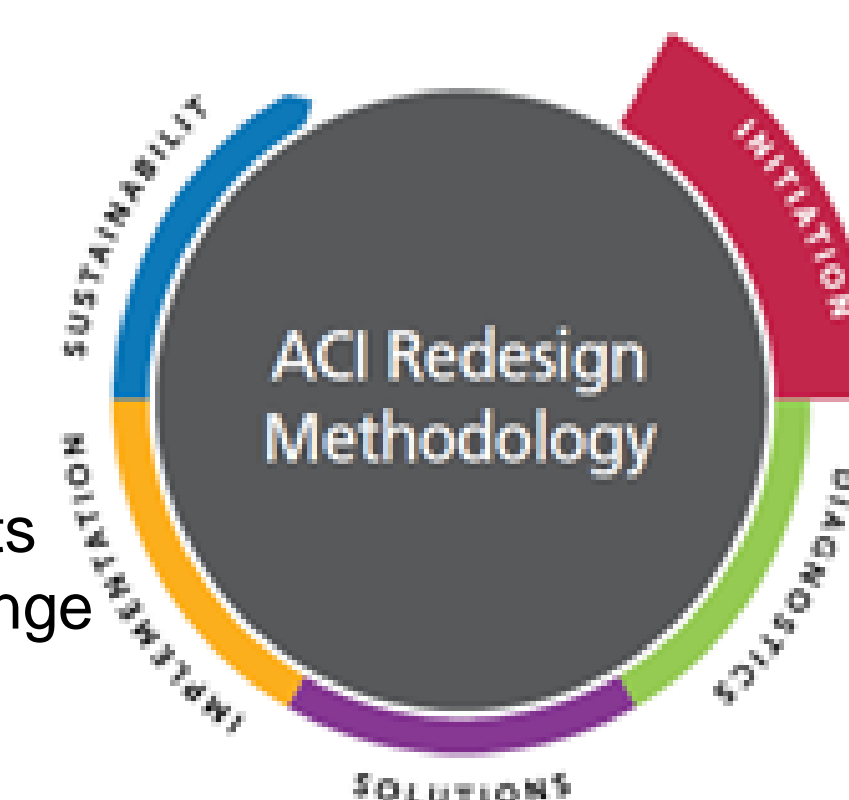
To design and deliver an efficient interventional radiology service to manage increasing activity, that enables improved patient access, preparation and safe scheduling practices in ISLHD by August 2019.

Objectives

- To increase staff satisfaction with access to IR proceduralist from 4% to 70%
- To decrease IR procedure delays/cancellations by inappropriate patient preparation from 35% to 10%
- To increase patient satisfaction:
 - With procedural information prior to their IR procedure from 56% to 90%
 - With waiting times from 50% to 90%
- To increase:
 - Documentation of receipt of outpatient IR request forms from 0% to 100%
 - Staff satisfaction with IR scheduling process from 30% to 70%
 - Appropriate timing of consent from 38% to 100%

Method

- Clinical Redesign Methodology was utilised.
- Process redesign utilised lean thinking & co-design principles
- Implementation Health Assessment surveys were used internally to assess the departments past experiences and climate to embrace change
- AIM training for key staff in department



Diagnostics

Patients arrive from other ward/site with inappropriate preparation causing delays and cancellations.

- Tag-a-long (n=6)
 - 1 pt. delayed
 - 1 patient rescheduled
- Process Mapping (n=38)
 - 55% of staff identified pt. inappropriately prepared as a reason for delays.
- ISLHD Staff survey (n=37)
 - Only 18.5% of staff felt preparation instructions clear.
 - 75% of staff had no access to protocols/guidelines.

Patient has poor understanding of their procedure.

- ISLHD Staff survey (n=37)
 - 60% not confident to provide procedural information with "Lack of knowledge" being the most frequent reason
- MI staff survey (n=34)
 - 46% felt patient was not informed correctly
- Patient Interview (n=16)
 - 44% reported a negative experience in regards to procedural information.

Scheduling process- forms lost, no date of receipt, IR procedures booked and staff not available.

- Staff Survey (n=34)
 - 70% of staff dissatisfied with scheduling process
- Tag-a-long (n=6)
 - Outpatient requests left on desk/ no digital entry.
 - Inpatient requests awaiting review by Radiologist left on desk.
- 58% of staff unaware of Radiologist credentialing. "I know some but not all of them, no set list written for quick reference"

No system for regular review of IR Procedural data.

- No standard approach to 'start' and 'end' times entered in RIS
- No day/time record for patient 'in room' and 'out of room' for IR Procedures
- No ability to review system with comparable data

Poor communication/ coordination between staff during patient preparation

"The communication between your staff is very very poor. And then we're talking to this nurse and she didn't seem to know whether I was going to have this anaesthetic or not. The other one told me I was and this one didn't know whether I was or not. It was a bit traumatic in some ways cause I'm sitting there thinking now am I going to get this or aren't I?"
Patient Interview

Long waiting times in department prior to procedure.

"Someone who's been given weeks to live, they don't need to be down there for two hours in that environment. I found it really disgusting."
Patient Carer

Solutions

- Creation of eMR template for Preparation instructions/procedure requirements
- Creation of IR Patient Information brochure
- New patient retrieval/arrival time guidelines
- Pilot new role - Interventional Radiology Procedure (IRP) Liaison Nurse
- Improvements in team communication
 - Nursing communication 'huddles' led by NUM
 - Allocation of individual nursing staff for each patient preparation
 - 'Scripted' handover from corridor nurse to procedure team
 - New text fields in RIS to allow for visibility of patient readiness + Radiologist instructions
- Agreement on correct timing of team time out, Information Poster, Training video for all staff

Procedures Today	Patient Ready Status	Appr.req.ind.ac.	Protocolled by	Proccpt.doc	Scheduling Priority	Procedure protocol	Spec. Equipment required
PREP_COMPLETED	TWHRP	USTRW	TWHRP	TWHRP	TWHRP	TWHRP	TWHRP
PREP_STARTED	TWHRP	USTRW	TWHRP	TWHRP	TWHRP	TWHRP	TWHRP
READY_FOR_ROOM	TWHRP	USTRW	TWHRP	TWHRP	TWHRP	TWHRP	TWHRP
IN_ROOM	TWHRP	USTRW	TWHRP	TWHRP	TWHRP	TWHRP	TWHRP

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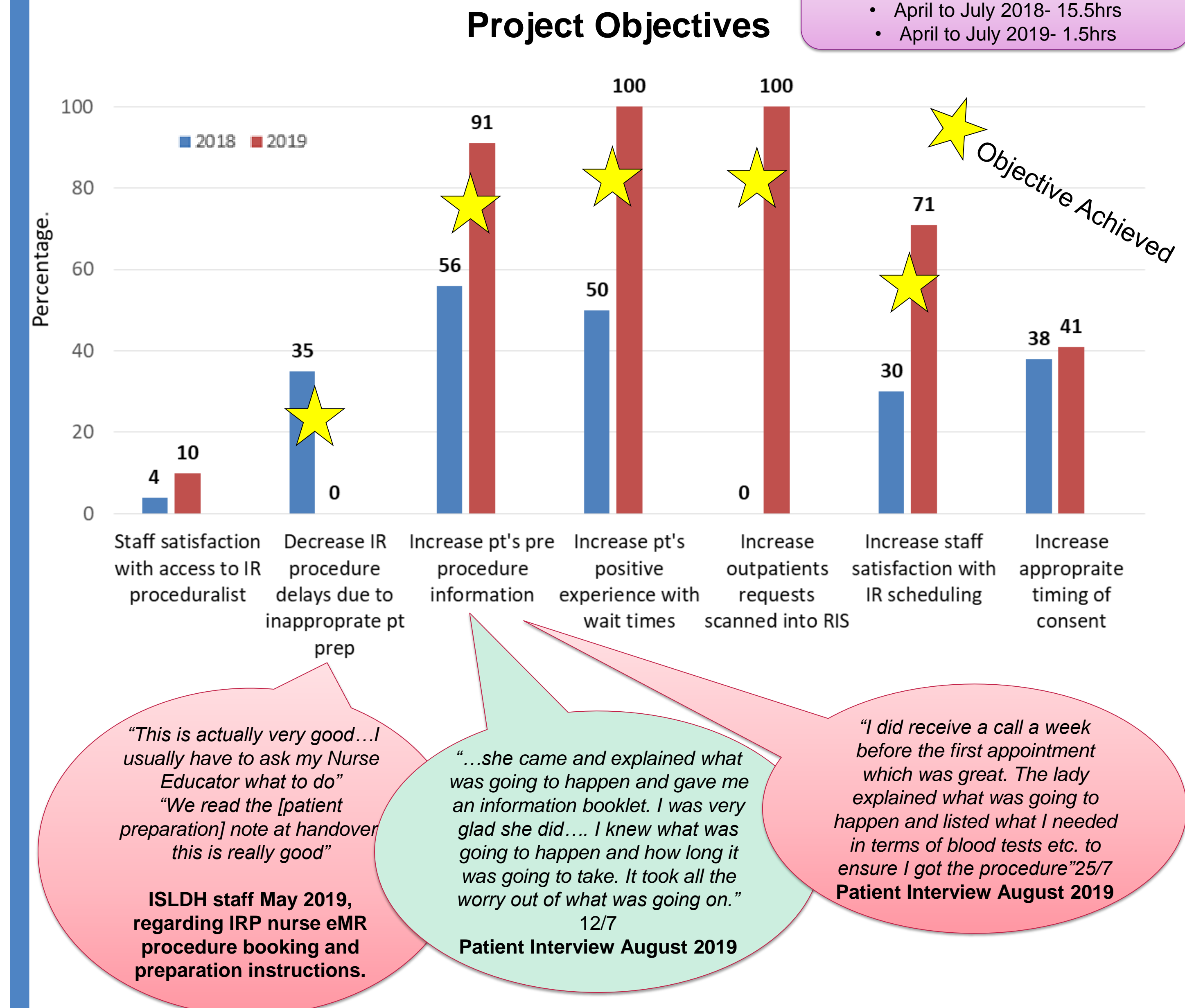
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Adam Roby (CT Senior Radiographer)
Dr Chung Yee Tan (DCS/SDMH)
Keona Wilson (A/HOD ISLHD Speech)
Dr Jeremy DeLeon (Radiation Oncologist/Cancer Care rep)

Contact

If you would like more information regarding the project please contact:

Suzanne Childs – suzanne.childs@health.nsw.gov.au
Chris Baines – chris.baines@health.nsw.gov.au
Kerrie O'Leary – kerrie.oleary@health.nsw.gov.au

Results



Sustaining change

- Workforce review for both Nursing and Radiologist workforce
- Development of procedure for Interventional Radiology Procedural Liaison Nurse role
- AIM training for key departmental staff
- Development of departmental training video for correct team time out procedure
- Daily huddle included in NUM's KPI's
- Acquisition of Philips Performance Bridge software package for automated auditing and report generation of Interventional Radiology procedural data

Conclusion

The creation of a patient focussed liaison role (Interventional Radiology Procedural Liaison Nurse) that provides patient education (inpatient and outpatient), organisation and coordination of procedural preparation and scheduling times, has resulted in improved patient and ISLHD staff experiences.

This Clinical Redesign project has also improved service delivery by reducing nursing overtime, procedural delays and/or cancellations. Other clinical departments have expressed an interest in creating similar roles for their services. The improvements to the Radiology Information System (RIS) and introduction of communication huddles has provided an opportunity for staff to improve patient safety and clinical team communication. Staff satisfaction with access to Radiologists should improve once the workforce issues have been resolved.

