

# Radiology Redesign

Putting the *T* into *Team*

**Julie Olsen**

**Manager Radiology**

**Royal Adelaide Hospital**



**Government  
of South Australia**

---

SA Health

# Overview

- Background
- Process
- Projects
- Team

# Background

- Hospital Management identified issues
  - Emergency Dept blockages/delays
  - Discharge delays
  - Theatre throughput/efficiencies
  - Radiology
- Patient Pathways born

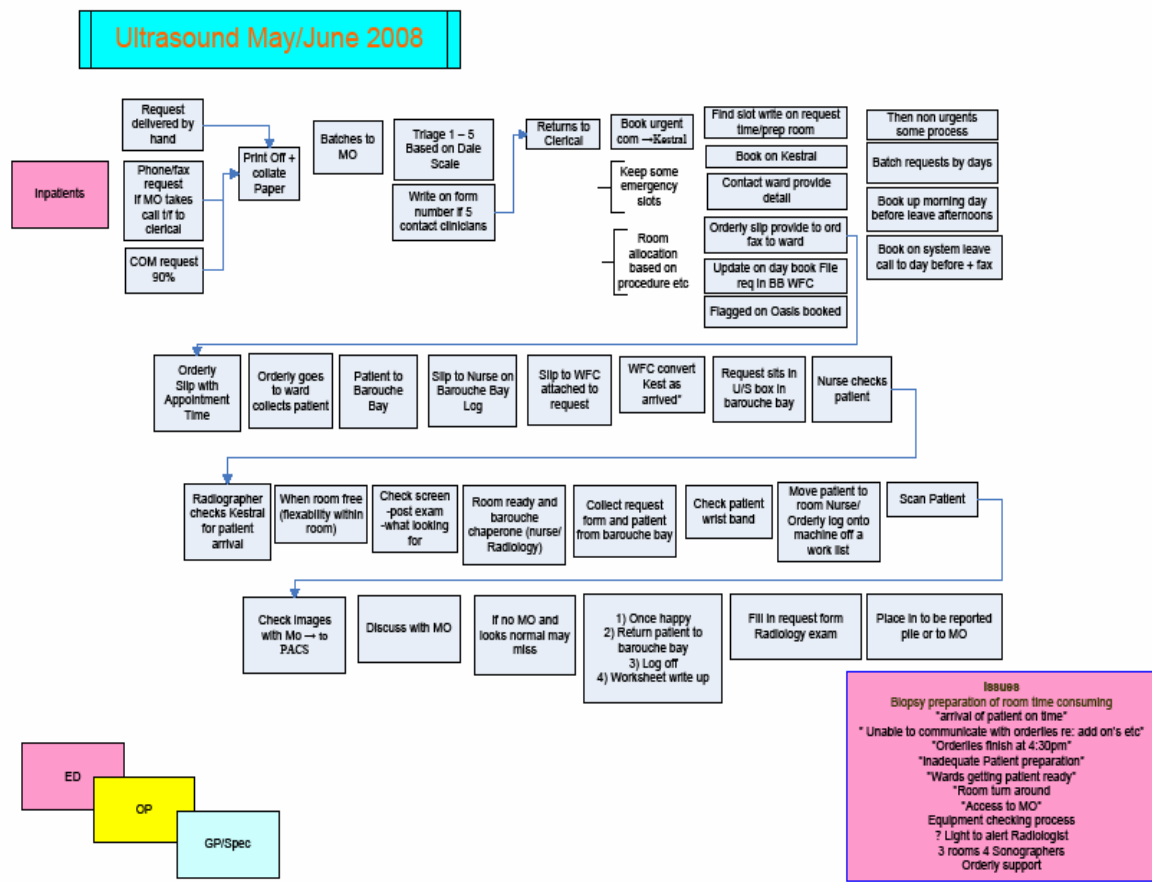
# Radiology Patient Pathways Workgroup

## The TEAM

- Executive support – General Manager
- Project support – Director Patient Pathways
- Radiology Management
- **Stakeholders**
- Consumer

# Pathway Redesign Process

- Mapping



# Pathway Redesign Process Tips

- No Solutions
- Identify
  - Issues
  - Opportunities
- Trial Interventions

# Projects

- Reporting turnaround
- PICC line access
- Orthopaedic inpatient access
- Bed Bay blockages
- Emergency Dept access to  
Radiology

# Reporting Turnaround

## Team

Radiologist - Director  
Radiologist

Registered Nurse - Manager  
Registered Nurse  
Registered Nurse  
Enrolled Nurse

Clerical Officer - Supervisor  
Clerical Officer  
Clerical Officer

Radiographer - Senior  
Radiographer  
Radiographer

Radiology Systems – Manager  
Radiology Systems

Hospital Systems

Referring Clinician  
Medical Registrar  
ED nurse

Orderly

Patient/Consumer

General Manager

# Reporting Turnaround

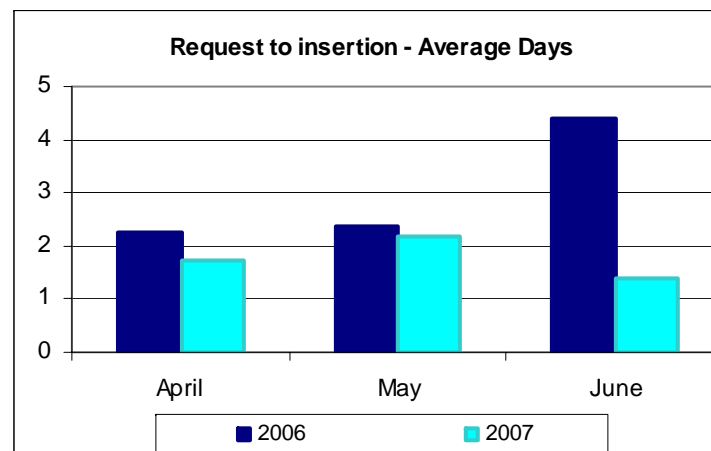
- Mapping – Issues/Opportunities
- Data
  - What can you measure?
  - Targets
- ‘Green’ streams- Glenday sieve
- Interventions
- Assess
  - Data
  - Satisfaction

Month	Total Number Examinations	Number of Examinations - ED	Total No. of reports	Authorise Report available*	Number reports for ED	Image examined off to ED Report available median (hrs:mins)	Report available ED (% within 4 hours)	Image examined off to IP Report available* median (day hrs:mins)	Report available IP (% within 24 hours)	Image examined off - OPD Report available* med (day hrs:mins)	Report available OP (% within 7 days)+
April_2005	8727	2810	8726	2810	2810	11:29	21%	2 1:08:00	31%	2 5:29	79%
May_2005	9065	2829	9071	8808	2829	16:19	21%	2 1:09:00	32%	3 18:19	70%
June_2005	8936	2677	8853	8090	2677	10:35	32%	2 2:29:00	30%	2 19:24	78%
July_2005	9114	3046	9114	7954	3055	4:32	47%	1 14:00	37%	1 21:19	87%
August_2005	9563	2904	9421	9275	2897	4:00	47%	1 11:42	56%	1 0:58	65%
September_2005	8991	2780	8386	7986	2769	3:19	48%	3 0:00	38%	1 8:08	59%
October_2005	8694	2949	8156	7843	2930	2:07	58%	1:23:18	36%	2 4:29	85%
November_2005	8736	2784	8591	8217	2770	2:31	56%	0 20:17	58%	1 11:31	87%
December_2005	8307	2884	8206	8071	2881	2:23	58%	0 21:42	55%	1 23:17	88%
January_2006	8107	2959	8035	7345	2953	2:35	57%	0 16:11	73%	1 3:16	92%
February_2006	8119	2587	7993	7729	2576	5:01	46%	0 18:55	61%	1 0:24	93%
March_2006	8960	2861	8581	7541	2843	6:32	42%	1 22:12	33%	1 14:26	81%
April_2006	7834	2792	7675	7481	2784	3:55	50%	0 22:48	52%	2 17:0	63%
May_2006	9230	3034	9073	8473	3025	4:37	48%	0 11:59	74%	1 20:53	82%
June_2006	8623	2959	8552	8001	2950	2:38	55%	0 10:16	72%	1 11:11	80%
July_2006	8785	3039	8721	8645	3037	2:03	59%	0 5:30	79%	0 20:13	97%
August_2006	9248	2967	9158	9076	2965	0 2:17	57%	0 4:04	82%	0 6:55	95%
September_2006	8873	2930	8796	8690	2925	0 1:40	63%	0 4:31	80%	0 7:18	98%
October_2006	8719	2957	8642	8469	2950	0 1:32	64%	0 2:35	85%	0 4:19	97%
November_2006	9036	2833	9038	9036	2833	0 1:29	62%	0 2:28	85%	0 3:52	96%
December_2006	8228	2907	8192	8002	2900	0 1:25	64%	0 1:53	88%	0 2:57	98%
January_2007	8397	2937	8362	8269	2935	0 1:06	66%	0 1:42	91%	0 3:09	98%
February_2007	8314	2739	8304	8258	2738	0 1:30	65%	0 3:15	85%	0 3:20	97%
March_2007	9139	3232	9085	8969	3220	0 1:39	66%	0 4:24	83%	0 18:31	97%
April_2007	8774	3130	8770	8767	3130	0 1:24	67%	0 2:51	87%	0 6:38	97%
May_2007	9808	3298	9790	9764	3298	0 1:07	67%	0 2:52	85%	0 7:28	96%
June_2007	9101	3139	8976	8675	3139	0 1:38	64%	0 4:08	85%	22:54	97%
July_2007	9632	3353	9615	9533	3352	0 1:50	67%	0 2:49	87%	23:27	75%
August_2007	9776	3320	9711	9520	3305	0 1:26	64%	0 3:00	89%	0 22:39	98%
September_2007	8975	3090	8908	8815	3076	0 1:42	63%	0 3:22	89%	0 20:17	98%
October_2007	9173	3098	9103	9043	3082	0 1:13	66%	0 2:49	88%	0 6:24	97%
November_2007	9307	3073	9301	9258	3073	0 1:12	66%	0 2:20	89%	0 7:28	98%
December_2007	8551	3152	8545	8538	3152	0 1:10	66%	0 3:35	85%	0 21:16	97%
January_2008	8537	3069	8524	8466	3068	0 1:01	69%	0 2:16	88%	0 9:50	96%
February_2008	8824	3068	8760	8579	3059	0 1:49	63%	0 3:18	87%	0 20:06	96%
March_2008	8743	3154	8694	8335	3150	0 1:32	65%	0 3:11	88%	0 22:21	92%
<b>TARGET</b>							<b>75%</b>		<b>100%</b>		<b>100%</b>

# PICC Line Access

- Nurse Initiated Insertion
- Electronic requesting
- Improved communication
- Medical officer allocated to exam room
- Patient information sheet reviewed
- Clinical practice guidelines updated

Overall increase of PICC insertions by 10%

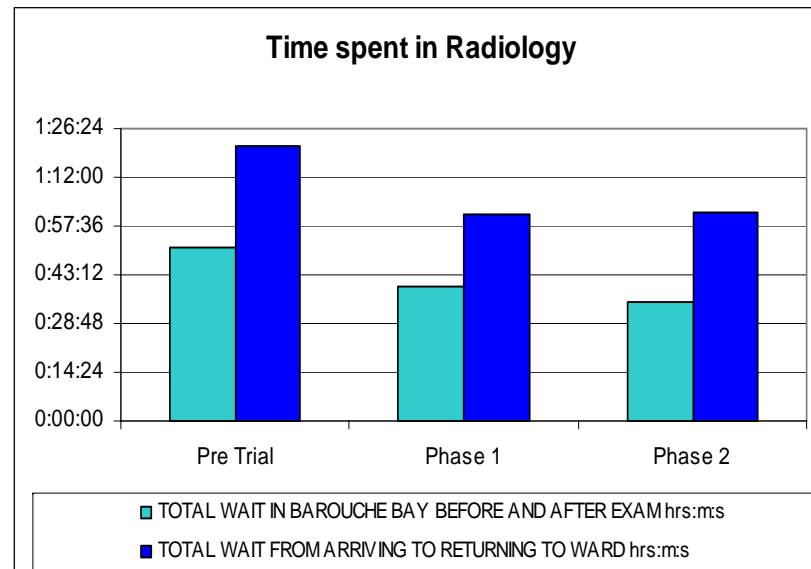


# Orthopaedic inpatient access

- Electronic ordering
- Orderlies
- Ward responsibility

6.5 to 17hr delay

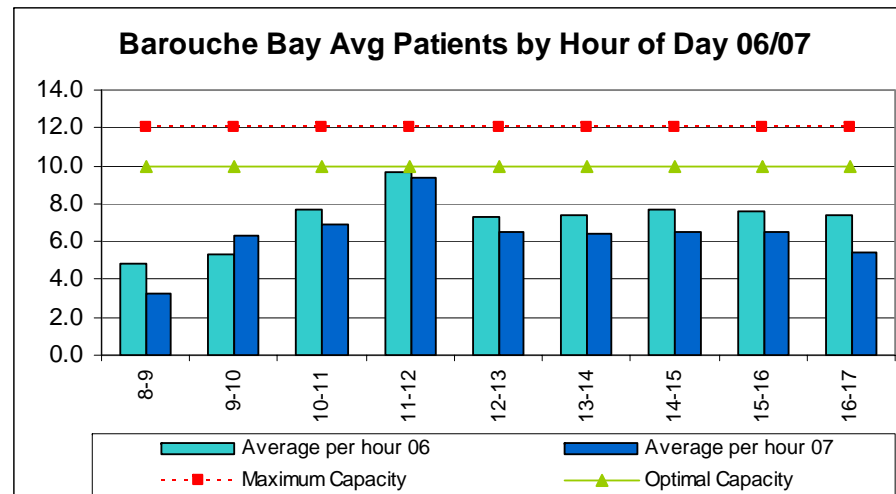
2 hr median time, average 10hr



# Bed Bay Blockages

- Uncoordinated flow
- Administrative staff-Workflow Coordinator
- Orderly

Bed bay stay reduced from 30 min to 27min - median



# Emergency Dept access

## General X-ray

- Mapping
- Data
- Dedicated Room – 1-5pm
- Transport – Orderly
- Systems
- Future
  - Electronic ordering
  - Review

# Putting the T into Team

- Selection
- Inclusion
- Governance
- Ideas
- Solutions
- Communication