## One Less Prick

Improving the Quality of Pathology Orders



October 2013



## PATHOLOGY COSTS ARE GROWING

- Inpatient pathology costs 
   û 12.2% (YTD Dec 2012)
- NSW Health Pathology and Activity Based Funding
- Reporting not linked to activity
- Encouraging Quality Pathology Ordering in Australia's Public Hospitals\*
  - Overuse
  - 'Appropriate' use hard to define



## NOT JUST AN ISSUE OF COST

Patients

- More pricks
- Higher care costs
- Complications pursuing irrelevant results

Pathology

- Increased workload (Phlebotomy and Lab)
- Slower turnaround times
- Reduced surge capacity

Doctors

- Risk of missing abnormal results
- Wasted time ordering unnecessary tests



## HOW INNOVATION CAME ABOUT

- CEC Executive Clinical Leadership Program
- Clinical Practice Improvement methodology
- Aim:

Reduce inpatient pathology activity at Concord Hospital by 10% within 6 months by improving the quality of pathology orders



## THE TEAM – CONCORD HOSPITAL

ANGUS RITCHIE

Clinical
Superintendent

MARGARET JANU

Diagnostic

Pathology Unit

ELSA JUREIDINI Intern

PAM LOW
Chief
Phlebotomist

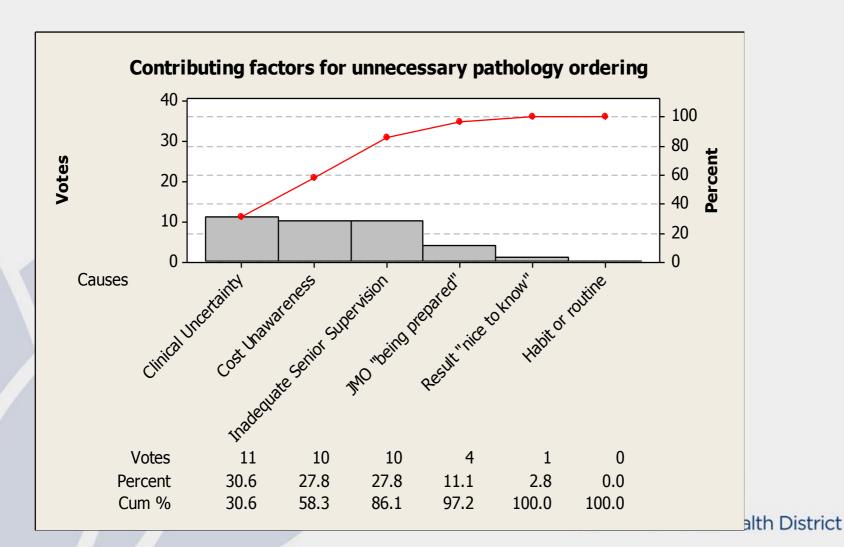
PRUE FARRELL
Clinical Liaison
Manager (Nurse)

PETER KATELARIS Gastroenterologist

ALESSANDRA BIANCHI Haematologist



## **ROOT CAUSES**



## **KEY PROBLEMS**

- 1 DEFINING TEST APPROPRIATENESS
  - Patient-level definitions not possible
  - Key value proposition 'One Less Prick'
- ② WHAT TO MEASURE?
  - Clinically meaningful metric for inpatient pathology activity at a hospital-level?
  - Collections per occupied bed day: links routine pathology ("daily bloods") to activity



## **COST INFORMATION SHEET**

	'ROUTINE' ORDERING	RATIONAL ORDERING
FBC	Daily \$84.75	Second daily \$50.85
Biochem (EUC, CMP, CRP)	Daily \$88.05	Second daily \$53.10
Coags check	"Coags" twice \$40.70	INR alone, once \$13.70
Thyroid function	"TFTs" \$34.80	Screening TSH alone \$25.05
B12 and folate	\$42.95	No order – normal FBC
Iron studies	\$32.55	No order – normal FBC
Vitamin D	Once \$39.05	No order - checked by GP 2/52 ago
Troponin	Two in 24h period \$40.15	No order – no chest pain, normal ECG
Total cost	\$403.45	\$142.70



## MONTHLY PATHOLOGY REPORTS

Department: xxx										
	May-13			May-12			Change (%)			
	Tests	Cost	OBDs	ests	Cost	OBD	Tests	Cost		
Ward A	1629	\$37,536.50	646	2136	\$51,819.20	687				
WardB	1757	\$44,428.25	713	1803	\$46,410.45	775				
Total	3386	\$81,964.75	1359	3939	\$98,229.65	1462	-14.04%	-16.56%		
			,							
Per OBD	2.5	\$60.31		2.7	\$67.19		-7.52%	-10.23%		
OBD	Occupied E	Bed Days								









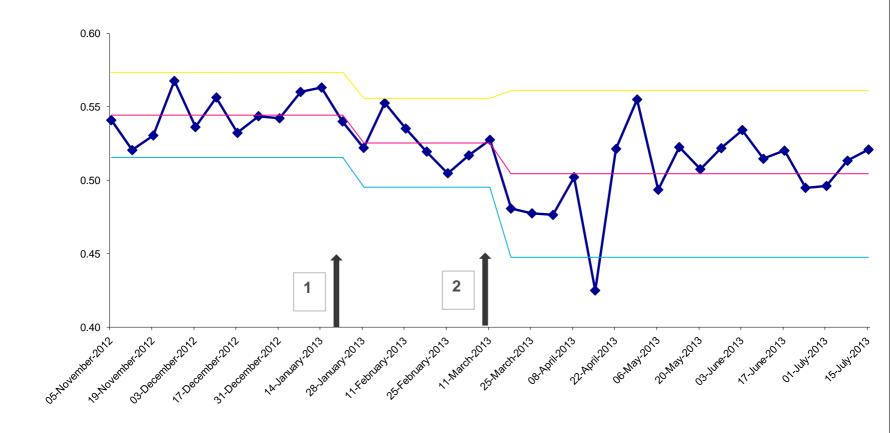




http://investigate.med.unsw.edu.au

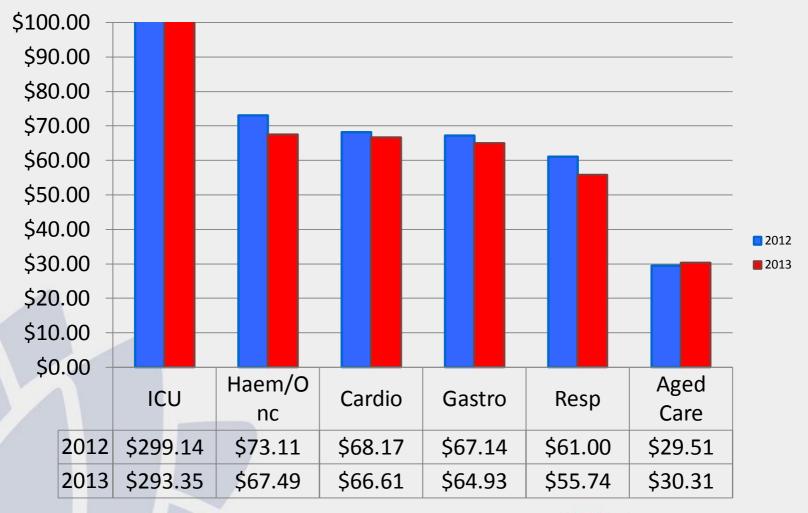


#### PATHOLOGY COLLECTIONS PER INPATIENT OCCUPIED BED DAY



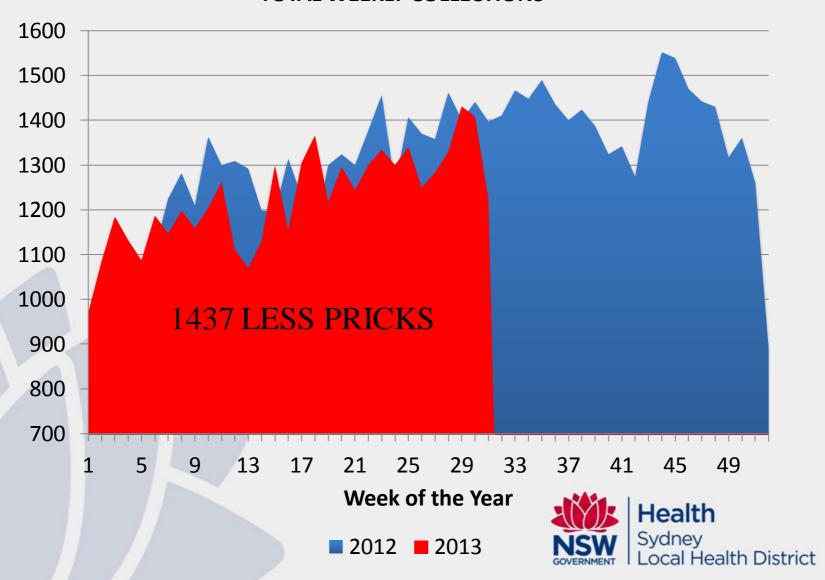


#### **AVERAGE COST PER OBD - FEB TO JUL (INCL.)**





#### **TOTAL WEEKLY COLLECTIONS**



## TAKE HOME ACTION POINTS

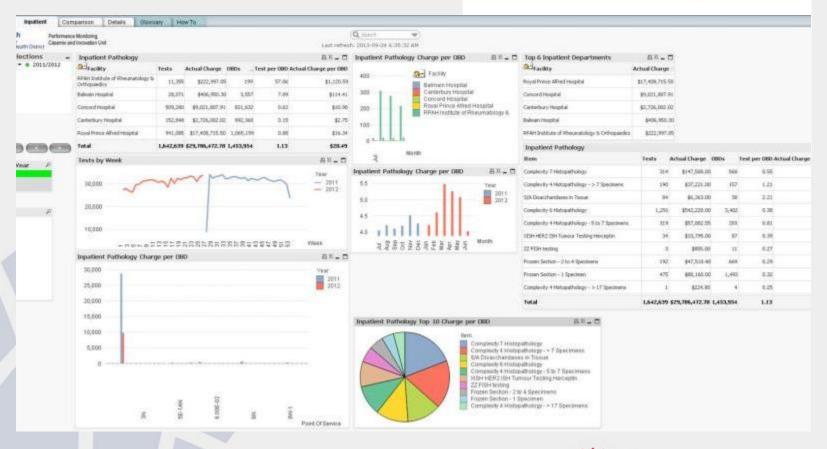
- (1) PRICE SIGNAL AT POINT OF DECISION MAKING
  - Display test costs in the electronic order catalogue<sup>1</sup>
- ② investigate into lms
  - Require or induce JMOs to complete modules
- 3 MEANINGFUL FINANCIAL TOOLS FOR CLINICIANS
  - Cost of care on a per patient basis





# STARS SLHD Targeted Activity & Reporting System

## 'STARS' IN OUR EYES





## WHAT DRIVES VARIATION?

#### **Rate of Inpatient Collections per Occupied Bed Day**

