SA Pathology

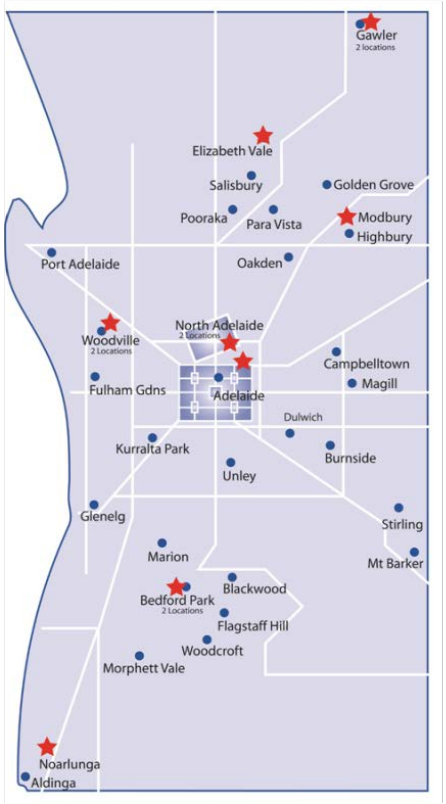
Using NHCDC data to support review of the efficiency, effectiveness and operational performance

Building a better working world

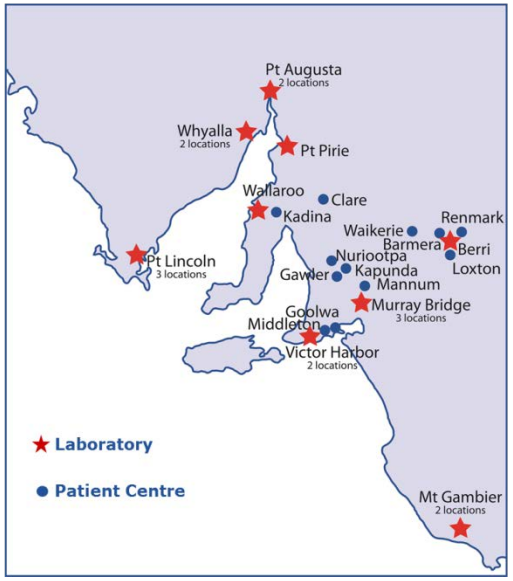
Background to the SA Pathology review

- Statewide service since 2008
- Serves population of 1.5M
- LHN and private support
- Uses ‘bulk billing’ to ensure access for all
- 24/7 provider
- Incorporates:
  - Diagnostic pathology
  - Clinical Services
  - Training
  - Research

Metropolitan Laboratories and Patient Centres

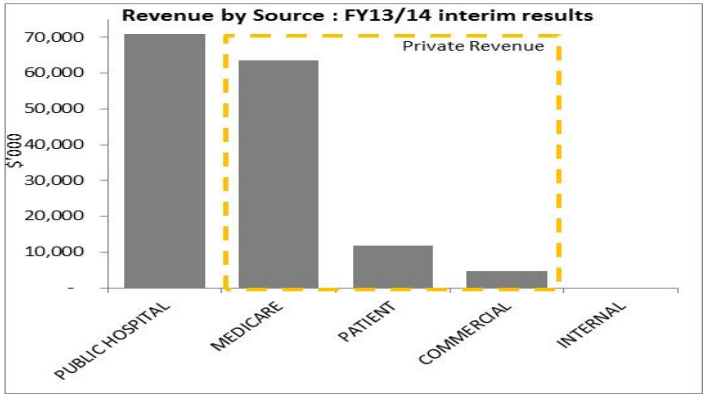


Regional Laboratories and Patient Centres



Background to the SA Pathology review

- SA Health is facing the challenge of meeting the increasing health care requirements of its population at a time when:
  - the cost of providing health care is increasing, and
  - State and Federal government revenues are declining
- SA Pathology has received targets for financial improvement over recent years. These were becoming increasingly difficult to deliver
- The private pathology market is becoming increasingly competitive and approximately 50% of SA Pathology revenue comes from private referrals



Objectives of the review

To determine what further financial improvement opportunities could be achieved while ensuring a safe and high quality pathology service is maintained for its patients and population.

To do this, we need to ask (and answer!) some key questions

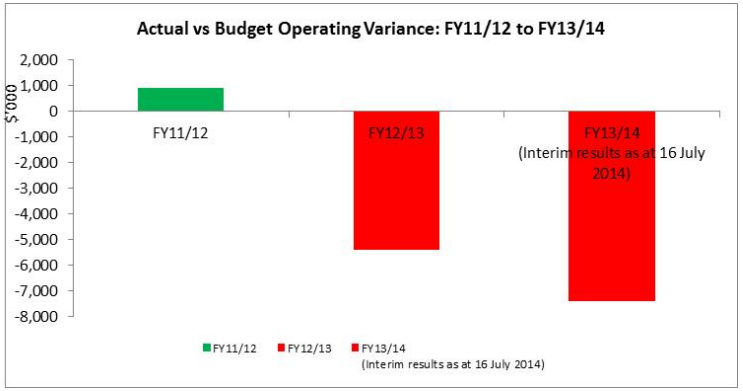
- What is the financial performance of SA Pathology relative to industry recognised ratios?
- How productive is SA Pathology compared to relevant national and international benchmarks?
- How effective is the business relationship between SA Pathology and the LHNs?
- What recommendations are required to improve the overall service and business of SA Pathology; improving efficiency while maintaining the current level of quality and safety?

So what did we find - The good news

- SA Pathology:
  - has maintained relatively stable activity levels and financial performance over the past three years,
  - routinely complies with all external accreditation standards plus RCPA and NATA quality assurance program requirements, and
  - LHNs, and GPs speak highly of the quality and delivery of the diagnostic service delivery.

So what did we find - The not so good news

- Over the past three years
  - Financial performance / operating result is declining
  - SA Pathology had not been able to deliver their expected annual financial improvement target for SA Health
  - Test volumes have remained relatively stable with only a slight increase of 1.5% overall (representing 2.3% increase in public and 0.6% in private testing volumes)



To get traction and ‘buy in’ we knew we needed to have…

- Robust analysis based on respected data sources
- National and International benchmarks from pathology services recognised as SA Pathology ‘peers’
- Evidence that was calibrated in a range of ways
- Input from the agencies and support services that are experienced in Health service delivery, including:
  - Data experts
  - SA Pathology staff
  - Clinical and executive representative from the LHNs
- A lot of time to familiarise everyone with our approach

Collecting, understanding and acting upon opportunities

To optimise the robustness and validity of the benchmarking, the productivity of the diagnostic laboratory was triangulated across three domains:

- Comparison of diagnostic Full Time Equivalent (FTE) numbers to activity volumes (a measure of the relative productivity)
- Comparison of the cost of service provision to MBS rebates (a measure of cost to the revenue at test level), and
- Comparison of the total cost of pathology delivery recorded in the NHCDC cost bucket for the major metropolitan hospitals to reported costs for the same activity volumes and mix for their nominated peer hospitals.

Key elements of our NHCDC analysis approach

- Recognised peer hospitals (already defined for each LHN in the study)
- Leverage the NHCDC dataset ‘cost bucket’ for pathology
- Alignment of the peer hospital casemix to the target hospital casemix
- Clear recognition of costs to be applied to inpatient activity only
- Application costs held at a State service level that did not automatically appear in the cost dataset

The component parts of the analysis

- Step 1 – Understand the costs for the target SA hospital

Hospital Group	DRG6x	DRG Desc	No Recs	Sameday	% Sameday	ALOS	Allied	Critical	Deprec	Hotel	Imag	NonClinical	OnCosts	OR	Path
5FLI	801A	OR PR UNREL TO PDX+	32	0	0%	22.8	$1,167	$5,163	$883	$1,137	$1,868	$1,093	$4,390	$2,614	$1,728
5FLI	801B	OR PR UNREL TO PDX+	13	1	8%	10.2	$344	$754	$473	$599	$240	$731	$1,633	$813	$220
5FLI	801C	OR PR UNREL TO PDX-	26	5	19%	2.8	$231	$0	$176	$194	$76	$199	$510	$2,144	$82
5FLI	A01Z	LIVER TRANSPLANT	19	0	0%	31.3	$1,377	$18,072	$3,911	$3,049	$3,176	$4,882	$18,030	$20,780	$5,975
5FLI	A06A	TRACHEOSTOMY W VE	52	0	0%	56.6	$4,196	$190,211	$12,516	$9,635	$5,705	$2,413	$25,752	$12,917	$8,749

- Step 2 – Obtain costs for nominated peer group

Hospital Group	DRG6x	DRG Desc	No Recs	Sameday	% Sameday	ALOS	Allied	Critical	Deprec	Hotel	Imag	NonClinical	OnCosts	OR	Path
Peer	801A		589	1	0%	18.1	$1,188	$4,047	$682	$1,447	$1,420	$2,267	$2,238	$2,778	$1,294
Peer	801B		218	26	12%	6.7	$447	$538	$298	$653	$821	$856	$717	$2,403	$404
Peer	801C		364	126	35%	2.9	$146	$194	$180	$353	$309	$361	$418	$2,820	$197
Peer	A01Z		86	0	0%	21.6	$2,730	$19,887	$1,453	$1,612	$2,326	$6,423	$6,750	$17,579	$5,004
Peer	A06A		714	0	0%	47.9	$7,198	$97,938	$3,523	$6,072	$5,301	$3,893	$13,050	$10,607	$6,145

- Step 3 – Apply peer cost to target hospital casemix

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Key findings

The NHCDC review showed a higher than national peer benchmark cost of pathology per acute bed day for all sites except WCH, in the range of 23% – 52%

LHN	Hospital	Pathology cost per acute bedday	Peer pathology cost per acute bedday	Annual $ to be saved by moving to the peer
SALHN	Flinders Medical Centre	$71	$55	$3,130,199
NALHN	Lyell McEwin	$63	$51	$1,629,261
SALHN	Noarlunga Hospital	$35	$23	$339,578
CALHN	Royal Adelaide Hospital	$71	$48	$6,063,758
SALHN	Repatriation Hospital	$60	$48	$540,460
CALHN	The Queen Elizabeth	$73	$57	$1,912,947
WCH	Womens and Childrens	$61	$61	-$28,154

So is this an answer?

No, it is a strong indication of a need to act, but which way?

Variation in peer relativity could be driven by one or a combination of factors:

- Lower productivity;
- Higher consumable costs;
- Higher salary costs; or a higher volume of tests per patient relative to nominated peer hospitals in Australia

Which is where the ‘triangulation’ of our analysis comes in

And can we really rely on NHCDC data in this way?

The ‘naysayers’ may say things like:

- ‘Counting and Costing processes are too different’,
- ‘Application of costing standards is not consistent’,
- ‘My hospital is different from your hospital’,
- Charging arrangements for pathology services are too variable
- The costs are all driven by (insert name of favourite jurisdiction here) and they are not like us

BUT

- There is a lot of cost data in the NHCDC now,
- By careful selection of peer groups at a hospital level you can access robust and relevant cost comparisons

And now – back to our ‘triangulation’

So what did our three sets of analysis show?

- Diagnostic staff productivity
  - Blood Sciences at the Frome Rd laboratory is less efficient than the UK mean by a factor of 2.9
  - Infection sciences at the Frome Rd laboratory is less efficient than the UK mean by a factor of 2.3
- Comparison to the MBS Schedule fee
  - The cost of providing public diagnostic services is estimated to be 126% of the MBS fee which is considerably higher than the industry accepted benchmark of 85% or less
- Comparison to the NHCDC
  - The NHCDC review showed a higher than national peer benchmark cost of pathology per acute bed day for all sites except WCH, in the range of 23% – 52%

And the headline!

The combined effect of these productivity gains and the implementation of other identified opportunities offer the potential to save $42.7m - $43.6m and reduce the annual appropriation payment by 56%.

Which will involve

- Rationalisation of laboratory locations with clinically appropriate test consolidation
- Improved utilisation of advanced analytical and ICT technology, and
- A change to the diagnostic service delivery model to allow a safe and patient focussed service whilst delivering a significant reduction in staffing numbers and skill mix to achieve the benchmarks mean FTE and mean cost per test levels.

So now we know there's a problem, what do we do about it?

Actions to understand what has happened retrospectively

- Work with the LHNs to develop tailored reports detailing monthly ordering volumes split by clinical group and ordering clinician to support appropriate requesting to manage volume of work
- Make sure these reports are easily accessible, easily understood and engage with clinicians and operational managers so they know how and when to use them
- Influence and direct different behaviours linked to agreed clinical need rather than chasing demand habits

So now we know there's a problem, what do we do about it?

Actions to address future clinical service delivery

- Research and propose detailed testing protocols for specific diseases with requesting clinicians similar to "Map of Medicine" and "Right Care" - UK
- Aim to review and understand the 'clinical reasons for requests' (not simply the 'number of requests made')
- Implement the technical tools and training/education to support application of agreed protocols

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