Analysing length of stay variation in metropolitan Adelaide public acute hospitals

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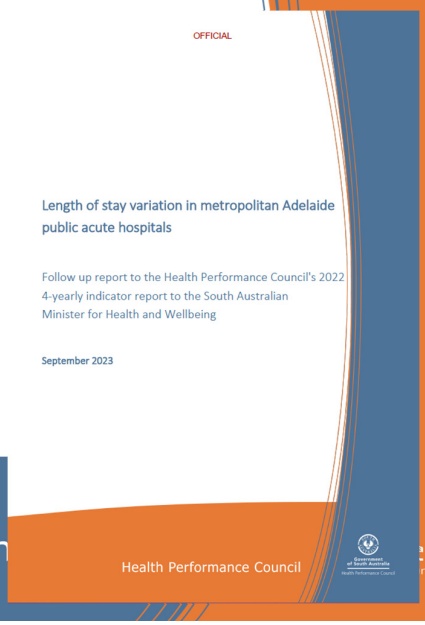

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Ambulance ramping 'absolute shocker' outside Royal Adelaide Hospital, union claims

By state political reporter Leah MacLennan
Posted Tue 6 Nov 2018 at 4:37pm

https://www.abc.net.au/news/2018-11-06/ambulance-ramping-outside-royal-adelaide-hospital-a-shocker/10469598

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Report of South Australian Health Performance Council

3.2 Costs of hospital care — Admitted acute

South Australia ranks second highest of the states and territories for admitted ac

Costs of delivering admitted acute hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 378,15 year for the admitt

The average cost t Australia is $6,523 episode of care.

The NWAU is a me against which the h way of comparing emergency depart weighted for clinic

South Australia ran acute hospital exp hospital expenditu

South Australia's e public hospitals wa

Admitted acute hosp Network is 20.1% mo expenditure per NWA

Table 29: Cost of del

2019-20									
Expenditure per NWAU	$5,108	$6,058	$6,000	$6,200	$5,79	$6,510	$3,669	$6,023	$5,296
Expenditure per episode	$5,786	$4,861	$4,879						

Source: Independent Hospital Pricing Authority web portal

Table 28: Cost of delivering admitted acute hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**273,257**	**$6,726**	**$6,862**	**$1,875.1m**
Central Adelaide	123,064	$7,481	$7,777	$957.0m
Northern Adelaide	64,416	$5,781	$5,529	$356.2m
Southern Adelaide	85,777	$6,296	$6,551	$561.9m
Women's and Children's*	29,704	$6,139	$7,386	$219.4m
Country SA	**75,196**	**$5,572**	**$3,324**	**$250.0m**
Barossa Hills Fleurieu	23,991	$5,230	$2,503	$60.1m
Eyre and Far North	5,334	$5,104	$4,359	$23.2m
Flinders and Upper North	17,470	$6,197	$3,457	$60.4m
Limestone Coast	8,946	$5,879	$5,129	$45.9m
Riverland Mallee Coorong	12,736	$5,150	$2,758	$35.1m
Yorke and Northern	6,719	$5,673	$3,760	$25.3m
South Australia	**378,157**	**$6,523**	**$6,200**	**$2,344.5m**
AUSTRALIA	**5,941,764**	**$6,231**	**$5,296**	**$31,465.7m**
South Australia rank (out of 8)	5	3	2	5

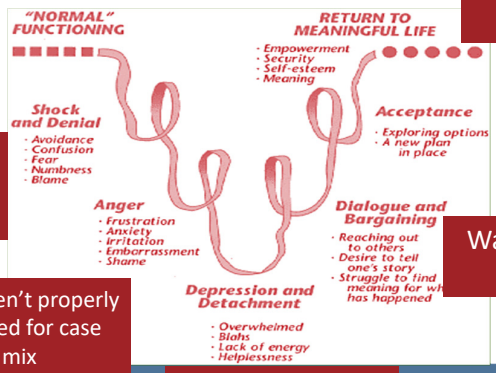
Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Why might length of stay be longer at Royal Adelaide Hospital?

1. Casemix (acute, overnight)
   - Raw: 6 days vs 4.7
   - DRG adjusted : 5.1 vs 4.7

= 40 beds

Addressing internal (and external) issues



Your data are wrong

Wait and it will go away

You haven't properly adjusted for case mix

Why are you targeting us? Sabotage?

Why might length of stay be longer at Royal Adelaide Hospital?

1. Casemix
   - Raw: 6 days vs 4.7
   - DRG adjusted : 5.1 vs 4.7
2. Rural vs urban
   - Can't discharge on same day, need to wait for transport
3. First Nations vs not
4. Emergency vs planned
   - Emergency patients stay longer, we have different mix

Expected reasons, addressed and adjusted for in consultation draft

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Why might length of stay be longer at Royal Adelaide Hospital?

1. Casemix
2. Rural vs urban
3. First Nations vs not
4. Emergency vs planned

= 40 beds

5. Private patient mix
   - Raw: 5.6 vs 4.5
   - DRG, planned vs emerg adjusted: 4.7 vs 4.6
6. 'Complexity not taken account by DRG'
   - aka within-DRG variation
   - MACSS
   - Yes!!
   - but only 2-8 beds of 40

Toson, B., Harvey, L. A.; Close, J. C. T. (2016). 'New ICD-10 version of the multipurpose Australian comorbidity scoring system outperformed Charlson and Elixhauser Comorbidities in an older population'. *Journal of Clinical Epidemiology*, 79, 62–69

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Why might length of stay be longer at Royal Adelaide Hospital?

'Adjusters' vs reasons or where to look

A. Adverse events
   - RAH slightly higher DRG-standardised rate (14.2% vs 14.0%)
   - Adverse events much longer LOS (Adelaide average: 10.8 vs 3.6)

B. Very long stay (> upper bound)
   - <= 75 years RAH vs average: 3.7% vs 3.0%

Jackson, Terri, et al. (2009), 'A classification of hospital-acquired diagnoses for use with routine hospital data', *Medical Journal of Australia*, 191 (10), 544-48.

Report conclusion

> We identified that, just looking at acute overnight patients, about 40 beds could be freed up if RAH addressed its excess ALOS.

> This is not just a theoretical exercise. Every bed taken up by a patient staying too long in hospital, is a bed not available for another patient. This inefficiency therefore contributes to unnecessary ramping and longer wait times for planned procedures.

> Our aim with this report is to identify potential areas for improvement. …. We will therefore revisit this analysis in a further report in the future when data from later periods become available

Subsequent steps

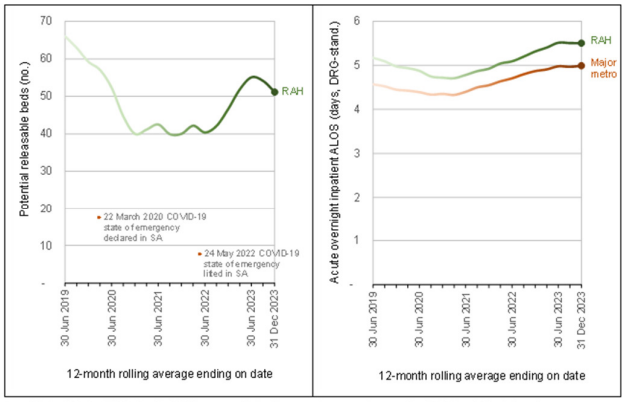
- Report release: ‘call to arms’
- Meetings with board chair, CEO
- Quarterly data (just to hospitals)
- Another public report next year

Patients stay too long at the RAH

Brad Crouch

The Royal Adelaide Hospital could free up 40 beds and cut ramping if it improved its efficiency in discharging patients, an independent in-

Figures 1a and 1b: Number of potential releasable beds* at the RAH and acute overnight ALOS comparison



* potential releasable beds = If RAH reduced its ALOS for acute overnight inpatient stays to the same as other metropolitan Adelaide hospitals for similar patients
Source: SA Health Admitted Patient Care data domain

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Broader implications

1. Preemptive analyses necessary to address ‘Grief cycle’
2. Clear language is helpful
   - KISS principle
   - ‘improve efficiency’ vs reduce LOS vs free up beds
3. Come back to the same issue regularly to keep pressure on

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