

WESTERN AUSTRALIAN SEPTEMBER 2009 SUBMISSION

ADMITTED PATIENT SERVICES

Key Points

- The Commission's remoteness weight of 17 for patient air transport expenses is highly understated, for the following reasons.
 - Western Australia's expenses have been allocated using patient numbers, without taking into account regional cost differentials, which are very substantial.
 - Western Australia's Midwest health region expenses have been classed as non-remote, despite being primarily remote, as reflected in the per-patient costs for the region. Only the Geraldton proportion of expenses should be classed as non-remote.
 - Queensland's unallocated expense data has been allocated EPC, so that a person in central Brisbane is assumed to require as much spending on patient air transport as a person in Mount Isa or the York Peninsula. Unallocated spending should be allocated to regions in the same proportions as the allocated expenses.
- The materiality of including 5 rather than 4 location bands in the Admitted Patient Services assessment should be retested once all data have been finalised.
- The socio-economic status measure proposed in the Draft Report cannot be meaningfully cross-classified with age and indigeneity.
 - Therefore, if this socio-economic status measure is to be used, it should be applied globally, rather than cross-classified.
 - This submission explains how this can be done, and quantifies the results, which are materially different from the proposed assessment.

PATIENT TRANSPORT

Calculation of the placeholder remote weight

Treatment of Western Australia's Royal Flying Doctor Service (RFDS) data

The Commission has allocated Western Australia's total expenses for RFDS to non-remote and remote classifications based on the proportion of patients transferred by region. This method fails to take into account the cost differential between regions, which we have been able to provide for 2007-08. The cost differentials are very substantial, with per-patient costs varying from \$1,300 in the South West to \$10,200 in the Kimberley.

- A more appropriate approach is to sum the product of the number of patients transferred and the average cost per patient, by non-remote and remote regions (scaled down to reflect the total expense¹).
 - Using the Commission's designation of remote regions (i.e. the Goldfields, Pilbara and Kimberley health regions), the share of RFDS expenses that is remote increases from \$9.4 million to \$13.6 million, out of a statewide total of \$19.1 million in 2007-08.
- Average cost per patient is not provided for years other than 2007-08. However, they can be approximated by applying the 2007-08 average cost per patient to the average number of patients transferred each year, then scaling the resulting total expense to match the total expense for that year.

Non-remote classification for Western Australia's Midwest health region

The Commission has allocated the \$3.4 million RFDS expense for the Midwest health region to non-remote areas. This reflects that the population-weighted SARIA score for the Midwest health region is 5.39, which is below the remote cut-off of 5.92.

Geraldton's large relative population and SARIA score of 2.55 dominate this result. However, the region's costs outside Geraldton are high because it includes towns such as Exmouth, Meekatharra and Wiluna, with SARIA scores of 17.46, 21.59 and 22.88 respectively.

- For example, the single-patient transfer cost to Perth from Meekatharra is \$9,941 compared to \$5,768 from Geraldton.²
- The average transport cost per patient for the Midwest region in 2007-08 is between 240% and 400% that for the other three regions classified as non-remote.

¹ The 2007-08 total expense is less than the sum product of patients transferred and cost per patient because Western Australia does not fully fund RFDS services. RFDS fundraising makes up the shortfall.

² This differs from the average cost per patient in the regional data provided, as many flights are multiple-patient transfers, thereby reducing the average cost.

- By contrast, the average cost is much closer to those for the regions classified as remote.
 - Indeed, the average cost for the Midwest is greater than that for the Goldfields, which is classified as remote.

The result is that Western Australia’s patient transfer costs for remote areas are understated, while patient transfer costs for non-remote areas are overstated. A better approach would be to:

- classify the Midwest as remote; or
- separate Geraldton from the remainder of the Midwest region, classifying Geraldton as non-remote and the remainder as remote.
 - This can be done by assuming that Geraldton’s share of total patient transfers in the Midwest region is proportional to Geraldton’s population share for the region (48%) and that Geraldton’s average per-patient cost matches the average per-patient cost of a region with similar characteristics to Geraldton.
 - Albany has a similar population, SARIA score and single-patient transfer cost to Perth as Geraldton. As Albany is the centre of the compact Great Southern region, Albany’s costs can be presumed to reflect the region’s costs. Therefore, the Great Southern region’s average cost per patient of \$2,178.15 (in 2007-08) can be appropriately applied to Geraldton.
 - On this basis, Table 1 allocates 2007-08 expenses in the Midwest region between Geraldton (to be classified as non-remote) and the remainder of the Midwest (to be classified as remote). The table shows that the majority of Midwest expenses (80%) should be regarded as remote.

Table 1: Analysis of Midwest Health Region RFDS Costs, 2007-08

	Population	Patient transfers (number)	Cost per patient transfer (\$)	Total cost (\$)	Government funded proportion of total cost (\$)
Geraldton	27,421	415.54	2,178.15	905,099	690,700
Balance of Midwest	29,330	444.46	7,951.70	3,534,247	2,697,057
Total Midwest	56,751	860.00	5,162.03	4,439,346	3,387,757

Notes:

- Patient numbers for Geraldton and Balance are imputed from population shares.
- Cost per patient for Geraldton is assumed equal to cost per patient in Great Southern.
- Costs for Balance are derived as a residual.
- Government funded proportion is 76.3% of total cost, reflecting the proportion of RFDS costs funded by the State.

Treatment of Queensland's data

Queensland was unable to allocate any of its aero-medical expenses in 2004-05, and only about 50% of its 2007-08 data has been allocated. The intermediate years have an intermediate level of allocation. The Commission has notionally allocated any unallocated expenses based on Queensland's non-remote/remote population shares. This methodology means that the remote share of Queensland's aero-medical expenses varies from 3% in 2004-05, to 11% in 2005-06 and 2006-07, to 25% in 2007-08.

- This methodology is obviously flawed, as it fails to take into account the differences in intensity of use and per patient costs between regions. Use of air services by Brisbane residents is far different from remote areas.
- We believe that any State's data that is not allocated to regions should be allocated to those regions in the same proportions as the allocated expense.
 - If this is not possible, it should not be included in the calculation of the remote weight.

LOCATION MATERIALITY

The Commission's analysis in Position Paper (CGC 2008/18) indicates that a remote/very remote split is not material for Admitted Patient Services, resulting in the use of 4 rather than 5 location bands.

- Western Australia considers that materiality for 5 location bands should be retested once all data have been finalised.
- In particular, a remote/very remote split should be considered for the patient transport data, which may make this split material overall.

SOCIO-ECONOMIC STATUS (SES)

The Commission is proposing to measure SES by the Australian Bureau of Statistic's SEIFA indexes, at the level of Statistical Local Area (SLA).

In our previous submissions, we have expressed concern with this measure, as all persons resident in an SLA will be assigned the same SES, based on the average for the SLA, regardless of their individual circumstances.

If the Commission decides to implement its proposed SES measure, it would be appropriate to do this in a way that recognises that this measure cannot be meaningfully cross-classified with age and indigeneity.

- For example, it is likely that indigenous people generally have a lower SES than the average for the SLA within which they live.

This could be done as follows:

- (1) Calculate a global adjustment factor for each of low, middle and high SES, as follows:
 - (a) For each SES (low, middle and high), calculate national expense.
 - (b) For each SES (low, middle and high), calculate national age, indigeneity and remoteness standardised expense.³
 - (c) Divide the results of Step 1a by the corresponding results of Step 1b.
- (2) For each State, split by SES, calculate standardised using national per capita expenses cross-classified by age, indigeneity and remoteness (but not SES).
- (3) Adjust the standardised expenses from step 2 for SES, by multiplying by the adjustment factors from step 1.
- (4) Sum the results of step 3 across SES, to give a standardised expense for each State.
- (5) Calculated disability factors from the results of step 4.

Table 2 (at the end of this submission) summarises this calculation for the 2006-07 data year, using the Commission's recently circulated database. The difference from the Commission's proposed assessment would be material for three States.

³ By multiplying the national per capita expense for each age/indigeneity/remoteness population sub-group by corresponding populations that are also cross-classified by SES.

Table 2: Admitted Patient Services assessment with SES not cross-classified with other variables, 2006-07

Step 1: Global SES adjustment factors									
	National expense (\$m)		National standardised expense (\$m)				Global SES adjustment factor		
Low SES	6,960		<i>divided by</i> 6,788				= 1.025		
Middle SES	3,318		<i>divided by</i> 3,052				= 1.087		
High SES	5,376		<i>divided by</i> 5,813				= 0.925		
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Step 2: Expenses standardised for age, indigeneity & remoteness (\$m)									
Low SES	2,648	1,337	1,268	441	681	267	5	143	6,788
Middle SES	849	782	642	492	177	71	7	32	3,052
High SES	1,699	1,632	1,184	602	384	57	203	51	5,813
Step 3: Standardised expenses adjusted for SES (\$m) [= Step 1 x Step 2]									
Low SES	2,714	1,370	1,300	452	698	273	5	147	6,960
Middle SES	923	850	698	535	193	77	8	35	3,318
High SES	1,571	1,509	1,095	557	355	53	188	47	5,376
Step 4: Total	5,208	3,729	3,094	1,544	1,246	404	201	228	15,653
Step 5: Factors	1.010	0.961	1.000	0.991	1.050	1.089	0.799	1.447	1.000
<i>CGC factors</i>	<i>1.012</i>	<i>0.969</i>	<i>0.990</i>	<i>0.985</i>	<i>1.072</i>	<i>1.032</i>	<i>0.786</i>	<i>1.439</i>	<i>1.000</i>