AUSTRALIAN INSTITUTE
FOR PRIMARY CARE

Centre for Health Systems Development
Centre for Quality Improvement Research and Practice
Lincoln Centre for Research on Ageing
and
Cochrane Consumers and Communication Review Group

26 May 2010

Senate Standing Committee on Finance and Public Administration
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Sir/Madam

Inquiry into Council of Australian Government Reforms relating to Health and Hospitals

Please accept the following submission with respect to your inquiry into the Council of Australian Government (COAG) Reforms relating to Health and Hospitals.

This submission addresses point (d) of the Inquiry's Terms of Reference and will provide the Inquiry with an analysis of Medicare utilisation and cost across the Australian states/territories over the past five years. For completeness, this submission also includes data from Western Australia.

1. Background

1.1. This submission will provide the Inquiry with an analysis of state/territory differences in the utilisation and cost of the federal Medicare program.

1.2. Given the joint governance arrangements for health in Australia, jurisdictional differences are particularly important in our health system. The National Health and Hospitals Reform Commission identified peculiarities of the Australian federal system (e.g. vertical fiscal imbalance) and the different capacities of the states/territories to fund health services as significant issues to be considered in the reform process.

1.3. A particularly striking example of the differences in health care across state/territory borders can be found in the annual *State of our Public Hospitals* report, which details the differences in hospital inpatient/outpatient services provided in each state/territory.

1.4. However, jurisdictional differences should not be considered exclusive to those parts of the health system involving state/territory governments; it is also a feature of the federally funded and controlled Medicare program.

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1.5. The Medicare program will naturally differ across state/territory borders due to the influence of population-related factors; for example, differences in population size, age, sex, and geographic distribution. Another significant influence is that of the state/territory's available health workforce. State/territory health policy may also influence Medicare utilisation; for example, in Victoria the Department of Health provides state-funded community health services with a "how to" guide to maximise utilisation of Medicare-funded allied health services.[1]

1.6. This submission has been provided to inform the Inquiry of the differences that currently exist within the Medicare program. This analysis will correct for certain population factors (age, sex and population size) to enable more meaningful comparison of state/territory Medicare utilisation.[2] Differences in the use of the overall Medicare program over the past five years are discussed in section 2; sections 3 and 4 provide examples from specific Medicare programs, selected to illustrate to the Inquiry the complex nature of differences in Medicare between the states/territories.

2. State/territory differences in total Medicare program utilisation and cost

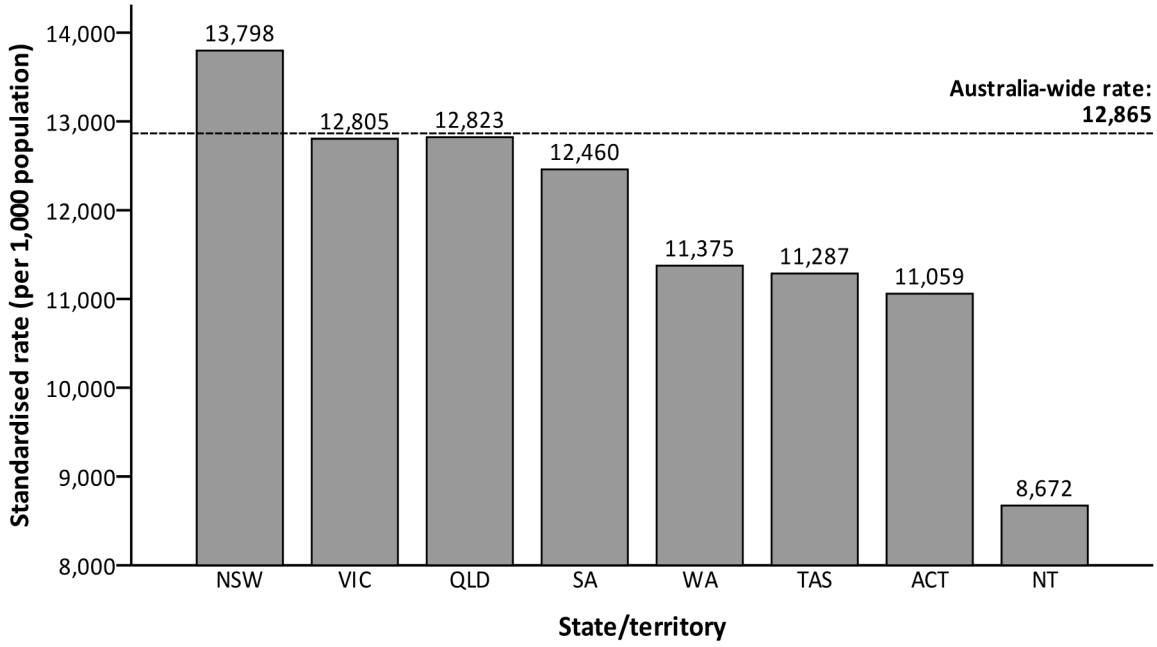
2.1. In total, the Medicare program delivered 304 million services in 2009, at a total cost to Medicare of approximately $15.1 billion. This spending is distributed over a wide variety of services; professional attendances (e.g. GP and specialist consultations) account for 43.8% of the total cost of Medicare, and pathology services account for 13.4%.

2.2. This analysis considers the average rate of Medicare utilisation by state/territory for the past five years. Medicare data for each calendar year was matched to the appropriate yearly population estimate from the Australian Bureau of Statistics.

2.3. As shown in Figure 1, a significantly higher average rate of utilisation is observed in New South Wales (13,798 services per 1,000 population)—almost 1,000 more services than that of Victoria or Queensland, and substantially more than elsewhere in Australia.

Figure 1: Average standardised rates for Medicare services by state/territory (2005 to 2009)

1 Victorian Government Department of Human Services (2009) *Client services through Medicare: Opportunities and considerations for community health services:* http://www.health.vic.gov.au/communityhealth/downloads/client_services_medicare.pdf.
2 Data and technical information is provided in section 6.



2.4. If the substantially higher rate of Medicare utilisation observed in New South Wales were to be replicated across Australia (i.e. if all Australians used Medicare at the same rate as New South Wales), the cost of the Medicare program would increase significantly. Table 1 shows the projected total costs of Medicare in 2009 if individual state/territory rates are applied to the entire Australian population; at New South Wales rates, the cost of Medicare would increase 11.7% to $16.8 billion. It is uncertain whether New South Wales' higher rate of utilisation results in improved health outcomes.

Table 1: Projected total costs of Medicare if individual state/territory rates applied (2009)

State/territory rate applied	Projected total cost for Australia	Difference from actual
New South Wales	$16.8 bil	+11.7%
Victoria	$15.2 bil	+1.1%
Queensland	$14.3 bil	-5.3%
South Australia	$14.5 bil	-3.9%
Western Australia	$12.4 bil	-17.8%
Tasmania	$12.9 bil	-14.6%
Australian Capital Territory	$12.5 bil	-17.4%
Northern Territory	$8.9 bil	-40.7%
Actual cost	**$15.1 bil**	**-**

2.5. The above analysis adjusts Medicare data to account for the effects of population age, sex and

size differences between the states/territories. However, other important population differences between the states/territories will strongly influence Medicare utilisation; for example, the proportion of the population living in remote areas of Australia. As remote populations generally have less access to health services, the proportion of the state/territory population living in such areas will influence these results. This problem is particularly acute in the Northern Territory; our research group is conducting further modelling to account for these other types of population differences.

2.6. The available health workforce in each state/territory will also influence these results; a higher number of GPs/medical specialists in a state/territory may increase the number of services delivered. However, the combined number of GPs and medical specialists in New South Wales (225.2 per 100,000 population) is comparable to that of Victoria (222.3 per 100,000) and lower than that of South Australia and the Australian Capital Territory (253.6 and 246.9 per 100,000 respectively). It should be noted that these workforce data are illustrative only, as they are not adjusted for full-time equivalence (FTE).

2.7. In summary, there is a substantial and continuing imbalance in Medicare utilisation across the states/territories. Figure 1 shows that at the "macro" level Medicare operates as a four-tiered system: New South Wales (Tier 1); Victoria, Queensland and South Australia (Tier 2); Western Australia, Tasmania and the Australian Capital Territory (Tier 3); and the Northern Territory (Tier 4).

3. Program example 1: Selected mental health services under Medicare

3.1. In 2006, the *Better Access to Psychiatrists, Psychologists and General Practitioners through Medicare* initiative was introduced. This program expanded the options available under Medicare for the care of mental illnesses, and included new Medicare items for services provided by clinical psychologists, psychologists, occupational therapists, and social workers. These services are available to patients on referral from their GP; the total number of services provided to a patient is capped at 12 per calendar year (with a further six available in exceptional circumstances).

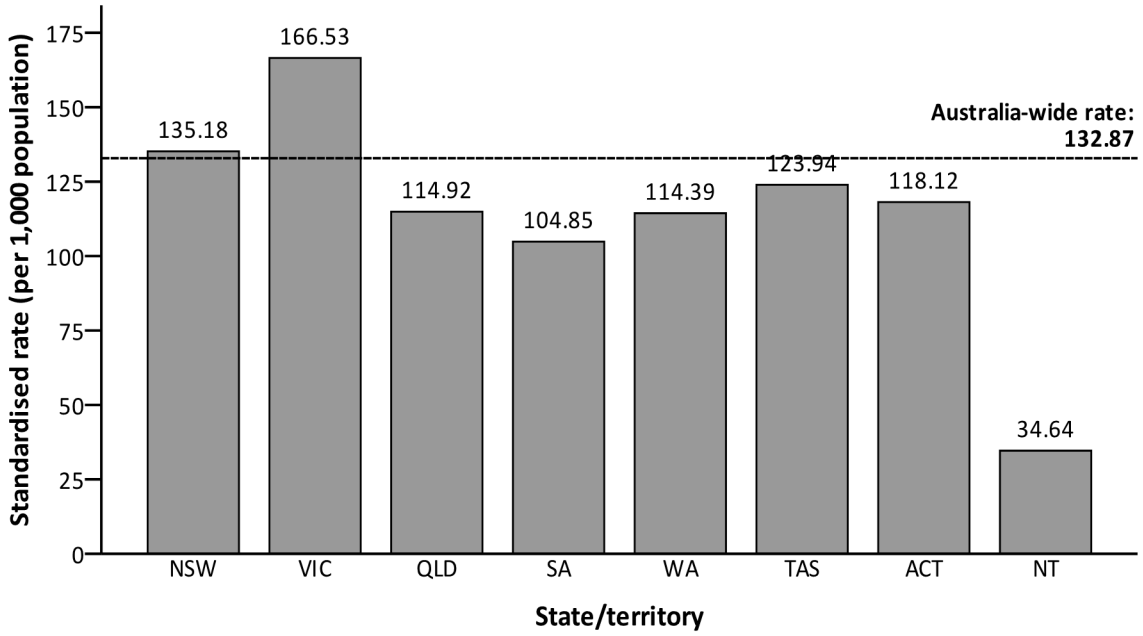
3.2. In 2009, approximately 2.9 million services were delivered under the allied health stream of the initiative, with 34.5% of these services delivered by clinical psychologists, 59.6% by psychologists, and 5.9% by occupational therapists/social workers. The total cost of Medicare rebates for these services in 2009 was $275.5 million.

3.3. This analysis considers utilisation data for 2009 only.

3.4. The observed state/territory rates for these services in 2009 were quite different to the pattern seen for all Medicare services (Figure 2). The highest rate of allied mental health services was observed in Victoria (166.53 services per 1,000 population); NSW had the second-highest utilisation rate. Rates in Queensland, South Australia, Western Australian and the Australian Capital Territory were all comparable; once again, service delivery in the Northern Territory was substantially lower than in any other jurisdiction.

Figure 2: Standardised rates for Medicare allied health services for mental health by

state/territory (2009)



3.5. As above, applying individual state/territory rates across the entire Australian population produces different projected costs (Table 2). If the higher rate of utilisation observed in Victoria in 2009 was applied to the entire Australian population, the cost of these services to Medicare would increase 21.8%. If the lower rates of utilisation observed in Queensland or South Australia applied across Australia, the cost of the program would be reduced by 17.1% or 16.9%, respectively.

Table 2: Projected total costs to Medicare if individual state/territory rates applied: Allied mental health services

State/territory rate applied	Projected cost for Australia	Difference from actual
New South Wales	$281.7 mil	+2.3%
Victoria	$335.5 mil	+21.8%
Queensland	$228.3 mil	-17.1%
South Australia	$228.8 mil	-16.9%
Western Australia	$264.0 mil	-4.2%
Tasmania	$267.6 mil	-2.9%
Australian Capital Territory	$253.7 mil	-7.9%
Northern Territory	$71.3 mil	-74.1%
Actual cost	**$275.5 mil**	**-**

3.6. Utilisation of these Medicare items is likely to be highly influenced by population distribution, and in particular the psychologist workforce, which varies considerably between jurisdictions.

For example, in Victoria, there are 61.5 psychologists per 100,000 population compared to 53.8 per 100,000 in NSW. The jurisdiction with the highest concentration of psychologists is in fact the Australian Capital Territory, with 93.1 psychologists per 100,000 population. However, it should be noted that these workforce data must be interpreted with caution, as they include all psychologists and are not adjusted for FTE or Medicare provider status.

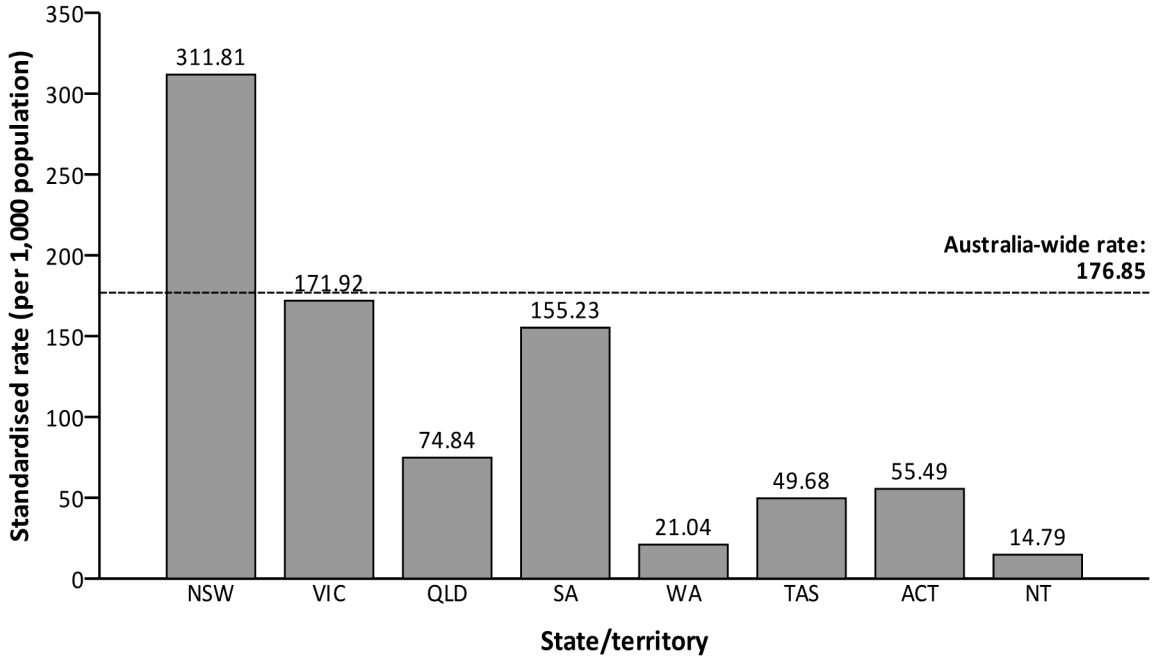
4. Program example 2: Dental services under Medicare

4.1. Certain types of dental services are eligible for Medicare rebates. Dental services under Medicare are provided under MBS categories 9 (dentist services, dental specialist services and dental prosthetic services) and 10 (preventive dental services for teenagers). In total, 3.9 million dental services were provided under these categories in 2009, at a total cost to Medicare of approximately $550 million.

4.2. This analysis considers utilisation data for 2009 only.

4.3. There were considerable differences between states/territories in the use of dental services under Medicare. As shown in Figure 3, the rate of utilisation of dental services in New South Wales is substantially higher than all other states/territories. Utilisation of Medicare dental services is particularly low in Queensland, Western Australia, Tasmania, the Australian Capital Territory, and the Northern Territory.

Figure 3: Standardised rates for Medicare dental services by state/territory (2009)



4.4. Once again, applying individual state/territory rates across the entire Australian population produces different projected costs (Table 3). If applied across Australia, the substantially higher rate of utilisation observed in NSW would result in an 80.6% increase in the cost of these

items to Medicare (i.e. $993 million, rather than the actual cost of $550 million).

Table 3: Projected total costs to Medicare if individual state/territory rates applied: Dental services

State/territory rate applied	Projected cost for Australia	Difference from actual
New South Wales	$993.2 mil	+80.6%
Victoria	$525.9 mil	-4.4%
Queensland	$223.2 mil	-59.4%
South Australia	$433.2 mil	-21.2%
Western Australia	$67.3 mil	-87.8%
Tasmania	$156.7 mil	-71.5%
Australian Capital Territory	$162.6 mil	-70.4%
Northern Territory	$40.8 mil	-92.6%
Actual cost	**$550.0 mil**	**-**

4.5. The extremely high utilisation rate in New South Wales cannot be entirely attributed to workforce influence; the number of dentists, dental specialists and dental prosthetists in New South Wales (46.7 per 100,000 population) is only marginally higher than Victoria or Queensland (42.9 and 41.4 per 100,000 respectively) and lower than South Australia and the Australian Capital Territory (48.4 and 52.1 per 100,000 respectively).

5. Summary

5.1. This analysis was prepared for the Inquiry based on research conducted by myself and co-researchers at La Trobe University and Monash University,[3] and is intended to inform the Inquiry of the current federal–state/territory health system interface. In summary, there are significant differences in the operation of Medicare, Australia's universal health system. While this analysis has adjusted for important population differences between the states/territories, further analysis is required to correct for other factors, such as population remoteness. However, preliminary findings from our research indicate that these differences between the states/territories persist even when factors such as remoteness are taken into account.

5.2. The two program-level examples—the psychology and dental items—demonstrate the complex nature of the federal–state/territory "balance" in health. The Medicare dental program provides an acute example of the imbalance in federal health programs across state/territory borders. The COAG reform process must consider these specific program-level differences—not just macro-level differences—with respect to providing top-up funding for the states/territories. Comprehensive monitoring of jurisdictional differences should also be considered. Furthermore, the "differential geometry" of Medicare illustrates the profound difficulties in establishing national systems in health, and greater appreciation of the current health system is required to properly inform the design of our future health system.

3 Dr Dell Horey and Professor Hal Swerissen (La Trobe University); Dr Charles Livingstone (Monash University).

Please let me know if I can be of further assistance to the Inquiry. I thank the Committee for the opportunity to make this contribution and for considering this submission.

Yours sincerely

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6. Data and technical information

6.1. *Data sources*: all Medicare data were obtained from the Medicare Australia Statistics website.[4] Population data were obtained from the Australian Bureau of Statistics.[5]

6.2. Medicare data based on state/territory of *patient* residence (not location of service).

6.3. *Age–sex standardisation*: all Medicare utilisation and expenditure data were age–sex standardised using the direct method.[6] The reference population used was the 2009 Australian ERP.

6.4. *Medicare items included in program example 1*: the following Medicare items were included in the analysis of allied health services under the *Better Access to Psychiatrists, Psychologists and General Practitioners through Medicare* initiative. Only items for individual patient consultations were considered; all group therapy items for these providers were excluded from the analysis.

Provider type	Medicare item numbers included in analysis
Clinical psychologist	80000, 80005, 80010, 80015
Psychologist	80100, 80105, 80110, 80115
Occupational therapist	80125, 80130, 80135, 80140
Social worker	80150, 80155, 80160, 80165

6.5. *Medicare items included in program example 2*: all Medicare items included under MBS categories 9 and 10 were included in the analysis.

6.6. *Workforce data*: workforce estimates were obtained from the Australian Institute for Health and Welfare's labour force data.[7] For psychologists, all professional subtypes were included with the exception of psychotherapists. Figures quoted for the dental workforce include dentists, dental specialists and dental prosthetists.

4 Medicare Australia Statistics: https://www.medicareaustralia.gov.au/statistics/mbs_group.shtml.
5 Australian Bureau of Statistics: http://www.abs.gov.au/AUSSTATS/abs@.nsf/webpages/statistics?opendocument.
6 Daly LE, Bourke GJ. *Interpretation and uses of medical statistics.* 5th ed. Oxford: Blackwell Science, 2000.
7 AIHW Online Labour Force Data: http://www.aihw.gov.au/labourforce/data_links.cfm.