



COMMONWEALTH GRANTS COMMISSION

DISCUSSION PAPER CGC 2002/29

INPATIENT SERVICES ASSESSMENT

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INPATIENT SERVICES PROPOSED CHANGES FOR THE 2004 REVIEW

1. This paper provides an overview of the proposed Inpatient Services, and Hospital Patient Fees assessments for the 2004 Review. It presents issues outlined in States' 2004 Review submissions concerning methodological and technical aspects of the categories, and staff responses to the issues. It also presents the results of Commission staff research concerning other proposed changes to the assessment.

The 1999 Review Hospitals Category

2. The Hospitals category comprised expenses on acute medical care and treatment. Acute care hospitals were defined as establishments that provided at least minimal medical, surgical or obstetric services for inpatient treatment and/or care, and which provided continuous comprehensive qualified nursing services as well as other necessary professional services¹. It included expenses on equipment and supplies, staff accommodation and amenities. More specifically, the category included expenses on:

- (i) all admitted patient services including nursing home type patients in acute care institutions;
- (ii) emergency transport to hospital;
- (iii) inter-hospital transport;
- (iv) non-emergency transport to and from treatment centres;
- (v) travel and accommodation assistance;
- (vi) research into health, medical and health sciences undertaken in acute care institutions; and
- (vii) medical instrumentation undertaken in acute care institutions.

3. Specific purpose payments (SPPs) from the Commonwealth relating to this category and their method of treatment in Commission assessments are listed in Attachment A to this paper.

4. Table 1 shows the gross standard expenses for the five years of the 2002 Update assessment period and for the previous year. In 2000-01, the Hospitals category represented 13.79 per cent of total gross standard expenses.

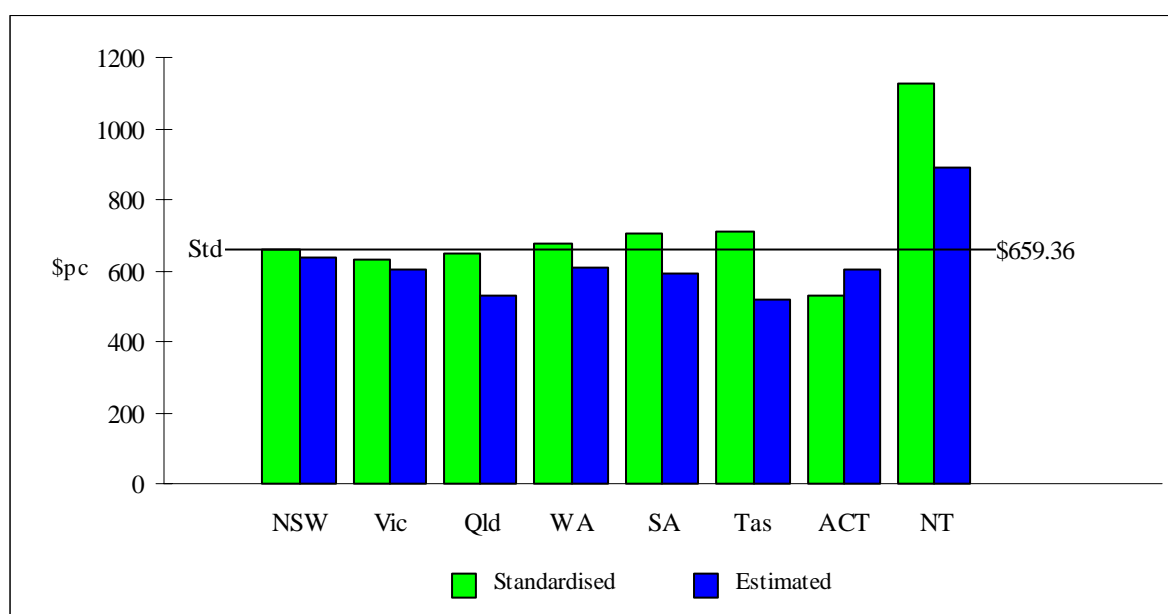
1 Australian Institute of Health and Welfare, *National Health Data Dictionary, Version 9, 2000*, Canberra, ACT.

Table 1 HOSPITALS — GROSS STANDARD EXPENSES

	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
\$pc	516.55	511.64	537.94	601.65	621.01	659.36
% of total gross standard expenses	14.55	13.93	13.94	13.21	13.40	13.79

5. Figure 1 shows the gross expenses per capita for 2000-01 in terms of standardised, estimated and standard expenses.

Figure 1 HOSPITALS — GROSS EXPENSES PER CAPITA — STANDARDISED, ESTIMATED AND STANDARD, 2000-01



6. Compared with an equal per capita assessment, the 2002 Update Hospitals assessment redistributed about \$191.5 million (\$9.96 per capita) away from New South Wales, Victoria, Queensland and the ACT to Western Australia, South Australia, Tasmania and the Northern Territory.

7. The main driver of change was the acute inpatients socio-demographic factor which moved \$128.6 million (\$6.67 per capita) in the 2002 Update.

8. Table 2 shows the structure of the assessment in the 1999 Review.

9. In the 1999 Review, the Health categories (including the Hospitals category) were defined using the ABS Government Purpose Classifications for health expenditure.

Table 2 HOSPITAL SERVICES EXPENDITURE ASSESSMENT STRUCTURE FOR THE 1999 REVIEW

Expenditure component	Expenditure component weight	Disability factors	Basis of calculation
	%		
Hospital acute inpatient services	89.76	Socio-demographic composition	Cost weighted utilisation rates by age, sex, Aboriginality, income, region and low English fluency derived from Hospital Morbidity Data and Census data.
		Hospital costs	Based on the average cost of treatment by region to account for dispersion, service delivery scale and research and case complexity.
		Input costs	General method with weights of 70% for wages, 2% for accommodation and 1% for electricity.
Hospital non-acute inpatient services	7.81	Socio-demographic composition	Bed day rates by age, sex, Aboriginality, income, region and low English fluency derived from Hospital Morbidity Data and Census data.
		Hospital costs	Based on the average cost of treatment by region to account for dispersion, service delivery scale and research and case complexity.
		Input costs	General method with weights of 70% for wages, 1% for accommodation and 3% for electricity.
Patient transport	1.50	Cost of patient transport	Based on the general dispersion method for air travel, inter-regional travel and local travel.
Scale-affected expenditure	0.64	Input costs	General method with weights of 80% for wages, 2% for accommodation and 1% for electricity.
		Administrative scale	General method.
Isolation	0.29	Isolation	General method.

Changes to the Category Assessment Structure

10. The main change proposed to this category is the inclusion of expenses for inpatients in designated psychiatric wards and inpatients in psychiatric institutions, as was outlined in the *Discussion Paper CGC 2001/12, Scope and Structure of the Standard Budget*. These services were previously included in a separate Mental Health category. The Hospitals category will be renamed Inpatient Services.

11. *State views.* New South Wales, Victoria, Queensland, Tasmania, and the Northern Territory supported the inclusion of the mental health inpatient expenditure in the Inpatient Services category. The Northern Territory suggested a separate expenditure component for psychiatric institutions and designated psychiatric wards.

12. Western Australia suggested a merging of the health categories and more global assessment measures.

13. South Australia questioned whether the proposed disaggregation of the mental health category into the Inpatient Services and Non-Inpatient Services and Community Health categories would be feasible, as States did not consistently use that disaggregation.

14. *Comments.* In relation to Western Australia's suggestions, the issue of adopting more global expenditure assessments was discussed in *Discussion Paper CGC2002/3, Scope and Structure of the Equalisation Budget*. In brief, that paper noted that the Commission was not inclined to adopt aggregated expenditure assessments, subject to any further arguments that may arise at the October or November 2002 conferences.

15. In response to South Australia, Commission staff believe that costs for mental health inpatients can be calculated using the methods currently used in the non-acute inpatients component. Staff also believe the amalgamation will produce a better assessment because:

- (i) the disability variables used to assess costs and demand in the non-acute inpatient component are relevant to the mental health inpatient population; and
- (ii) as a standard policy, States fund inpatient mental health episodes on a per diem basis, similar to non-acute general inpatients.

16. Staff propose to recommend to the Commission that mental health inpatient expenditure be combined with non-acute inpatient expenditure. We propose no change to the component structure for this category.

ACUTE INPATIENT SERVICES COMPONENT

17. In the 1999 Review, the acute inpatient services component included assessments for disability factors relating to:

- (i) socio-demographic composition;
- (ii) hospital costs; and
- (iii) input costs.

SOCIO-DEMOGRAPHIC COMPOSITION FACTOR

Introduction

18. Demand for acute inpatient services, and the unit costs of providing these services, are affected by population characteristics. The 1999 Review socio-demographic composition factor reflected the demand and unit cost influences of different population groups on the total cost of acute inpatient services.

19. The factor was based on use rates and Diagnosis Related Groups (DRG) cost weights for different population groups. Use rates measure demand for inpatient services, while DRG cost weights measure the relative cost of treating inpatients. Data on the use and cost of services by different population groups were derived from the National Hospital Morbidity dataset and the number of people in each group in the Census of Population and Housing.

20. Use rates and/or DRG cost weights were calculated for all acute inpatients grouped by:

- (i) age (use rates and cost per unit weights);
- (ii) sex (use rates and cost per unit weights);
- (iii) Indigeneity (use rates and cost per unit weights);
- (iv) low English fluency (cost per unit weight based on actual State expenses);
- (v) population location (use rates and cost per unit weights); and
- (vi) socio-economic status (use rates).

21. Three adjustments were made to the DRG cost weights. They were:

- (i) outlier cost adjustment – to reflect the differential costs incurred due to varying lengths of stay in hospital;
- (ii) Indigeneity cost adjustment – to reflect the extra costs of servicing Indigenous inpatients not picked up in the outlier adjustment; and
- (iii) private patients cost adjustment – to reflect the lower costs of servicing private inpatients in public hospitals.

Age / Sex

22. The use and cost of inpatient services is influenced by the age and sex composition of State populations. To recognise this influence, age groups were selected to

capture differences in demand and cost structures. The age groups used for both males and females were:

- (i) less than 1 year old;
- (ii) 1;
- (iii) 2 to 4;
- (iv) 5 to 14;
- (v) 15 to 19;
- (vi) 20 to 39;
- (vii) 40 to 59;
- (viii) 60 to 64;
- (ix) 65 to 69;
- (x) 70 to 74;
- (xi) 75 to 79;
- (xii) 80 to 84; and
- (xiii) 85 and over.

23. No issues were raised concerning the assessment of age/sex or the current age groups. It is proposed that the same age/sex groups be retained for the 2004 Review.

Indigeneity

24. Research has found that Indigenous inpatients use services more often, cost more than other inpatients, and have longer lengths of stay than non-Indigenous inpatients^{2,3}.

25. The influences of Indigeneity recognised in the socio-demographic composition assessment were:

- (i) demand, measured by utilisation rates;
- (ii) cost per unit, measured by DRG cost weights;
- (iii) under recording of Indigenous inpatients;
- (iv) longer length of stay; and

² National Aboriginal and Torres Strait Islander Casemix Study (1997), Commonwealth Department of Health and Family Services.

³ *Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99* (2001) Australian Institute of Health and Welfare, pp 52,55.

- (v) higher cost of treatment not captured by length of stay.

Indigenous Demand

26. **State views.** Western Australia noted that the Commission calculated Indigenous use rates using Australia-wide data. It considered that this approach significantly disadvantaged States with high Indigenous hospital utilisation. Western Australia stated that the solution would be to:

- (i) assume actual service provision reflected need;
- (ii) use actual ratios of Indigenous use rates to non-Indigenous use rates for each State; or
- (iii) combine the Northern States and Southern States into two separate groups and determine standard Indigenous utilisation rates for each of these groups separately.

27. **Comments.** The underlying issue raised by Western Australia is that using a national average use rate for Indigenous inpatient separations placed it at a disadvantage due to its higher than average level of Indigenous separations. Two of Western Australia's solutions proposed the use of actual State separation rates. It is not clear how much of the Western Australian difference from the average is due to policy influences and how much is due to disability. Commission staff would prefer that Western Australia identify additional disabilities that should be taken into account.

28. Previous research has indicated that there are differences in Indigenous utilisation rates between States. Commission staff propose further investigation of whether the Western Australian suggestions should be developed.

Under-identification of Indigenous Inpatients

29. **Background.** In the 1999 Review, an adjustment was made to compensate for the under-identification of Indigenous inpatients in the hospital morbidity data used in the Hospital assessment. The adjustment was considered necessary because of significant under-recording of Indigenous status in inpatient data.

30. The Indigenous under-identification adjustment was made using the estimates of under-identification from the report '*Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1995-1996*' (1998) by the Australian Institute of Health and Welfare.

31. **State views.** The ACT requested that the Commission use the estimate of Indigenous under-identification reported in '*Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99*' (2001) by the AIHW. It commented that the AIHW based the under-reporting figure for the ACT (44 per cent) on an ABS Report '*Assessing the Quality of Identification of Aboriginal and Torres Strait Islander People in Hospital Data*' (1999).

32. Table 3 compares the under-reporting estimates from the two AIHW reports.

Table 3 UNDER-IDENTIFICATION PERCENTAGE OF INDIGENOUS INPATIENT POPULATIONS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	%	%	%	%	%	%	%	%
1998 AIHW Report	33	25	15	0	10	n/a ^(a)	0	0
2001 AIHW Report	30	25	20	6	10	n/a ^(a)	44	0

(a) Recording errors in Tasmania were so large that no under-identification factor could be applied (see further explanations below).

Source: Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1995-96, 1998, AIHW.
Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99, 2001, AIHW.

33. **Comments.** For most States, the level of Indigenous under-recording identified in the two reports were about the same, except for the ACT. The more recent report identified, for the ACT, 44 per cent of under-recording of Indigeneity compared with zero under-recording in the earlier report. The AIHW believes that the new estimate is reasonably reliable.

34. In the AIHW (1998) report, an Indigenous under-recording estimate was not provided for Tasmania, so a figure equal to the average of the other States was applied. A similar situation existed in the 2001 report, which stated that recording errors for Tasmania were so large that no under-identification factor could be applied. As for the 1999 Review, Commission staff propose to recommend that an average of the other States figures from the 2001 report (22.5 per cent) be applied to Tasmania.

35. Commission staff propose to use the updated estimates of under-recording provided in '*Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99*' (2001) by the AIHW.

36. In the 1999 Review, a 20 per cent discount was applied to the 1995-96 figures for the first year, and a 10 per cent reduction was applied to the figures for the following years. This was because it was assumed that the recording of Indigenous data would improve with time. In retrospect, this assumption was not supported as the 2001 figures are the same as, or higher than, the 1995-96 figures. Commission staff propose that no yearly discounts be applied in the 2004 Review.

Low English Fluency

37. **Background.** In the 1999 Review, interpreter services were considered one of the drivers that affected inpatient costs. A weight of 10 per cent was applied, based on information received from States to reflect the cost of interpreter services and additional staff time associated with more complex oral communications.

38. **State views.** Victoria stated that the low English fluency cost weight was too low. It said that the current factor only took into account the cost of translations, but there

were other costs associated with people from low English fluency backgrounds. These were:

- (i) people of non-English speaking background often entered the health system later and therefore increased the costs of treatment;
- (ii) re-admissions due to the poor post treatment action taken by many people with low English fluency; and
- (iii) provision of prayer rooms and other specific cultural facilities.

39. Victoria would like the Commission to increase the cost weight attributed to people with low English fluency due to the added cost of meeting divergent cultural needs and accommodating their higher use rates.

40. Tasmania suggested that the low-English fluency cost weight did not recognise economies of scale which could be achieved in relation to delivering services to people with communication difficulties or cultural differences. It commented that in areas where there were smaller communities of people from similar cultures or languages, it was often more necessary to bring in interpreters. While these people could provide the service of interpretation, they may not be aware of services available or the cultural differences which needed to be taken into account. In larger communities of people from similar cultures or languages, this was not likely to be the case.

41. Tasmania would like the Commission to introduce an additional weight for those States with a small number of people with low English fluency, or discount the weight for States with a high number of people with low English fluency.

42. *Comments.* Information available at the time of the 1999 Review showed that people from non-English speaking backgrounds had lower than average use rates of hospital services. While this finding has been supported by more recent publications⁴, Commission staff acknowledge that there are higher costs involved in the use of translators for inpatient services. However, it would seem that the provision of prayer rooms and other specific cultural facilities are unlikely to have a material impact on State hospital budgets.

43. Commission staff propose to continue the low English fluency cost weight adjustment. As for the 1999 Review, the weight will be applied to all people with low English fluency, including Indigenous people. We intend to update the low English fluency cost weight to reflect the current level of costs involved with providing these services. In order to calculate the new cost weight, Commission staff request:

- (i) data to establish expenses for translation services for inpatients; and
- (ii) data to establish expenses for other low English fluency inpatient related provisions eg. prayer rooms etc.

⁴ Australian Health Inequalities. Bulletin, Issue 2, July 2002, AIHW, pp1.

Location

44. The 1999 Review assessment used the Rural, Remote, Metropolitan Areas (RRMA) classification to assess cost weighted demand in different State regions.

45. The Commission proposes to use the ARIA+ classification for the 2004 Review. See *Discussion Paper CGC 2002/22, Dispersion*, for a discussion of this issue.

Socio-economic Status

46. ***Background.*** In the 1999 Review, a socio-economic status (SES) adjustment was included to account for the greater use of hospital inpatient services by people from low socio-economic groups.

47. In the 1999 Review, the possibility of using health status measures as predictors of hospital use was considered. However, no adequate measure could be found that could readily be integrated with the Commission's approach of measuring standard utilisation rates and cost weights from data for all Australian public hospitals. Because of their greater transparency and consistency with other assessments, a preference was expressed by the Commission for use of indicators that could be directly related to the use and cost of hospital inpatient services.

48. While it had been hoped that income, education and possibly employment status could be combined in a measure of socio-economic status, the Commission concluded that it would be more practical and simpler (especially in view of the data limitations) to use income as the sole measure of SES.

49. Data from the 1989-90 National Health Survey were used to estimate the different propensities of people in specified income ranges to use inpatient services (the 1994-95 National Health Survey results were not used because public and private hospitals could not be differentiated). The influence of Indigeneity on the demand for services by people from low socio-economic status was removed to avoid double counting between the two disability assessments. Family incomes were weighted to reflect the number of dependent children and the employment status of the adults, using the Henderson simplified equivalence scales. These weights were applied where family incomes were less than \$26 000, or individual incomes less than \$15 600 (based on 1996 Census income data).

50. ***State views.*** South Australia asked that the strong links between socio-economic disadvantage and use of health services be appropriately recognised in the assessments.

51. Tasmania stated that the measure of low socio-economic status should be broadened to include more than just a measure of income. It said that the application of broader indexes such as the Index of Relative Socio-economic Disadvantage (IRSD), which is the basis of the ABS Socio-economic Indexes for Areas (SEIFA) Index, would be more appropriate. The IRSD is derived from population attributes such as low income, low education, unemployment and jobs in relatively unskilled occupations.

52. Tasmania also noted that if the IRSD were used, it should be applied at the Local Government Area (LGA) level and not to individuals. It believed that in most instances, additional demand for services came from people who lived in LGAs where the SES was below average. Therefore, Tasmania proposed that SES should be applied to LGA populations.

53. **Comments.** *Discussion Paper CGC 2002/21, Socio-demographic Composition*, examined the issues raised concerning the measurement of SES, including the use of SEIFA as an indicator.

54. The paper did not support Tasmania's suggestion of using broader measures such as the SEIFA indexes. Their use in the Commission's assessments could possibly double-count with the assessments of age/sex, Indigeneity and place of residence. The SEIFA indexes are area-based (rather than people-based), which makes them inconsistent with other socio-demographic data used in assessments.

55. An argument could be mounted for SEIFA indexes to replace the age/sex, Indigeneity and place of residence measures, but their use in this way would mean the loss of transparency due to the impossibility of identifying disabilities incorporated within the indexes.

56. Staff acknowledge that populations with low SES are not particularly well defined by low income alone. The use of measures such as employment status and/or education attainment would fit very well within the current framework. There is also evidence to suggest that people with low income and low educational achievement suffer compounded disadvantage.

57. In addition, there is a high correlation between the different measures of low socio-economic status. For example, unemployed and poorly educated people are likely to be on low incomes, and poorly educated people are more likely to be unemployed. It is also likely, therefore, that the weights applied to low income groups would at least partly cover the effects of differences in unemployment and poor education.

58. **Proposal.** Commission staff are inclined to propose that the 1999 Review method be retained. The weights would be updated with data from the 2001 National Health Survey.

Cost Weights

59. **Background.** In the 1999 Review, acute inpatient separations were weighted by the national DRG costs weights. This allowed for an assessment of the relative cost per inpatient separation due to demand patterns and case complexity. As the DRG cost weights were national averages, three other adjustments were also made. These adjustments reflected differences between population groups considered to affect costs. They were:

- (i) the outlier cost adjustment – to reflect the differences between population groups in length of stay in hospital;

- (ii) the Indigeneity cost adjustment – to reflect the greater costs of servicing Indigenous inpatients; and
- (iii) the private patient cost adjustment – to reflect the lower costs to the public sector of servicing private patients in public hospitals.

Outlier Cost Adjustment

60. The outlier cost adjustment was applied to the cost weighted separations which had a length of stay markedly greater or smaller than average. Boundary points of three times and one third the average length of stay were used because they reflected the average State policy. Half of the DRG cost weight was applied to outlying days.

61. A majority of States, including Victoria, Queensland, Western Australia, South Australia and the Northern Territory, currently use boundary points of three times and one third the average length of stay in their funding formulas for acute inpatient services. Tasmania does not use a casemix funding model to allocate funds, however, it does use it to report hospital activity on a State and national level. As part of its reporting of casemix activity, the same policy of costing outlying days is used.

62. No State raised concerns about the DRG cost weight or the outlier cost weight adjustment. Commission staff propose to recommend the continuation of both.

Indigeneity Cost Adjustment

63. **Background.** In the 1999 Review, different cost weights were calculated for Indigenous inpatients.

64. Table 4 shows the average separation cost at Major Diagnostic Category (MDC) level for Indigenous and non-Indigenous inpatients. These separation costs were derived from the National Aboriginal and Torres Strait Islander Casemix study (NATSIC), 1997. Due to low separation numbers for many DRGs in the study, reliable estimates of average DRG costs could not be made, and the more aggregated MDC level data were used. It was assumed that the differences observed for an MDC applied to all DRGs in that MDC. Data at the MDC level indicated that cost differences did exist, and that in some cases they were large. The differences in the costs were used as the basis of the 1999 Review Indigeneity cost adjustment.

65. The cost differences shown reflected the combined effects of longer length of stay by Indigenous inpatients and higher costs of treatment. To avoid double counting of the costs associated with length of stay (which are reflected in the outliers adjustment), the Indigeneity cost adjustment was based on 50 per cent of the cost differences at the MDC level.

Table 4 AVERAGE COST PER SEPARATION FOR MAJOR DIAGNOSTIC CATEGORIES (MDC)

	Indigenous	Non-Indigenous	Diff.
	\$	\$	%
Pre-MDC (Tracheostomy Procedures, Transplants, ECMO)	32541.3	23389.7	39.13
MDC 01 Diseases & Disorders of the Nervous System	2818.4	2314.7	21.76
MDC 02 Diseases & Disorders of the Eye	1498.9	1088.1	37.75
MDC 03 Diseases & Disorders of the Ear, Nose, Mouth & Throat	1355.2	1057.2	28.18
MDC 04 Diseases & Disorders of the Respiratory System	1833.0	1829.1	0.21
MDC 05 Diseases & Disorders of the Circulatory System	2836.6	2563.4	10.66
MDC 06 Diseases & Disorders of the Digestive System	1713.1	1207.9	41.82
MDC 07 Diseases & Disorders of the Hepatobiliary System & Pancreas	2716.2	2081.9	30.47
MDC 08 Diseases & Disorders of the Musculoskeletal System & Connective Tissue	2254.7	2237.3	0.78
MDC 09 Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast	2142.8	1469.8	45.78
MDC 10 Endocrine, Nutritional & Metabolic Diseases & Disorders	3108.5	2131.3	45.85
MDC 11 Diseases & Disorders of the Kidney & Urinary Tract	520.5	441.1	18.00
MDC 12 Diseases & Disorders of the Male Reproductive System	1235.1	1144.8	7.89
MDC 13 Diseases & Disorders of the Female Reproductive System	1850.5	1228.2	50.67
MDC 14 Pregnancy, Childbirth & the Puerperium	1497.6	1130.2	32.51
MDC 15 Newborns & Other Neonates	3188.3	3011.0	5.89
MDC 16 Diseases & Disorders of Blood, Blood Forming Organs, Immunological Disorders	1915.3	936.8	104.45
MDC 17 Neoplastic Disorders (Haematological & Solid Neoplasms)	835.9	598.0	39.79
MDC 18 Infectious & Parasitic Diseases, Systemic or Unspecified Sites	2548.2	1945.5	30.98
MDC 19 Mental Diseases & Disorders	2032.5	2527.1	-19.57
MDC 20 Alcohol/Drug Use & Alcohol/Drug Induced Organic Mental Disorders	753.2	1229.8	-38.76
MDC 21 Injuries, Poisonings & Toxic Effects of Drugs	1680.7	1512.8	11.10
MDC 22 Burns	3889.6	3214.8	20.99
MDC 23 Factors Influencing Health Status & Other Contacts with Health Services	165.1	905.1	83.97
Average all MDCs	1 627.27	1 545.65	5.30

Source: National Aboriginal and Torres Strait Islander Casemix Study (1997), Commonwealth Department of Health and Family Services.

66. **State views.** Victoria suggested that a cost differential weighted by use would more accurately reflect the true impact and incidence of costs. It argued that such a cost differential should form the basis of the Commission's assessment of the relative costs of treating Indigenous inpatients. It felt that any further calculations were unnecessary and presented significant risk of double counting.

67. Western Australia argued that there was no basis for assuming that half the additional cost of treating Indigenous inpatients was reflected in lengths of stay, and that the Commission should no longer discount the adjustment. It also said that the relative costs for Indigenous clients compared to non-Indigenous clients increased significantly with increasing remoteness. Cost differentials were influenced by variables such as language difficulties, cultural factors and health status. Accordingly, Western Australia believed that the Commission's current cost adjustment for Indigenous inpatients was too low.

68. South Australia asked the Commission to re-evaluate the adjustment given to non-traditional Indigenous people relative to non-Indigenous people. It provided some data to show differential costs involved in providing health services to traditional Indigenous people, non-traditional rural Indigenous people and non-traditional urban Indigenous people.

69. **Comments.** The continued use of Indigenous cost adjustments is supported by recent findings in *Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99* (2001) by the AIHW. This report shows that differences in treatment costs exist for Indigenous and non-Indigenous inpatients⁵. These findings were based on the New South Wales Trendstar hospitals data set which showed that, after adjustment for casemix, Indigenous patients cost about 9.5 per cent more per separation.

70. The report commented that the New South Wales hospitals in the study were mostly larger metropolitan hospitals, and did not represent the costs of many smaller rural and base hospitals in New South Wales. However, the authors of the report commented that they felt it was a solid study which supported anecdotal evidence⁶.

71. It is also evident from State funding policies⁷, that half of the States (Victoria, Western Australia, South Australia and the ACT) acknowledged the higher costs of treating Indigenous inpatients by applying an extra loading, or similar, to their funding for Indigenous inpatient treatment.

72. A regional disaggregation based on the RRMA classification was used in the 1999 Review Hospitals assessment to differentiate cost weighted demand by Indigenous people in different State regions. While this method does not take into account costs and demands for the specific Indigenous groups, as suggested by South Australia, it assumes that the majority of the Indigenous population in the remote regions could be identified as

⁵ *Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99* (2001) Australian Institute of Health and Welfare, pp55.

⁶ Ibid, pp55.

⁷ Australian Healthcare Review, Vol 25(1), 2002.

NSW Episode Funding Guidelines for Acute Inpatient Services 2001/2000, NSW HEALTH August 2001.

‘traditional’, while those in the urban regions could be identified as ‘non-traditional’ lifestyles.

73. Staff believe that the current approach to recognising additional Indigenous costs does the same as Victoria’s preferred approach. The calculation was carried out by:

- (i) classifying each DRG cost weighted separation to its MDC classification; and
- (ii) increasing each Indigenous separation by its corresponding MDC cost difference shown in the ‘difference’ column of Table 4 - the cost difference was discounted by 50 per cent to remove the effects of double counting with the outlier cost weight adjustment.

74. This method takes into account both the extra cost and demand of treating Indigenous inpatients.

75. ***Discounting of the Indigenous cost weights.*** In its recent report, *Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99* (2001), the AIHW commented that, on average, 75 per cent of an episode cost was explained by the length of stay. However, for particular DRGs, such as surgical DRGs, the proportion that varies with length of stay was lower.⁸

76. Results from the New South Wales Trendstar study (AIHW (2001) report) showed different results. After adjustment for casemix, Indigenous patients cost about 9.5 per cent more per separation, with about 2.5 per cent being due to longer length of stay. This suggested that about 75 per cent of the higher cost for treating Indigenous inpatients was not due to length of stay.

77. The NATSIC (1997) study also presented cost data broken down by the various cost elements of inpatient stay. It found that about 75 per cent of an episode’s cost could be attributed to components proportional to the length of stay.⁹

78. One explanation for this contrast in results might be where the data for each of the studies were gathered. Most of the NATSIC data were from rural and remote hospitals in Queensland, Western Australia, South Australia, and the Northern Territory. The New South Wales data were generally from larger metropolitan hospitals in that State.

79. In large urban areas, Indigenous patients are more likely to live near the hospital and be discharged earlier because they could be monitored at home or elsewhere for post treatment care if need be. The length of stay in these cases would be shorter.

80. ***Proposals.*** Commission staff propose to recommend that Indigenous cost adjustments continue to be applied in the 2004 Review. Staff intend to further explore the

⁸ *Expenditure on Health Services for Aboriginal and Torres Strait Islander People 1998-99* Australian Institute of Health and Welfare, (2001), pp143.

⁹ National Aboriginal and Torres Strait Islander Casemix Study 1997, Brewerton & Associates, pp56.

results of the Trendstar studies as a potential source of Indigenous cost adjustment data. These results will be examined in comparison with those from the NATSIC study. If more up to date cost weight data can be obtained this will also be considered.

81. Research findings also show that a proportion of the extra costs of treating Indigenous inpatients can be attributed to their greater lengths of hospital stay. These findings provide support for the continued discounting of the Indigenous cost weights. While it may be possible to assign differential discounts in different State regions, for simplicity, we propose to retain the 50 per cent discount for all regions.

Private Patient Cost Adjustment

82. **Background.** In the 1999 Review, private patient separations in public hospitals were allocated a cost weight to acknowledge that they cost less to treat because private patients meet some of the costs involved. Based on the New South Wales resource distribution formula, a discount of 12 per cent was applied to private patients.

83. **State views.** New South Wales recommended the Commission amend the 12 per cent discount used for private patients in public hospitals to 9 per cent, based on its latest calculations. Its analyses revealed that for most case-types, a private patient staying a given number of days will cost between 90 per cent and 92 per cent of the cost of public patients in the same DRG, staying the same number of days, in the same hospitals, with the same mode of discharge.

84. **Comments.** Staff intend to continue the adjustment and ask for comments on the updated figure of 9 per cent discount suggested by New South Wales.

Additional Adjustments - Renal Dialysis and HIV/AIDS

85. **Background.** In the 1999 Review, some States argued that they faced situations that led to greater use of inpatient hospital services which caused the application of national average use rates to be inadequate. In particular, the Northern Territory asked for a special weight to recognise its extraordinarily high and increasing rate of renal dialysis. It argued that, in the case of renal dialysis, the divergence from the standard was so pronounced that the usual Commission methods were not adequate.

86. Analysis of DRG separation data showed that the Northern Territory's renal dialysis use rate for Indigenous people was 2.7 times the national average. Its standardised cost weighted use would have been 1167 when its actual cost weighted use was 3178. The Northern Territory's standardised demand was increased by 2000 cost weighted separations to roughly equal its actual demand which was not policy influenced.

87. In the 1999 Review, New South Wales also presented a similar argument. It said that its incidence and costs of treating HIV/AIDS was disproportionately large relative to other States, and that it also had a disproportionately high level of drug use associated with highly urbanised areas.

88. New South Wales' separations relating to HIV/AIDS were significantly higher than the national average, and therefore its standardised demand was increased by 6500 cost weighted separations. The difference between actual and standardised separations in other States were much smaller and no other adjustments were made.

89. *State views.* New South Wales stated that not all end stage renal failure patients were treated as inpatients and some would therefore not be picked up in the National Hospital Morbidity Data (NHMD). It pointed out that renal dialysis patients were also treated in outpatient and community settings. New South Wales said that due to the current method used to make the adjustment for renal dialysis, it is implied that New South Wales had lower cost weighted use rates for renal dialysis than the national average. However, its analysis, based on the number of persons dependent on dialysis using the Australian and New Zealand Dialysis and Transplant Registry data (ANZDATA), showed the relative use rate for New South Wales was above the national average.

90. New South Wales also suggested that, as almost all States now fund dialysis on a per patient basis rather than through an episode basis, it was preferable for the Commission to use a per patient payment basis to reflect total costs. It recommended that the Commission use the number of patients on dialysis for the renal dialysis adjustment as it gave a better estimate of the relative funding requirement than admitted patient statistics.

91. New South Wales also pointed out that services for patients with HIV/AIDS and Hepatitis C were provided in inpatient, outpatient and community based services. It stated that there had been a shift in the setting of care in recent years for programs managing HIV/AIDS and dealing with the emerging cost of Hepatitis C. As a result, the share of patient care provided for HIV/AIDS and Hepatitis C in an inpatient setting had fallen from 30 per cent in 1997-98 to 15 per cent in 2000-01. New South Wales suggested that the Commission make allowances for HIV/AIDS and hepatitis C in all its health categories.

92. The Northern Territory stated that the renal dialysis adjustment should continue to be made in the acute inpatient component as it still has higher than average rates of occurrence.

93. The Northern Territory also argued that it has a high level of co-morbidity for people with chronic diseases, for example, diabetes and diseases of the circulatory, respiratory and digestive systems. It commented that hospital separations data may not fully account for the level of chronic disease and its resultant cost on hospitals. It suggested that the Commission should introduce an adjustment to account for expenditure that arose because of its higher incidence of chronic diseases, based on death rates.

94. *Comments.* Before assessing the relative merits of the cases made, a number of questions need to be considered concerning treatment of specific adjustments, for example:

- (i) do these types of adjustments enhance fiscal equalisation by focusing on particular causes of demand ? or

- (ii) are these causes of demand already accounted for by other disabilities, resulting in overlap with other disability assessments?

95. Other States could point to other causes of demand that affect them more than the national average, for example, skin cancer in Queensland. To achieve fiscal equalisation, Commission staff believe all causes of demand that have a material and differential impact on State budgets should be assessed. If exceptions are made, these should be based on some consistent criteria.

96. It is possible that some disabilities which are already recognised by the Commission, such as age/sex, Indigeneity, population location and SES structures, could explain the interstate differences in expenditure on some causes of demands (eg, renal dialysis, HIV/AIDS and chronic diseases). At this stage, Commission staff are inclined to minimise the use of such specific adjustments. We ask for State views on this issue.

97. *HIV/AIDS*. Table 5 shows HIV/AIDS and drug and alcohol related DRG cost weighted inpatient use rates for each State and the Australian national average. Data were selected from the 1996-97, 1998-99 and 1999-2000 National Hospital Morbidity Data. The DRG cost weighted use rates are an indication of the differential demand and cost for HIV/AIDS and drug related inpatient services for each State and for Australia.

Table 5 COST WEIGHTED SEPARATIONS FOR HIV /AIDS AND DRUG AND ALCOHOL RELATED CONDITIONS, PER 100 POPULATION

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
1996-97	0.26	0.09	0.12	0.13	0.10	0.05	0.03	0.07	0.16
1998-99	0.13	0.09	0.14	0.12	0.09	0.05	0.04	0.10	0.11
1999-2000	0.14	0.09	0.14	0.12	0.10	0.04	0.05	0.09	0.12

Source: 1996-97, 1998-99 and 1999-2000 National Hospital Morbidity Data, admitted patients.

98. Results show that for the 1998-99 and 1999-2000 data, inpatient cost weighted use rates for New South Wales were only slightly higher than the national average, and not markedly different from any other State. Based on these findings, Commission staff are not inclined to recommend that the HIV/AIDS and drugs adjustment for New South Wales be continued in the Inpatient Services category.

99. *Renal dialysis*. The demand for renal dialysis was measured through the acute inpatients component of the Hospitals assessment via the number of renal dialysis DRG (L61Z) cost weighted separations.

100. Current State policies on renal dialysis services shows that New South Wales, Victoria, Queensland, Western Australia, the ACT and the Northern Territory have changed their funding for renal dialysis from a DRG cost weight based method. In general, these States are now using a per patient, or per occasion type of funding.

101. Research has also found that the setting for providing renal dialysis services is shifting. For example, in some States, these services are now also provided in outpatient and community settings, or at home. Some States have chosen to provide them as inpatient services, while others have chosen to move them to other settings. It may be that, in the Northern Territory, the community service setting is not as viable a treatment option as it is elsewhere.

102. In order to ensure that the Northern Territory's needs for renal dialysis services are accurately assessed, we need to know the total number of occasions of service for renal dialysis. We would also like to obtain information on funding and reporting protocols for this service.

103. When the total number of occasions of service is known, we will be in a position to recommend whether additional needs for renal dialysis services should be assessed. If an additional assessment is pursued, renal dialysis expenditure will need to be separately identified.

104. *Chronic diseases.* The Northern Territory asked the Commission to introduce an assessment to account for its higher than average level of chronic disease and its resultant cost on hospitals. It supplied figures, outlined in Table 6, relating to standardised death rates for key chronic diseases.

Table 6 STANDARDISED DEATH RATE (PER 100,000) FROM KEY CHRONIC DISEASES

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Diabetes mellitus	0.8060	1.1866	1.0522	1.0522	1.0522	0.7836	0.6642	2.9030
Diseases of the circulatory system	1.0592	0.9241	1.0191	0.8869	1.0162	1.0840	0.9866	1.2567
Diseases of the respiratory system	1.0290	0.8841	0.9151	0.8551	1.1201	1.1615	0.7433	1.8447
Diseases of the digestive system	0.9347	0.8141	0.8844	0.9146	1.0101	0.9899	0.5829	2.1759
Total	1.0340	0.9220	0.9942	0.8911	1.0347	1.0766	0.9038	1.4928

Source: Source: ABS Catalogue No. 3303.0, *Causes of Death Australia, 2000*, Table 1.7.

105. It is possible that some disabilities which are already recognised by the Commission, such as Indigeneity, population location and SES structures, could explain the interstate differences in standardised death rates from chronic diseases. Commission staff are not yet convinced that an adjustment for chronic disease should be pursued.

Other Issues Relating to the Socio-demographic Composition Assessment

Costs of Eligible Overseas Patients

106. *State views.* New South Wales pointed out that Australia has a range of reciprocal health care agreements with other countries. Under these agreements, overseas

residents working in or visiting Australia can be treated in New South Wales' public hospitals as Medicare eligible patients. Reciprocal agreements currently exist with New Zealand, UK, Netherlands, Italy, Sweden, Malta, Finland and Ireland.

107. New South Wales stated there were 1976 separations of eligible visitors in 2000-01. It estimated the cost of providing acute inpatient services to these patients at \$5.4m and said it was not in a position to control the number of overseas people seeking treatment in its hospitals. It claimed the higher per capita costs it faced should be recognised by the Commission.

108. New South Wales recommended that short-term visitors from countries with a reciprocal health agreement should be included in the estimated population in the Inpatient Services assessment.

109. *Comments.* The 1999 Review Hospitals assessment did not include separations for overseas visitors, or for those who had no permanent address. Only usual residents of the States were included.

110. To accurately assess eligible overseas visitors, a number of data adjustments would need to be made to the National Hospital Morbidity Data (NHMD) and to Census data. For example, the number of Australian residents visiting countries where Australia has a similar reciprocal agreement would need to be netted off.

111. Census data would also need to be adjusted to include net numbers of people from eligible countries. As the NHMD does not distinguish between long and short-term eligible overseas visitors, further adjustments would need to be devised to account for this issue.

112. New South Wales estimated the cost of providing acute inpatient services to eligible overseas patients to be \$5.4m. While staff recognise this to be a financial burden to the State, the amounts involved are small and we currently have no data on the number or value of services provided to residents who are abroad. It should also be noted that each State will suffer some burden and the figure for New South Wales should be compared to the National average.

113. Commission staff are not inclined to introduce such complex adjustments to NHMD and Census data. In addition, the level of materiality involved suggests that they are not warranted. However, staff ask States for their views on ways in which this type of adjustment could be carried out with less complexity.

Costs of Refugees

114. *State views.* South Australia stated that the Commonwealth Government policy of detaining refugees had caused an increase in the demand for many State Government services such as health, education and policing. The South Australia Departments of Human Services; and Education, Training and Employment; estimated that the additional demand for their services cost in the order of \$6 million per annum. South Australia stated that it is currently seeking or already receiving just over \$2 million. It

argued that this additional cost due to Commonwealth Government policy should be accounted for in the Commission's assessment.

115. South Australia estimated that the cost of providing hospital and acute care services to refugees while in detention centres was about \$300,000. It commented that most of these costs were being reimbursed by the Commonwealth and discussions were continuing to determine the full extent of the costs.

116. South Australia also estimated that the costs for providing hospital services to temporary protection visa holders to be about \$1 million per year, but noted that the Commonwealth would not reimburse these costs.

117. **Comments.** Staff propose to recommend that no assessments of inpatient costs for refugees in detention is necessary.

118. People on temporary protection visas are Medicare eligible patients, and under the Australian Health Care Agreements they are the responsibility of States. We consider that our current socio-demographic composition factor would account for needs arising from this group. If South Australia can show that disabilities exist for this group that are not already picked up in the assessment, and that they have a material effect on grants share, we will reconsider our position. Otherwise, we do not propose to introduce an assessment for the costs of refugees.

Impact of the Private Hospital Sector

119. **Background.** In the 1999 Review, the issue of including an economic environment disability in the Hospitals assessment was raised to reflect the additional demand for public hospital services in areas where there were no or few private hospital services. In response, a regional dimension was included within the socio-demographic composition factor to account for economic environment and urbanisation effects.

120. **State views.** New South Wales stated that it is generally acknowledged that residents obtaining services from private hospitals saved the States from having to meet the corresponding need in public hospitals. This type of private sector substitution of services is recognised by New South Wales in its Resource Distribution Formula (RDF), but it acknowledged that not all activity in private hospitals is substitutable. For example, cosmetic surgery would not take place in public hospitals because admission criteria are based on clinical need. Obstetric services, on the other hand, were 100 per cent substitutable. For this reason, New South Wales applied a discount of around 20-30 per cent to private hospital sector activities.

121. New South Wales argued that its private hospital sector was proportionally smaller than in other States. It also stated that patients treated in the New South Wales private hospital sector have less complex treatments, shorter lengths of stay and lower utilisation rates than in other States. It noted that relative to other States, the New South Wales public hospital system shared a greater burden in treating patients in public hospitals, particularly more complex patients.

122. New South Wales stated that the Hospitals assessment would pick up the difference in private versus public supply and the higher supply of private hospitals in metropolitan areas. However, it said this would not adjust for the underlying differences between States in the share of demand met by the private sector. It recommended that the Commission include a further adjustment for economic environment in the inpatient component to recognise this.

123. *Comments.* The 1999 Review Hospitals assessment accounted for differential demand for public inpatient services due to the different levels of private hospital inpatient services in each State region. The major issue which must be addressed in relation to the different size of the private hospital sector in comparable regions of State, is the extent to which State policy influences are involved.

124. Table 7 shows private patient separations for each State.

Table 7 PRIVATE PATIENT SEPARATIONS BY STATE, 1999-2000, PER 100 POPULATION

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus
State populations ^(a)	6 462 976	4 764 236	3 567 101	1 884 279	1 497 453	470 481	310 765	196 547	19 153 840
Private patients in public hospitals ^(b)	129 429	61 850	45 348	21 979	24 838	4 791	1 910	836	290 980
Use rate	2.00	1.30	1.27	1.17	1.66	1.02	0.61	0.43	1.52
Private patients in private hospitals ^{(c)(d)}	536 660	474 116	390 777	163 881	152 662	38 681	20 563	0	1 777 340
Use rate	8.30	9.95	10.96	8.70	10.19	8.22	6.62	0	9.28
Total private patients	666 089	535 966	436 125	185 860	177 500	43 472	22 473	836	2 068 320
Use rate	10.31	11.25	12.23	9.86	11.85	9.24	7.23	0.43	10.80

(a) 1999-2000 Estimated Resident Population.

(b) 1999-2000 National Hospital Morbidity Data, Australian Institute of Health and Welfare.

(c) Australian Hospital Statistics 1999-00, Australian Institute of Health and Welfare (2001). This data includes private patient separations from private hospitals for eligible private, eligible other, ineligible and not reported patients. Department of Veterans Affairs patients are not included.

(d) Private sector hospitals not included in the data were 17 day-hospital facilities and one other private hospital in Victoria, all day-hospital facilities in the ACT and one private hospital in the Northern Territory. For South Australia, data were not available for three day-hospital facilities (one of which commenced operation in September 1999) and data were missing for March to June 2000, May to June 2000 and for June 2000 respectively for three others. For Tasmania, data were not available for one day-hospital facility and one other private hospital, and were missing for April to June 2000, December 1999 to June 2000, January and February 2000 and June 2000 respectively for four other hospitals. Australian Hospital Statistics 1999-00, Australian Institute of Health and Welfare (2001), pp 3.

125. Table 7 shows that New South Wales had a higher than average rate of use for private patients in public hospitals, and a lower than average rate of use private patients in private hospitals. Neither of these were remarkably different from the average. The rates of use are similar, except for the smaller States.

126. Based on the evidence in Table 7, Commission staff are not inclined to pursue this issue further.

HOSPITAL COSTS FACTOR

127. **Background.** The 1999 Review identified four main types of cost disabilities that affected expenditure on hospital inpatient services. These were cost differences which:

- (i) were associated with the mix of cases treated;
- (ii) related to the location of hospitals away from capital cities;
- (iii) related to the small size of hospitals; and
- (iv) related to training, research and case complexity, mainly associated with tertiary hospitals in major urban areas.

128. The first of these was assessed in the socio-demographic composition factor. The remaining three were assessed in a separate factor which incorporated the average effects of dispersion, service delivery scale, research and extraordinary case complexity.

129. The hospital costs factor was calculated in the following way.

- (i) Average costs per separation for hospitals in each geographic region of the Rural, Remote and Metropolitan Area (RRMA) classification were calculated from the National Public Hospital Establishments Data.
- (ii) Australian average costs based on Diagnosis Related Group (DRG) cost weights for hospitals for each RRMA region were calculated from the National Hospital Morbidity Data.
- (iii) Average costs per separation were divided by the DRG cost weights (that is, (i) divided by (ii)), resulting in a national average relative cost index (RCI) for each RRMA region. The RCI reflects the costs of providing inpatient services with the effect of case complexity (ie DRG costs weights) taken out.
- (iv) The standardised demand by location of treatment was derived. This was adjusted to compensate for standard patients flows between regions. This was done by applying the same method used in the calculation for standardised demand in the acute inpatient socio-

demographic composition factor. However, in this case, the standardised demand did not include the effects of the DRG, Indigenous, outlier, low English fluency and private patient cost weights.

- (v) RCI cost weighted standardised separations were derived for each State and for Australia. This was done by applying the national average RCI, calculated in (iii), to the standardised demand, calculated in (iv).
- (vi) The hospital cost factor for each State was derived by dividing each State's ratio of RCI cost weighted standardised demand derived in (v) by the unweighted standardised demand derived in (iv). The resulting ratio for each State was divided by the Australian ratio to obtain a raw factor.

130. The separation costs for each metropolitan hospital had an extra 4 per cent weight applied to recognise cost differences that related to training, research and extraordinary case complexity, mainly associated with tertiary hospitals in major urban areas.

131. *State views.* Victoria suggested that the Commission should calculate Relative Cost Indices (RCI) for each State region, and use those RCIs directly to calculate the service delivery scale disability. It stated that given the average cost per separation for each State region is based on actual service volumes, it implicitly includes all service delivery scale effects. Calculation of the Australian average RCIs for each level of remoteness removed the State specific element of the scale effect, thereby underestimating the scale effect for which the adjustment was intended

132. Victoria also suggested that savings due to technology could be made through the use of video-conference calls and telemedicine. A discounting of these costs in the hospital costs factor was therefore appropriate.

133. Tasmania stated the averaging process used in the hospital costs factor placed it at a disadvantage as it had a relatively high proportion of very small hospitals. It felt that the measurement of this disability would be improved by increasing the number of categories used to group the size of hospitals. It did not want a change to the overall approach.

134. The ACT raised a number of issues relating to service delivery scale in its hospital system. It noted that a separate service delivery scale factor was not assessed but said that the Commission recognised some service delivery effects due to the location of hospitals, through the hospital costs factor. The ACT considered that economies of scale achieved by some hospitals were substantially understated.

135. The ACT said it would like a service delivery scale factor for clinically based services incorporated into the assessment to take account of its circumstances, including:

- (i) the wide range of services and large number of specialities that it is required to provide to a relatively small population, and the few opportunities for economies of scale to be achieved given the low throughput; and
- (ii) the inability of the population of the ACT and New South Wales Southern Area Health Service to support the throughput required to ensure certain speciality services achieve benchmark costs.

136. The ACT suggested that in determining the 2004 Review service delivery scale factor, a range of DRGs should be examined with a view to determining a factor based on comparing staffing to throughput level ratios.

137. The ACT also commented that its diseconomies of scale affected the cost of providing appropriate teaching and research facilities necessary to achieve accreditation as a teaching hospital. It said it attempted to disperse these costs over minimal throughput, and over a patient profile which more closely resembled that of a relatively inexpensive non-teaching hospital.

138. The ACT claimed that without extra throughput, the cost per cost weighted separation would remain high to accommodate the expenditure on facilities and infrastructure necessary to provide an accredited teaching hospital. It asked the Commission to assess a scale factor to account for teaching and research scale-related costs in addition to the hospital costs factor.

139. The ACT also noted that consideration should be given to the capacity of smaller jurisdictions to support private hospital sectors. The ACT pointed out that except for the Northern Territory, it had the lowest proportion of total acute separations provided through private hospitals. It requested that the higher costs of complex cases within small hospital systems, and constraints on the ACT system in operating viable private sector alternatives to public teaching hospitals, should be taken into account through the service delivery scale factor.

140. **Comments.** In relation to Victoria's issues, the use of State-based RCIs instead of the national average would deviate from standard Commission methods of assessing States needs against a national average or standard policy. Use of State-based RCIs would potentially allow policy issues to contaminate the assessment.

141. In relation to Victoria's suggestion that savings can be made through technology, staff note that the hospital costs factor assessment was based on the average of States' actual costs and demands in each State region. The cost data for the assessment was derived from actual inpatient separation costs obtained from the National Public Hospital Establishment Data (NPHEd). The financial effects of the average level of use of such technologies should be already embedded in these cost, although this issue is discussed more fully in *Discussion Paper CGC 2002/7, Implications for Assessments of Developments in Technology and Public Administration Practice*.

142. On Tasmania's concern that the averaging process used in the hospital costs factor was to its disadvantage, staff note that the hospital costs factor is not dependent on

the number or size of hospitals in each State or region. The factor calculated average costs per region and allocated them to the proportions of people living in each region in each State. To the extent that a greater number of small hospitals reflects the high proportion of population living in rural and remote areas, the higher costs faced by Tasmania will be picked up in the factor.

143. In the 1999 Review, the ACT presented an argument claiming that it suffered from disabilities in the provision of super-specialty services and argued that it should be given the capacity to provide the same level of hospital services as other capital cities. Super-specialty services were defined (at the time) as:

highly specialised services which catered for relatively rare diseases or which provided unusually complex and costly forms of treatment. These services should be planned on a State-wide or nation-wide basis.¹⁰

144. Research in the 1999 Review found that data did not appear to support the existence of scale disabilities for super specialty services. The then Commission concluded that the provision of uneconomical non-emergency super-specialty services was a policy choice. Based on these findings, a super-specialty assessment was not introduced.

145. Staff are not convinced that a clear case for service delivery scale in the provision of clinical services has been demonstrated. It is not clear that the higher costs claimed by the ACT are disability driven. The ACT has not established a case that it must have a teaching hospital or that it needs to deliver all the specialty services in which it cannot achieve the necessary throughput or benchmark costs.

146. Commission staff are inclined to recommend that no assessment of a clinically based service delivery scale factor be developed.

CROSS-BORDER ASSESSMENT

147. **Background.** In the 1999 Review, due to arrangements in the 1998 Australian Health Care Agreements (AHCAs), cross-border costs were not taken into account in the Hospitals assessment.

148. **State views.** The ACT said that cross-border patient flows have a disproportionately large impact on the ACT budget compared with any other State. It believed the significance of this matter justified reconsideration of the treatment of non-resident use of the ACT's hospital system in the 2004 Review. It stated that as a result of the 1998 AHCA, it attempted to negotiate cross-border arrangements with New South Wales. An agreement could not be reached and the matter was referred to arbitration.

¹⁰ National Health Data Dictionary, Version 4.

149. The main outcome of the arbitration process was that: *'The price paid by NSW to the ACT for treating NSW patients should be based on blended NSW average costs for teaching and major urban hospitals, without a special ACT loading'¹¹.*

150. The ACT estimated that the costs associated with excess length of stay by cross-border patients to be in the order of \$5m per annum. This represented the amount that is not being paid to the ACT in respect of non-resident use under the AHCA and does not include economic costs of high cost and complex services to the region.

151. It also requested that the Inpatient Services assessment reflect the non-resident use of ACT Ambulance Services. It estimated that about 4 per cent of its non-resident customers use the ACT's ambulance services and do not reimburse the Government.

152. The ACT also stated that the socio-demographic composition of the region surrounding the ACT is significantly different to that of the ACT. This factor influenced both cost and demand for inpatient services as about 25 per cent of its separations are not ACT residents.

153. The ACT requested that a cross-border factor be introduced in the Inpatient Services assessment because it was not fully reimbursed by New South Wales for the provision of hospital services to New South Wales residents.

154. **Comments.** Commission staff believe that clear mechanisms exist for the reimbursement of cross-border services and that the introduction of a cross-order assessment is not a preferred option.

155. However, the ACT view that the average DRG costs applied to cross-border inpatients do not capture the additional costs associated with the socio-demographic composition of the New South Wales population surrounding the ACT is of concern. The current arrangement under the AHCA would capture the actual demand for services by New South Wales residents and the average cost per separation (through DRG cost weights).

156. What the AHCA arrangements may not capture, but the Commission's assessments do, are:

- (i) the costs associated with low English fluency;
- (ii) the above average costs associated with Indigeneity status; and
- (iii) the costs associated with longer and shorter than average lengths of stay.

157. Commission staff would prefer these costs to be reimbursed through the mechanisms set out in the AHCA. However, we will investigate whether they are or not and how these factors would affect the ACT's inpatient services expenses. The issue of the impact of the socio-demographic composition profile of the New South Wales population

¹¹ The Australian Capital Territory 2004 Review Submission, pp362.

surrounding the ACT on the use and cost of services is explored in the *Discussion Paper CGC 2002/5, Cross-Border and Special Circumstances of the Australian Capital Territory*.

158. A new round of Australian Health Care Agreements are currently being negotiated and are due to be in place by June 30 2003. This issue should be re-examined after that date. If cross-border funding arrangements are again dealt with in those agreements, Commission staff propose that no adjustment be made for cross-border inpatient funding, unless the research proposed above finds that the ACT is not receiving a standardised level of expense.

159. In the 1999 Review, the Hospitals assessment took account of the cost of patient transport through the cost of patient transport factor. No assessment was made to compensate for the cost of transporting cross-border patients. The AHCA states that the ACT '*may enter into a bilateral arrangement with another State or Territory to adjust for costs of non-admitted services of the type covered by this Agreement*¹².'

160. Commission staff are of the view that it would be appropriate for the ACT to discuss the issue of reimbursement of ambulance costs with New South Wales and enter into a bilateral agreement. If provisions to enter into such an agreement are not available in the next round of AHCAs, this matter will be re-examined at that time.

INPUT COSTS FACTOR

161. **Background.** The input costs factor takes into account interstate differences in costs of inputs to service provision through:

- (i) wage and salaries;
- (ii) office accommodation; and
- (iii) electricity.

162. In the 1999 Review, 70 per cent of hospital costs were attributed to wages and salaries, 2 per cent to accommodation and 1 per cent to electricity.

163. **State views.** Both Queensland and Tasmania suggested that the wage component of the input costs could be abolished as the health labour market is dominated by the States and significant differences in wages no longer exist as a national market is now in place.

164. **Comments.** This issue is examined in the *Discussion Paper, CGC 2002/20, Input Costs Assessment*.

¹² Australian Health Care Agreement between the Commonwealth of Australia and the Australian Capital Territory. 1998, pp16, para 62.

NON-ACUTE INPATIENTS COMPONENT

165. In the 1999 Review, a separate component was created for non-acute inpatient services to acknowledge that funding for these services was done in a different manner to acute inpatient services.

166. The factors assessed in the non-acute inpatients component were the same as those in the acute inpatients component. They were:

- (i) socio-demographic composition;
- (ii) hospital costs; and
- (iii) input costs.

167. The difference between the acute and non-acute inpatient components was the assessment method for the socio-demographic composition factor.

168. In the non-acute inpatient component, bed days were used as the measure of costs per unit of demand instead of DRG cost weights. Because DRG cost weights were not used in the non-acute inpatients component, the outlier adjustment, which is directly associated with DRG cost weights, was not applied. All other aspects of the factor were assessed in the same way as the acute inpatients component.

169. The socio-demographic composition factor in the non-acute inpatients component took into account use rates and cost for the same population groups as the acute inpatients component. These were groups distinguished by:

- (i) age (use rate and cost per unit weights);
- (ii) sex (use rate and cost per unit weights);
- (iii) Indigeneity (use rates and cost per unit weights);
- (iv) low English fluency (cost per unit weight);
- (v) population location (use rates and cost per unit weights); and
- (vi) socio-economic status (use rates).

170. The adjustments applied in the non-acute inpatients component were:

- (i) the Indigeneity cost adjustment — to reflect the extra costs of servicing Indigenous inpatients; and
- (ii) the private patients cost adjustment — to reflect the lower costs of servicing private inpatients in public hospitals.

171. **State views.** The issue of nursing home type patients (NHTP) was raised by four States. Western Australia noted that it had NHTPs in its rural and remote public hospitals. Tasmania stated that its number of NHTP beds had increased 35 per cent in the past 12 months. In addition, patient stays longer than 35 days had increased by 25 per cent. It also said Royal Hobart Hospital had 30 NHTPs and had to rent beds in private hospitals. Launceston General Hospital had 19 NHTPs (out of 100 hospital beds). Half of these patients would go to nursing homes if beds were available, and half would go home supported by community health care if these services were available. The ACT commented that it had a proportionately large number of NHTPs being cared for through the hospital system. States were concerned that their costs were not adequately being recognised. South Australia sought clarification on whether NHTP expenses would be included in the Inpatient Services category.

172. The States did not raise issues concerning the socio-demographic composition, hospital cost or inputs costs factors that were specifically related to the non-acute inpatient expenditure

173. **Comments.** In the 1999 Review Hospitals assessment, NHTP expenses were included in the non-acute inpatient component. NHTP expenses were assessed in the same way as other non-acute inpatient expenses. States were given the capacity to provide the Australian standard level of NHTP services for their populations, at Australian standard costs

174. Staff propose to recommend that the Commission continue to assess NHTPs in the non-acute inpatient component of this category, using the same approach as was adopted in the 1999 Review. Unless States can advise how this fails to recognise the costs they face in providing NHTP services, staff do not propose to make any changes.

COST OF PATIENT TRANSPORT COMPONENT

175. **Background.** While expenditure on patient transport relates to all health services, the bulk of it falls within the scope of hospitals. The 1999 Review cost of patient transport factor assessed expenses relating to patient transport for:

- (i) emergency transport to hospital;
- (ii) inter-hospital transport;
- (iii) non-emergency transport to and from treatment centres;
- (iv) travel and accommodation assistance; and
- (v) expenses on the royal flying doctor service (RFDS) and the Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS).

176. These expenses related to intrastate travel, while the Isolation factor covered expenses incurred on interstate patient travel.

177. The cost of patient transport was measured using the general dispersion method which captured three types of travel:

- (i) air travel between regional centres and capital cities for distances over 250 kms;
- (ii) inter-regional travel between regional centres and capital cities for distances less than 250 kms; and
- (iii) local travel to and from and within the nearest urban centre of 1000 or more population.

178. In the 1999 Review, expenditure weights were applied according to the level of demand and costs for each of these three types of travel. These were 50, 25 and 25 per cent, respectively.

179. *State views.* New South Wales commented that telehealth provided a means to improve health care service delivery, particularly in rural and remote communities, while at the same time achieving cost savings. It recommended that the Commission review its loadings for travel in the isolation and dispersion factors, given the cost effectiveness and savings achievable in health administration, education and service delivery.

180. Victoria stated that through the uptake of telemedicine significant cost savings could be made. It recommended that the cost weights for the cost of patient transport assessment be reduced to account for the take-up of telehealth. Specifically, it recommended that a discount of 10 per cent should be applied to the dispersion-related costs in the acute and non-acute components for the Inpatient Services assessment (this issue was discussed in the hospitals costs factor section). Victoria also recommended that similar discounts should apply to inter-regional travel, air travel and the patient transfer scheme.

181. Western Australia argued that despite all the technological advances, dispersion-related costs across the full range of essential State services remain very real. It noted that the Western Australia Department of Health was making increased use of telehealth for doctors to confer with specialists when making diagnoses, and to support doctors in remote regions. Technology was being used to address unmet need in regions that previously received lower standards of service. Western Australia commented that telehealth resulted in better diagnoses, which increased the demand for health treatments, resulting in higher costs to the States. In effect, the technology was facilitating improved services across the State, but at significant additional expense.

182. Tasmania commented that video-conferencing and telehealth had enabled savings in relation to staff travel and accommodation as well as the travel and accommodation costs for patients. It had also improved the quality of service delivered to people in rural areas. However, administrative costs had increased as the cost of these services were covered by the head office.

183. Tasmania also commented that although the technology was available, line rental costs were high. This significantly offset savings made in travel costs (and the

number of people using the services). It also stated that costs were being shifted to the State as Medicare did not reimburse non face-to-face consultations with specialists.

184. Tasmania also stated that specialist acute services were only provided in Hobart. Therefore, all other patients, whether public or private, needed to be transported to these units. The State effectively subsidised privately insured patients which represented a significant cost to the State health system.

185. The Northern Territory strongly supported maintaining the cost of patient transport assessment. It questioned, however, whether the Commission took into account associated costs of patient transport such as providing accommodation for patients and patient escorts, and loss of productivity if a proposed transport could not occur due to environmental conditions.

186. *Comments.* The effects of technology on dispersion will be examined. *Discussion Paper, CGC 2002/7, Implications for Assessments of Developments in Technology and Public Administration Practice*, sets out the current thinking of the Commission staff. The findings of the work proposed in that paper will assist in determining whether components of the cost of patient transport assessment should be reviewed due to the adoption of new technologies.

187. Costs in the patient transport factor are based on the national averages of the States' actual expenditure. The effects of changes in technology on the costs of providing services should, therefore, be picked up through changes in these costs.

188. In relation to the Northern Territory's concerns, the cost of patient transport assessment takes into account three types of travel, as outlined above. The weights of these components were determined through actual State costs and demand for each type of travel. Costs for the Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS) were included. Therefore, costs relating to patient accommodation and other related issues should be reflected in the weights.

189. In the 1999 Review, the expenses for the RFDS and IPTAAS were not separately identified in the ABS GPC data, so expenses for these were sought directly from States. Data will again be sought as part of the dispersion factor special data requests to determine if the component weights should be updated.

190. In the 1999 Review, the issue of unproductive travel time (UTT) was raised. Adjustments were made to account for this in some of the cost of patient transport components. They were:

- (i) an upwards adjustment of the inter-regional travel component by 50 per cent of the direct travel costs; and
- (ii) an upwards adjustment of air travel by 5 per cent to reflect indirect and hidden costs.

191. The treatment of adjustments for UTT in the 2004 Review will be conducted as part of the review process for the dispersion factor.

192. State policies differ on the provision of emergency patient transport (eg, emergency ambulance travel). Typically, a person is required to pay a bill for emergency transport to hospital in an ambulance, but there are State variations to this rule. For example:

- (i) in Tasmania, this type of service is provided free to most of the population;
- (ii) in New South Wales and the ACT, all hospital insurance cover includes an ambulance levy. People with this type of hospital insurance are entitled to ambulance services without charge. Those who hold Centrelink cards may also be exempt from the ambulance levy; and
- (iii) in Queensland, those who hold pensioners and seniors cards, and their dependants, are entitled to free ambulance cover from the State Government.

193. For the majority of States, emergency ambulance transport is paid for by the user. Commission staff propose to recommend that no separate disability be assessed for the provision of emergency transport or private patients to hospitals.

SCALE-AFFECTED EXPENDITURE COMPONENT

194. There are two factors assessed in the scale-affected expenditure component of the Inpatient Services category. They are input costs and administrative scale.

Input Costs

195. No issues were raised concerning input costs for scale-affected expenditure. We propose to continue this assessment in the 2004 Review.

Administrative Scale

196. ***Background.*** The administrative scale factor reflects the needs of some States to spend more per capita than other States to provide the basic structure of Government. In this context the basic structure of Government refers to head office of departments and whole of State services. In the 1999 Review, the fixed costs assessed for Health (excluding Public Health) were \$10 million. The fixed cost assessed for Hospitals was \$5.4 million.

197. ***State views.*** Tasmania suggested that the scale disability should also apply to hospital administration, and argued that the scale-affected expenditure for health and welfare is about 27 per cent understated. It said that the national hospital cost data

collection (NHCDC) identified a cost component which represented administrative overheads and that this could be used to determine the scale disability of smaller hospitals.

198. Tasmania acknowledged that there were significant differences between the States concerning the derivation of the costs for the NHCDC. It urged that caution be used if this type of approach were adopted in deriving the administrative costs incurred in different hospitals in delivering inpatient services.

199. The ACT requested that the component weight for scale-affected expenditure be increased to reflect the higher administrative scale costs it faced. These included:

- (i) the ability of the more populous States to take advantage of economies of large scale with regard to:
 - managing public hospitals, particularly the largest metropolitan hospitals, as hospital system networks include separate general and more specialised hospitals;
 - reducing costs per separation through the networking of hospital systems;
 - costs of licensing and operation; and
 - costs of implementation and operation of IT support systems, such as patient recording and costing systems;
- (ii) the higher proportions of overhead costs faced by the smaller States (23 per cent for Tasmania, 34 per cent for the ACT and 45 per cent for the Northern Territory), which reflected, for example, the level of development of costing systems;
- (iii) differences in the structure of the public hospital systems between States and the ability of the larger systems to benefit from economies of large scale, for example:
 - Tasmania, the ACT and the Northern Territory did not operate specialist psychiatric hospitals, which reflected the uneconomic nature of attempting to operate such specialist facilities within small systems; and
 - the ACT was unique in that the implied expenditure standard based on AIHW data comprised 100 per cent teaching hospital costs and zero per cent non-teaching hospital costs. For Australia as a whole, the respective figures are 60 per cent teaching hospital costs and 40 per cent non-teaching hospital costs; and
- (iv) teaching and research costs within hospital systems.

200. **Comments.** *Discussion Paper, CGC 2002/23, The Administrative Scale Factor*, examines the issues relating to the administrative scale factor. These issues will not be examined further in this paper.

201. In relation to Tasmania's suggestion, Commission staff are reluctant to recommend that the concept of fixed cost be expanded beyond head office expenses and State-wide services. The notion of fixed cost could be generalised to every service States provide.

202. Commission staff believe that the issues raised by the ACT have more to do with service delivery scale than the minimum fixed costs of head offices as captured in the administrative scale factor. We are not convinced that the higher costs mentioned by the ACT are mostly disability related, or are not already captured. The hospital costs factor captures higher costs associated with large metropolitan hospitals.

203. Commission staff propose to recommend that an administrative scale assessment be retained, consistent with decisions made on the general approach to an administrative scale assessment. The review of minimum fixed cost for health services will be conducted in conjunction with that general review.

ISOLATION COMPONENT

204. **Background.** In the 1999 Review, the isolation factor accounted for the higher costs in some States caused by their economic and geographical isolation from the main sources of supply in south-eastern Australia. It reflected the combined effect of isolation on:

- (i) labour costs;
- (ii) professional infrastructure costs;
- (iii) interstate freight costs;
- (iv) interstate airfares;
- (v) travel allowances; and
- (vi) other travel-related subsidies.

205. **State views.** Tasmania stated that the proportion of Hospital expenses (0.29 per cent) applied to isolation was too low. It noted that its allowance of \$2.1 million to offset the above-average costs incurred due to its isolation was too small. This amount would not cover the above average cost it incurred in relation to providing teaching facilities to encourage medical professionals to deliver services in Tasmania. Nor would it cover the additional costs incurred in transporting patients to large population centres to access services not available in Tasmania.

206. The ACT stated that due to its geographic location, it was more influenced than any other jurisdiction by the strength of market demand, and remuneration levels in the Sydney metropolitan area, for specialist medical staff. It also said that the small numbers of specialists in each clinical area meant it was vulnerable to monopoly-like effects for specialist services.

207. The ACT requested that a professional isolation factor be assessed to reflect the costs it faced in recruiting staff. It suggested that a factor equivalent to \$3.4m per annum, based on half of the VMO costs differential (to remove any policy influences) represented a reasonable proxy of the costs faced by the ACT.

208. Recruitment and retention of staff in rural and remote areas was an issue raised by Queensland, Western Australia, Tasmania and the Northern Territory. The Northern Territory suggested that the administrative scale, input costs and isolation factors should be increased to compensate for the high costs of advertising, additional incentives, travel allowances and other enticements to recruit and retain staff from interstate.

209. *Comments.* The higher costs of recruitment and retention in rural and remote areas of States would come under the coverage of the dispersion assessment. *Discussion Paper CGC 2002/22, Dispersion*, discussed this issue. Costs of interstate recruitment and retention of staff will be explored as part of the review of the isolation assessment.

210. These arguments relating to component weights and professional isolation will be dealt with as part of the work being undertaken on the Isolation factor (see *Discussion Paper CGC 2002/4, Isolation*).

PROPOSED ASSESSMENT FOR INPATIENT SERVICES

211. Table 8 provides an outline of the proposed assessment structure for the 2004 Review Inpatient Services category. Summaries of proposed changes to assessment methods and requests for comments from States concerning assessment options and of special data requests are also provided.

Acute Inpatients Component

212. *Socio-demographic composition factor.* The following outlines the changes being considered to the elements in the factor.

- (i) *age / sex* – no change.
- (ii) *Indigeneity* – update the under-recording of estimates for Indigenous separations and discontinue yearly discounting of the under-recording estimates.

- (iii) *low English fluency* – request translation costs data for inpatients and other data concerning costs of providing services to people from culturally diverse backgrounds.
- (iv) *location* – change classification from RRMA to ARIA+.
- (v) *socio-economic status* – proposed to retain current assessment.
- (vi) *DRG cost weights* – no change.
- (vii) *outlier cost adjustments* – no change.
- (viii) *Indigeneity cost adjustments* – continue adjustment. Staff intend to explore the results of the New South Wales Trendstar hospital studies as a potential source of Indigenous cost adjustment data. These results will be examined in comparison with those from the NATSIC (1997) study. If more up to date cost weight data can be obtained before the 2004 Review, it will also be considered,
- (ix) *private patients adjustments* – continue adjustment. States asked for comments concerning updating the discount from 12 per cent to 9 per cent as proposed by New South Wales.

213. Because of materiality and complexity, Commission staff are not inclined to adjust NHMD and Census data to take into account all eligible overseas inpatients. However, States are asked for their opinions on whether a more simplified approach for capturing differential costs due to all eligible overseas inpatients can be found.

214. *Additional adjustments:*

- (i) comments were sought concerning the renal dialysis and chronic diseases adjustments; and
- (ii) data were requested concerning the funding and reporting protocols for people receiving renal dialysis treatment.

215. ***Hospital costs factor.*** No changes were proposed for this factor.

216. ***Input costs factor.*** No changes were proposed for this factor .

Non-acute Inpatients Component

217. ***Socio-demographic composition factor.*** Changes to the disability variables for this factor are the same as those outlined for the acute inpatients component. In addition, Commission staff propose to include all inpatients from designated psychiatric wards and mental health institutions in the inpatient population of this component.

218. No changes were proposed for the hospital costs factor or the input costs factors in the non-acute inpatients component.

Cost of Patient Transport Component

219. No changes were proposed for the assessment method for the cost of patient transport factor. Data will be sought from States to enable the travel component weights to be updated.

Scale-affected Expenditure Component

220. No changes were proposed for the assessment method for the scale-affected input costs and administrative scale factors in this component. Component weights will be reviewed.

Isolation Component

221. No changes were proposed for the assessment method of the isolation factor. Component weights will be reviewed.

Table 8 2004 REVIEW PROPOSED ASSESSMENT STRUCTURE FOR INPATIENT SERVICES CATEGORY

Expenses Component	Component weight	Factors	Basis of calculation
	%		
Acute inpatient services		Socio-demographic composition	Cost weighted utilisation rates by age, sex, Indigeneity, Socio-economic status, region and low English fluency derived from National Hospital Morbidity Data, and 2001 Census of Population data.
		Hospital costs	Based on the average cost of treatment by region to account for dispersion, service delivery scale and research and extraordinary case complexity.
		Input costs	General method with weights for wages, accommodation and electricity to be determined
Non-acute inpatient services (including mental health inpatients)		Socio-demographic composition	Bed day rates by age, sex, Indigeneity, socio-economic status, region and low English fluency derived from National Hospital Morbidity Data, and 2001 Census of Population data.
		Hospital costs	Based on the average cost of treatment by region to account for dispersion, service delivery scale and research and extraordinary case complexity.
		Input costs	General method with weights for wages, accommodation and electricity to be determined.
Cost of patient transport		Cost of patient transport	Based on the general dispersion method for air travel, inter-regional travel and local travel.
Scale-affected expenditure		Input costs	General method with weights for wages, accommodation and electricity to be determined.
		Administrative scale	General method.
Isolation		Isolation	General method.

HOSPITAL PATIENT FEES ASSESSMENT

Background

222. In the 1999 Review, the capacities of States to raise revenue from patient fees were assessed to differ in per capita terms. The assessment was based on national average use rates of private patients in public hospitals, adjusted for age, sex, region, Indigeneity and income.

223. The category covers hospital user charges derived from patient fees received from inpatients, non-inpatients and same-day patients in all public hospitals. All other user charges are classified to the Hospitals - User Charges category.

224. Table 9 shows the user charges for the five years of the 2002 Update assessment period and the previous year. In 2000-01, this category represented 6.57 per cent of gross standard expenses on Hospitals.

Table 9 HOSPITAL PATIENT FEES — STANDARD USER CHARGES, 2002 UPDATE

	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01
\$pc	37.65	34.97	33.11	41.16	41.57	43.31
% of Hospitals gross standard expenses	7.29	6.83	6.16	6.84	6.69	6.57

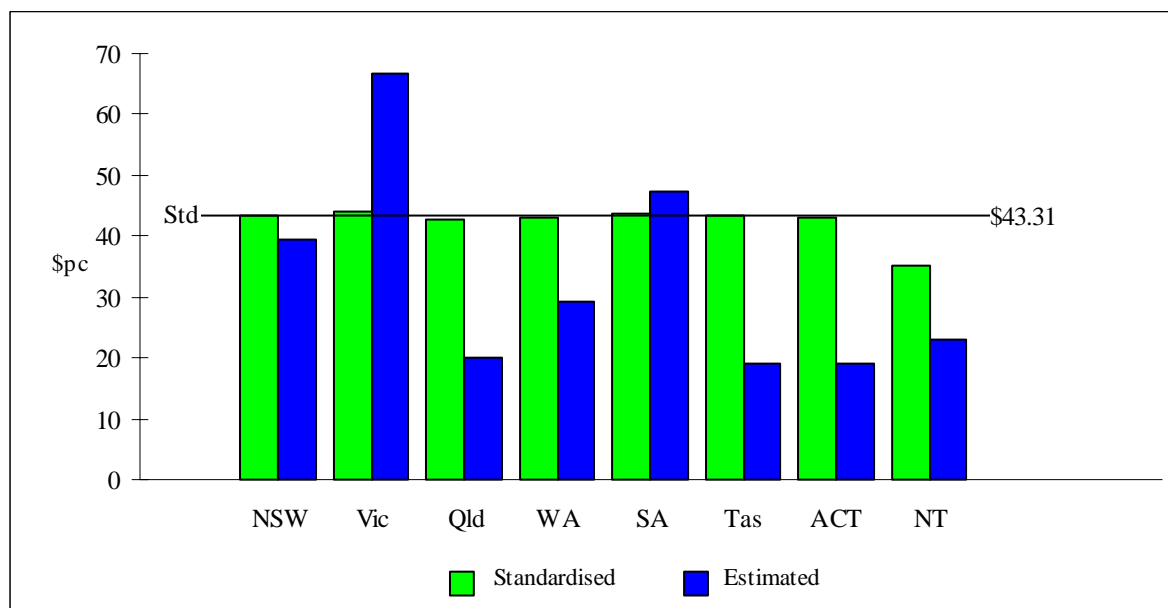
225. *Assessment structure.* The structure used in the 2002 Update is summarised in Table 10.

Table 10 HOSPITAL PATIENT FEES — ASSESSMENT STRUCTURE

User Charges component	Component weight	Factor	Basis of calculation
	%		
Hospital patient fees	100.00	Hospital patient fees	Standardised numbers of private patients by age, sex, Indigeneity, income and region, derived from Hospital Morbidity Data, and Census of Population and Housing data.

226. Figure 2 shows the user charges per capita for 2000-01 in terms of standardised, estimated and standard user charges.

Figure 2 HOSPITAL PATIENT FEES — USER CHARGES PER CAPITA — STANDARDISED, ESTIMATED AND STANDARD, 2000-01



227. Compared to an equal per capita assessment, the 2002 Update Hospital Patient Fees user charges assessment redistributed about \$4.5 million (\$0.23 per capita) away from New South Wales, Victoria and South Australia to the other States.

State Views

228. New South Wales stated it would like the Commission to take into account the level of charges it has to write off due to the non-payment of bills by non-Australian residents, visitors who do not hold travel insurance, and those whose country does not have a reciprocal health care agreement.

229. It said that while its policy is to obtain payment in advance, this is often not practical or humane, particularly in emergency situations

230. New South Wales stated it received the highest proportion of international visitors (59 per cent). In 1999-2000, it had to write off \$3.8 million and, in 2000-01, \$3.4 million.

231. In addition, New South Wales commented that the majority of the visitors stay in Australia less than 12 months. They are therefore not counted in the ABS population estimates and are not included in Commission calculations.

Comments

232. New South Wales provided data concerning the level of patient fees it has to write off. Table 11 provides data to illustrate the burden incurred by States due to writing off inpatients fees .

Table 11 ESTIMATE OF HOSPITAL PATIENT FEES NEEDING TO BE WRITTEN OFF

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust.
Total separations (000's) ^(a)	1 246	1 003	707	360	360	76	60	57	3 872
Cost total separations (\$m) ^(b)	3 399	2 738	1 931	983	982	207	165	158	10 563
Ineligible separations ^(c)	8 733	3 124	2 227	1 033	767	107	248	1 296	17 535
Cost ineligible separations (\$m) ^(d)	23.82	8.52	6.12	2.82	2.09	0.29	0.68	3.54	47.84
Per cent ineligible cost ^(e)	0.70	0.31	0.32	0.29	0.21	0.14	0.41	2.24	0.45
17.8 per cent written off (\$m) ^(f)	4.21	1.52	1.09	0.50	0.37	0.05	0.12	0.63	8.52
Estimate to write off based on national average (\$m) ^(g)	2.74	2.21	1.56	0.79	0.79	0.17	0.13	0.13	8.52
Difference (\$m) ^(h)	1.5	-0.7	-0.48	-0.3	-0.42	-0.12	-0.01	0.5	0

(a) Australian Hospital Statistics 1999-2000, Australian Institute of Health and Welfare (2001), pp 60.

(b) National average total cost per casemix adjusted separation, \$2728.00. Australian Hospital Statistics 1999-2000, Australian Institute of Health and Welfare (2001), pp 15.

(c) Australian Hospital Statistics 1999-2000, Australian Institute of Health and Welfare (2001), pp 60.

(d) Cost of ineligible separations. (Number of ineligible separation * National average total cost per casemix adjusted separation (\$2728.00))

(e) Total cost divided by ineligible cost.

(f) 17.8 per cent written off. This is the average of the amounts written off by NSW in 1999-2000 and 2000-01.

(g) This is the estimated amount needing to be written off based on the national average, (ie, for New South Wales \$4.241m * 0.45/0.7.)

(h) Difference between State amount and national average amount needing to be written off.

233. Based on these calculations, New South Wales wrote off about \$1.5 million more than the national average in hospital patient fees. While Commission staff recognise this to be a financial burden to the State, the amounts involved are small. Staff do not believe the amounts are material enough to warrant the introduction of a new adjustment.

234. **Proposal.** Commission staff propose to recommend a continuation of the current Hospital Patient Fees assessment in the 2004 Review.

ATTACHMENT A

Table 1 **SPECIFIC PURPOSE PAYMENTS IN THE HOSPITALS CATEGORY**

Specific Purpose Payment	Treatment
Highly Specialised Drug Program	Exclusion
National Health Development Fund	Exclusion
Health Program Grants - Treated by Deduction WA and SA	Exclusion
Other Medicare - Mental Health	Exclusion
Magnetic Resonance Imaging - Adjustment	Exclusion
Repatriation General Hospitals	Exclusion
Blood Transfusion Services	Inclusion
Magnetic Resonance Imaging	Inclusion
Other Medicare - AIDS	Absorption
Other Medicare - Hospital Access Program	Absorption
Health Care Grants	Absorption
Other Medicare - Incentive Package	Absorption
Kalgoorlie Pathology Laboratory	Absorption
Pathology Laboratories	Absorption
Medicare Base Grant	Absorption
Medical Speciality Centres	Absorption
Other Medicare - Other Health Services	Absorption
Medicare Related Payment - Outpatients Pilot Program	Absorption
Medicare Related Payment - Palliative Care	Absorption
Medicare Related Payment - Pharmaceutical Benefits for	Absorption
Medicare Related Payment - Public Hospital Charter	Absorption
Repatriation Hospital Services	Absorption
Medicare Related Payment - STD Clinic	Absorption
Medicare Related Payments - Waiting Lists	Absorption

Source: Commonwealth Grants Commission Working papers Vol 1 U2002, Attachment 1, pp52-3.