



COMMONWEALTH GRANTS COMMISSION

DRAFT ASSESSMENT PAPER CGC 2003/29

**NON-INPATIENT AND
COMMUNITY HEALTH SERVICES —**

REVISED

Prepared for the Commission's 2003 Conferences on Draft Assessments

AUGUST 2003

NOTE

Included in this paper are the results of preliminary calculations based on the methods proposed throughout the paper and using the data currently available. Those results are indicative only and should be seen as work in progress. Ongoing changes are being made to standards and factor calculations as new data come to hand. Moreover, the calculations have been done using a prototype assessment system and are subject to ongoing revision as checking processes proceed.

Analyses of the Australian Bureau of Statistics' 2001 National Health Survey data included in this paper reflect the views of the Commonwealth Grants Commission, and not the Australian Bureau of Statistics.

In this version of the paper State-specific expense data, and data referring to State-specific numbers have been removed for confidentiality reasons.

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INTRODUCTION

1. This paper presents a draft assessment for the Non-Inpatient and Community Health Services category for the 2004 Review. It builds on the staff proposals set out in *Discussion Paper 2002/30, Non-Inpatient and Community Health Services* and State comments on them provided at the 2002 Conferences and in the 2003 Rejoinder Submissions.

BACKGROUND

Scope of the category

2. In the 1999 Review, the Community Health category comprised expenses on administration, inspection, support and operation of community health services, outpatient services and emergency departments. More specifically, the category included expenses on non-admitted patient services in acute care institutions (accident, emergency and outreach services, outpatient, well baby and dental clinics), domiciliary nursing services, home nursing services not delivered as part of a welfare oriented program, health services provided to a particular community group, such as Aborigines and Torres Strait Islanders, alcohol and drug rehabilitation programs not involving admission and other health services provided in a community setting.

3. Table 1 shows the standard expenses for 1996-97 to 2001-02. In 2001-02, this category represented 4.38 per cent of total gross standard expenses.

Table 1 NON-INPATIENT AND COMMUNITY HEALTH SERVICES —
STANDARD EXPENSES AND USER CHARGES, 2003 UPDATE

	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
Standard expenses (\$pc)	181.23	185.90	209.52	220.66	218.73	219.27
% of total standard expenses	4.93	4.81	4.60	4.76	4.51	4.38

4. Specific Purpose Payments (SPPs) from the Australian Government that funded some of the expenses in this category are shown in Table 2. They were treated by inclusion in the 1999 Review.

Table 2 DISTRIBUTION OF NON-INPATIENT AND COMMUNITY HEALTH SPPS TO STATES, 2001-02

Australian Government Payment		NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Aged care assessment	\$m	13.53	10.32	6.63	3.72	3.56	1.12	0.41	0.64
	\$pc	2.04	2.13	1.81	1.94	2.34	2.37	1.27	3.20
Home and Community Care	\$m	29.65	41.12	36.20	8.80	13.34	4.93	0.84	0.20
	\$pc	4.46	8.47	9.86	4.59	8.78	10.42	2.60	1.00
OATSI grants	\$m	20.99	11.24	26.32	28.75	16.89	2.66	1.36	30.40
	\$pc	3.16	2.32	7.17	14.99	11.12	5.62	4.21	152.05
Youth health services	\$m	0.74	0.62	0.33	0.20	0.18	0.06	0.05	0.05
	\$pc	0.11	0.13	0.09	0.10	0.12	0.13	0.15	0.25

Structure of the assessment

5. The assessment structure used in the 1999 Review is shown in Table 3.

6. In the 2003 Update, the category redistributed \$192.1 million (\$9.80 per capita) away from New South Wales, Victoria, South Australia and the ACT

7. The factors with the greatest impact on grant shares were the socio-demographic composition factors, which redistributed \$109 million in the 2003 Update assessment.

Table 3 1999 REVIEW ASSESSMENT STRUCTURE

Expenditure component	Component weight	Factors	Basis of calculation
Scale-affected expenditure	0.64	Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Administrative scale	General method.
Emergency departments	12.97	Dispersion	General method, non-inpatient weights.
		Economic environment	Based on number of general practitioners in different regions.
		Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Socio-demographic composition	Covers age-sex, Indigeneity, English fluency and income.
Outpatients	51.91	Dispersion	General method, non-inpatient weights.
		Economic environment	Based on number of general practitioners in different regions.
		Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Socio-demographic composition	Covers age-sex, Indigeneity, English fluency and income.
Community health	34.27	Dispersion	General method.
		Economic environment	Based on number of general practitioners in different regions.
		Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Socio-demographic composition	Covers age-sex, Indigeneity, English fluency and income.
		Cross border	General method.
Isolation	0.21	Isolation	General method.

PROPOSED CATEGORY DEFINITION AND ASSESSMENT STRUCTURE

8. In discussion papers 2002/30, *Non-Inpatient and Community Health Services* and 2003/73, *The Treatment of Commonwealth Revenue Payments*, staff proposed, for the 2004 Review, that the:

- (i) expenses on community mental health that were previously allocated to the Mental Health category be included in this category; and
- (ii) category be renamed Non-inpatient and Community Health Services.

9. A separate assessment of community mental health expenses was not proposed. Instead, it was proposed to merge them into the community health services component because:

- (i) the disabilities assessed for the two components are very similar;
- (ii) community mental health services are provided increasingly from community health centres;
- (iii) the 1999 Review assessment had a small impact on relativities; and
- (iv) it would reduce the problem of the lack of data on the use of services that cause difficulties in the assessment of this category.

10. ***Preliminary State views.*** Tasmania proposed that the outpatient and emergency department services components be combined, as there was no difference in the basis of calculation for the two components.

11. Western Australia submitted that highly complex and dissected expenditure assessments failed to take into account interactions and substitutability between different types of expenditures and the overall objectives of these expenditures. It suggested that the Commission consider merging all the Health categories and use more global measures of the impact of age, sex, Indigeneity and location of residence on service delivery costs.

12. ***Staff proposals.*** Commission staff argued that, while outpatient, emergency and community health services are to some extent substitutable, they are not totally so. These services differ in nature and this is reflected in the information available on patterns of use and in the location of the services.

13. Commission staff proposed the three-component structure be retained. 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.

14. ***Further State views.*** New South Wales did not support merging the emergency departments, outpatients and community health components, as there was no

complete substitution between them and each had different factors and utilisation patterns. It provided information on New South Wales Health program objectives and activities to illustrate that each program had a different objective and field of activity.

15. The Northern Territory supported the merging of mental health expenses into the community health services component and retaining the three-component structure.

16. **Analysis.** The services covered in the three service delivery components differ in terms of the use of them and in aspects of the economic environment in which they are provided. The assessments for the 2003 Update indicate that there were significant differences in the impact of each group of services on State budgets, primarily stemming from the characteristics of the population that use each service. For example, in the 2003 Update, the component factors for the Northern Territory varied from 1.506 in emergency departments, to 1.648 for outpatients to 6.599 for community health.

17. We have relatively good data on utilisation of emergency department and outpatient services; while data on community health services are not as good as we would like, they are good enough to allow a separate assessment of these services. Merging the three components would be a second-best option.

18. **Commission decisions.** The Commission considers that there is a conceptual case for retaining the three service delivery component structure because the characteristics of the users of the services differ, as do some of the influences on costs per unit of service. Those differences cause differences across the States in the costs of providing the services which have a material effect on the assessments. In general data required for the assessments is good and we are confident equalisation is improved by continuing to make separate assessments for outpatients, emergency departments and community health. The Commission has therefore decided to retain the three separate service delivery components in the category.

19. The Commission also decided that community mental health expenses will be included in the community health services component because the services are increasingly being provided from community health centres and the influences that lead to interstate differences in costs did not appear to be materially different from those for other aspects of community health.

20. The Commission's decisions concerning the 2004 Review Non-inpatient and Community Health services assessment structure are summarised in Table 4.

Table 4 COMMISSION DECISIONS – CATEGORY DEFINITION, ASSESSMENT STRUCTURE AND COMPONENT WEIGHTS

Recommendation/Decision	Reason
Definition. Unchanged from the 1999 Review, except for the addition of expenses on community mental health services.	Similar disabilities apply to community mental health services. This change has the support of the States.
Assessment structure and component weights: <ul style="list-style-type: none"> • Fixed costs: 0.52% • Emergency department services: 23.85% • Outpatient services: 36.77% • Community health services: 38.76% • Isolation: 0.10% 	The Commission proposes to maintain the same component structure as used in the 1999 Review. This is because it still reflects the standard policies used for providing non-inpatient and community health services. Component weights were determined from State annual reports and budgets.

FIXED COSTS COMPONENT

ADMINISTRATIVE SCALE FACTOR

21. **1999 Review.** The administrative scale factor was assessed to account for differences in per capita costs of providing central office functions and whole of State services. Scale-affected expenses for this category were assessed as \$11 million, of which \$8 million was considered as fixed cost and \$3 million as variable cost. The scale-affected expenses component represented 0.64 per cent of expenses in this category.

22. **2004 Review.** Draft Assessment Paper 2003/60 *Administrative Scale* discusses the issues raised by the States regarding the assessment of this factor. The paper sets out the Commission’s decisions on the general method of assessment adopted for the 2004 Review and on the size of the fixed cost component in each category.

23. The Northern Territory submitted that the scale-affected variable cost component of the factor should cover the extra administrative costs associated with developing Indigenous specific programs and positions. Those costs included the need to tailor programs and training to accommodate differences in Indigenous language and culture, and delivery of programs and training to small groups using specialised resources.

24. The Northern Territory gave the example of Aboriginal Health Worker (AHW) Education and Training Coordinators (ETCs) who provide education and training support to AHWs employed in hospitals, urban clinics and remote communities. The additional costs of AHW ETCs in the Top End of the Northern Territory were estimated at around \$520 000. The Northern Territory said that these costs were not included in other disabilities such as socio-demographic composition. If the variable component of the administrative scale factor were removed from the assessment, the Northern Territory said the Commission should account for the additional administrative costs associated with developing Indigenous specific programs and positions in the Indigeneity factors.

25. The Commission has decided that administrative scale will be assessed for this category to recognise the unavoidable costs each State would incur to have the policy and administrative infrastructure necessary to provide the service regardless of the size of the task.

26. The administrative scale factors for this category, shown in Table 5, have been calculated using the 2004 Review general method. Fixed costs for this category have been estimated to be \$2.8 million per State. The Commission also assessed extra fixed costs of \$0.24 million for the Northern Territory to recognise the extra costs it incurs through the dual policy development tasks it must perform because of the high proportion of Indigenous people in its population. Fixed costs for the category represent 0.52 per cent of the category standard.

Table 5 ADMINISTRATIVE SCALE FACTORS — FIXED COSTS COMPONENT

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
1997-98	0.33982	0.464511	0.6272	1.186301	1.445781	4.541337	6.936187	19.05288
1998-99	0.33978	0.4651	0.624802	1.181036	1.454848	4.60512	6.967836	18.94507
1999-2000	0.33979	0.4654	0.622141	1.178632	1.464388	4.663242	6.981556	18.85992
2000-01	0.33971	0.465504	0.619214	1.177999	1.476504	4.722428	6.986087	18.83349
2001-02	0.34013	0.465243	0.615384	1.177537	1.487348	4.773583	7.000164	18.94453

27. The factor, which is based on estimated resident population, and the component weight will be updated annually.

INPUT COSTS FACTOR

28. **1999 Review method.** The input costs factor was assessed to account for differences between States in per capita costs of labour, office accommodation and electricity. A separate factor was calculated for each type of input and the following standard expense proportions were applied to each of the factors assessed for the fixed cost component:

- (i) wages and salaries 80 per cent;
- (ii) accommodation 2 per cent; and
- (iii) electricity 1 per cent.

29. **2004 Review method.** *Discussion Paper CGC 2003/04 Input Costs* sets out the issues raised by the States regarding the assessment of wages and salaries costs. The paper sets out the Commission’s proposals for the general method of assessment for the 2004 Review. *Draft Assessment Paper CGC 2003/79 Input Costs - Electricity and Accommodation* sets out the issues raised by the States regarding the assessment of input costs relating to accommodation and electricity. The paper sets out the Commission’s decisions on the general method of assessment to be adopted for the 2004 Review and on the size of the standard expense proportions in each category for accommodation costs and electricity costs. The States did not raise issues specific to this category.

30. The Commission considered that the prices of labour, accommodation and electricity, used in providing head office services related to non-inpatient and community health, differ across States for reasons beyond the control of individual States. It has therefore decided that input costs will be assessed for this component.

31. The input costs factors for the fixed cost component of this category, shown in Table 6, have been calculated according to the 2004 Review general methods. The standard expense proportions applied were 80 per cent for wages and salaries, 2 per cent for accommodation and 1 per cent for electricity.

Table 6 INPUT COSTS FACTORS — FIXED COSTS COMPONENT

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
1997-98	1.02957	0.98900	0.98398	0.97980	0.97449	0.94384	1.00918	1.09099
1998-99	1.03139	0.99002	0.98206	0.97635	0.97258	0.94141	1.01345	1.08640
1999-2000	1.03419	0.98918	0.97920	0.97834	0.96903	0.93477	1.01783	1.08174
2000-01	1.03477	0.99057	0.97731	0.97830	0.96785	0.93192	1.01707	1.07906
2001-02	1.03372	0.99171	0.97604	0.97939	0.97181	0.93162	1.01410	1.07560

EMERGENCY DEPARTMENT SERVICES COMPONENT

32. Five factors were applied to the emergency department services component:

- (i) socio-demographic composition;

- (ii) economic environment;
- (iii) cross-border;
- (iv) dispersion; and
- (v) input costs.

SOCIO-DEMOGRAPHIC COMPOSITION FACTOR

33. In the 1999 Review, the socio-demographic composition factor for this component allowed for the effects on the use and costs per unit of services arising from interstate differences in the age-sex distribution of the population, Indigeneity, income and low English fluency. The issues associated with those assessments and other issues raised during the review are discussed in the following sections.

Age-sex

34. **1999 Review.** The socio-demographic factor included age-sex weights based on data from the National Health Survey (NHS). The NHS data were used because they reflected the Australia wide demand pattern and were policy neutral.

35. **Preliminary State views.** New South Wales said that the NHS data had a number of shortcomings. It suggested that the Commission use cost weighted demand data derived from its Emergency Department Information System (EDIS), shown in Table 7. Those data captured patient-related cost drivers such as urgency, disposition and complexity of condition, rather than only demand differences as reflected in the NHS.

Table 7 EMERGENCY DEPARTMENT AGE-SEX WEIGHTS COMPARISON

Age group	NHS 2001		NSW EDIS 2000-01		SA RAH 2001-02		NT 2001-02	
	Male	Female	Male	Female	Male	Female	Male	Female
0-4	2.03	2.12	2.26	1.81	0.98	0.98	1.56	1.74
5-14	0.94	1.28	0.81	0.60	0.85	0.84	0.61	0.67
15-24	1.81	0.83	0.97	0.85	0.93	0.88	1.07	0.94
25-44	0.82	0.81	0.85	0.70	0.94	0.92	1.11	1.02
45-54	0.40	1.04	0.75	0.60	1.00	0.95	0.83	0.89
55-64	1.10	1.18	0.97	0.77	1.04	1.02	0.72	1.20
65-74	0.85	0.71	1.59	1.21	1.12	1.08	0.80	1.35
75+	0.22	0.42	2.78	2.34	1.17	1.14	1.44	1.07

Source: New South Wales' main submission to 2004 Review, South Australia's rejoinder submission to 2004 Review, ABS 2001 NHS data.

36. **Staff proposals.** Commission staff concluded that EDIS data may be preferable to NHS data because EDIS data have more reliability and integrity than the NHS, and capture unit cost and demand differences. Other States were asked to provide data similar to that provided by New South Wales. If they could not, it was proposed that New South Wales' EDIS data would be used.

37. **Further State views.** New South Wales and South Australia supported the use of New South Wales EDIS data. Queensland, Western Australia and the Northern Territory did not. Victoria and the ACT did not comment on this issue.

38. New South Wales agreed that age-sex weights from its EDIS should be used if no alternative weights were available from other States' data. It said that using New South Wales weights would be acceptable because, at an aggregated level, New South Wales emergency department services experienced a similar age-sex profile to other States.

39. South Australia said that EDIS data were a more reliable measure of age-sex usage than NHS data and should be used in the assessment. It undertook an analysis of emergency department data from the Royal Adelaide Hospital (RAH) for comparison with the New South Wales and NHS data.

40. South Australia pointed out that its data, shown in Table 7, differed from that presented by New South Wales, but that in general the difference was not as large as from the NHS data. It suggested some possible causes for the differences, such as differences in the sample population (the RAH does not provide maternity or paediatric services) and the New South Wales policy to fund patients who leave before receiving services.

41. Queensland said that using New South Wales' EDIS age-sex disabilities as a national average would be inappropriate. It argued that age-sex disabilities should be drawn from all States' data, but that it did not have appropriate data. It said that, if other States also could not provide age-sex data, the only appropriate data were those from the NHS.

42. Western Australia wrote that its system would not provide the age-sex disaggregation required by the Commission, and expressed concern that the New South Wales data would not be representative of national experience. It said that emergency department use was heavily influenced by the availability of alternative services in the private sector, particularly after hours GPs, and by the income and Indigeneity of the population. Because the New South Wales population differed from that of other States in these respects, the New South Wales data would not be sufficiently representative of the national picture. Western Australia concluded it would be better to use the NHS data, which was representative of all States.

43. The Northern Territory said that a State's demographic profile would impact on its demand and cost patterns, and that New South Wales' demographic profile was vastly different to that of the Northern Territory. The key contrasts were the Northern Territory's younger population, its larger male population, its high Indigenous population and the greater number of people in rural and remote areas. The use rates of the last two groups were much higher than the national average.

44. The Northern Territory concluded that its circumstances would not be reflected in New South Wales' data and did not support its use for calculating age-sex disabilities. It said that, although the NHS data were not fully representative of its circumstances either, they were likely to be less biased than the EDIS data.

45. The Northern Territory provided data on its emergency department use, which it said demonstrated a consistently high use by Indigenous people compared with non-Indigenous people. It suggested that the Commission use those data to set the Northern Territory's age-sex weights. The second best option was to use NHS data.

46. **Analysis.** States have provided much persuasive data that indicates the data for New South Wales would not be sufficiently representative to use to set the national average use weights. Given the large differences in some aspects of the population profiles of the States, there could be material differences between the use of emergency departments in New South Wales and the other States. Therefore, we think it best to continue to derive age-sex weights for emergency department services from NHS data, updated to the 2001 data instead of the 1994-95 version.

47. For similar reasons, we are not inclined to use the Northern Territory's data to set its age-sex weights. More importantly, it would also not be policy neutral to set a State's use weights using its own data.

48. **Commission decisions.** We accept that there is a strong conceptual case that different age-sex groups in the population use non-inpatient and community health services at different rates. That case is well supported by the NHS data and the data provided by individual States. The data indicate that the different utilisation rates have an impact on State budgets which the Commission considers to be material. We, therefore, have decided to continue to make allowances for the effects of interstate differences in their age-sex profiles.

49. The other issue is which set of use data to apply in determining the use weights. We have concluded that the data from the NHS are comparable and representative, and provide a strong basis for assessing age-sex use weights. In the interest of policy neutrality we have decided to continue to base the use weights on the NHS data, as updated to 2001.

50. The Commission decided to retain the 1999 Review method for calculating age-sex weights for the emergency department component.

Socio-economic status

51. **1999 Review.** The Commission applied use weights to people with low income to reflect their greater propensity to use emergency department services. The weights were derived from 1994-95 NHS data, and were adjusted with the Henderson scale to reflect different family structures. Excluding the effects of age and sex, the weight allocated to people with low incomes was 2.11.

52. **Preliminary State views.** Tasmania argued that the income disability should be expanded to include other factors associated with low socio-economic status, such as unemployment. The ACT asked that the income disability be removed.

53. **Staff proposals.** Staff recommended that income continue to be used as the measure of socio-economic status. Because the NHS was the only source of data that provided details of the use of health services by people of different socio-economic status, staff proposed using the 2001 NHS data to update the use weights.

54. **Further State views.** New South Wales expressed concerns with the measure of income currently being used because it failed to account for the differences in the cost of living across States. It argued that there should be an adjustment to the low income threshold to recognise the effects on the welfare of people of higher living costs. It said that, as a minimum, the adjustment should capture housing cost differentials.

55. Queensland cited an ABS survey which found that people with lower socio-economic status made greater use of doctors and outpatient/casualty services. It said that, in the absence of an alternative, NHS data should continue to be used.

56. South Australia supported the proposal to continue using income as a proxy for relative socio-economic disadvantage. It said that, as highlighted in its workplace discussions, there was a high correlation between demand for emergency and outpatient services and low socio-economic status, which must be reflected in the assessment.

57. South Australia expressed sympathy for Tasmania's argument that ideally the socio-economic factor would be more broadly based, but considered that income was a reasonable proxy in this instance. It said it also had the added advantage of being consistent with the measure used in the Inpatient Services category.

58. The Northern Territory suggested that it may be appropriate to use a broader set of measures than income for socio-economic status, including such things as education and unemployment, to better reflect the compounded disadvantage of low socio-economic status. It noted weights based on the NHS would be biased because its sample is drawn from urban and rural areas with few Indigenous people, especially those from remote areas, in the sample. However, it was unable to suggest a better alternative.

59. **Analysis.** The issue of whether income continues to be the most appropriate measure of low socio-economic status is discussed in *Draft Assessment Paper CGC 2002/59 Socio-demographic Composition*. The paper concluded that income continues to be the most appropriate measure of socio-economic status.

60. The issue of housing cost was also dealt with in the socio-demographic composition Draft Assessment Paper. The paper concluded that no adjustment would be made for the cost of housing.

61. **Commission decisions.** The Commission accepts that there is a strong and well recognised conceptual case that socio-economic status affects the use of emergency department services. Because there are differences between States in the relative socio-economic status of their population, there is a strong case for continuing to allow for

differences in socio-economic status in the assessments. The conceptual case is supported by data. The Commission is satisfied that these data are comparable and representative, and provide a strong basis for assessing a socio-economic status disability. The data indicate that the different utilisation rates have an impact on State budgets which the Commission considers to be material. The Commission therefore decided to continue to assess a socio-economic disability.

62. The Commission decided to continue to use income level as a proxy for socio-economic status, for the reasons given in the socio-demographic composition paper.

63. The Commission decided that weights for people with low income will continue to be derived from NHS data. The use of the Henderson scale to adjust income weights to reflect different family structures will also continue.

Indigeneity

64. ***1999 Review.*** The Commission included a combined use and cost weight for Indigenous people. The weights were derived from data for 1995-96 in the 1998 AIHW report *Expenditures on Health Services for Aboriginal and Torres Strait Islander People*. This report showed that per capita spending on Indigenous people was 2.2 times greater than spending on non-Indigenous people for emergency department services.

65. The weight was also adjusted to remove the influence of differences between States in the age-sex and income structures of their Indigenous population. The adjustment resulted in an Indigenous weight of 1.62 for emergency department services.

66. ***Preliminary State views.*** Victoria argued that there was no need to assess age-sex-income weights for all populations (Indigenous and non-Indigenous), since the weights for Indigenous people were implicit in the weighting of 2.2 derived from the AIHW report.

67. South Australia asked that the weights given to non-traditional Indigenous relative to traditional Indigenous persons, as well as non-traditional Indigenous relative to non-Indigenous persons, be revised.

68. ***Staff proposals.*** Staff proposed retaining a combined use and cost weight for Indigenous people. It was also proposed that an extra weight be applied to Indigenous people living a traditional lifestyle. Consistent with the Commission's general proposal on that issue, as outlined in *Discussion Paper CGC 2002/59 Socio-demographic Composition*, staff said that, if data were not available to distinguish between Indigenous groups across other dimensions, a measure of remoteness would continue to be applied as a reasonable proxy for the increased disadvantage of remote Indigenous populations.

69. ***Further State views.*** New South Wales agreed that it was appropriate to use national Indigenous weights derived from the AIHW report, as individual State weights might be biased by local policy differences.

70. New South Wales accepted that in principle it would cost more to provide services to Indigenous populations in traditional settings. However it said the concept of

‘traditional setting’ was not well defined for funding purposes and there was the possibility of double counting with the other socio-economic and remoteness adjustments. It suggested that an extra weight for traditional Indigenous populations should be considered only after:

- (i) there was a consensus on the definition of ‘traditional setting’;
- (ii) any extra costs of providing services to those populations were quantified by a well designed study; and
- (iii) the extent to which those costs were already accounted for in existing factors such as isolation and dispersion were identified.

71. The Northern Territory said that AIHW expenditure reports could be used for Indigenous and non-Indigenous rates. It also supported the Commission’s proposal to continue using remoteness as a proxy for increased disadvantage and higher costs. Because location alone did not fully capture the impact on service delivery, it recommended that the Commission also use language, transience, displacement from homelands and access to employment to identify different Indigenous groups.

72. **Analysis.** The higher use of emergency department services by Indigenous people and the higher cost of providing them are well recognised and supported by data. The latest edition of the AIHW *Expenditures on Health Services for Aboriginal and Torres Strait Islander People* report, which used 1998-99 data confirms that there is greater per capita expenditure on Indigenous compared with non-Indigenous people.

73. There is also substantial evidence that treating Indigenous people from a traditional setting costs more than treating other Indigenous people. However, it is likely that the combination of weights for socio-economic status, Indigeneity, and remoteness would capture most of the cost impact associated with language, displacement and access to employment. It is likely that introducing further weights, such as those suggested by the Northern Territory, would lead to double-counting.

74. **Commission decisions.** The Commission is satisfied that there is a strong conceptual case that Indigenous people use emergency department services more than non-Indigenous people and that the costs of treating them are higher. It also considers there is a conceptual case for higher weights for Indigenous people in traditional settings. The case for a higher use and cost weight for Indigenous people is supported by comparable and representative data that provide a strong basis for assessing a weight. Those data indicate that the higher costs have an impact on State budgets which the Commission considers to be material. The Commission therefore decided to continue to assess a combined use and cost weight for Indigenous people.

75. The Commission decided to retain the current method for assessing Indigeneity weights for the 2004 Review, using information from the latest edition of the AIHW report on *Expenditures on Health Services for Aboriginal and Torres Strait Islander People*. This report provides data on actual expense per capita for different types of health services for Indigenous and non-Indigenous people. This makes it possible to calculate overall weights for Indigenous people that reflect their aggregate effects on per capita expenditure.

76. Because the AIHW data reflected the total effects of Indigenous people relative to non-Indigenous people, the Commission continued the current adjustments to ensure that the Indigeneity weights did not double count allowances included in the age-sex and income influences. It also considered that the use of the combination of the weights for age, sex, income and Indigeneity reflected the aggregate effects of all Indigenous people and it was not necessary to introduce a separate allowance for the effects of Indigenous people living in traditional settings.

77. The 2001 AIHW report showed that per capita spending on Indigenous people was 2.2 times greater than spending on non-Indigenous people for emergency department services. That weight became 1.87 after it was adjusted to remove the influence of interstate differences in the age-sex and income structures of the Indigenous population.

Low English fluency

78. ***1999 Review.*** The Commission applied a cost weight of 1.5 to the proportion of the population with low fluency in English. This was to take account of the extra costs associated with the use of interpreters and longer consultation times. The weight was not applied to the Indigenous population, as language costs associated with Indigeneity were included in the Indigeneity weight. No use weight was applied to people with low English fluency as some of the available data suggested that people from non-English speaking backgrounds (NESBs) used health services less than other population groups.

79. ***Preliminary State views.*** No States commented on this issue.

80. ***Staff proposals.*** Staff proposed that the weight of 1.5 should be retained.

81. ***Further State views.*** No States mentioned low English fluency in the context of emergency department services.

82. ***Commission decisions.*** Workplace discussions and submissions have demonstrated that there is a strong conceptual case that the costs of providing a wide range of States services (including emergency department services) to a proportion of people with low English fluency is increased by the need for interpreter services and the extra time taken, especially when dealing with medical professionals. The case is supported by data that indicate the extra costs have a material impact on State budgets. The Commission has decided to continue to assess a cost weight for low English fluency.

83. In the absence of information to the contrary, the Commission decided to continue the 1999 Review approach of applying a weighting of 1.5 for low English fluency. That weight was not applied to Indigenous people because the method adopted to measure the Indigeneity weights includes the effects of the low English fluency of Indigenous people.

Other socio-demographic composition issues

Specific causes of demand

84. ***Preliminary State views.*** New South Wales argued that the assessment should incorporate a component for the health related cost of illicit drug use, and recognise the size of the illegal drug user population in New South Wales relative to other States. It provided data about deaths from opioid overdoses and national methadone statistics that showed a greater impact of drugs in New South Wales.

85. New South Wales also suggested that the Commission should extend its assessment of services to people with HIV/AIDS to include inpatient, outpatient and community based services.

86. Tasmania said that a diabetes disability should be assessed to recognise the high costs of containing this expensive chronic disease.

87. ***Staff proposals.*** Staff discussed the principles of the adjustment suggested, and concluded the following:

- (i) Fiscal equalisation may not be enhanced by focusing on some areas of demand and not others. All States identify some issues where demand was above the national average, for example, skin cancer in Queensland.
- (ii) It is possible that some disabilities already recognised by the Commission explain the interstate differences in expenditure caused by some indicators of demand. For example, New South Wales' higher than average expenditure on drugs could be explained by different age-sex and income structures.

88. Staff asked other States to provide similar data to that provided by New South Wales on expenditure for the treatment of HIV/AIDS across different settings of care.

89. Tasmania did not provide evidence that it needed to spend more per capita in relation to diabetes, therefore staff considered that no disability should be assessed.

90. ***Further State views.*** New South Wales re-iterated its view that the budgetary impact of drug abuse and HIV/AIDS is much greater in New South Wales than in other States and should be recognised in the Commission's assessments. It said that its higher than average expense was not explained by different age-sex and income structures. It said this unique degree of disability arose because of the effect of urban influences in Sydney and the role of Sydney as a major international port.

91. New South Wales provided more recent data on the treatment of HIV/AIDS in non-inpatient settings. In 2001-2, New South Wales Health spent \$48.8 million to care for people with HIV/AIDS in the community.

92. Queensland argued that adjustments for States' higher than average incidence of specific diseases or diagnostic related groups would add significant complexity for what is likely to be little material benefit.

93. Western Australia agreed with the view that each State could quote population groups that have higher demand for services. It said that, for example, skin cancer was a particular problem in Western Australia. To be sure of improving fiscal equalisation by adjusting demand for these groups, Western Australia said the Commission would need to identify every population sub-group with higher demand, or assess this category by an actual per capita method.

94. Western Australia said that New South Wales' measures of drug users were not reliable. Western Australia said the number of methadone clients had two problems:

- (i) not all injecting drug users were treated with methadone and the availability of methadone treatment varied between States; and
- (ii) some people being treated with methadone were taking heroin by means other than injection.

95. Western Australia said the number of opioid deaths was dependent in part on policy affected factors, such as the treatment options available and the availability of heroin. It cited alternative data from the AIHW's *2001 National Drug Strategy Household Survey* (NDSHS) which showed Western Australia as having 19 300 injecting drug users in 2002 — a higher absolute number than any other State.

96. South Australia was unwilling to support either of the proposed measures unless it could be shown that the impact was material and that there was sufficiently accurate data to base it on.

97. Tasmania said that its HIV/AIDS non-inpatient services were provided through regular community based outpatient clinics with some nurse outreach. The costs for these services were based on staff time (five hours per week nursing and three hours per week for Infectious Disease Physicians, plus the Resident Medical Officer), plus other treatment costs of about \$1 million.

98. Tasmania said that economies of scale could be achieved in serving large numbers of HIV/AIDS patients. Tasmania treated relatively few HIV/AIDS patients, however the fixed costs of providing specialised services, pharmaceuticals and non-inpatient support networks were high and the small numbers resulted in an inability to achieve diminishing costs per patient.

99. Tasmania said that if a disability were introduced for HIV/AIDS, the Commission would be compelled to include disability assessments for all diseases in which States have a relatively high number of sufferers. It repeated its example of diabetes. Tasmania said that to maintain simplicity, disability factors should not be introduced for specific diseases of high prevalence such as HIV/AIDS or diabetes.

100. Tasmania acknowledged that servicing high levels of drug use imposed additional strains on community health services but suggested that New South Wales did not experience a uniquely high level of intravenous drug use. It argued that the table of information referred to by the Commission significantly under-represented Tasmania's current expenditure on needle exchange activity, which was \$0.87 million in 2001-02. It wrote that the drug use prevalence modelling based on levels of methadone usage and opiate deaths did not reflect the nature of drug use in Tasmania.

101. Tasmania cited the *1998 National Drug Strategy Household Survey* as reporting that 46.1 per cent of Tasmania's population aged 14 and over stated they had used illicit drugs in their lifetime, as opposed to New South Wales with 45.1 per cent. Moreover, 1.6 per cent of Tasmanians aged 14 years and over had injected illegal drugs in their lifetime, compared to 1.4 per cent for New South Wales. Based on the survey's findings that the incidence of drug use across States was fairly similar, Tasmania strongly suggested that no additional factor for drug use be assessed.

102. The Northern Territory argued that special adjustments relating to causes of demand would enhance fiscal equalisation and that the onus lies with States to provide evidence that their circumstances differ from other States by such a degree that they could be materially disadvantaged by the Commission's assessment methods. The Commission could then apply judgement to determine whether the evidence showed a level of need that was not adequately taken into account by the existing factors.

103. The Northern Territory provided HIV/AIDS expense data, which indicated that its 2001-02 expenses amounted to \$1.9 million.

104. The Northern Territory argued that the Commission should interpret the methadone data presented by New South Wales with care, because New South Wales actively promoted methadone as a treatment option for addicts, but this option was much less readily available in the Northern Territory. Accordingly, the Northern Territory said that, if an adjustment was made for illicit drugs, it would be better based on a measure such as the number of opioid overdose deaths rather than on users of a particular treatment when different treatment options are possible.

105. **Analysis. HIV/AIDS.** Based on expenditure data provided by States, in 2001-02, New South Wales spent \$7.64 per capita on non-inpatient HIV/AIDS services, while the Northern Territory spent \$10.34 per capita. However, according to the National Centre in HIV Epidemiology and Clinical Research, about 60 per cent of Australian HIV/AIDS sufferers lived in New South Wales.

106. However, the high proportion of HIV/AIDS sufferers living in New South Wales, does not appear to be translated into higher per capita expenditure.

107. **Commission decisions.** The Commission considers that the issue of HIV/AIDS is only a part in a bigger issue. The argument for higher spending on particular diseases could be applied to numerous diseases. The evidence relating to HIV/AIDS in New South Wales is no stronger than the evidence relating to other diseases in other States. The Commission is not inclined to make allowances for the effects of specific conditions, unless it is demonstrated that they stem from underlying causes that are not affected by the

policy of individual States and that they have materially different effects on per capita expenditures across the States.

108. The available evidence does not appear to demonstrate that per capita expenditure in New South Wales is affected markedly by the high incidence of HIV/AIDS in the population. In the absence of that information and information demonstrating that the effects on costs are not already reflected in the other allowances the Commission has assessed, the conceptual case is not established.

109. The Commission decided not to make an adjustment for the higher incidence of HIV/AIDS in the New South Wales population. It would reconsider this matter in the light of further information.

110. **Analysis. Drug users.** Statistics from the 2001 NDSHS, conducted by the AIHW, have been used to examine the relative incidence of drug use across the States.

111. The 2001 NDSHS is the most comprehensive survey concerning legal and illicit drug use ever undertaken in Australia. Almost 27,000 people aged 14 years and over provided information on their drug use patterns, attitudes and behaviours. While the survey could be expected to under-report the level of drug use¹, there is no reason to consider that the under-reporting would differ significantly between States.

112. Table 8 and Table 9 show the proportion of the population who have recently used illicit drugs and the proportion who are considered to be injecting drug users. The data indicate that New South Wales has less than the Australian average number of people who have recently used illicit drugs and is estimated to have less than the Australian average proportion of its population who are injecting drug users.

¹ *Estimating the number of dependent opioid users in Australia*, National Drug and Alcohol Research Centre.

Table 8 RECENT^(a) ILLICIT DRUG USE SUMMARY: PROPORTION OF THE POPULATION AGED 14 YEARS AND OVER, 2001

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
	%	%	%	%	%	%	%	%	%
Marijuana/cannabis	11.9	11.8	12.7	17.5	14.2	11.9	14.4	24.4	12.9
Amphetamines ^(b)	3.4	2.4	2.9	5.8	4.3	2.1	4.5	6.3	3.4
Pain-killers/analgesics ^(b)	2.5	3.2	3.4	3.9	3.1	2.2	3.3	3.8	3.1
Ecstasy/designer drugs	3.4	3.0	1.7	4.0	2.0	0.8	4.8	2.8	2.9
Cocaine	1.8	1.3	0.7	1.5	0.7	*0.2	1.5	*0.5	1.3
Tranquillisers/sleeping pills ^(b)	0.9	1.1	1.2	1.7	1.4	1.0	1.4	1.1	1.1
Hallucinogens	0.9	0.9	0.8	2.0	1.9	1.0	1.8	1.7	1.1
Injected drugs	0.3	0.4	0.6	1.3	0.8	1.0	*0.3	1.9	0.6
Inhalants	0.5	0.3	0.3	0.6	0.7	*0.2	0.5	*0.5	0.4
Other opiates ^(b)	0.2	0.4	0.3	0.6	*0.3	0.7	0.6	0.8	0.3
Heroin	0.2	0.3	*0.2	0.3	*0.1	*0.3	*0.4	*0.1	0.2
Barbiturates ^(b)	*0.1	0.2	*0.2	0.2	*0.3	*0.1	*0.2	*0.1	0.2
Steroids ^(b)	*0.1	0.3	*0.1	*0.1	*0.3	*0.1	*0.1	*0.1	0.2
Methadone ^(c)	*0.1	*0.1	—	*0.1	*0.1	*0.1	—	*0.3	0.1
Any illicit excluding cannabis	3.3	3.8	3.1	3.0	3.1	0.9	2.8	3.2	3.3
Any illicit	15.8	16.0	16.5	22.0	17.8	14.3	18.1	29.2	16.9

(a) Used in past 12 months.

(b) For non-medical purposes.

(c) For non-maintenance purposes.

* Relative standard error greater than 50 per cent.

Source: AIHW, 2001 National Drug Strategy Household Survey, State and Territory Supplement.

Table 9 RECENT^(a) INJECTED DRUG USE: ESTIMATE OF THE POPULATION AGED 14 YEARS AND OVER

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Injecting drug users	18 000	17 700	18 700	19 300	9 600	3 700	800	2 700	90 800
Proportion of population aged 14 years and over who are injecting drug users (%)	0.3	0.5	0.6	1.3	0.8	1.0	0.3	1.8	0.6

(a) Used in past 12 months.

Source: AIHW, 2001 National Drug Strategy Household Survey, State and Territory Supplement.

113. **Commission decisions.** The available data do not support the argument that New South Wales has a relatively higher number of illicit drug users per capita and therefore a need to spend more per capita on health services relating to illicit drug use. The Commission therefore does not consider a conceptual case exists for New South Wales needing to spend more per capita on illicit drug use.

114. The Commission decided not to make an adjustment for the size of the illicit drug using population in New South Wales.

Short-term visitors

115. ***Preliminary State views.*** New South Wales asked that short-term visitors from countries with a reciprocal health agreement with Australia be included in the estimated population in the emergency department and outpatient services components, as they are entitled to receive hospital services free of charge while they are in Australia.

116. ***Staff proposals.*** Staff were inclined to accept New South Wales' argument and proposed to explore how an adjustment to Census data for overseas visitors could be made, and whether it would have a material impact on relativities.

117. ***Further State views.*** New South Wales repeated its argument that an adjustment should be made for overseas visitors. It said that some temporary entrants who were ineligible for Medicare posed a health risk, particularly in HIV/AIDS, to the general public and needed to be treated regardless of their Medicare eligibility.

118. New South Wales estimated that the cost of treating these patients was \$500 000 for the South Eastern Sydney Area Health Service alone. Another \$300 000 was spent for post exposure prevention for people exposed to HIV/AIDS.

119. Queensland said that, if material, an adjustment for overseas visitors was appropriate because, while interstate visitors were accounted for in the Health Care Agreement, any additional costs arising from higher than average overseas visitors were overlooked. It provided a method for adjusting for overseas visitors.

120. South Australia questioned the materiality of including an adjustment for overseas visitors, particularly given the additional complexity and relatively minor costs involved. In addition, it did not see why the Commission would consider the impact of overseas visitors not material enough to warrant a factor in the Inpatient Services category, but consider it to be material in this category when the impact was smaller. In any case, South Australia doubted that the visitor data was good enough to support an adjustment.

121. Tasmania said that any adjustment would need to take account of a State's residents travelling overseas in countries where reciprocal agreements exist. The complexity of this issue, together with the lack of nationally consistent and complete data, and the lack of materiality, led Tasmania to conclude that the Commission should not pursue this issue.

122. The Northern Territory argued that it was not clear that the effect on relativities was material enough to warrant an adjustment. It said that adjusting Census data could be made more difficult since many visitors go to more than one State during their stay — the Census only captured one of these States so it did not give an accurate picture of the potential population for emergency department and outpatient services.

123. ***Analysis.*** To accurately assess eligible overseas visitors, a number of adjustments would need to be made to the Census data. In particular, the number of

residents of each State visiting countries where Australia has a similar reciprocal agreement would need to be offset against the number of visitors.

124. New South Wales estimated the cost of providing acute inpatient services to eligible overseas patients to be \$5.4 million — the limited data available suggest the costs for non-inpatient services would be smaller. While this amount is a financial burden to the State, it is likely that other States incur some similar expenses, but data are not available. The relevant issue for Commission assessments is whether the costs in New South Wales exceeds the national average costs. In addition, we currently have no data on the number or value of services provided to residents of each State who are abroad.

125. **Commission decisions.** There is an argument that the net costs to health services of short-term international visitors could differ across States. However, the limited data suggest any impact on State expenses would be small. Moreover, there is a lack of data on the net number of short-term international visitors. Overall, the Commission is not convinced that the conceptual case has yet been made.

126. The Commission decided not to include an adjustment for overseas visitors in the assessment.

Refugees

127. **Preliminary State views.** South Australia said that the refugee detention centres in South Australia have caused an increase in the demand for many State Government services, including health. The Departments of Human Services and Education, Training and Employment estimated that the additional costs were about \$6 million annually. Those costs were not fully covered by the current level of compensation received from the Australian Government.

128. **Staff proposals.** It was not clear why the expenses were not Australian Government expenses and why South Australia appeared to be the only State where detention centres were located that was not fully compensated. Commission staff concluded that the matter appeared to be more an issue for Australian Government-State negotiation than for equalisation.

129. **Further State views.** New South Wales agreed that there should be no assessment for refugees in detention centres as providing this care is an Australian Government responsibility and should be covered by the Australian Government.

130. South Australia indicated that it had reliable data that identified additional health costs of approximately \$3.50 per capita (over \$5 million) for services provided directly to Australian Government detainees, which they expected would be replicated to a similar extent in the three other States housing Australian Government detention centres.

131. In response to the Commission's specific questions, South Australia said that it was actively seeking reimbursement of around \$5 million from the Australian Government for all services (including police and health) provided to detention centre

refugees, but was yet to receive a response from the Australian Government. This amount related to total costs in relation to asylum seekers of about \$10.2 million.

132. The Northern Territory said it appeared that the Australian Government was reimbursing South Australia for most costs and that the costs of providing health services to temporary protection visa holders should be covered by Medicare. Therefore, it considered there did not seem to be a material need to include an assessment for refugees.

133. **Commission decisions.** The Commission does not have sufficient evidence that there is a disability driven case for including an allowance for the costs of detainees in detention centres. The issue is one that would be more appropriately resolved through Australian Government-State negotiation than for equalisation. Therefore, the Commission decided not to include an assessment for the costs of refugees in the 2004 Review.

Proposed method for calculating the socio-demographic composition factor and results

134. The socio-demographic composition factor will recognise the following influences on State costs.

- (i) age-sex;
- (ii) Indigeneity;
- (iii) income; and
- (iv) low English fluency.

135. 2001 NHS data were used to derive use weights for age, sex and income.

136. Table 10 shows the estimated numbers of people who used and did not use emergency department services, from the 2001 NHS.

Table 10 USE OF EMERGENCY DEPARTMENTS BY AGE AND SEX

Age	Used ED services in previous two weeks?	Male	Female	Total
0 to 4	Used	13 361	13 214	26 575
	Did not use	640 699	607 849	1 248 548
5 to 14	Used	13 152	16 950	30 102
	Did not use	1 357 961	1 285 711	2 643 672
15 to 24	Used	23 772	10 664	34 436
	Did not use	1 282 149	1 251 801	2 533 950
25 to 44	Used	23 527	24 099	47 627
	Did not use	2 791 518	2 886 543	5 678 061
45 to 54	Used	5 279	13 928	19 207
	Did not use	1 293 355	1 303 962	2 597 317
55 to 64	Used	10 034	10 778	20 812
	Did not use	889629	886706	1 776 335
65 to 74	Used	5 401	4 784	10 185
	Did not use	615 068	658 251	1 273 319
75+	Used	908	2 447	3 355
	Did not use	398 470	573 669	972 140
Total used		95 433	96 866	192 299
Total did not use		9 268 851	9 454 492	18 723 343

Source: ABS 2001 NHS data.

137. Table 11 calculates the use ratios (number who used the service divided by number that did not) and the resulting weights (rate of use ratios for each age-sex group divided by total use ratios).

Table 11 AGE-SEX USE RATES AND WEIGHTS — EMERGENCY DEPARTMENTS

Age	Sex	Proportion using ED services	Weight (proportion divided by total proportion)
0 to 4	Male	0.021	2.03
	Female	0.022	2.12
5 to 14	Male	0.010	0.94
	Female	0.013	1.28
15 to 24	Male	0.019	1.81
	Female	0.009	0.83
25 to 44	Male	0.008	0.82
	Female	0.008	0.81
45 to 54	Male	0.004	0.40
	Female	0.011	1.04
55 to 64	Male	0.011	1.10
	Female	0.012	1.18
65 to 74	Male	0.009	0.85
	Female	0.007	0.71
75+	Male	0.002	0.22
	Female	0.004	0.42
Total		0.010	1

138. Use weights were assessed for people with low incomes to reflect their greater propensity to use emergency department services. Analysis of 2001 NHS data, including the use of Henderson Scales to adjust income levels to reflect different family structures, showed that people with low incomes used emergency department services at a rate 1.45 times that of others. The calculation is shown in Table 12.

Table 12 CALCULATION OF INCOME WEIGHTS FOR EMERGENCY DEPARTMENT SERVICES

	High Income	Low Income	Not Stated
Used emergency services in period of study	59 555	85 977	46 767
Did not use emergency services	7 323 724	7 242 938	4 156 681
Total	7 383 279	7 328 915	4 203 448
Proportion	0.0081	0.0117	0.0102
Weight (low income use as proportion of high income use)	1	1.4544	

Source: ABS 2001 NHS data.

139. It was considered that the effects of income and the age-sex profile of the low income population could interact. Therefore, before being used in calculating the socio-demographic composition factor, the income effect was adjusted for the effects of age and sex. The method for doing this was similar to that used to adjust the Indigeneity weights below.

140. After the age and sex adjustment, the low income weight increased from 1.45 to 1.56, indicating that the raw weight under-estimated the greater needs of people with low incomes. It did not take into account the fact that they were less likely to be in the age-sex groups with higher utilisation rates.

141. A weight for Indigenous people was derived from data in the *AIHW Report on Expenditures on Health Services for Aboriginal and Torres Strait Islander People, 1998-99*. That report showed per capita spending on Indigenous people for non-inpatient services was 2.21 times the expenditure per non-Indigenous person, as shown in Table 13.

Table 13 EMERGENCY DEPARTMENT EXPENDITURE ON INDIGENOUS AND NON-INDIGENOUS PEOPLE

	Indigenous	Non-Indigenous	Ratio/weight
	\$ per person	\$ per person	
Expenditure	307	139	2.21

Source: Expenditures on Health Services for Aboriginal and Torres Strait Islander People, 1998-99.

142. The report used an Indigenous population from the ABS 1998 experimental estimates. When adjusted for the latest data the Indigenous weight decreased to 1.96.

143. Because that weight reflects the total extra costs attributable to Indigenous people due to higher use rates, higher unit costs, interpreters and the need for culturally sensitive services, it was adjusted for the age-sex structure of the Indigenous population and income before being used in the calculation of the socio-demographic composition factor.

144. Table 14 shows the age-sex-income weights.

Table 14 TOTAL AGE-SEX-INCOME WEIGHTS FOR EMERGENCY DEPARTMENT SERVICES

Age	Sex	Income	Age-sex weight	Income weight	Total weight
0 to 4	Male	Low	2.03	1.56	3.16
		High	2.03	1.00	2.03
	Female	Low	2.12	1.56	3.30
		High	2.12	1.00	2.12
5 to 14	Male	Low	0.94	1.56	1.47
		High	0.94	1.00	0.94
	Female	Low	1.28	1.56	2.00
		High	1.28	1.00	1.28
15 to 24	Male	Low	1.81	1.56	2.81
		High	1.81	1.00	1.81
	Female	Low	0.83	1.56	1.29
		High	0.83	1.00	0.83
25 to 44	Male	Low	0.82	1.56	1.28
		High	0.82	1.00	0.82
	Female	Low	0.81	1.56	1.27
		High	0.81	1.00	0.81
45 to 54	Male	Low	0.40	1.56	0.62
		High	0.40	1.00	0.40
	Female	Low	1.04	1.56	1.62
		High	1.04	1.00	1.04
55 to 64	Male	Low	1.10	1.56	1.71
		High	1.10	1.00	1.10
	Female	Low	1.18	1.56	1.84
		High	1.18	1.00	1.18
65 to 74	Male	Low	0.85	1.56	1.33
		High	0.85	1.00	0.85
	Female	Low	0.71	1.56	1.10
		High	0.71	1.00	0.71
75+	Male	Low	0.22	1.56	0.35
		High	0.22	1.00	0.22
	Female	Low	0.42	1.56	0.65
		High	0.42	1.00	0.42

145. Table 15 disaggregates the Indigenous and non-Indigenous populations by age, sex and income.

Table 15 NUMBERS OF INDIGENOUS AND NON-INDIGENOUS PEOPLE BY AGE-SEX AND INCOME STATUS

Age	Sex	Income	Indigenous Population	Non-Indigenous Population	Proportion of Indigenous Population.	Proportion of non-Indigenous Population.
0 to 4	Male	Low	12 951	429 402	0.02826	0.02346
		High	16 687	146 727	0.03641	0.00802
	Female	Low	13 152	452 430	0.02870	0.02472
		High	17 386	154 998	0.03794	0.00847
5 to 14	Male	Low	27 163	920 007	0.05927	0.05026
		High	30 081	321 091	0.06564	0.01754
	Female	Low	29 472	967 939	0.06431	0.05288
		High	31 730	340 420	0.06924	0.01860
15 to 24	Male	Low	18 230	830 632	0.03978	0.04538
		High	23 612	386 887	0.05152	0.02114
	Female	Low	21 105	917 588	0.04605	0.05013
		High	20 995	345 445	0.04581	0.01887
25 to 44	Male	Low	31 515	2 141 387	0.06877	0.11699
		High	35 272	632 071	0.07696	0.03453
	Female	Low	33 002	2 212 008	0.07201	0.12085
		High	28 685	474 950	0.06259	0.02595
45 to 54	Male	Low	9 541	979 827	0.02082	0.05353
		High	8 893	293 683	0.01940	0.01604
	Female	Low	9 435	1 023 762	0.02059	0.05593
		High	8 099	234 069	0.01767	0.01279
55 to 64	Male	Low	3 705	472 366	0.00808	0.02581
		High	5 833	392 826	0.01273	0.02146
	Female	Low	3 813	574 014	0.00832	0.03136
		High	4 887	301 912	0.01066	0.01649
65 to 74	Male	Low	1 509	211 554	0.00329	0.01156
		High	3 328	448 088	0.00726	0.02448
	Female	Low	1 147	229 138	0.00250	0.01252
		High	2 812	382 388	0.00614	0.02089
75+	Male	Low	690	171 049	0.00151	0.00935
		High	1 862	489 794	0.00406	0.02676
	Female	Low	503	136 617	0.00110	0.00746
		High	1 191	288 737	0.00260	0.01577
Total			458 286	18 303 806	1.00000	1.00000

Source: ABS 2001 Census of Population and Housing data.

Table 16 INDIGENOUS AND NON-INDIGENOUS WEIGHTS DUE TO AGE, SEX AND INCOME — POPULATION PROPORTIONS MULTIPLIED BY AGE-SEX-INCOME WEIGHTS (FROM TABLE 14)

Age	Sex	Income	Indigenous Population	Non-Indigenous Population
0 to 4	Male	Low	0.0893	0.0742
		High	0.0739	0.0163
	Female	Low	0.0946	0.0815
		High	0.0803	0.0179
5 to 14	Male	Low	0.0870	0.0738
		High	0.0619	0.0165
	Female	Low	0.1285	0.1057
		High	0.0889	0.0239
15 to 24	Male	Low	0.1118	0.1276
		High	0.0930	0.0382
	Female	Low	0.0595	0.0647
		High	0.0380	0.0157
25 to 44	Male	Low	0.0879	0.1495
		High	0.0632	0.0283
	Female	Low	0.0911	0.1530
		High	0.0509	0.0211
45 to 54	Male	Low	0.0129	0.0331
		High	0.0077	0.0064
	Female	Low	0.0333	0.0906
		High	0.0184	0.0133
55 to 64	Male	Low	0.0138	0.0441
		High	0.0140	0.0236
	Female	Low	0.0153	0.0578
		High	0.0126	0.0195
65 to 74	Male	Low	0.0044	0.0154
		High	0.0062	0.0209
	Female	Low	0.0028	0.0138
		High	0.0043	0.0148
75+	Male	Low	0.0005	0.0032
		High	0.0009	0.0059
	Female	Low	0.0007	0.0048
		High	0.0011	0.0066
Total			1.4488	1.3816

146. The data in the tables indicate that the age-sex-income profile of Indigenous people resulted in their demand for emergency department services being 1.05 times that of non-Indigenous people.

147. The extra costs of Indigenous people, over and above that due to their age-sex-income profile, was calculated by dividing the total Indigenous weight (1.96) by 1.05. That calculation, which removed all double counting, gave an adjusted Indigenous weight of 1.86. That weight was applied to all Indigenous people in the calculation of the socio-demographic composition factor for emergency department services. The calculation is in Table 17.

Table 17 AGE-SEX ADJUSTMENT OF INDIGENEITY WEIGHT

	Weight
Ratio (from Table 16) (a)	1.0487
Indigeneity weight (b)	1.96
Age-sex adjusted Indigeneity weight (b/a)	1.8688

148. A cost weight of 1.5 was applied to people with low English fluency. The weight was not applied to Indigenous people, as any extra costs associated with language difficulties were captured in the weight already calculated for Indigenous people.

149. The overall socio-demographic composition factor for the emergency departments component was calculated in the following way:

- (i) the weights for age-sex groups, Indigeneity, income and low English fluency (all outlined above) were applied to cross-tabulated 2001 Census data for each State and for Australia to derive weighted populations to derive estimates of cost-adjusted, standardised use in each State;
- (ii) the weighted population for each State and for Australia was divided by the unweighted population; and
- (iii) factors were derived by dividing the ratio for each State by the ratio for Australia.

150. The resulting socio-demographic composition factors calculated for the emergency department services component are shown in Table 18.

Table 18 EMERGENCY DEPARTMENTS COMPONENT —
SOCIO-DEMOGRAPHIC COMPOSITION FACTORS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	AUS
Population	6 332 166	4 669 129	3 517 735	1 822 841	1 468 918	458 898	308 589	183 817	18 762 092
Weighted population	7 654 520	5 520 072	4 364 532	2 247 039	1 758 262	576 315	356 994	304 490	22 782 223
Ratio	1.20883	1.18225	1.24072	1.23271	1.19698	1.25 587	1.15686	1.65648	1.20883
Factors	0.99552	0.97363	1.02179	1.01519	0.98576	1.03426	0.95272	1.36418	1.00000
U2003 Factors	0.99550	0.98280	1.01768	0.99650	1.01063	1.03715	0.92147	1.24033	1.00000

151. **Updateability.** Most of the data used in the calculations, particularly the NHS and the Census data, are not updated on an annual basis. Therefore, the socio-demographic composition factor in this component will not be updated.

152. **Reality check.** States with greater than average proportions of people in groups who have higher rates of emergency department use, such as Indigenous people and people with low income, are receiving a higher grant share from this assessment.

ECONOMIC ENVIRONMENT FACTOR

153. **1999 Review.** An economic environment factor was assessed to account for the greater need for State funded services in regions where there were fewer private sector alternatives. It was applied to the emergency departments, outpatients and community health components.

154. The factor was based on general practitioner (GP) numbers by region, defined using the Remote, Rural, Metropolitan Area (RRMA) classification. The Commission assessed the factor because, even though GPs were not necessarily a direct substitute for services provided by non-admitted and community health service providers, they were likely to be a good proxy for the level of private provision of these services. Further, good data on GP numbers were available, whereas this was not the case for other private service providers.

155. For the emergency department services component, the disability was discounted by 50 per cent because many serious emergency cases had to be treated in public hospitals because there was no private sector alternative.

156. The factor was calculated as follows:

- (i) A single average number of full time equivalent GPs per capita was calculated to cover capital cities, other metropolitan centres, large rural centres and small rural centres, all of which were considered able to sustain adequate levels of GP services.
- (ii) The average number of full time equivalent GPs per capita was calculated separately for each of the 'other rural', 'remote' and 'other remote' regions. (The weights for each region derived at steps (i) and (ii) were calculated by dividing the national average per capita number of GPs by the per capita average for that region.)
- (iii) These weights were applied to the number of people living in each region in each State.
- (iv) The ratio of the State weighted population to unweighted population was calculated for each State and Australia.
- (v) The factors were calculated by dividing the State ratios by the Australian ratio.

157. **Preliminary State views.** Victoria, Western Australia, Tasmania, the ACT and the Northern Territory expressed concerns with certain aspects of the calculation of this factor, and suggested some amendments be made to it. Paragraphs 86 to 100 of *Discussion Paper CGC 2002/30* summarised those views.

158. **Staff proposals.** Commission staff proposed that the current approach to the factor calculation be retained, but that, in response to State concerns:

- (i) the number of specialists per region be added to the number of GPs;
- (ii) the ARIA+ classification be used; and
- (iii) the factor not be updated between reviews.

159. **Further State views.** New South Wales said that the current assessment double counted the effect the lack of primary care had on higher inpatient admissions in rural areas. It said that rural and remote areas were already compensated for the higher hospital separation rates that were partly explained by higher admission rates of ambulatory care sensitive conditions (ACSC) in rural/remote areas in the Inpatient Services category. It cited information that demonstrated rural regions had significantly higher ACSC admission rates than metropolitan regions.

160. New South Wales also questioned the extent of substitution between GP services and the emergency/outpatients services. It said that emergency departments, outpatient departments and community health centres provided a wide range of services not provided by GPs. Further, access to public sector funded services were based on clinical need and the Commission should not assume the services provided in an oversupplied

private market substitute to the same extent as those in undersupplied markets in rural and remote areas.

161. New South Wales also said that the economic environment assessment should be further discounted to reflect the oversupply of GPs in metropolitan areas. It cited the report of the General Practice Workforce Working Party to the Australian Medical Workforce Advisory Committee (AMWAC) on *The General Practice Workforce in Australia: Supply and Requirements, 1999-2010*, which concluded that ‘in 1998 there was...supply in excess of benchmark levels of approximately 2 300 GPs in metropolitan areas.’ The AMWAC working party also found that ‘to some extent the higher average GP private practice encounter rate per capita in capital cities of 6.7 (compared with 6.2 encounters per capita in large rural centres) may be more a product of patient and/or supplier induced servicing in excess of population need if the medical conditions being treated were similar.’ New South Wales considered that the higher rate of service provision in metropolitan areas by GPs should be discounted by that level of implied over-servicing.

162. New South Wales disagreed with the proposal to include the number of specialists, unless account was made for their oversupply in metropolitan areas. It also said it was not clear what proportion of emergency department services could be substituted by specialist services. It provided activity data which it said indicated that only 2.45 per cent of services provided in outpatients were GP type (primary care) services, which suggested little substitution between outpatient and GP type services. Based on these figures, New South Wales recommended the Commission apply a 50 per cent discount to the economic environment factors in the community health and outpatient components.

163. Queensland and Western Australia agreed that the number of specialists should be included in the economic environment factor, to provide a more comprehensive measure of the impact of lack of private provision of services in remote areas.

164. Tasmania said that the relative scale of the costs involved in recruiting and retaining GPs in rural and remote areas in Tasmania warranted recognition in this factor. It said that a shortage of competition amongst service providers within the Tasmanian private sector resulted in a low number of bulk billing GPs, and difficulty in ensuring rural and remote areas received an adequate level of health services. To attract and retain private providers in these areas, financial incentive programs were required. Tasmania provided details of the costs involved.

165. Tasmania said that the Commission should recognise that non-bulk billing GPs did not provide a substitute for the no-cost service provided by public outpatients and emergency service departments. It said that, from 2000-01 to 2001-02, emergency department utilisation increased in Tasmania by 7.7 per cent, while Tasmania’s population increased by only 0.2 per cent in 2001. National figures reflected a 5 per cent increase in emergency department attendances in the period 1999-2000 to 2001-02, with a population growth of 3.2 per cent. However, the number of bulk billed GP services had declined by 1.6 per cent nationally in the period 1999-00 to 2001-02.

166. Tasmania noted that the figures illustrated that Tasmania’s public system was more heavily affected than the national average. It cited an Issues Brief produced by the Department of the Parliamentary Library, which concluded that ‘in rural towns where

bulk billing was low or non-existent, there was a significant increase in presentations in local hospital emergency departments compared with towns in which GPs did bulk bill.’ Tasmania noted that less than 60 per cent of its Medicare services were bulk billed, with only the ACT reporting similarly low levels.

167. The ACT focused on the relative undersupply of GPs and specialists in the ACT. It did not support the current assessment method of using geographical classifications, as it said it failed to recognise the shortage of GPs between different areas with the same classification. It noted that the supply of GPs influenced demand and cost for State funded services irrespective of geographic classification.

168. The ACT cited the Productivity Commission’s *Report on Government Services, 2003* as showing that in 2001-02, the ACT had 65.5 FTE GPs per 100 000 population, compared to a national average of 84.9 per 100 000 and the average for Other Rural Areas (68.3 per 100 000). It was only above the average for Remote Areas.

169. To gauge the impact the GP shortage was having on emergency departments, the ACT cited a survey on the reasons people with less urgent conditions were attending ACT emergency departments after-hours and their preferences for alternative services. Results from this research indicated that, for patients with less urgent conditions, 61 per cent could have been appropriately cared for by a GP, and 85 per cent would have preferred to be seen by a GP, even if they had to pay.

170. The ACT said that a major cause of the shortage of GPs in the ACT had been Australian Government policies that provided incentives for GPs to work in rural areas and restrict the supply of GPs in urban areas. It cited figures, shown in Table 19, which it said showed the effects Australian Government policies have had in redirecting GPs from urban areas to rural areas, with the number of FTE GPs falling in Capital Cities, Other Metropolitan Centres and Large Rural Centres, but growing in other areas.

Table 19 FULL TIME WORKLOAD EQUIVALENT GPS PER 100 000 PEOPLE BY RURAL, REMOTE AND METROPOLITAN AREAS.

	Capital city	Other metro centre	Large rural centre	Small rural centre	Other rural area	Remote centre	Other remote area	Aust
1996-97	96.8	89.9	80.9	74.8	63.1	53.8	40.2	88.0
1997-98	96.0	89.5	81.5	75.0	63.0	54.1	42.9	87.6
1998-99	94.5	87.5	80.3	73.7	62.7	52.4	45.3	86.3
1999-00	93.2	86.1	79.4	75.0	62.9	51.6	45.2	85.5
2000-01	91.5	83.5	78.4	77.5	65.0	55.3	48.0	84.7
2001-02	90.8	83.3	79.7	80.2	68.3	54.5	49.0	84.9
Change from 1996-97 to 2001-02 (%)	-6.2	-7.3	-1.5	7.2	8.2	1.3	21.9	-3.5

Source: Productivity Commission, *Report on Government Services 2003*.

171. The ACT gave other reasons for the shortage of GPs in the ACT during its workplace discussions. These reasons included difficulty in attracting staff because the ACT operates as a provincial centre rather than a State/Territory capital. Issues limiting attractiveness included close proximity to Sydney, lack of opportunity for private practice, and the absence of a pool of specialist medical practitioners with family ties to the ACT. The ACT also said its supply of GP training places, which is controlled by the Australian Government, was not sufficient to maintain fulltime workload equivalent numbers of GPs in the ACT.

172. The ACT said that the current factor should be modified to allow for differences in supply between States, rather than between geographic classifications. It said that the shortage of GPs in some rural and remote areas could influence the overall supply factors, particularly for larger States. These shortages should be balanced with the above average supply in other areas of the State to produce an overall assessment of the extent to which private sector services are available to reduce the demand for State funded services.

173. The ACT supported the inclusion of private specialists if the factor is modified to reflect GP shortages across States. It noted that the number of specialists cited by the Commission in *Discussion Paper CGC 2002/30* was not an accurate representation of private specialists. It considered the number of FTE specialists was a more accurate measure of those service providers.

174. The Northern Territory continued to argue that its alternative method for calculating the economic environment factor, as discussed in paragraphs 111 to 113 of *Discussion Paper CGC 2002/30*, would be a better measure than the use of numbers of GPs and specialists. Commission said then that the Northern Territory's method would compensate for both low numbers of private services and lower use of non-metropolitan services. Staff suggested that it would be inappropriate to compensate for the latter as the levels of GP attendance in metropolitan areas could represent over servicing, while levels of non-metropolitan areas could be reasonable. The Northern Territory said that the difference between GP attendance between regions represents unmet demand — metropolitan areas are not over-serviced; rather, they represent a standard level of service.

175. The Northern Territory regarded the proposal to include specialists as an improvement on the 1999 Review method.

176. **Analysis.** New South Wales argued that there was double counting in the assessments because the lack of primary care in rural areas was reflected in both the allowance for lower GP numbers in this category and the use of the higher rural and remote area hospital separation rates in the acute inpatients assessment.

177. We are not convinced there is double counting between the two assessments, because each covers a different type of service. The Inpatient Services assessment accounts for differences in the use of public inpatient services across regions. The Non-inpatient assessment accounts for the need to provide more public non-inpatient services. Each type of service may be affected by the absence of private services.

178. New South Wales said that the benchmarks for the assessment should exclude the implied over-servicing in metropolitan areas as determined by the AMWAC General Practice Workforce Working Party. The data suggest that there may be over-servicing in metropolitan areas. The assessment should not imply that metropolitan levels of servicing were required in remote areas. To ensure the assessment does not build in any over servicing, we will remove capital cities from the calculation of the benchmark number of GPs. The benchmark will include inner and outer regional areas. While capital cities data will not be used to calculate the benchmark, in the factor calculation, capital cities will be set at the benchmark level to ensure that any oversupply of GPs does not imply a reduced demand for non-inpatient and community health services in metropolitan areas.

179. While GP services do not completely substitute for community health and non-inpatient services, the degree of substitution is higher than the 2.45 per cent as argued by New South Wales, at least in non-metropolitan areas. The AMWAC report said that it is known that hospital outpatient services in most rural and remote areas are provided mainly by GPs. The report cited the AIHW national medical labour force survey, which shows the proportion of primary care practitioners working in public hospitals increasing from 7.5 per cent of practitioners in capital cities to 76.5 per cent of practitioners in other rural centres. This information suggests that there could be considerable substitution between GP and non-inpatient services and does not support the extra 50 per cent discounting of the factor sought New South Wales.

180. There has however been no argument that we should cease the existing 50 per cent discount that was intended to allow for the fact that there were no private sector alternatives in the case of many serious emergency cases. The Commission proposes to retain that 50 per cent discount.

181. States have made a plausible conceptual case that the costs of attracting and retaining GPs in rural and remote areas increases costs to the States and State data returns indicated that it is common State policy to provide incentives to retain GPs in these areas. However, as noted in *Draft Assessment Paper 2003/63 Dispersion*, the information presently available does not demonstrate that the effects are the material.

182. State arguments and our own research, strongly suggest that the level of bulk billing by GPs impacts on the need for community health and non-inpatient services. Non-bulk billing GPs do not provide a substitute for the services provided by the public sector. This issue was the subject of a letter from State and Territory Health Ministers to the Federal Minister of Health and Ageing in August 2002. The Ministers said that the decline in bulk billing, combined with the closure of 24 hour medical clinics, increased out of pocket expenses for patients visiting GPs, which resulted in greater demand for public hospital emergency departments. Findings from a recent New South Wales Department of Health study, cited by Tasmania, indicated that, in rural towns where bulk billing was low or non-existent, there was a significant increase in presentations in local hospital emergency departments compared with towns in which GPs did bulk bill.² Evidence such as this indicates that areas with low levels of bulk billing do have a greater need for State funded

² Heather Ferguson, *Bulk billing drop overloads A&E*, Australian Doctor, 3 May 2002.

services. This strongly indicates that the assessment should be based on the proportion of GP consultations that were bulk billed.

183. In regard to the ACT's low proportion of GPs, it is not clear why the situation has arisen. It appears it could be the result of many factors including past and present Australian Government policies, ACT Government policies (or the lack of them) or other influences. Because a conceptual case has not yet been made, the Commission is not inclined to make an allowance for the ACT's low proportion of GPs. The ACT is currently being treated consistently with other regional areas with the same circumstances.

184. There has not been any argument against the proposal to include the number of specialists with the number of GPs in deriving this factor. However, in response to the ACT's concerns about the measurement of the number of specialists, we will use the data on number of FTE specialists from the Health Insurance Commission. This will ensure that the assessment reflects the provision of private service providers through their use of the Medicare system.

185. We still consider it preferable to base the assessment on the number of GPs, supplemented by the number of specialists, because that better reflects the potential availability of services that are substitutable for emergency department services. The proposal to further adjust the data to reflect the bulk billed services will further confine the assessment to substitutable services. The main alternative of using MBS payments is a less direct measure of service availability and could be affected by other influences.

186. **Commission decisions.** The Commission considers that a strong conceptual case exists for allowing for the impact of the lesser availability of private GP and specialist services in rural and remote areas on the use of State provided emergency department services. The data on the availability of GPs in different regions and the increased use of State services when GP numbers change indicate that the effects on State expenses are material. The data required to measure the factor are reliable and we have confidence that equalisation is improved by assessing the allowance. In the absence of a demonstrably better approach, we propose to continue the general approach to the economic environment factor calculation adopted in the 1999 Review.

187. For the reasons discussed above, the Commission decided to change the calculation in the following ways:

- (i) capital city GP numbers will not be used in the calculation of the benchmark supply of GPs;
- (ii) the number of private sector specialists per region will be added to the number of GPs;
- (iii) the number of GPs in each region will be adjusted using the proportion of consultations bulk billed to Medicare; and
- (iv) the ABS Remoteness Areas classification will be used in place of the RRMA classification, except that Hobart will be reclassified from

inner regional to capital city because it has a much higher supply of GPs than inner regional areas.

188. ***Proposed method and results.*** The factor was calculated as follows.

- (i) A single average number of full time equivalent GPs and specialists per capita was calculated to cover inner regional areas and outer regional areas, both of which were considered able to sustain adequate levels of GP and specialist services.
- (ii) The average number of full time equivalent GPs and specialists per capita was calculated separately for the 'major cities', 'remote' and 'very remote' regions.
- (iii) The number of GPs and specialists in each region was adjusted by the proportion of services bulk billed, to give the number of bulk billing GPs and specialists in each region.
- (iv) Weights for each region were calculated by dividing the national average per capita number of bulk billing GPs and specialists by the per capita average for that region.
- (v) These weights were applied to each State according to the number of people living in each region.
- (vi) The ratio of the State weighted population to unweighted population was calculated for each State and Australia.
- (vii) The factors were calculated by dividing the State ratios by the Australian ratio.

189. The numbers used for these calculations, and the resulting factors, are shown in Table 20, Table 21, Table 22, Table 23 and Table 24. The factors were based on the number of full-time equivalent bulk billing GPs and specialists data for 2001-02. This is shown in Table 20. Table 22 shows the number of full-time equivalent bulk billing GPs and specialists per 100 000 people for 2001-02

Table 20 STATE POPULATIONS BY ABS REMOTENESS REGION, 2001

ABS regions	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Major Cities of Australia	4 499 785	3 427 890	1 866 357	1 302 097	1 060 979	294 024	307 973		12 759 106
Inner Regional Australia	1 322 401	988 908	909 866	217 982	180 684		615		3 620 456
Outer Regional Australia	466 339	246 349	608 381	173 652	170 857	154 387		96 044	1 916 008
Remote Australia	36 663	5 981	84 780	82 863	43 325	8 001		38 285	299 899
Very Remote Australia	6 978		48 352	46 247	13 074	2 485		49 488	166 623
Total	6 332 166	4 669 129	3 517 735	1 822 841	1 468 918	458 898	308 589	183 817	18 762 092

Source: 2001 Census of Population and Housing data.

Table 21 FULL-TIME EQUIVALENT BULK BILLING GENERAL PRACTITIONER AND SPECIALIST NUMBERS, BY ABS REMOTENESS REGION

ABS Regions	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Major Cities of Australia	x	x	x	x	x	x	x	x	12 166
Inner Regional Australia	x	x	x	x	x	x	x	x	2 667
Outer Regional Australia	x	x	x	x	x	x	x	x	1 109
Remote Australia	x	x	x	x	x	x	x	x	122
Very Remote Australia	x	x	x	x	x	x	x	x	52
Total	x	x	x	x	x	x	x	x	16 116

Source: Medicare data 2001-02, Health Insurance Commission; Productivity Commission data on proportion of services bulk billed.

X = Data have been suppressed for confidentiality reasons.

Table 22 FULL-TIME EQUIVALENT BULK BILLING GENERAL PRACTITIONER AND SPECIALIST NUMBERS PER 100 000 PEOPLE, BY ABS REMOTENESS REGION

ABS Regions	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Major Cities of Australia	x	x	x	x	x	x	x	x	98
Inner Regional Australia	x	x	x	x	x	x	x	x	66
Outer Regional Australia	x	x	x	x	x	x	x	x	58
Remote Australia	x	x	x	x	x	x	x	x	41
Very Remote Australia	x	x	x	x	x	x	x	x	31
Total	x	x	x	x	x	x	x	x	86

Source: Medicare data 2001-02, Health Insurance Commission; Productivity Commission data on proportion of services bulk billed.

X = Data have been suppressed for confidentiality reasons.

190. The number of GPs and specialists per 1000 people, based on the numbers above, is 0.8590. Weights to be applied for each of the regions were calculated by dividing the numbers of GPs and specialists per 1000 people for the whole of Australia (0.8590) by the number for the whole region.

191. The weights calculated for each of the regions are shown below.

Table 23 WEIGHTS FOR DIFFERENT REGIONS BASED ON GP AND SPECIALIST NUMBERS

Region	Weight Applied
Major Cities of Australia	1.0000
Inner Regional Australia	1.0000
Outer Regional Australia	1.0000
Remote Australia	1.54396
Very Remote Australia	2.02843

Table 24 EMERGENCY DEPARTMENTS COMPONENT — ECONOMIC ENVIRONMENT FACTORS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Population	6 332 166	4 669 129	3 517 735	1 822 841	1 468 918	458 898	308 589	183 817	18 762 092
Weighted population	8 662 428	6 364 579	4 922 307	2 609 204	2 051 333	6 34 506	4 203 50	348 086	26 012 794
Ratio	1.36800	1.36312	1.39928	1.43139	1.39649	1.38268	1.36217	1.89365	1.38645
Factors	0.98669	0.98317	1.00925	1.03241	1.00724	0.99727	0.98248	1.36582	1.00000
Factors discounted by 50 per cent	0.99335	0.99158	1.00463	1.01621	1.00362	0.99864	0.99124	1.18291	1.00000
U2003 Factors	0.97317	0.98632	1.03076	1.03442	1.00685	1.03578	0.92030	1.34054	1.00000
U2003 Factors discounted by 50 per cent	0.98659	0.99316	1.01538	1.01721	1.00343	1.01789	0.96015	1.17027	1.00000

192. The factor for the emergency department services component was discounted by 50 per cent to recognise that there are many serious emergency cases which need to be treated in public hospitals because there is no private sector alternative.

193. **Updateability.** The factor was updated annually in the updates following the 1999 Review. The data are available to continue that process. The Commission proposes to do so.

DISPERSION FACTOR

194. **1999 Review.** The dispersion factor was assessed to account for differences in per capita costs of providing services arising from differences between States in the spread of their population. The factor reflects the effects of population dispersion on State expenses associated with telecommunication, freight, travel and staffing on-costs.

195. There were seven indexes within the dispersion factor, each reflecting the effect of interstate differences in population dispersion on a separate type of dispersion-affected cost. Each index was weighted by the proportion of standard expenses affected by each type of dispersion-affected cost. The seven indexes were combined to form the overall dispersion factor. The proportions of standard expenses estimated for the emergency department services component are shown in Table 25.

Table 25 DISPERSION COST WEIGHTS FOR EMERGENCY DEPARTMENT SERVICES COMPONENT, 2003 UPDATE

Telephone	Freight	Air Travel	Road Travel		Remote Removals	Locality Allowances
			Inter Regional	Local		
0.00686	0.00234	0.00135	0.00850	0.0110	0.00250	0.00096

Source: 2003 Update Working Papers Volume 4, p242.

196. **2004 Review.** Draft Assessment Paper 2003/63 *Dispersion* discusses the issues raised by the States regarding the assessment of the dispersion factor. The paper sets out the Commission's decisions on the general method of assessment adopted for the 2004 Review and on the size of the standard expense proportions estimated for each of the nine elements of dispersion-affected expenses.

197. The Commission noted that the expenses incurred in providing emergency department services include costs that are affected by population dispersal. It has therefore decided that a dispersion disability will be assessed.

198. As mentioned in the discussion of economic environment, there is a conceptual case that the costs of attracting and retaining GPs in rural and remote areas warrant recognition in the assessment because State data returns indicated that it is common State policy to provide incentives to retain GPs in these areas. This issue relates to the locality allowance part of the dispersion assessment. However, as discussed in *Draft Assessment Paper 2003/63 Dispersion*, the information presently available does not demonstrate that the effects are material.

199. The dispersion factors for the emergency department services component have been calculated according to the 2004 Review general method. There were nine indexes within the dispersion factor for the 2004 Review. Table 26 shows the proportions of standard expenses estimated for each of the nine elements of dispersion affected expenses for this component.

Table 26 2004 REVIEW DISPERSION COST WEIGHTS, EMERGENCY DEPARTMENT SERVICES COMPONENT

Telecommunication		Freight, General	Air Travel	Road Travel		Repairs and Maintenance	Remote Staff Turnover	Locality Allowances
Voice	Non-voice			Inter Regional	Local			
0.00451	0.00050	0.00339	0.01058	0.00220	0.00511	0.00191	0.00033	0.00047

200. Table 27 shows the dispersion factors assessed for the emergency department services component for the 2004 Review.

Table 27 2004 REVIEW DISPERSION FACTORS, EMERGENCY DEPARTMENT SERVICES COMPONENT

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
1996	0.99901	0.98734	1.01762	1.00889	0.98969	0.98883	0.97685	1.09025
1997	0.99896	0.98728	1.01757	1.00884	0.98964	0.98878	0.97680	1.09020
1998	0.99893	0.98725	1.01753	1.00880	0.98961	0.98874	0.97677	1.09016
1999	0.99890	0.98722	1.01750	1.00877	0.98958	0.98871	0.97674	1.09012
2000	0.99887	0.98719	1.01747	1.00874	0.98955	0.98868	0.97671	1.09009
2001	0.99884	0.98717	1.01745	1.00872	0.98952	0.98866	0.97669	1.09007

201. Neither the factor nor the dispersion costs weights will be updated before the next review.

INPUT COSTS FACTOR

202. **1999 Review.** In the 1999 Review, the input costs factors assessed for this component were the same as those for the scale affected costs component.

203. **2004 Review.** The Commission considers that approach remains appropriate for the 2004 Review because the proportion of standard expenses affected by input cost factors in the fixed costs and emergency department components would be similar. The input costs factors shown in Table 6 have also been applied in the emergency department services component.

CROSS-BORDER FACTOR

204. **1999 Review.** The Commission did not assess a cross-border factor for emergency department services during the 1999 Review because of the operation of the Australian Health Care Agreement (AHCA). Since 1997-98, an arrangement has been in place for annual payments from New South Wales to the ACT to include \$0.66 million for net cross-border emergency department services.

205. **Preliminary State views.** The ACT submitted that under the present payment arrangements for cross-border use of emergency department services, there was only a tenuous link between levels of payment between States and the levels of service provided, as the payment had not been adjusted for indexation or growth. It therefore asked that the Commission assess a cross-border factor for the emergency department component.

206. The ACT also said that an assessment of cross-border demand should take account of the wider scope of demand for ACT trauma and emergency services as a consequence of improvements in transport and accessibility.

207. **Staff proposals.** Staff proposed that no cross-border factor be assessed for the emergency department and outpatient services components. Staff considered that the ACT and New South Wales should resolve the issue under the AHCA umbrella.

208. **Further State views.** New South Wales agreed with the Commission's reasons for not including a cross-border factor in the emergency department component. It said that if the ACT has concerns with the present payment arrangements it should take them up directly with New South Wales.

209. **Commission decisions.** The Commission does not consider that a conceptual basis exists for assessing a cross-border factor in the emergency department services component. It considered that the ACT and New South Wales should resolve the issue under the AHCA umbrella.

OUTPATIENT SERVICES COMPONENT

210. Five factors were applied to the outpatient services component:

- (i) socio-demographic composition;
- (ii) economic environment;
- (iii) cross-border;
- (iv) dispersion; and

(v) input costs.

211. The economic environment, dispersion and input costs factors proposed for the 2004 Review are the same as those proposed for the emergency department services component.

SOCIO-DEMOGRAPHIC COMPOSITION FACTOR

212. **1999 Review.** The socio-demographic factor assessed for this component was similar to that assessed for the emergency department component in terms of the influences it reflected. The factor allowed for the effects of differences between the States in the following characteristics of their populations:

- (i) age-sex profile;
- (ii) Indigeneity;
- (iii) socio-economic status as measured by income; and
- (iv) low English fluency.

213. The factors were however noticeably different because the data indicated the use of outpatient services by the various groups in the population differed from their use of emergency department services.

214. **Preliminary State views.** States comments did not distinguish between the emergency department component and the outpatient component.

215. **Staff proposals.** In the absence of any issues specific to the outpatients component, staff proposed that the Commission continue to use similar methods in the two components. However, as in the 1999 Review method, the data would be specific to each component. It was proposed that the calculations continue to use data from the NHS. Like the emergency department component, staff proposed updating the data to use the results of the 2001 NHS.

216. **Further State views.** No States commented on issues specific to the outpatients component.

217. **Commission decisions.** For the same reasons as discussed under the emergency department component, the Commission considers there is a strong case for assessing a socio-demographic composition factor to allow for the effects on the relative costs of providing outpatients services of interstate differences in population characteristics. As was the case in the emergency department component, the Commission has concluded that the relevant influences are age-sex profile of the population, Indigeneity, income and low English fluency. These are the same influences as those recognised in the 1999 Review.

218. Each of these influences have a material effect on States expenses and reliable and comparable data are available to measure each influence. The Commission has decided to continue to assess a socio-demographic composition factor. It will follow processes similar to those used for the emergency department component, except that the data will be tailored to measure the specific effects on outpatient service use and costs.

Proposed method and results

219. This factor was calculated using cost and/or use weights, derived from the 2001 NHS data, for the following influences:

- (i) age-sex;
- (ii) Indigeneity;
- (iii) income; and
- (iv) low English fluency.

220. Table 28 shows the estimated numbers of people who used and did not use outpatient services, from the 2001 NHS.

Table 28 USE OF OUTPATIENT DEPARTMENTS BY AGE AND SEX

Age	Used outpatient services in previous two weeks?	Male	Female	Total
0 to 4	Used	13 398	5 695	19 094
	Did not use	640 661	615 368	1 256 029
5 to 14	Used	15 182	17 990	33 172
	Did not use	1 355 930	1 284 671	2 640 601
15 to 24	Used	20 772	21 573	42 346
	Did not use	1 285 149	1 240 892	2 526 040
25 to 44	Used	39 822	61 883	101 705
	Did not use	2 775 224	2 848 759	5 623 983
45 to 54	Used	23 891	21 632	45 523
	Did not use	1 274 743	1 296 258	2 571 001
55 to 64	Used	22 892	17 584	40 476
	Did not use	876 771	879 901	1 756 672
65 to 74	Used	29 088	18 378	47 466
	Did not use	591 381	644 657	1 236 038
75+	Used	19 549	18 298	37 847
	Did not use	379 829	557 819	937 648
Total used		184 595	183 034	367 629
Total did not use		9 179 689	9 368 324	18 548 013

Source: ABS 2001 NHS data.

221. Table 29 calculates the use ratios (number who used the service divided by number that did not) and the resulting weights (rate of use ratios for each age-sex group divided by total use ratios).

Table 29 USE RATES AND WEIGHTS — OUTPATIENT DEPARTMENTS

Age	Sex	Proportion using outpatient services	Weight (proportion divided by total proportion)
0 to 4	Male	0.021	1.06
	Female	0.009	0.47
5 to 14	Male	0.011	0.56
	Female	0.014	0.71
15 to 24	Male	0.016	0.82
	Female	0.017	0.88
25 to 44	Male	0.019	0.72
	Female	0.022	1.10
45 to 54	Male	0.019	0.95
	Female	0.017	0.84
55 to 64	Male	0.026	1.32
	Female	0.020	1.01
65 to 74	Male	0.049	2.48
	Female	0.029	1.44
75+	Male	0.051	2.60
	Female	0.033	1.65
Total		0.020	1

222. Use weights were assessed for people with low incomes to reflect their greater propensity to use outpatient department services. Analysis of 2001 NHS data, including the use of Henderson Scales to adjust income levels to reflect different family structures, showed that people with low incomes used outpatient department services at a rate 2.4 times that of others. This calculation is shown in Table 30.

Table 30 CALCULATION OF INCOME WEIGHTS FOR OUTPATIENT SERVICES

	High Income	Low Income	Not stated
Used outpatient services in period of study	86 989	207 114	73 526
Did not use outpatient services	7 296 290	7 121 800	4 129 922
Total	7 383 279	7 328 915	4 203 448
Proportion	0.0118	0.0283	0.0175
Weight (low income use as proportion of high income use)	1	2.3986	

Source: ABS 2001 NHS Data.

223. As with the emergency departments component, it was considered that this weight included double counting based on the different age-sex structure of the low income population. That is, the greater use of services was partly because people with low incomes tended to be in the age groups which use services more (or vice versa). To prevent double-counting, the low income weight was adjusted for age and sex. The method for doing this is explained in the section on emergency departments, above.

224. After the age and sex adjustment, the weight changed from 2.4 to 1.9, indicating that some of the greater needs of people with low incomes indicated by the raw income weight were due to people with low incomes being in the age-sex groups that were more likely to use outpatient services.

225. A weight for Indigenous people was derived from data in the *AIHW Report on Expenditures on Health Services for Aboriginal and Torres Strait Islander People, 1998-99*. That report showed that per capita spending on Indigenous people for non-inpatient services was 2.21 times the expenditure per non-Indigenous person. As was explained for emergency departments, the report used 1998 data on Indigenous population. When adjusted for the latest data, the weight became 1.96.

226. This weight reflects all the ways Indigenous people affect expenditure levels, including higher use rates, higher unit costs, interpreters, development of culturally sensitive services. To ensure there was no double-counting, the weight was adjusted for the effects of the age-sex and income profile of the Indigenous population.

227. The method used to do this was explained in the section on emergency departments, above.

228. When standardised for their age-sex and income profile, the data indicated that Indigenous people use emergency services 0.75 times the use by non-Indigenous people.

229. The extra costs of Indigenous people, over and above their age-sex-income profile, were calculated by dividing the total Indigenous weight (1.96) by 0.75. This calculation, which removes double-counting, gave an adjusted Indigenous weight of 2.61. This weight was applied to all Indigenous people in the calculation of the socio-demographic composition factor for the outpatient departments component.

230. A cost weight of 1.5 was applied to people with low English fluency. The weight was not applied to Indigenous people, as any extra costs associated with language difficulties were captured in the weight already calculated for Indigenous people.

231. The socio-demographic composition factor for the outpatient departments component was calculated in the following way:

- (i) the weights for age-sex groups, Indigeneity, income and low English fluency were applied to cross-tabulated 2001 Census data for each State and for Australia to derive weighted populations;

- (ii) the weighted population for each State and for Australia was divided by the unweighted population; and
- (iii) factors were derived by dividing the ratio for each State by the ratio for Australia.

232. The socio-demographic composition factor calculated for the outpatient departments component, using the weights and calculation method described above, is shown in Table 31.

Table 31 OUTPATIENT DEPARTMENTS COMPONENT —
SOCIO-DEMOGRAPHIC COMPOSITION FACTORS

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Population	6 332 166	4 669 129	3 517 735	1 822 841	1 468 918	458 898	308 589	183 817	18 762 092
Weighted population	8 983 468	6 469 833	5 020 483	2 552 091	2 159 547	694 509	367 975	332 861	26 580 767
Ratio	1.41870	1.38566	1.42719	1.40006	1.47016	1.51343	1.19244	1.81083	1.41673
Factors	1.00140	0.97807	1.00739	0.98824	1.03772	1.06826	0.84169	1.27818	1.00000
U2003 factors	1.00521	0.99150	0.99669	0.98150	1.02866	1.02091	0.88249	1.18504	1.00000

233. **Updateability.** Most of the data used in the calculations, particularly the NHS and the Census data, are not updated on an annual basis. Therefore, the socio-demographic composition factor in this component will not be updated.

ECONOMIC ENVIRONMENT FACTOR

234. The economic environment factor discussion in the emergency department services component also applies to the outpatient services component. The factor is the same as that calculated for the emergency department services component, but is not discounted because it was considered that there was greater substitutability between outpatient services and private sector alternatives. The factor is shown in Table 24.

DISPERSION FACTOR

235. **1999 Review.** In the 1999 Review, the dispersion factors assessed for this component were the same as those for the emergency department services component.

236. **2004 Review.** The Commission considers that the 1999 Review approach remains appropriate for the 2004 Review because the proportion of dispersion-affected costs in the emergency department and outpatient components would be similar. The dispersion factors shown in Table 27 have also been applied in the outpatient services component.

INPUT COSTS FACTOR

237. **1999 Review.** In the 1999 Review, the input costs factors assessed for this component were the same as those for the scale affected costs component.

238. **2004 Review.** The Commission considers that approach remains appropriate for the 2004 Review because the proportion of standard expenses affected by input cost factors in the fixed costs and outpatient services components would be similar. The input costs factors shown in Table 6 have also been applied in the outpatient services component.

CROSS-BORDER FACTOR

239. The cross-border discussion in the emergency department services component also applies to the outpatient services component. The Commission decided not to introduce a cross-border assessment in the outpatient services component.

COMMUNITY HEALTH SERVICES COMPONENT

240. Five factors were applied to the community health services component:

- (i) socio-demographic composition;
- (ii) economic environment;
- (iii) cross-border;
- (iv) dispersion; and
- (v) input costs.

241. The economic environment, dispersion and input costs factors proposed for the 2004 Review are the same as those proposed for the emergency department services component.

SOCIO-DEMOGRAPHIC COMPOSITION FACTOR

242. In the 1999 Review, the socio-demographic composition factor for this component allowed for the effects on relative costs of providing services of interstate differences in age-sex profile of State populations, Indigeneity (with an extra cost weight for Indigenous people living in remote areas), income and low English fluency. The relevant issues raised in this review are discussed below.

Age-sex

243. ***1999 Review.*** The socio-demographic composition factor included age-sex weights based on Medicare data on use of GPs and some other primary health care services. These data were chosen because no nationally consistent data on the use of community health centres were available.

244. ***Preliminary State views.*** Tasmania said that the current use data did not reflect the demand for community health services, as some services included in the factor calculation could be seen as an alternative to community health services. Therefore, a high utilisation of community health services could result in a relatively low use of services such as those provided by GPs. Hence, the current method would understate the use of community health care services by those targeted by these programs.

245. Tasmania argued that national utilisation data should be used, with the alternative being to continue to use Medicare data, but to add use data for alternative services such as Home and Community Care (HACC).

246. ***Staff proposals.*** Staff considered that the 1999 Review method remained the best option because nationally consistent community health utilisation data were not available. The inclusion of HACC use data was not favoured because it was not clear that one program would have a significantly greater impact on demand patterns than others.

247. ***Further State views.*** New South Wales provided some data showing the proportion of people in each age group who used community health services during 2002.

248. Queensland considered Medicare data a good proxy for community health services and supported their continued use in the absence of comparative age-sex data.

249. South Australia said that, while it was able to provide some data on community health client activity profiles, corresponding cost data was not available. In the absence of appropriate data, it supported the continued use of Medicare data as a proxy for community health service use.

250. Tasmania re-iterated its argument that the current method of deriving the community health age-sex weights was fundamentally unsound. It said that GP and other services that are in the scope of the Medicare data used in the current assessment could be substitutes for community health services. Therefore Medicare data potentially understated the use of services such as community nursing and other community-based care.

251. Tasmania cited the Australian Medical Workforce Advisory Committee and the Australian Medical Association as supporting the argument that there is substitutability between GP services and community-based and other non-inpatient care services.

252. Tasmania said that recent data from the Australian Government showed that Tasmania received significantly less than the national average per capita expenditure under Medicare, which represented about \$20 million annually. It said that, given Tasmania has some of the nation's lowest health status indicators, Tasmania's use of health services would be expected to be above the national average. It said that the gap was likely to be bridged by the Tasmanian community's use of no-cost State community health services, emergency departments and other outpatient services.

253. Tasmania argued that given the apparent absence of national use data for community health services the Medicare data should be supplemented by use data of alternatives to GP services, such as HACC. It said this would ensure services that reduced the level of demand on GP services were factored in and produced a more realistic measure of community health services use. It is not evident that further supplementing the measure with emergency department triage data, or substituting that data for the GP data would produce a better proxy measure of community health services use. In any case, sufficiently comprehensive data are not readily available.

254. The Northern Territory said that Medicare use was skewed towards urban, non-Indigenous, high socio-economic status groups and may understate the use of community health clinics which generally have a different client profile. Also, the costs allowed in the Medicare schedule underestimated the cost of providing services in community health clinics as they were flat rates with no allowance for differences between regions in the cost of providing services.

255. The Northern Territory provided some data on the use of community health services, which showed the number of occasions of service for urban community health services broken down by age and Indigeneity. It suggested that, if comparable data were not available from other States, emergency department use for triage categories 4 and 5 could be used as a proxy for age-sex weights and AIHW expenditure reports could be used for Indigenous and non-Indigenous rates.

256. *Analysis.* The issue of including HACC use data has been reconsidered. The HACC program is often provided through community health centres. Many of the services provided by this program, such as community nursing and allied health services, are distinct from GP services. Combining HACC and GP use data would seem to provide a more comprehensive proxy for community health service use than just GP use.

257. Table 31 compares the combined Medicare and HACC data with community health services use rate data provided by the Northern Territory and New South Wales.

While these weights are not directly comparable, they provide a reasonable reality check. The Medicare, HACC and Northern Territory data are based on occasions of service, whereas the New South Wales data are based on the proportion of the population who have used the service.

Table 32 AGE-SEX USE WEIGHTS FOR COMMUNITY HEALTH SERVICES

Age	Sex	Weights based on 2001-02		
		Weights based on 2001-02 Medicare and HACC data	Northern Territory community health utilisation data	Weights based on 2002 New South Wales community health utilisation data
0-4	Male	1.20	5.58	4.93
	Female	1.12	5.15	4.56
5-15	Male	0.54	0.95	0.90
	Female	0.54	0.74	0.69
15-24	Male	0.53	0.30	0.76
	Female	0.93	0.29	0.85
25-44	Male	0.65	0.36	0.52
	Female	1.04	0.34	1.18
45-54	Male	0.83	0.61	0.25
	Female	1.16	0.52	0.74
55-64	Male	1.15	1.30	0.47
	Female	1.46	0.86	0.60
65-74	Male	1.65	1.70	0.44
	Female	1.80	0.87	0.74
75+	Male	1.66	1.90	0.93
	Female	2.26	1.96	0.77

Source: Health Insurance Commission Medicare data, New South Wales's rejoinder submission to 2004 Review, Northern Territory's rejoinder submission to 2004 Review.

258. As the table shows, the weights for most age groups, except the 0-4 age group, are broadly similar across the data sources. The weights for the 0-4 age group derived from both the New South Wales and Northern Territory data are much higher than those derived from Medicare and HACC data. This indicates that the 0-4 age group makes greater use of community health services relative to other age groups than they do GP services. This seems plausible because many infants and children are taken to community health centres for services, such as vaccinations and baby checkups, which do not require the intervention of a GP.

259. Overall, Medicare and HACC data appear reasonable sources from which to derive community health age-sex utilisation weights. They reflect activity in all States and are therefore more policy neutral than data provided by just two States. However, the

Medicare and HACC data do not appear to be a good proxy for the 0-4 age group. For that group, our judgement, informed by the data from New South Wales and the Northern Territory, is that a weight of 5 would be preferable.

260. In response to the Northern Territory, it is not clear that the use of Medicare cost rates would be appropriate in this assessment. This is because the use rates are applied to the community health expenditure standard, which will reflect the average cost per occasion of community health services.

261. **Commission decisions.** There is a good conceptual case that the use of community health services differs according to age and sex groups and the age-sex profiles of the State populations are substantially different. The case is well supported by data that is considered a good proxy for the use of community health services. Those data, which are comparable and representative, provide a strong basis for assessing an age-sex disability. The data indicate that the different utilisation rates have an impact on State budgets which the Commission considers to be material. The Commission therefore decided to continue to assess an age-sex disability.

262. The arguments by the States provided several suggestions on how the assessment method might be refined. But on the whole they did not indicate it was fundamentally unsound. The Commission has decided to retain the basic approach adopted in the 1999 Review. It will however supplement the Medicare data previously used to calculate the age-sex weights with data on the use of HACC services. For the 0-4 age group, it decided to use a weight of 5 for both males and females based on judgement, informed by the data provided by New South Wales and the Northern Territory.

Socio-economic status

263. The discussion of socio-economic status in the emergency department services component also applies to the community health services component. The Commission decided to retain the 1999 Review method for assessing a socio-economic status disability.

Indigeneity

264. The discussion of Indigeneity in the emergency department services component also applies to the community health services component. The only difference between the two components is the size of the weights calculated. In the community health services component, grants from the Office of Aboriginal and Torres Strait Islander Health Services were included in the equalisation budget to reflect the full direct expenditure impact on State budgets. This increased the weight based on AIHW data for community health expenditure from 4.04 to 6.49. The adjustments to account for the different Indigenous population used by the Commission and to remove the influence of differential age-sex and income structures of the different States' Indigenous populations resulted in an Indigenous weight of 5.63 for community health services.

Low English fluency

265. ***1999 Review.*** The Commission applied a cost weight of 1.5 to the proportion of the population with low fluency in English. This was to take account of the extra costs associated with the use of interpreters and longer consultation times. The weight was not applied to the Indigenous population, as language costs associated with Indigeneity were included in the Indigeneity weight. No use weight was applied to people with low English fluency because the available data was inconclusive on the issue of whether people from non-English speaking backgrounds (NESBs) used health services differently from other population groups.

266. ***Preliminary State views.*** No States raised the issue of low English fluency in their submissions. Victoria mentioned it in relation to community health services in its workplace discussions. It provided data on clients of a community health centre, which indicated increased consultation time and numbers of contacts for NESB clients.

267. ***Staff proposals.*** Staff considered the data presented by Victoria indicated that the current cost weight of 1.5 should be increased. Subject to States providing more data, staff were inclined to suggest a weighting of at least 2.0 for the additional costs associated with providing services to people low English fluency. This would take into account costs associated with such things as outreach visits and increased case complexity, in addition to the costs associated with the need for interpreters and longer consultations.

268. Other States were asked to provide data similar to that provided by Victoria.

269. ***Further State views.*** New South Wales supported the proposal to increase the weight from 1.5 to 2 based on the evidence provided by Victoria, which it said was similar to the experience in New South Wales. It provided some data on the human resource costs associated with providing services to people from NESB and the rates of pay for health care interpreters. It also provided some information about additional community health service programs aimed at assisting people from NESB.

270. Queensland said that cost weights for low English fluency should be supported by data that represent average additional costs, and questioned whether the data provided by Victoria showed average costs. It said that the Victorian data implied all people with low English fluency required translation, had complex problems and required an extra visit. Further, the Victorian data assumed that all people who were fluent in English did not have complex problems nor require additional visits. Unless it could be shown Victoria's data were representative of overall additional costs, Queensland said those data alone should not be used as the basis for increasing the weighting from 1.5 to at least 2.

271. Queensland also said that the cost weight for low English fluency should be balanced against lower demand for services. It cited the AIHW as noting that the standardised mortality ratios for all causes are lower for both males and females in all four birthplace categories other than Australian born.

272. South Australia did not consider that the proposed increase in the low English fluency weight was justified. It said that, while it did not dispute the veracity of the cost data reported by Victoria in respect of specific cases that involve complex/severe health

issues, it found it hard to believe that it was representative of the average NESB consultation. It said that it was not standard policy in South Australia for follow-up consultations and outreach visits to be provided on the basis of English fluency, rather they were provided solely on the complexity/severity of the health issue involved.

273. South Australia said that specific data on additional costs per NESB consultation were not available. However, data provided by its Department of Human Services indicated that language services costs in non-inpatient and community health services were relatively minor at less than \$1 million.

274. The Northern Territory said Victoria's data were useful for demonstrating the additional time associated with servicing clients with low English fluency and cultural differences. It said that equivalent data was not collected or readily available from its community health services.

275. The Northern Territory stated that it did not have a standard policy to provide additional follow-ups or outreach visits to low English fluency patients. Some similarity could be seen between these services and the co-ordinated case management system provided by health clinics in remote Indigenous communities. It asserted that the need for these services, however, could not be solely attributed to the low English fluency of remote Indigenous people.

276. The Northern Territory said that the Commission should be careful in making universal judgements about NESB people and the need for additional services. The cost of interpretation, translation and lengthier consultations (due to the interpretation process) should be included in the English fluency cost weights; however, it said that, before other costs were included, the Commission should be confident that they are applicable to the entire group captured under this factor.

277. **Analysis.** There was conflicting information provided by States on the policies towards services provided as a result of case complexity. In general, it would appear that services provided, including the extent of follow-up visits, reflect the case complexity, rather than English fluency *per se*. There was not any substantial evidence to indicate that there was a difference in the case complexity associated with people of NESB compared with other people.

278. Queensland said that the cost weight for low English fluency should be balanced against lower demand for services. Table 33 shows 2001 NHS data on use of health services by country of birth. The data indicate that use rates differ depending on which services and countries are looked at. But, it appears that, overall, service use is greater among people from non-English speaking countries. However, those rates would be influenced by socio-economic status. People from low socio-economic status use more non-inpatient and community health services than average, and people from non-English speaking background are more likely to be from a low socio-economic status. The analysis we have been able to do, suggests that the socio-economic status of people from non-English speaking backgrounds is likely to explain a significant proportion of their higher use.

Table 33 USE OF NON-INPATIENT HEALTH SERVICES, BY COUNTRY OF BIRTH

Country of birth	Casualty, outpatients, day clinic visits	Doctor consultation	Dental consultation	Other health professional consultation
	%	%	%	%
Australia	4.5	23.6	5.8	13.3
Other Oceania	4.8	21.4	5.5	12.3
United Kingdom	5.4	26.5	6.8	14.5
Other North-West Europe	5.2	24.5	7.1	13.0
Southern and Eastern Europe	6.4	36.8	8.8	14.0
North Africa and the Middle East	5.2	33.1	7.3	8.1
South-East Asia	5.1	23.4	5.6	8.0
All other countries	3.7	25.2	7.6	11.7

Source: ABS 2001 NHS Summary of Results.

279. **Commission decisions.** There is a strong conceptual case in this and other categories, that a proportion of people with low English fluency need interpreter services in dealing with medical professionals and consultations take more time. This case is well recognised and is supported by data. The extra costs associated with the use of interpreters and the extra consultation time have a material impact on State budgets. We have therefore decided to continue to assess a low English fluency weight for this component.

280. The question of the size of the weight is however more problematical. The data provided by Victoria suggest that the weight of 1.5 adopted used in the 1999 Review could be too low. However, we also acknowledge that the data was based on a limited sample of health centres.

281. Victoria said that there is often a need for additional services to be provided to NESB clients, such as follow-up visits due to case complexity. However, as other States have noted the question of extra services is normally determined on the basis of the case complexity itself, not the patient's English fluency. Overall, there is presently, insufficient robust information to support the arguments that a higher proportion of people with low English fluency require follow-up services or that the existing allowance substantially understates the average extra costs of treating people with low English fluency. The Commission therefore decided that it would not increase the existing weight. It will continue to apply a cost weight of 1.5 to people with low English fluency, excluding Indigenous people. That weight implies people with low English fluency cost 50 per cent more to service than people who are fluent in English. It will review that decision if further information is provided.

282. The evidence does not support there being a conceptual case for introducing a separate adjustment for use rates for people from NESB. There is presently insufficient information to disentangle the effects of low income and people born in non-English speaking countries. The Commission has concluded that the existing allowance for low

socio-economic status is already likely to capture most of the higher demand from people from NESB. Therefore, the Commission decided not to introduce an adjustment for use rates for people from NESB.

283. In summary, the Commission decided to retain the 1999 Review weight of 1.5 to account for the extra costs of interpreter services and long consultation time associated with people with low-English fluency. It decided not to introduce a weight associated with case complexity or service use.

Remoteness

284. ***1999 Review.*** The Commission applied a weight of 2 to people living in remote areas in the community health services component because it considered there were disabilities affecting remote areas not reflected in the other disabilities assessed. That view was based on evidence presented in workplace discussions.

285. ***Preliminary State views.*** No States specifically mentioned remoteness in their submissions.

286. ***Staff proposals.*** Staff proposed to continue to assess an additional weight for people in remote areas in the community health services component.

287. ***Further State views.*** New South Wales said that maintaining the weight of 2 for remote populations could double count the Indigeneity weight, as Indigenous persons were over-represented in remote areas (it said that around 28 per cent of remote area populations were Indigenous). It therefore recommended that the remoteness disability be discounted to reflect the double counting and suggested a discount of 28 per cent. Alternatively, it said that the Commission should provide more evidence or data to support the continuation of the weighting.

288. Western Australia drew attention to data which demonstrated that persons in remote areas had, on average, relatively poor health enhancing behaviours. It said this would be a contributing factor to the greater demand for services from these populations and supported the continuation of the weight of 2.

289. ***Analysis.*** The remoteness weight was devised in the knowledge that it was additional to the other weights in the assessment. It was partly intended to account for the additional costs associated with traditional Indigenous people. Those costs are not fully accounted for by the Indigeneity weight, which is based on national average expenses on Indigenous people, regardless of location. The extra costs appear in the form of extra demand arising from the relatively greater disadvantage of people in remote communities, the much greater time required to deal with those people and the greater need for cultural sensitivity, including the use of separate facilities for men and women. These costs have a much greater impact in this component than in the others in this category because the services are generally more disbursed and provided in the remote communities.

290. ***Commission decisions.*** The Commission accepts that a conceptual case exists for the existence of different use rates and different cost levels for community health

services associated with remote and non-remote populations. Evidence provided in State submissions and at workplace discussions demonstrate that community health services in remote areas are of a different nature from those offered in metropolitan areas. The evidence indicate that those cost differentials are material.

291. While there is evidence to support the conceptual case, there are little data available to estimate cost weights. The Commission considers that the different nature of remote community health services has a material impact on State budgets. In the absence of better information, it decided to retain the 1999 Review weight of 2 for remote populations.

Proposed method for calculating the socio-demographic composition factor for community health and results.

292. The socio-demographic composition disability factors assessed for community health services incorporated the influences of:

- (i) age-sex;
- (ii) Indigeneity;
- (iii) English fluency;
- (iv) income; and
- (v) remoteness.

293. The age-sex weights for all age groups except 0 to 4 were derived from Medicare data on use of GPs and other primary health services, and Home and Community Care Utilisation data. Weights for the 0 to 4 age groups were based on judgement. Table 34 shows the calculation of the age-sex weights for the community health component.

Table 34 CALCULATION OF AGE-SEX WEIGHTS FOR COMMUNITY HEALTH SERVICES

Age	Sex	Number of services (2001-02)	Proportion of total services (a)	Total population	Proportion of total (b)	Weight (a/b)
0 to 4	Male	na	na	na		5
	Female	na	na	na		5
5 to 14	Male	3 970 536	0.0392	1 369 561	0.0782	0.50
	Female	3 784 416	0.0374	1 298 341	0.0741	0.50
15 to 24	Male	3 722 527	0.0368	1 305 133	0.0745	0.49
	Female	6 339 999	0.0627	1 259 362	0.0719	0.87
25 to 44	Male	9 695 598	0.0958	2 748 645	0.1569	0.61
	Female	15 860 060	0.1568	2 840 245	0.1621	0.97
45 to 54	Male	5 675 156	0.0561	1 275 364	0.0728	0.77
	Female	8 094 185	0.0800	1 291 944	0.0737	1.08
55 to 64	Male	5 507 803	0.0544	884 626	0.0505	1.08
	Female	6 869 960	0.0679	874 731	0.0499	1.36
65 to 74	Male	5 481 302	0.0542	615 485	0.0351	1.54
	Female	6 467 937	0.0639	664 479	0.0379	1.69
75 +	Male	3 829 308	0.0378	427 049	0.0244	1.55
	Female	8 100 900	0.0801	663 396	0.0379	2.11
Total		101 178 544	1.0000	17 518 360	1.0000	1.00

294. Weights were assessed for people with low incomes to reflect their greater propensity to use community health services. Analysis of 2001 NHS data on use of GP services (used as a proxy for community health services), including the use of Henderson Scales to adjust income levels to reflect different family structures, showed that people with low incomes used community health services at a rate 1.5 times that of others. This calculation is shown in Table 35.

Table 35 CALCULATION OF INCOME WEIGHTS FOR COMMUNITY HEALTH SERVICES

	High Income	Low Income	Not stated
Used GP services in period of study	1 303 907	1 967 714	844 785
Did not use GP services	6 079 373	5361200	3 358 663
Total	7 383 279	7328915	4 203 448
Proportion	0.1766	0.2685	0.2010
Weight (low income use as proportion of high income use)	1	1.520286	

Source: ABS 2001 NHS data.

295. As with the emergency department component, this weight was adjusted to exclude the interactions between low income and the age-sex profile of the population. The method used to do this was explained in the section on emergency departments, above.

296. The age and sex adjustment changed the weight from 1.52 to 1.42, indicating that some of the greater needs of people with low incomes indicated by the raw weight was due to people with low incomes being in the age-sex groups that were more likely to use community health services.

297. The weights for Indigeneity were derived from the *AIHW Report on Expenditures on Health Services for Aboriginal and Torres Strait Islander People, 1998-99*. This report showed that per capita spending on Indigenous people for community and public health was 4.04 times the expenditure per non-Indigenous person when grants from the Office of Aboriginal and Torres Strait Islander Health Services (OATSIHS) were excluded, and 6.49 when the OATSIHS grants (at the 2001-02 levels) were included. When adjusted for the latest Indigenous population data, the weight of 6.49 decreased to 5.76.

298. This weight reflects most of the factors which require greater community health expenditure on Indigenous people. Because of this, it was adjusted for the age-sex and income profile of the Indigenous population. The adjustment method was the same as that used for the emergency departments component.

299. When standardised for age, sex and income, demand by Indigenous people for community health services was 1.02 times that of non-Indigenous people.

300. The extra costs of Indigenous people, over and above their age-sex-income profile, were calculated by dividing the total Indigenous weight (5.76) by 1.02, which gave an Indigenous weight of 5.63

301. A cost weight of 1.5 was applied to the proportion of the population with low fluency in English to reflect the extra costs associated with the use of interpreters and longer consultation times. This weight was not applied to Indigenous people.

302. A weight of 2 was applied to people living in the 'remote' and 'very remote' categories of the ABS Remoteness Area classification to address their additional needs.

303. The socio-demographic composition factor for this component was calculated in the following way:

- (i) the weights for age-sex groups, Indigeneity, income, low English fluency and remoteness (all outlined above) were applied to cross-tabulated 2001 Census data for each State and for Australia to derive weighted populations;
- (ii) the weighted population for each State and for Australia was divided by the unweighted population; and
- (iii) factors were derived by dividing the ratio for each State by the ratio for Australia.

304. The socio-demographic composition factors calculated for the community health component, using the weights and calculation method described above, are shown in Table 36.

Table 36 COMMUNITY HEALTH COMPONENT — SOCIO-DEMOGRAPHIC COMPOSITION FACTORS

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Population								
6 332 166	4 669 129	3 517 735	1 822 841	1 468 918	458 898	308 589	183 817	18 762 092
Weighted Population								
10 065 865	6 736 227	6 211 842	33 71 746	2 380 414	7 999 43.5	418 594	1 136 954	31 121 585
Ratio								
1.58964	1.44272	1.76586	1.84972	1.62052	1.74319	1.35648	6.18524	1.65875
Factors								
0.95834	0.86976	1.06458	1.11513	0.97695	1.05090	0.81777	3.72886	1.00000
U2003 Factors								
0.96636	0.85558	1.07361	1.13667	0.94029	0.98812	0.81501	3.91182	1.00000

305. **Reality check.** Consistent with expected outcomes, States with greater than average proportions of people in groups who have higher rates of community health service use, such as children, Indigenous people and people with low income, are receiving a higher grant share from this assessment.

306. **Updateability.** Most of the data used in the calculations, particularly the NHS and Census data, are not updated on an annual basis. Therefore, the socio-demographic composition factor in this component will not be updated.

ECONOMIC ENVIRONMENT FACTOR

307. The economic environment factor discussion in the emergency department services component also applies to this component. The factor is the same as that calculated for the emergency department services component, but is not discounted. The factor is shown in Table 24.

DISPERSION FACTOR

308. *1999 Review.* In the 1999 Review, the dispersion factors assessed for this component were the same as those for the emergency department services component.

309. *2004 Review.* The Commission considers that the 1999 Review approach remains appropriate for the 2004 Review because the proportion of dispersion-affected costs in the emergency department and community health components would be similar. The dispersion factors shown in Table 27 have also been applied in the community health services component.

INPUT COSTS FACTOR

310. *1999 Review.* In the 1999 Review, the input costs factors assessed for this component were the same as those for the scale affected costs component.

311. *2004 Review.* The Commission considers that approach remains appropriate for the 2004 Review because the proportion of standard expenses affected by input cost factors in the fixed costs and community health services components would be similar. The input costs factors shown in Table 6 have also been applied in the community health services component.

CROSS-BORDER FACTOR

312. *1999 Review.* In the 1999 Review, a cross-border factor was applied to the community health services component to recognise the additional costs the ACT incurred in providing community health services to New South Wales residents. The factor was assessed using the general method. It was based on 50 per cent of the total population in the Queanbeyan, Yass, Yarrowlunla and Gunning local government areas (LGAs) and 20 per cent of the total population in the Bega Valley, Bombala, Boorowa, Cooma-Monaro, Crookwell, Eurobodalla, Goulburn, Harden, Mulwaree, Snowy River, Tallaganda and Young LGAs.

313. **Preliminary State views.** The ACT asked that, in addition to the current cross-border factor for the community health services component, a factor be introduced to recognise the non-resident use of the ACT's Queen Elizabeth II Family Centre (QEII), as it had approximately 50 per cent cross-border use. The ACT said this use was not reflected in the current cross-border assessment. The QEII facility costs the ACT, on average, \$875 per client. In 2000-01, non-resident use of this facility cost the ACT approximately \$690 000.

314. The ACT also asked that the cross-border factors be weighted to reflect the different age-sex and socio-economic composition of the population used in the assessment. It proposed that a cross-border factor be calculated using a weighted average of community health use (in the form of QEII use) and hospital separation data.

315. New South Wales said that there appeared to be little evidence that the ACT provided community based services to New South Wales residents to the same extent as it provided acute inpatient care. It said that acute hospital admission data used by the Commission overstated the cross-border adjustment for the community health services component and that, until there was firm evidence of flows, the Commission should assume that a flow adjustment for community health was not warranted.

316. **Staff proposals.** Staff proposed that the cross-border factor for the community health services component be retained, unless the ACT and/or New South Wales provided data relating to services other than those provided by the QEII centre, that indicated that the current cross-border assessment for the community health services component was inadequate.

317. The ACT's arguments about the impact on costs of improved transport links increasing the regional population and the different socio-demographic characteristics of populations in the surrounding regions were covered in *Discussion Paper CGC 2002/46, Cross-border and Special Circumstances of the ACT*. In that paper, staff proposed that the adjustments for socio-demographic characteristics or the coverage of regions not be pursued because there was no evidence to demonstrate that they were material.

318. Staff considered that the ACT's proposal to use data on the use of hospital or specialised community care centres by non-residents as the basis of a general factor for other services was inappropriate. Those services were specialised and not readily available elsewhere in the region. They were thus different from child immunisation clinics and other community health services where people tend to make greater use of local facilities.

319. **Further State views.** New South Wales said that, although data collection in community health was limited, there are some data to indicate that the flows between the two States were not one-way. It said data from the Southern Area Health Service showed there were 1 121 occasions of service provided to ACT residents in 2001-02 and the data collection processes suggested that figure was likely to be understated.

320. New South Wales also contended that referral practices also give some indication that the current assessment of cross-border flows is overstated. In practice, when discharged from the ACT hospital patients are referred back to a community nursing team in their local area. To support this, it provided figures from a survey conducted by the Centre for Health Service Development in 2002 which it said showed that a relatively large

proportion of clients living in Queanbeyan, Tallaganda and Yarrowlumla and treated within Southern Area Health Service (SAHS) were referred from hospitals outside of SAHS.

321. New South Wales also said that community nurses refer Queanbeyan residents to Queanbeyan service providers wherever possible. Because most services available in the ACT are also available in Queanbeyan, there are few cases where patients are referred back to the ACT. It said that, even when New South Wales residents are referred to ACT community health providers, the ACT providers test eligibility strictly. Therefore it expected a small proportion of New South Wales residents were accessing ACT community health services.

322. New South Wales said that its Resource Distribution Formula for health makes no allowance for flows between Area Health Services for primary and community health services as planning principles dictate that they are locally provided services. It provided data on inter-area flows in community mental health in 2001-02 to support its argument. It said that the size of net inter-area flows in community mental health (1.4 per cent of total activity) compare to 11 per cent and 19 per cent in emergency department and acute inpatients respectively. It said that supported its argument that acute inpatient flow should not be used to estimate the flows in community health services. It also said a similar pattern was observed in SAHS, where 94 per cent or more of clients were treated in their own planning division and 4 per cent of staff hours were used to treat clients from outside SAHS. New South Wales considered that a minimum data set in community mental health, available from the AIHW, should provide a more accurate picture for flows in community mental health services. It concluded that the Commission should not make any cross border adjustment for community health services unless there were information on patient flows to quantify it.

323. Regarding the QEII Family Centre, New South Wales said it was inappropriate to use a residential facility to assess the New South Wales catchment for community health services. It said that generally community health services are ambulatory facilities and hence the catchment area would be much smaller. The QEII is a residential tertiary type facility and bears no resemblance to the usual community health facility such as a baby health centre and community mental health service.

324. The ACT re-iterated its statements about community health services from its main submission, but did not provide any additional information or data.

325. *Analysis.* Much of the evidence from State submissions, workplace discussions and administrative data indicate a net inflow of patients using ACT services. This reflects that:

- (i) many people living in areas surrounding the ACT work or study in the ACT; and
- (ii) there is a perception that the level of service is better in the ACT than in the localities surrounding the ACT.

326. In the other direction, ACT residents holidaying on the South Coast would use New South Wales services.

327. The evidence points to the net cross-border flow having a material impact on the ACT budget. Data available suggest that net cross-border patients could be between 10 to 25 per cent of all patients treated in the ACT. However, QEII centre cross-border data are not considered representative of cross-border flows for community health services in general.

328. We are unaware of any eligibility criteria being applied by the ACT. By the same token, we are not aware of any legislative requirements that would dictate the ACT to provide community health services to cross-border patients.

329. We have no reason to consider that community mental health flows would be representative of flows in community health services in general. Also, the minimum data set mentioned by New South Wales is relatively new and has a number of deficiencies, as stated by the AIHW in its *Mental Health Services in Australia 2000-01* publication.

330. **Commission decisions.** The Commission accepts that the location of the ACT within New South Wales results in net additional demand for ACT community health services from New South Wales residents. There is, thus, a conceptual case for assessing cross border factors to recognise the net additional costs incurred by the ACT. The strength of the conceptual case and the indications provided by the evidence available, are sufficient for the Commission to conclude that equalisation would be improved by continuing to assess cross border influences for this component.

331. The Commission notes the QEII data. However, the ACT has provided no evidence that total use of community health services materially exceeds that expected by the general cross-border method. Data on the actual cross-border use of ACT community health services in total are not available. The Commission therefore decided to apply the general cross-border method developed for this review in the community health component, and to retain the cross-border populations used in the 1999 Review.

332. **Proposed method and results.** The cross border factors for this component, shown in Table 37, have been calculated according to the 2004 Review general method. The populations used were 50 per cent of the total population in the nearest LGAs and 20 per cent of the total population in the rest of the LGAs, because cross border demand is assumed to be stronger for LGAs closer to the ACT and weaker for LGAs further from the ACT.

Table 37 2004 REVIEW CROSS-BORDER FACTORS — COMMUNITY HEALTH SERVICES COMPONENT

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
All years	0.99151	1.00000	1.00000	1.00000	1.00000	1.00000	1.17478	1.00000

333. **Updateability.** Annual estimates of LGA resident populations will be used to update the cross border factors.

SERVICE DELIVERY SCALE FACTOR

334. **1999 Review.** No assessment of service delivery scale disabilities was made. The Commission considered that enough flexibility existed in the delivery of community health services to minimise the effects of service delivery scale.

335. **Preliminary State views.** Tasmania argued that establishing smaller facilities across the State meant the advantages of having a service area with a population which provided an optimal client base were foregone. For safety and efficiency reasons, more qualified staff needed to be employed — they must be able to operate with minimal supervision in very small or sole practice service outlets. Adding to diseconomies of scale was the need to fully equip small facilities despite the low volume of clients using them.

336. Tasmania said that its small and dispersed population attracted relatively few private health facilities that were open for extended hours or bulk billed services to Medicare.

337. **Staff proposals.** Staff were not convinced that service delivery scale disabilities were significant for the provision of community health services from small delivery units. Staff considered that the flexibility in the way services could be organised and delivered for States minimised the service delivery scale effects. Staff proposed a service delivery scale factor not be assessed, unless States provided cost data that demonstrated their existence.

338. **Further State views.** New South Wales agreed that there was not enough evidence to justify inclusion of a service delivery scale factor in this assessment.

339. Queensland said that a service delivery scale disability was warranted because, as with police stations, community health services were provided in communities with a low population. However, it argued devising an assessment method would be problematic. Queensland concluded that, if there was an appropriate measure and if it was material, it would provide the relevant data to calculate a service delivery scale disability.

340. The Northern Territory said it had over 90 community health clinics, some of which are located in communities with less than 100 people. Accordingly, there was variation in the size of non-inpatient and community health service delivery units and the patient to staff ratios. It suggested that, to assess service delivery scale disabilities, the Commission could use a similar method to that used for education — a regression of staff to population ratios after dividing clinics into catchment areas and population bands.

341. **Commission decisions.** The Commission considers that it is plausible that service delivery scale effects could exist for community health services. However, it has no information to demonstrate that they would be material or to allow it to measure any effects with any confidence. It therefore concluded that a conceptual case has not been made and decided not to include a service delivery scale disability in this assessment.

ISOLATION-AFFECTED EXPENSES COMPONENT

ISOLATION FACTOR

342. **1999 Review.** The isolation factor was assessed to account for differences in per capita costs of service provision for some States because of their economic and geographical isolation from the main interstate sources of supply in South Eastern Australia. It reflected the combined effect of isolation on labour-related costs, interstate freight costs, professional infrastructure costs, commercial goods costs, airfares, travel allowances and other travel-related subsidies. The isolation-affected expenses component represented 0.21 per cent of expenses in this category.

343. **2004 Review.** *Draft Assessment Paper CGC 2003/65 Isolation* discusses the issues raised by the States regarding the assessment of isolation. The paper sets out the Commission's decisions on the general method of assessment adopted for the 2004 Review and on the size of the isolation-affected expenses component for relevant categories. The States did not raise issues specific to this category.

344. **Proposed method and results.** The isolation factors for the isolation component, shown in Table 38 have been calculated according to the 2004 Review general method. Isolation-affected expenses for this category have been estimated to be 0.10 per cent of the category standard

Table 38 ISOLATION FACTORS — ISOLATION-AFFECTED EXPENSES COMPONENT

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
All years	0.05107	0.10737	0.17783	0.74777	0.56469	3.49490	1.51842	68.2722

345. The factor and component weight will not be updated until the next review. This means that isolation-affected expenses will grow at the same rate as category expenses.

PROPOSED ASSESSMENT FOR THE 2004 REVIEW - EXPENSES

346. Table 39 summarises the proposed assessment for the 2004 Review.

SUMMARY OF RESULTS – EXPENSES

Derivation of category factor

347. Table 40 summarises the components, component weights and disability factors assessed for this category for 2001-02. It shows the calculation of the category factor.

Table 39 PROPOSED ASSESSMENT STRUCTURE FOR THE 2004 REVIEW

Expenditure component	Component weight	Factors	Basis of calculation
Fixed costs	0.52	Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Administrative scale	General method.
Emergency department services	23.85	Dispersion	General method, non-inpatient weights.
		Economic environment	Based on number of general practitioners and specialists in different regions.
		Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Socio-demographic composition	Covers age-sex, Indigeneity, income, and low English fluency.
Outpatient services	36.77	Dispersion	General method, non-inpatient weights.
		Economic environment	Based on number of general practitioners and specialists in different regions.
		Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Socio-demographic composition	Covers age-sex, Indigeneity, income and low English fluency.
Community health services	38.76	Dispersion	General method, non-inpatient weights.
		Economic environment	Based on number of general practitioners and specialists in different regions.
		Input costs	General method with weights of 80 per cent for wages, 2 per cent for accommodation and 1 per cent for electricity.
		Socio-demographic composition	Covers age-sex, Indigeneity, income, English fluency and remoteness.
		Cross border	General method.
Isolation	0.10	Isolation	General method.

Table 40 NON-INPATIENT AND COMMUNITY HEALTH SERVICES —
DERIVATION OF CATEGORY FACTOR, 2004 REVIEW

Factors	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Fixed costs (component weight = 0.52%)								
Administrative scale	0.34013	0.46524	0.61538	1.17754	1.48735	4.77358	7.00016	18.94453
Input costs	1.03498	0.99044	0.97446	0.98186	0.97135	0.92001	1.01306	1.09897
Component factor	0.34992	0.45804	0.59609	1.14927	1.43611	4.36551	7.04923	20.69514
Cont. to category factor	0.00168	0.00220	0.00286	0.00552	0.00689	0.02095	0.03384	0.09934
Emergency department services (component weight = 23.85%)								
Dispersion	0.99884	0.98717	1.01745	1.00872	0.98952	0.98866	0.97669	1.09007
Input costs	1.03498	0.99044	0.97446	0.98186	0.97135	0.92001	1.01306	1.09897
Economic environment	0.99335	0.99158	1.00463	1.01621	1.00362	0.99864	0.99124	1.18291
Socio-demographic composition	0.99552	0.97363	1.02179	1.01519	0.98576	1.03426	0.95272	1.36418
Component factor	1.02011	0.94175	1.01597	1.01968	0.94853	0.93646	0.93264	1.91455
Cont. to category factor	0.24330	0.22461	0.24231	0.24319	0.22623	0.22335	0.22244	0.45662
Outpatient services (component weight = 36.77%)								
Dispersion	0.99884	0.98717	1.01745	1.00872	0.98952	0.98866	0.97669	1.09007
Input costs	1.03498	0.99044	0.97446	0.98186	0.97135	0.92001	1.01306	1.09897
Economic environment	0.98669	0.98317	1.00925	1.03241	1.00724	0.99727	0.98248	1.36582
Socio-demographic composition	1.00140	0.97807	1.00739	0.98824	1.03772	1.06826	0.84169	1.27818
Component factor	1.01882	0.93762	1.00585	1.00801	1.00171	0.96551	0.81633	2.07035
Cont. to category factor	0.37462	0.34476	0.36985	0.37065	0.36833	0.35502	0.30016	0.76127
Community health services (component weight = 38.76%)								
Dispersion	0.99884	0.98717	1.01745	1.00872	0.98952	0.98866	0.97669	1.09007
Input costs	1.03498	0.99044	0.97446	0.98186	0.97135	0.92001	1.01306	1.09897
Economic environment	0.98669	0.98317	1.00925	1.03241	1.00724	0.99727	0.98248	1.36582
Socio-demographic composition	0.95834	0.86976	1.06458	1.11513	0.97695	1.05090	0.81777	3.72886
Cross-border	0.99151	1.00000	1.00000	1.00000	1.00000	1.00000	1.17478	1.00000
Component factor	0.95015	0.81948	1.04470	1.11792	0.92687	0.93353	0.91576	5.93622
Cont. to category factor	0.36828	0.31763	0.40493	0.43331	0.35925	0.36183	0.35495	2.30088
Isolation (component weight = 0.10%)								
Isolation	0.05107	0.10737	0.17783	0.74776	0.56469	3.49490	1.51842	68.27218
Component factor	0.05107	0.10737	0.17783	0.74776	0.56469	3.49490	1.51842	68.27218
Cont. to category factor	0.00005	0.00011	0.00018	0.00075	0.00056	0.00349	0.00152	0.06827
CATEGORY FACTOR	0.98793	0.88930	1.02012	1.05341	0.96126	0.96465	0.91290	3.68637

Comparison of category factors

348. Table 41 shows the category factors calculated for the draft assessment for the 2004 Review compared with the category factors assessed for this category in the 2003 Update.

Table 41 COMPARISON OF CATEGORY FACTORS, 2003 UPDATE AND DRAFT ASSESSMENT FOR THE 2004 REVIEW

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2003 Update	0.96449	0.90913	1.02709	1.09375	0.95985	1.03355	0.86304	3.43598
Draft Assessment - 2004 Review	0.98793	0.88930	1.02012	1.05341	0.96126	0.96465	0.91290	3.68637

Standardised expenses

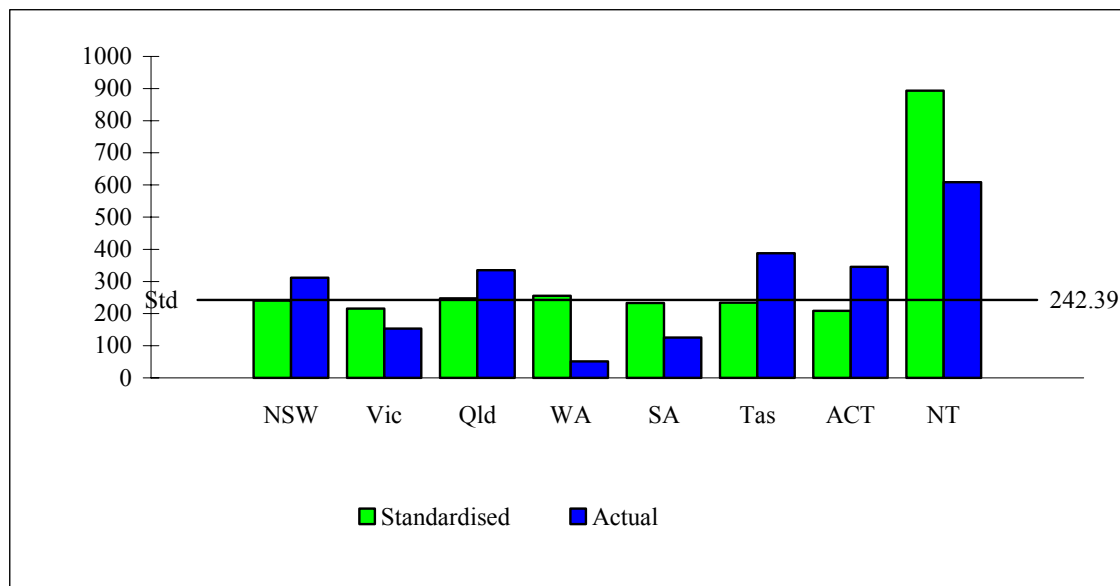
349. Table 42 shows the standardised expenses assessed for this category for 2001-02 in the draft assessment compared with those assessed in the 2003 Update.

Table 42 ESTIMATED, STANDARD AND STANDARDISED EXPENSES, 2001-02

	Standard	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2003 Update -									
Estimated expenses									
\$m	4297.47	1416.77	408.06	969.37	618.95	428.97	150.12	94.11	211.09
\$pc	219.27	213.34	84.05	264.10	322.67	282.47	317.26	291.67	1055.78
Standardised expenses									
\$m		1404.43	967.80	826.61	460.03	319.62	107.23	61.06	150.63
\$pc		211.48	199.34	225.21	239.82	210.46	226.62	189.24	753.40
2004 Review									
Estimated expenses									
\$m	4752.42	2069.31	747.20	1229.09	99.37	191.02	183.33	111.48	121.62
\$pc	242.39	311.60	153.90	334.86	51.81	125.78	387.45	345.48	608.31
Standardised expenses									
\$m		1590.86	1046.93	907.94	489.97	353.98	110.68	71.43	178.72
\$pc		239.55	215.64	247.36	255.43	233.09	233.91	221.36	893.88

350. Figure 1 shows, for 2001-02, the standardised, estimated and standard expenses per capita in the 2004 Review draft assessment.

Figure 1 NON-INPATIENT AND COMMUNITY HEALTH SERVICES — GROSS EXPENSES PER CAPITA — STANDARDISED, ESTIMATED AND STANDARD



Analysis

351. Table 43 shows the redistribution of grants resulting from the assessment in the 2003 Update and the draft assessment. It also shows the sources of change.

Table 43 EFFECT OF ASSESSMENT ON GRANT DISTRIBUTION — NON-INPATIENT AND COMMUNITY HEALTH SERVICES

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total ^(a)
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Contribution to 2003 Update relativities ^(b)	-62.6	-112.5	28.0	46.2	-13.7	4.6	-10.5	120.5	199.3
Contribution to 2004 Review Draft Assessments relativities ^(b)	-22.3	-140.8	22.6	26.2	-15.1	-3.4	-6.7	139.6	188.3
Total Change	40.3	-28.3	-5.4	-20.1	-1.4	-8.0	3.8	19.1	63.2 ^(c)

(a) Total redistribution.

(b) Assuming same pool and a constant population.

(c) This figure shows the change in the amount redistributed among the States between the 2003 Update and the 2004 Review Draft Assessment. It does not necessarily equal the difference in the total contributions to the relativities between the two inquiries.

352. The main reasons for the change in grant shares were:

- (i) changes to the input costs factor, which explains half the change in grant shares;
- (ii) changes to component weights — while the assessment structure has remained unchanged, there have been significant changes to the component weights, to reflect States' decreased spending on outpatient services and increased spending on emergency department and community health services; and
- (iii) updating of the factors, particularly economic environment.

SUMMARY OF RESULTS — USER CHARGES

353. **1999 Review.** User charges comprises all non-inpatient and community health user charges. User charges were assessed using an equal per capita method.

354. Table 44 shows the non-inpatient and community health user charges assessed in the 2004 Review preliminary assessment. The figures presented are actual amounts.

Table 44 NON-INPATIENT AND COMMUNITY HEALTH USER CHARGES, 2001-02

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Per capita (\$)	24.31	10.63	9.29	22.99	5.24	27.57	10.84	24.96	16.37
User charges (\$m)	161.44	51.61	34.11	44.09	7.96	13.05	3.50	4.99	320.75

355. **State views.** No State views were raised concerning non-inpatient and community health user charges in the first round or rejoinder submissions.

356. **Commission decisions.** Amounts of non-inpatient and community health user charges raised by States can vary greatly. Differences in State policies and circumstances of individual health service providers will influence the level of money able to be raised by States. Therefore, the Commission has decided it is appropriate to continue the current method for assessing non-inpatient and community health user charges in the 2004 Review.

357. **Proposed method and results.** As an equal per capita method is proposed, the actual amounts will be distributed on an equal per capita basis. This assessment will have no effect on the relativities.