

# **Medicare and Pharmaceutical Benefits Scheme Usage Patterns in the Northern Territory**

**1993/94 to 2003/04**

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## Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ARIA	Accessibility and Remoteness Index of Australia
BEACH	Bettering the Evaluation And Care of Health
CCT	Coordinated Care Trials
DoHA	Australian Government Department of Health and Ageing
HIC	Health Insurance Commission
MBS	Medicare Benefits Schedule
NT	Northern Territory
PBS	Pharmaceutical Benefits Scheme
PHCAP	Primary Health Care Access Program
RPBS	Repatriation Pharmaceutical Benefits Scheme





## Executive Summary

Medicare and the Pharmaceutical Benefits Scheme (PBS) are regarded as comprising the mainstream universal health insurance system in Australia. There have been previous reports indicating that the Northern Territory residents have comparatively poor access to the primary health care services funded by these schemes. This study provides a comprehensive comparison of the Medicare and PBS utilisation levels in the Northern Territory compared to the other States/Territories for the eleven years from 1993/94 to 2003/04.

The Medicare and PBS services, payments and expenditure data were obtained mainly from the Health Insurance Commission and Australian Government Department of Health and Ageing either via accessing on-line datacubes or by special requests. The estimated resident populations are from Australian Bureau of Statistics reports. Direct and indirect age standardisation methods were applied as part of the statistical analyses.

Importantly, the national comparisons used in this report are conservative because they are made on a *per capita basis*. An alternative method would be to estimate the expected Northern Territory Medicare/PBS usage on a *needs basis*, which because of the high health care need of Aboriginal Territorians would significantly increase the expected average in the NT, well beyond the estimates based on a simple per capita basis.

### ***Northern Territory trends***

- In 2003/04, \$44.2 million in Medicare payments and \$18.2 million in PBS payments were made to Northern Territory residents. This was a total of \$62.4 million from the two schemes.
- Over the period 1993/94 to 2003/04, PBS payments grew at a much faster rate than the Medicare payments. PBS payments grew at an annual average compound rate of 13.2 percent compared to only 4.4 percent for the Medicare payments.
- In 2003/04 the average per capita payments were \$204 for Medicare and \$84 for PBS for Northern Territory residents. This was a total of \$284 for both schemes.
- On a per capita basis, there were an average of 6 Medicare services and 3 PBS services (scripts) for each Territorian.

### ***Northern Territory share of Australian pool***

- The Northern Territory's share of the total Medicare payments pool for Australia has averaged 0.5 percent over the period 1993/94 to 2003/04, even though the Northern Territory's population averages out at 1.0 percent of the Australian population. The Northern Territory's share of the PBS pool is even less at 0.3 percent.

- While on a per capita basis, a Territorian uses 6 Medicare services per year, the per capita Australian average was 11 services per year. In 2003/04, the Australian per capita average in Medicare payments was \$427, and in the same year the Northern Territory average was \$222, or 52 percent of the Australian level.
- In the same way, while on a per capita basis, a Territorian uses 3 PBS services per year, the Australian average was 9 services. In 2003/04, the per capita for Australia was \$233 in PBS payments, compared with the Northern Territory average of \$87, which is 34 percent of the Australian average.
- The Northern Territory population is younger than the rest of Australia. In 2001 the Northern Territory median age was 30 years compared to 35 years for Australia overall. This report has shown, by the use of age-standardisation, that the under utilisation of Medicare and PBS in the Northern Territory is not explained by the Northern Territory's younger population.

#### ***Funding Gaps***

- The Northern Territory's Medicare funding shortfall was estimated to be \$23.1 million in 2003/04. This is the additional amount of funding that would be expected on top of the actual funding of \$44.2 million if the Northern Territory had the same age-standardised Medicare usage rates as Australia overall. This annual shortfall has increased over time, from \$15.8 million in 1994/95 to the 2003/04 level of \$23.1 million.
- The Australian Government funds additional national programs which improve access to primary health care services for Aboriginal Territorians, including the Coordinated Care Trials and Primary Health Care Access Program. PHCAP expenditure in the Northern Territory has increased from \$8.998 million in 2002/03 to an expected \$16.621 million in 2004/05. These amounts would indicate a significant closing of the funding gap if the expenditures were on Medicare-like services, that is, medical services provided by medical practitioners. However, while PHCAP expenditures cover many important aspects of overall health care services, only a proportion of the expenditure is on Medicare-like services.
- In the same way that the Medicare funding gap was estimated, the PBS shortfall for the Northern Territory was estimated to be \$25.8 million in 2003/04.
- An alleviating factor in relation to the PBS funding shortfall are the substantial additional payments in relation to Aboriginal health services paid under Section 100 of the PBS scheme. In 2003/04 these additional payments amounted to \$10.3 million for the Northern Territory.

#### ***Aboriginal usage levels for Medicare***

- There is very limited information on Indigenous status in the HIC's Medicare data collection. Estimates of Aboriginal usage of Medicare have been made here based on various recent surveys and reports. These estimates show Aboriginal usage in the Northern Territory to be significantly below non-Aboriginal usage. Within the Aboriginal population, urban residents have a significantly higher Medicare usage than residents in the rest of the Northern Territory.

# 1 Introduction

## 1.1 Background

Established in 1984 as a universal health insurance system, Medicare seeks to provide Australian residents with a system of affordable, accessible, and high-quality health care. Medicare is designed on principles of universality, equity, simplicity and ease of access. The Medicare Benefits Schedule (MBS) offers details on the medical services covered by this system.<sup>1</sup>

The Pharmaceutical Benefits Scheme (PBS) has been established since 1948. It provides safe, effective and affordable medicines to Australian residents by subsidising a range of drugs prescribed by doctors. Its primary goal has been to provide all Australians with safe medicine, whatever their financial circumstances.<sup>2</sup>

Medicare and PBS are regarded as mainstream primary health care systems in Australia.

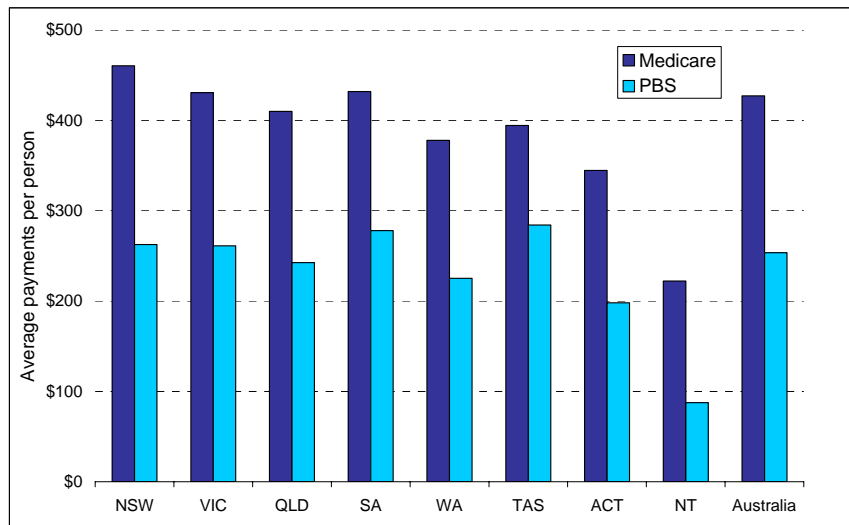
The Health Insurance Commission (HIC) administers the operation of the both Medicare and PBS on behalf of the Australian Government. Statistical tables in the 2003/2004 HIC Annual Report reveal that the average Medicare payment per Northern Territory resident was \$222 per person.<sup>1</sup> This figure represents only 52 percent of the national average national benefit paid of \$427.<sup>3</sup>

The same report indicates that the average pharmaceutical benefit payment in the Northern Territory was \$87 per person, an amount representing only 34 percent of the national average PBS payment of \$253 per person (see Figure 1). The Australian Institute of Health and Welfare (AIHW) reported similar results on this issue. The national surveys on general practice activities report that the frequency of Northern Territory residents visits to general practitioners was half that of the national average. Northern Territory Medicare claims (0.5% of the Australian total claims) significantly under-represented the Northern Territory population (1.0% of Australian population).<sup>4,5,6</sup>

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<sup>1</sup> The Medicare per capita usage rates reported in the HIC Annual Reports are not identical to those per capita rates shown in the HIC website databases. In the remainder of this report, the HIC website Medicare database rates have been used. Also, the HIC website does not publish the PBS per capita rates at all. The PBS per capita usage rates used in the remainder of this report were based on the implied population levels determined from the Medicare per capita rates.

Figure 1: Medicare and PBS benefits per capita by States and Territories, Australia 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

The full extent of utilisation of the Medicare and PBS has not been previously reported for the Northern Territory, although there has been general agreement that Northern Territory usage levels are significantly below the Australian average. Accordingly, this project has sought to establish a comprehensive comparison of the utilisation levels in the Northern Territory compared to other States/Territory as well as comparison with Australia as a whole.

The objectives of this study were to:

- Establish the Medicare and PBS usage patterns for the Northern Territory residents and investigate the historical trends in Medicare and PBS usages over the eleven years from 1993/94 to 2003/04 in relation to service and payment levels in the Northern Territory;
- Compare the Medicare and PBS usages with the Australian averages and estimate the magnitude of the possible under-utilisation of Medicare and PBS by the Northern Territory residents; and
- Examine the effect of recent direct actions to increase the level of medical services in the Northern Territory both within the Medicare/PBS framework and by other funding initiatives.

This study compares Northern Territory usage levels of Medicare and PBS on an equal per capita basis. An alternative framework would be to estimate the Northern Territory Medicare/PBS expected usage rates on a *needs* basis but this has not been attempted here. That is, given that the overall health status for Territorians is worse than other Australians<sup>7,8</sup>, largely as a result of poor Aboriginal health status, the Northern Territory usage of primary health care would be expected to be above the per capita national level not merely equal to it.

## 1.2 Data Sources

General information on Medicare and PBS are available from HIC Annual Reports and datacubes available on the HIC website ([www.hic.gov.au](http://www.hic.gov.au)). These datacubes provided an aggregate summary of the Medicare/PBS data by the items, groups and demographic variables (age and sex) for each State or Territory. Monthly and quarterly reports were also available on line. There was no information recorded on Indigenous status prior to 2002/03. From HIC website, the following datasets were downloaded in late 2004:

- Medicare services and payments per State or Territory per year between 1993/94 and 2003/04;
- Medicare services and payments per capita State or Territory per year between 1993/94 and 2003/04;
- Medicare services and payments per State or Territory per year by Medicare category between 1993/94 and 2003/04;
- PBS services and payments per State or Territory per year between 1993/94 and 2003/04;
- PBS services and payments per capita State or Territory per year between 1993/94 and 2003/04; and
- PBS services and payments per State or Territory per year by Anatomical Therapeutic Chemical (ATC) category between 1993/94 and 2003/04.

Australian Department of Health and Ageing (DoHA) is primary data custodian of Medicare/PBS information. The most recent schedule books and information on changes in legislation regarding Medicare and PBS were accessed from the DoHA website ([www.health.gov.au](http://www.health.gov.au)). The website also provided information on selected aggregate by State or Territory. From DoHA, the following datasets were obtained:

- Medicare services and payments per month by regions (Darwin vs Northern Territory Balance) between 1993/94 and 2003/04; and
- PBS services and payments per month by regions (Darwin vs Northern Territory Balance) between 1993/94 and 2003/04.

The Family Medicine Research Centre, the University of Sydney, in collaboration with AIHW, undertakes an annual national study on general practice activity in Australia, entitled the Bettering the Evaluation And Care of Health (BEACH) study. The study is based on a random sample (about 24%) of General Practitioners from across Australia and has been undertaken annually since 1998. An interactive datacube was accessed through the website ([www.fmrc.org.au](http://www.fmrc.org.au)), which provided aggregate data on problems managed in general practice by State or Territory. Specific requests are also available at cost. Potential problems with the data include insufficient sample size for the Northern Territory, reliability of Indigenous status and significant cost of the requests. The BEACH study has enabled the AIHW to produce a series of reports on general practice activities in Australia.

Estimated resident populations by age, sex and regions between 1994 and 2003 were obtained from Australian Bureau of Statistics (ABS).<sup>9</sup> ABS experimental Indigenous population estimates were used to derive the population by Indigenous status.<sup>10</sup>

### **1.3 Methods**

Statistical analysis was conducted on the basis of authorised data sources on Medicare/PBS usage (HIC and DoHA) and estimated resident population on age group, sex and regions sourced from ABS. Simple time series was established in the Northern Territory and nationally for various statistical measures:

- Total Medicare benefits claimed;
- Total Medicare services provided;
- Average Medicare benefits per person;
- Average Medicare services per person;
- Total PBS benefits claimed;
- Total PBS services provided;
- Average PBS benefits per person;
- Average PBS services per person; and
- Medicare payment and services data for the two Northern Territory General Practice Divisions.

Comparison was made between the Northern Territory figures and national figures for the crude data and standardised data. Because Medicare/PBS usages are different among children, youth and adults and between males and females, direct and indirect age and sex standardisations were used to eliminate the impact of age and sex on the total Medicare usage. Expected usage was derived based on the national average and Northern Territory population in indirect standardisation. The annual national average usage by age and sex was used as the standard.

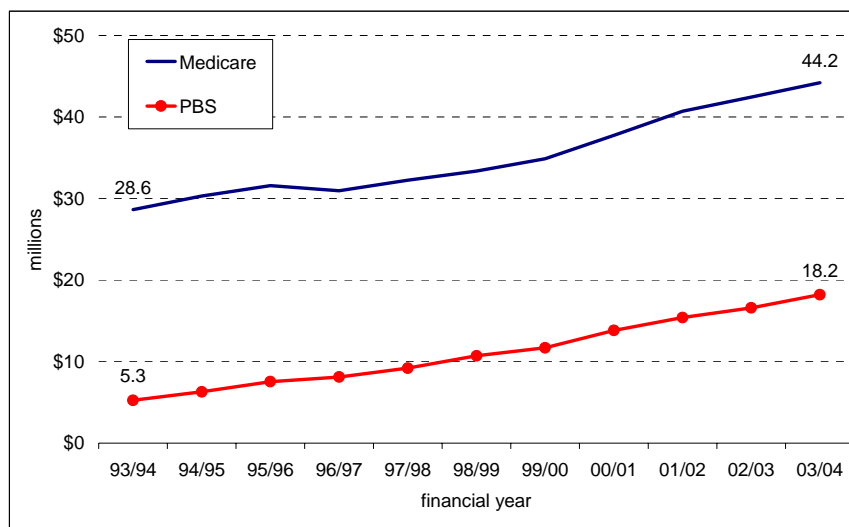
Method for estimation of Aboriginal Medicare use is noted in Appendix 1: Aboriginal population Medicare usage rates. Because these figures were not raw data, but derived mathematically from regional data and AIHW studies, the results are indicative only. Caution needs to be taken when interpreting these results.

## 2 Medicare and PBS usage in the Northern Territory

### 2.1 Overall levels of Medicare and PBS usage

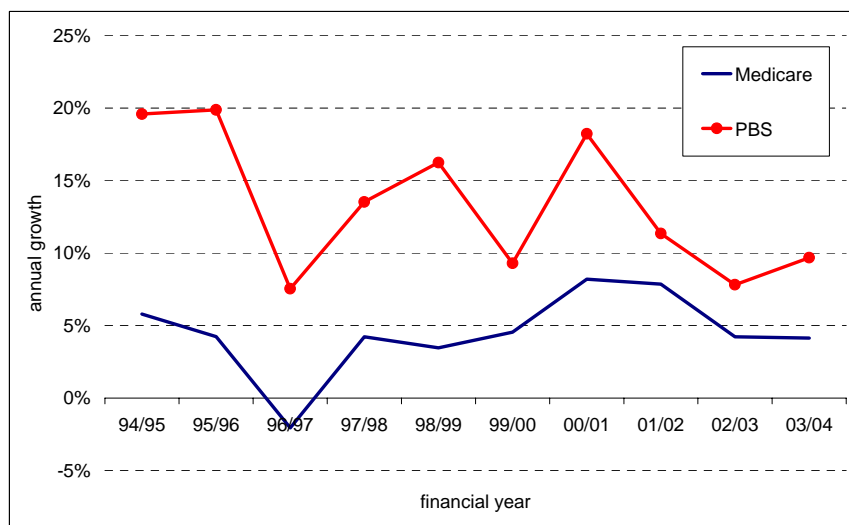
Between 1993/94 and 2003/04, Medicare payments to Northern Territory residents increased, in current price terms, from \$28.64 million to \$44.20 million. PBS payments increased from \$5.26 million to \$18.20 million (see Figure 2). PBS payments have been growing at a much faster rate than the Medicare payments. PBS payments grew at an annual average compound rate of 13.2 percent compared to 4.4 percent for the Medicare payments. The year-by-year annual growth rates are shown in Figure 3.

**Figure 2: Medicare and PBS payments to Northern Territory residents, current prices, 1993/94 to 2003/04**



Source: HIC - MBS/PBS Group Statistics Report (online)

**Figure 3: Medicare and PBS payments to Northern Territory residents, annual growth (current prices), 1993/94 to 2003/04**

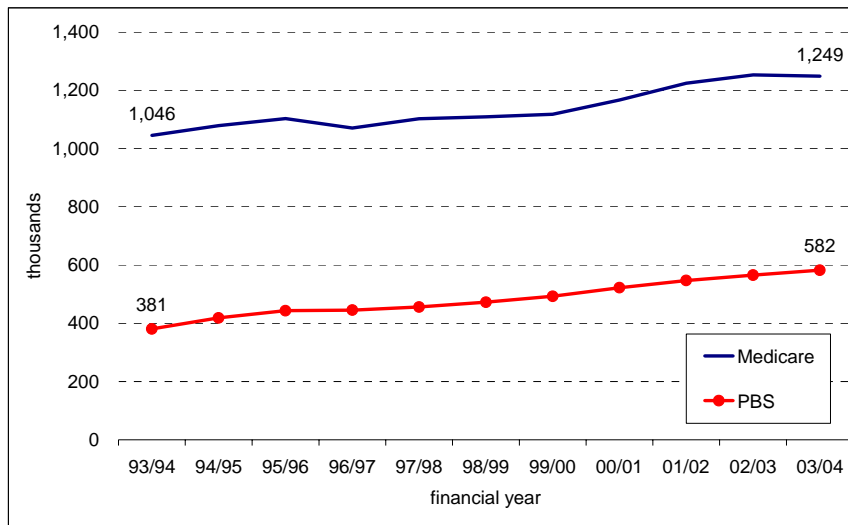


Source: HIC - MBS/PBS Group Statistics Report (online)

## 2.2 Medicare and PBS Services

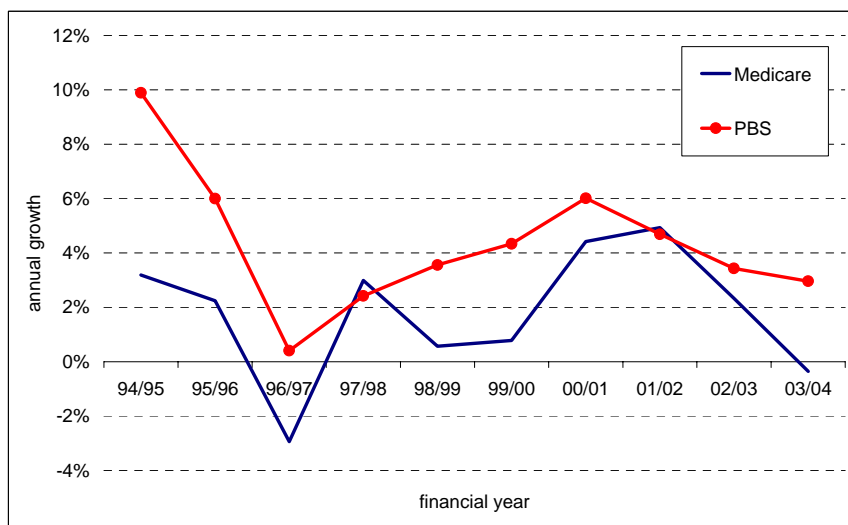
The number of Medicare services increased between 1993/94 to 2003/04 from 1,045,563 to 1,248,600 at an average annual compound rate of 1.8 percent. The number of PBS services increased from 380,593 to 582,257 over the same period at an average annual compound rate of 4.3 percent (see Figure 4). The year-by-year annual growth rates are shown in Figure 5. It is noticeable that in 2003/04 the number of Medicare services actually fell for the Northern Territory. In 2002/03 there were 1,253,064 services, whereas in 2003/04 there were 1,248,600 services, or a drop of 0.4 percent (see Figure 4 and Figure 5).

Figure 4: Medicare and PBS services to Northern Territory residents, 1993/94 to 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

Figure 5: Medicare and PBS services to Northern Territory residents, annual growth, 1993/94 to 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

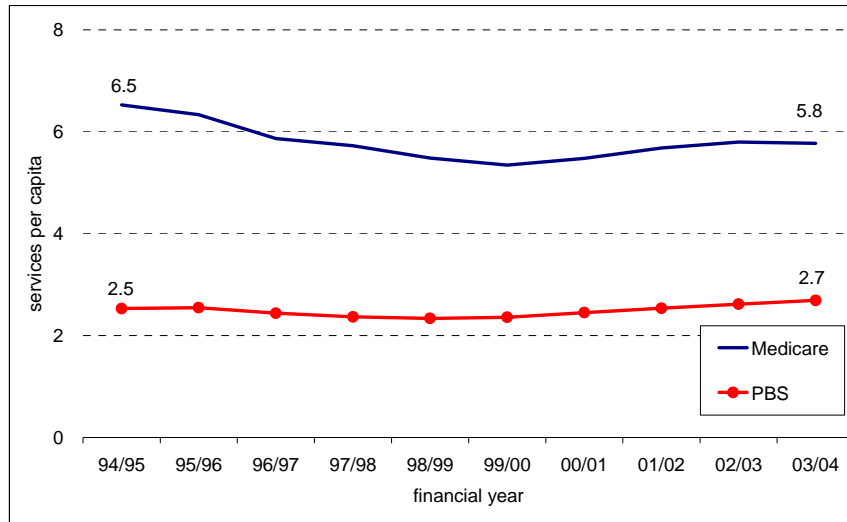


## 2.3 Per capita services

The growth in the level of Medicare and PBS payments can be due to three factors; cost increases per item, population growth, and increased usage per person. Figure 6 shows the level of Medicare and PBS services for the Northern Territory<sup>i</sup>. Medicare services per capita decreased over the period 1994/95 to 2003/04 in the Northern Territory; from 6.5 services per person to 5.8 services. This was equivalent to a negative 1.4 percent average annual compound growth rate. But the rate was not constant over the period. The per capita Medicare rate dropped in every year from 1995/96 to 1999/2000, grew slightly between 2000/01 and 2002/03, before dropping again in 2003/04 (see Figure 7).

PBS services per capita<sup>ii</sup> grew marginally over the same period from 2.5 services per person to 2.7 services. This was equivalent to a 0.7 percent average annual compound growth rate.

Figure 6: Medicare and PBS services per capita, Northern Territory, 1994/95 to 2003/04

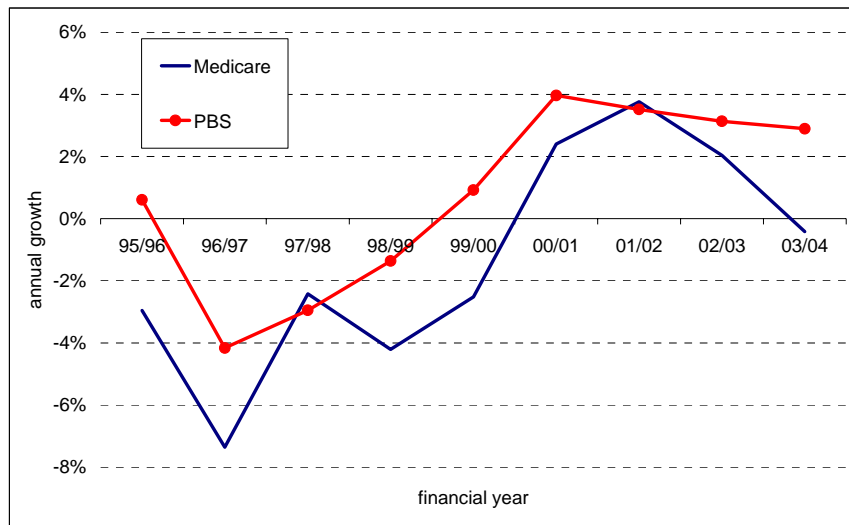


Source: HIC - MBS/PBS Group Statistics Report (online)

<sup>i</sup> The HIC per capita data are only available from 1994/95 onwards

<sup>ii</sup> The HIC does not publish PBS per capita data but does publish Medicare per capita data. The PBS per capita estimates here are based on the population estimates underlying the Medicare per capita series.

Figure 7: Medicare and PBS services per capita, Northern Territory, annual growth, 1994/95 to 2003/04



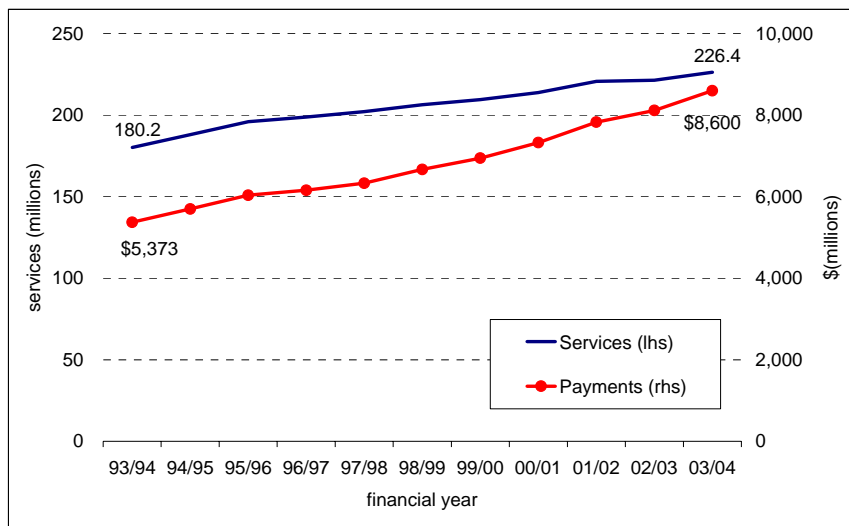
Source: HIC - MBS/PBS Group Statistics Report (online)

### 3 Medicare Usage, historical trends comparing the Northern Territory and Australia

#### 3.1 Medicare, Australian levels

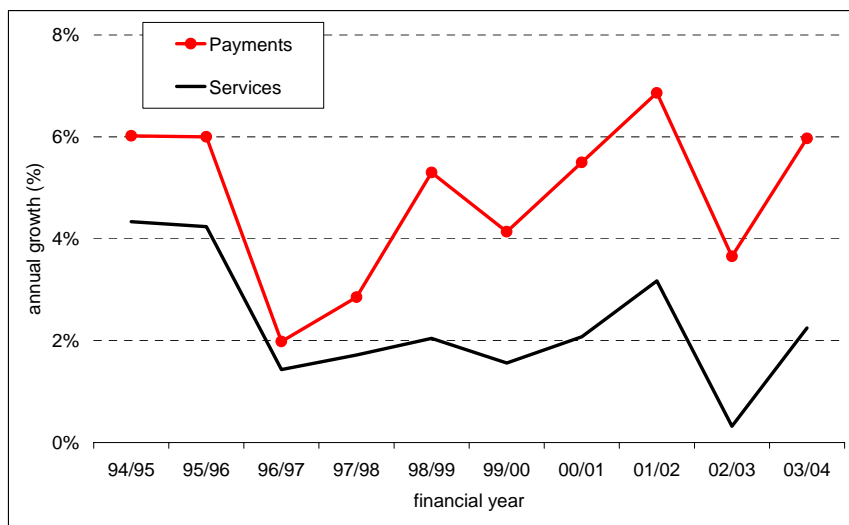
Over the period 1993/94 to 2003/04, Medicare payments in Australia increased from \$5,373.0 million to \$8,600.0 million in current prices (see Figure 8). This was equal to an average annual compound growth of 4.8 percent. The number of services over the corresponding period increased from 180.2 million to 226.4 million at an average annual compound growth rate of 2.3 percent. The year-by-year growth rates for both payments and services are shown in Figure 9.

Figure 8: Medicare, services and payments (current prices), Australia, 1993/94 to 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

Figure 9: Medicare, annual growth in services and payments (current prices), Australia, 1994/95 to 2003/04

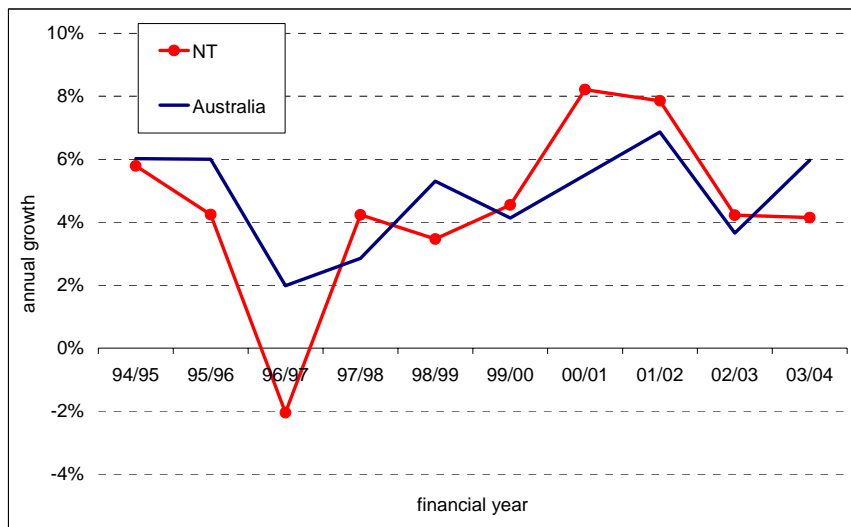


Source: HIC - MBS/PBS Group Statistics Report (online)

### 3.2 Medicare usage, Australian and Northern Territory growth rates

From 1993/94 to 2003/04, the Northern Territory growth in Medicare payments was at an average annual compound rate of 4.4 percent. The corresponding figure for Australia was 4.8 percent. While these levels are relatively similar, two points are notable. Firstly, the simple fact that Australian payments have grown at a greater rate than the Northern Territory, and secondly, the rates of growth have fluctuated significantly in certain years (see Figure 10).

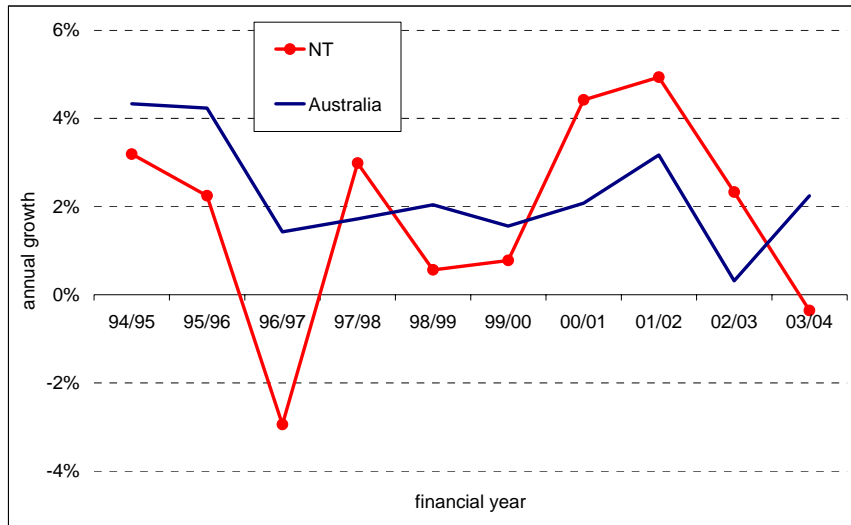
**Figure 10: Medicare, annual growth in payments (current dollars), Australia and Northern Territory, 1994/95 to 2003/04**



Source: HIC - MBS/PBS Group Statistics Report (online)

The Northern Territory growth in Medicare services has also fluctuated widely but with an average annual compound rate of 1.8 percent (See Figure 11). The corresponding figure for Australia was 2.3 percent. In 2003/04, Northern Territory services experienced negative growth for only the second time, after three years of growth rates substantially above the Australian average.

Figure 11: Medicare, annual growth in services, Australia and Northern Territory, 1994/95 to 2003/04

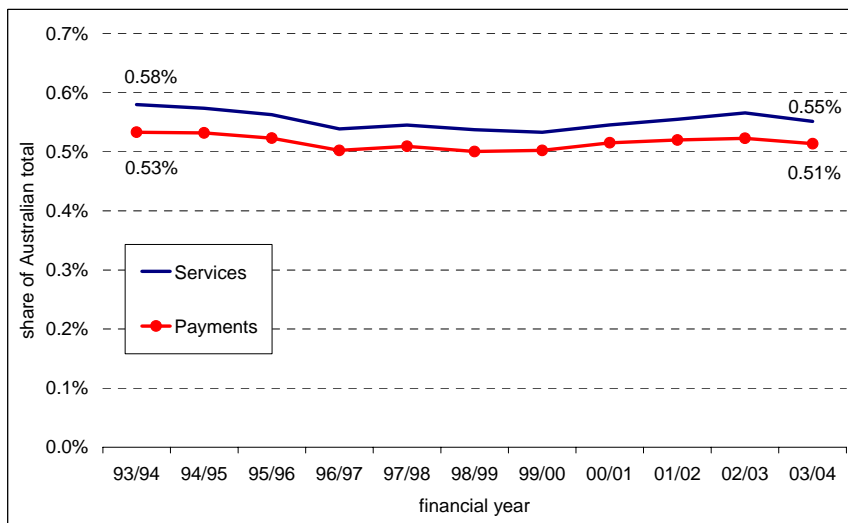


Source: HIC - MBS/PBS Group Statistics Report (online)

### 3.3 Medicare usage, Northern Territory and Australia comparisons

The Northern Territory's share of the total Medicare payments pool for Australia has averaged at 0.52 percent over the period 1993/94 to 2003/04 (see Figure 12). The Northern Territory's share of the total Medicare services in Australia averaged 0.55 percent over the same period. The payments share being less than the services share is a reflection that Territorians typically receive a lower average Medicare payment than the rest of Australia. This in turn is a reflection of the higher availability of specialists and high-cost treatments in the rest of Australia compared to the Northern Territory.

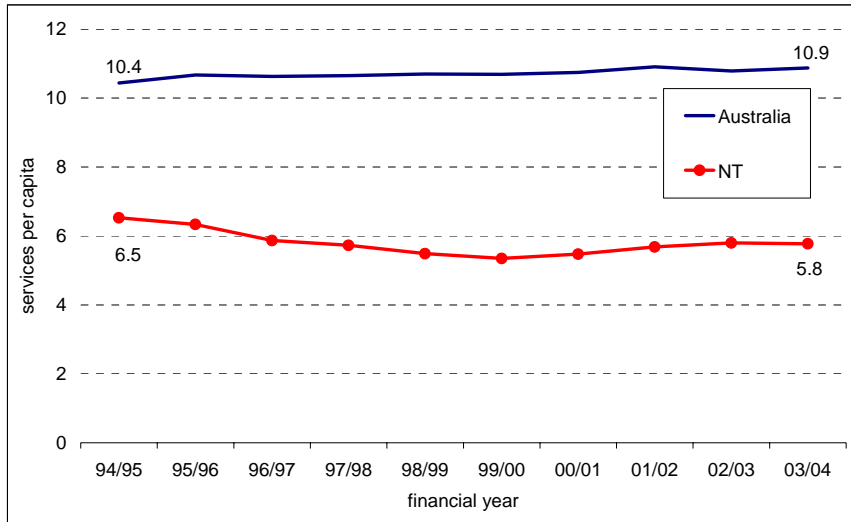
Figure 12: Medicare, Northern Territory share of total Australian payments and services, 1993/94 to 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

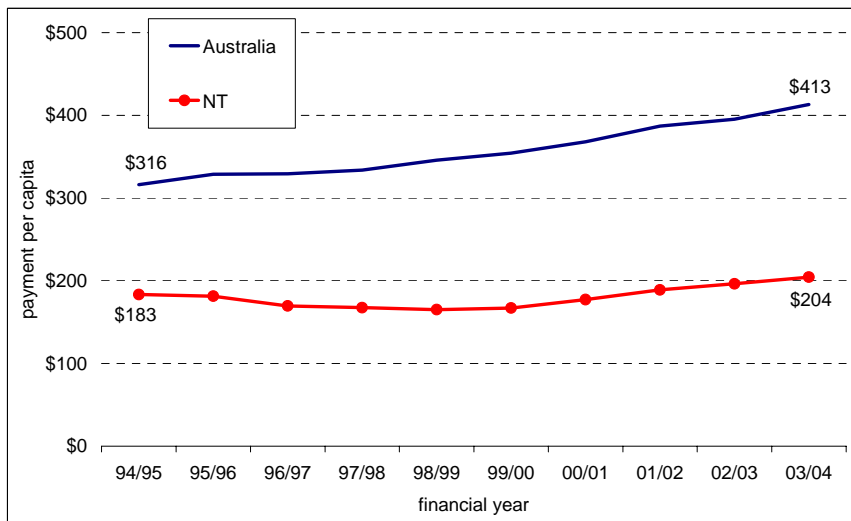
The Northern Territory's per capita Medicare usage rates are dramatically below that of the Australian average. In 1994/95 the per capita Australian average was 10.4 Medicare services per annum, rising to 10.9 services in 2003/04. The per capita average for the Northern Territory was only 6.5 Medicare services in 1994/95 and this level dropped to 5.8 services per annum in 2003/04. In rounded terms, the per capita average for the Northern Territory was 6 Medicare services per annum compared to the Australian average of 11 services (see Figure 13).

Figure 13: Medicare, services per capita, Australia and Northern Territory, 1994/95 to 2003/04



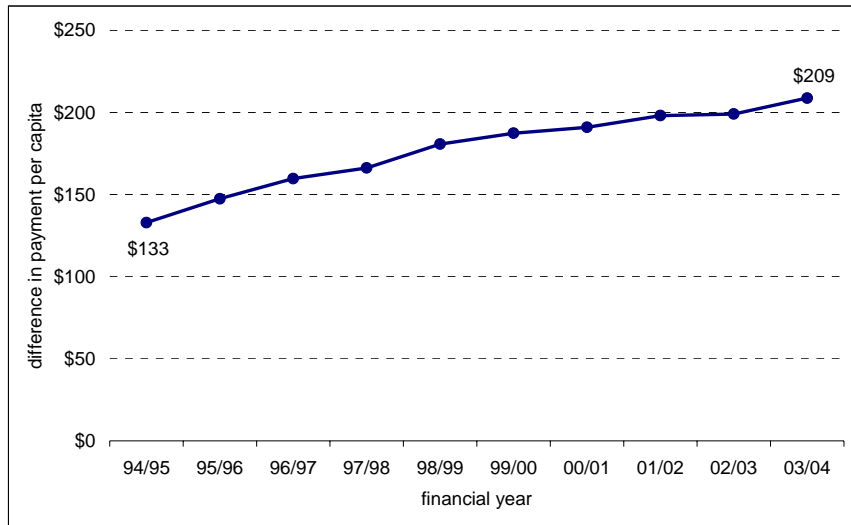
Source: HIC - MBS/PBS Group Statistics Report (online)

Figure 14: Medicare, payments per capita, Australia and Northern Territory, 1994/95 to 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

Figure 15: Medicare, difference between Northern Territory payment per capita and Australian payment per capita, 1994/95 to 2003/04



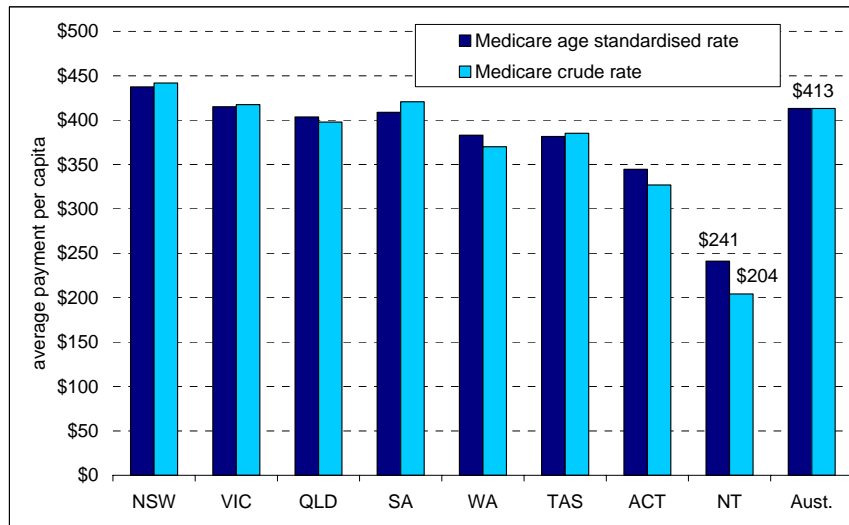
Source: HIC - MBS/PBS Group Statistics Report (online)

The gap in the per capita services between the Northern Territory and the Australian averages converts into an equally substantial gap in terms of payments. Figure 14 shows that in 2003/04, the per capita average Medicare payment for Australia was \$413, compared with the average payment for the Northern Territory of \$204 (49% of the Australian average).

The Australian per capita average payment has increased from \$316 in 1994/95 to \$413 in 2003/04, a growth of 31 percent. Over the same period the Northern Territory level went from \$183 to \$204, an increase of only 11 percent. Figure 15 shows how the gap between the average payments for the Northern Territory and Australia has grown from \$133 in 1994/95 to \$209 in 2003/04.

It has been argued that a proportion of Northern Territory-Australia gap shown in Figure 13, Figure 14 and Figure 15 can be associated with the younger age structure of the Northern Territory compared to Australia overall. In Figure 16 the age-standardised rates are shown for 2003/04 for the Northern Territory and for all other states/territories. The age-standardised average per capita payment for the Northern Territory in 2003/04 was \$241 compared to the crude average of \$204. This shows that while the age structure of the Northern Territory population is a factor, once this is removed by using the age-standardised rate, the Northern Territory per capita payment is still far below the Australian average payment.

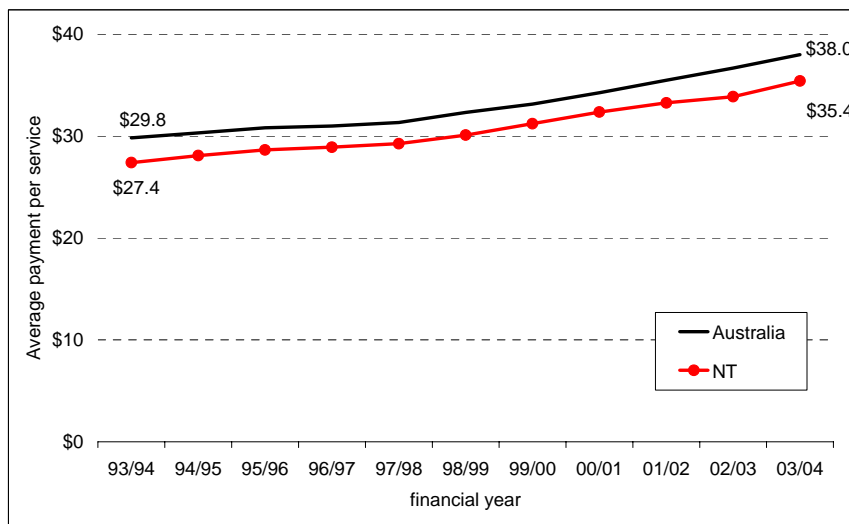
Figure 16: Medicare, average per capita payments, crude rates and age-standardised rates, 2003/04.



Source: HIC - MBS/PBS Group Statistics Report (online)

The average payment per Medicare service was \$35.4 in 2003/04 in the Northern Territory compared to \$38.0 in Australia overall (see Figure 17). As can be seen from the chart, this gap in average payments has been consistent over the ten-year period.

Figure 17: Medicare, average payment per service (current prices), Australia and Northern Territory, 1993/94 to 2003/04

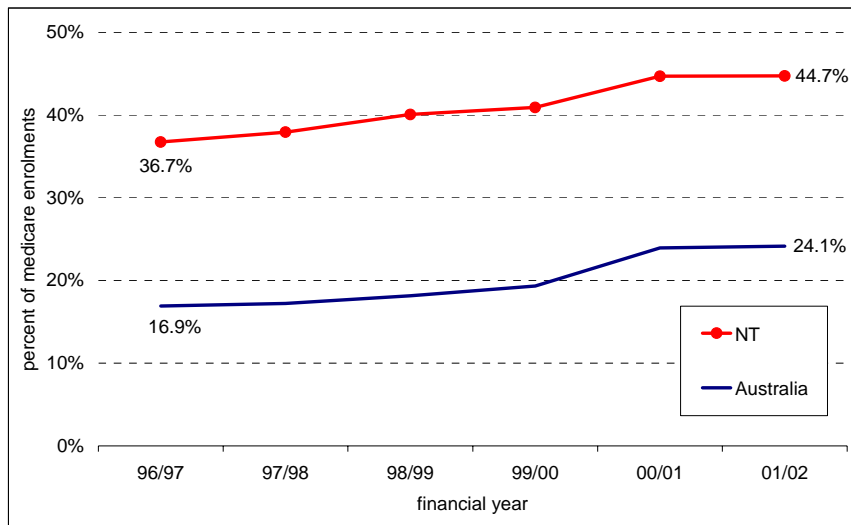


Source: HIC - MBS/PBS Group Statistics Report (online)

The HIC has also published information on the percentage of Medicare enrolments in each State/Territory who do not claim a Medicare service in a particular year. The latest available information is from 2001/02, and this shows that in that year 44.7 percent of Northern Territorians were not involved in a Medicare claim compared to only 24.1 percent in the overall Australian population (see Figure 18).



Figure 18: Medicare, percent of population who did not use Medicare, Australia and Northern Territory, 1996/97 to 2001/02



Source: HIC – MBS/PBS Group Statistics Report (online)

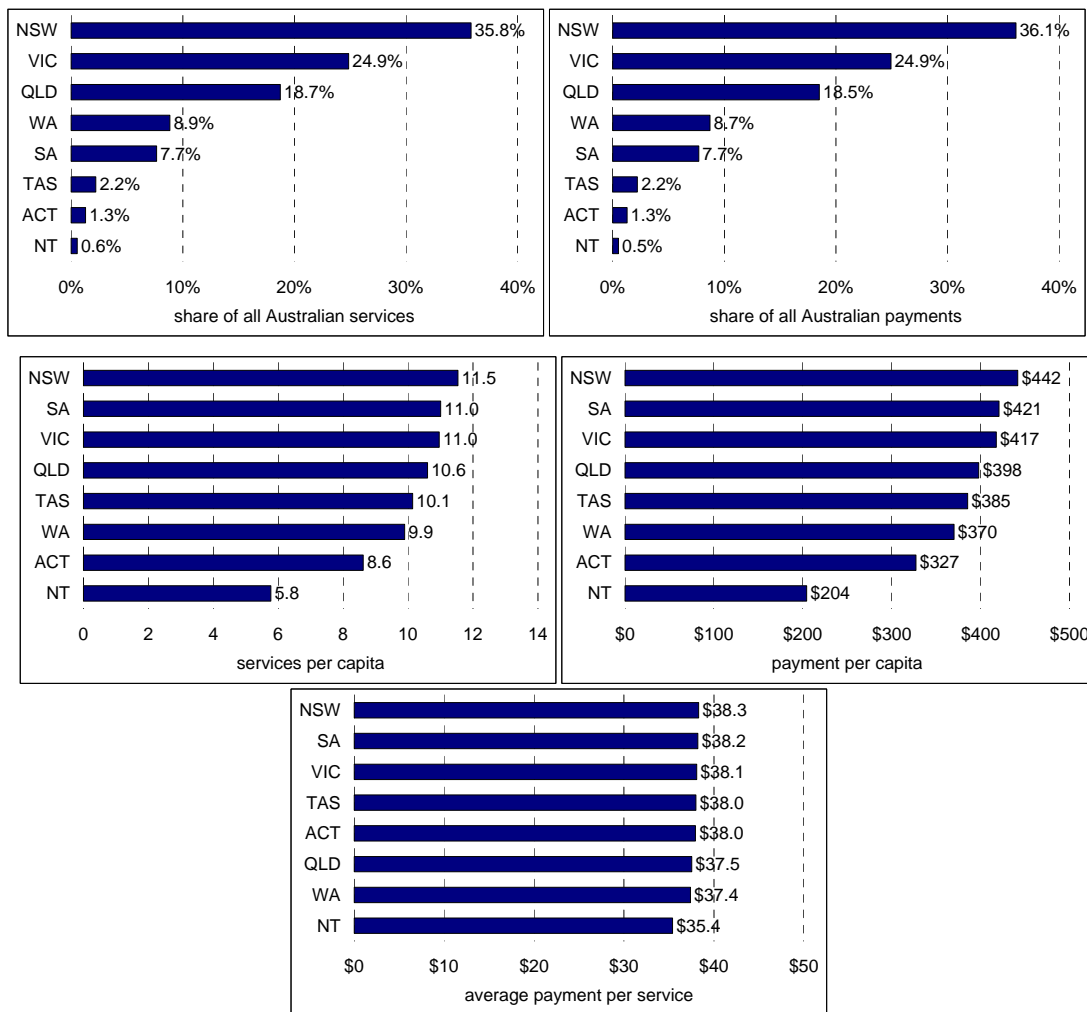
### 3.4 Medicare, State/Territory comparisons

The following chart (Figure 19) shows a number of major comparisons in relation to Medicare usage between the Northern Territory and the other Australian States and Territories for 2003/04.

Some major points are:

- NSW had the highest service per capita level with 11.5, almost double that of the Northern Territory's rate of 5.8;
- NSW (\$442), South Australia (\$421) and Victoria (\$417) all had a payment per capita level more than twice that of the Northern Territory (\$204); and
- the average payment per service was relatively uniform across the states/territories (\$37.4 to \$38.3) except for a noticeably lower level in the Northern Territory (\$35.4).

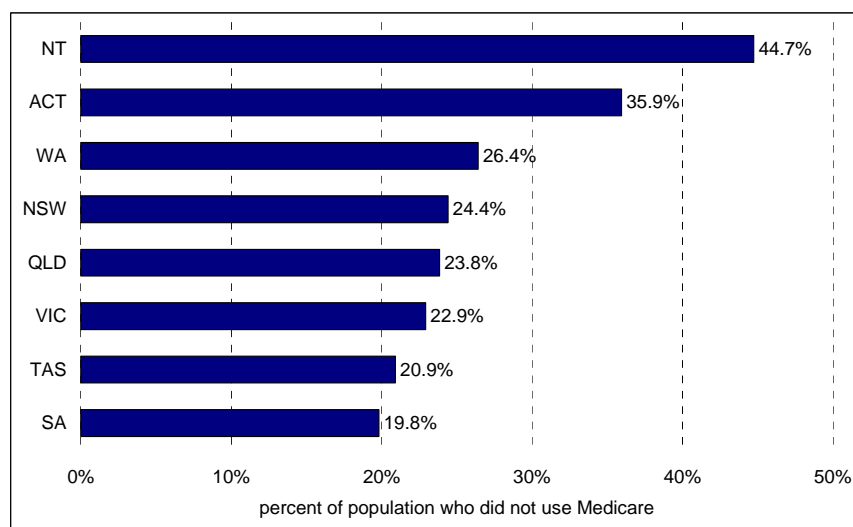
Figure 19: Medicare, State/Territory usage comparisons, 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

The proportions of the population in each State/Territory who did not use Medicare in 2001/02 are shown in Figure 20. The greatest contrast is between South Australia and the Northern Territory. In South Australia there are only 20 persons in 100 who did not use Medicare in 2001/02 compared with 45 in 100 in the Northern Territory.

Figure 20: Medicare, State/Territory comparison, percent of population who did not use Medicare, 2001/02



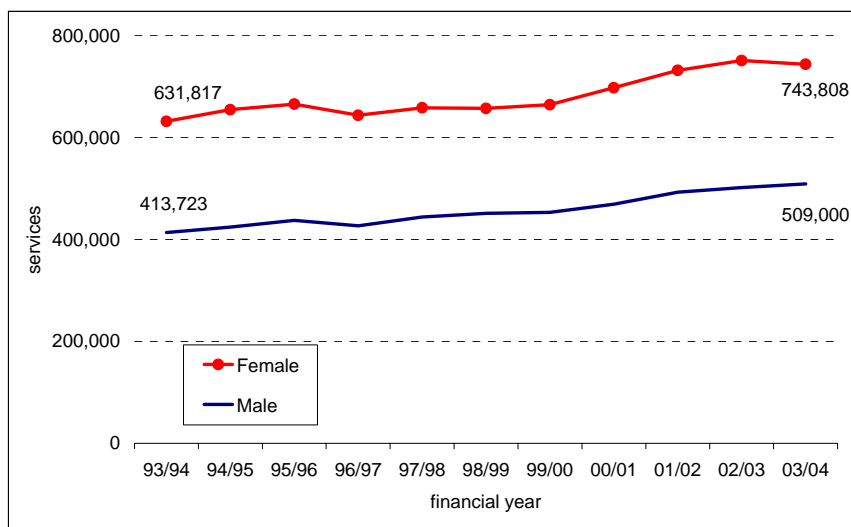
Source: HIC - MBS/PBS Group Statistics Report (online)

## 4 Medicare usage, gender and age patterns, Northern Territory

### 4.1 Gender

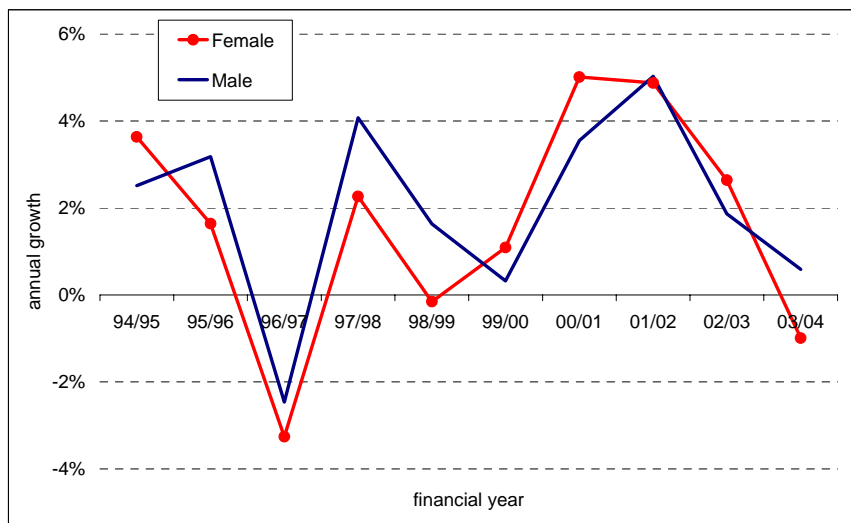
Females account for six out of every ten Medicare services in the Northern Territory, this compares to the Northern Territory population sex ratio (male to female: 1.11). In 2003/04 females accounted for 743,808 services compared to 509,000 for males (see Figure 21). The annual growth rates for male and female services follow the same general pattern (see Figure 22) although it is worth noting that the number of female services in 2003/04 was less (-1%) than in the previous year.

Figure 21: Medicare, services by gender, Northern Territory, 1993/94 to 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

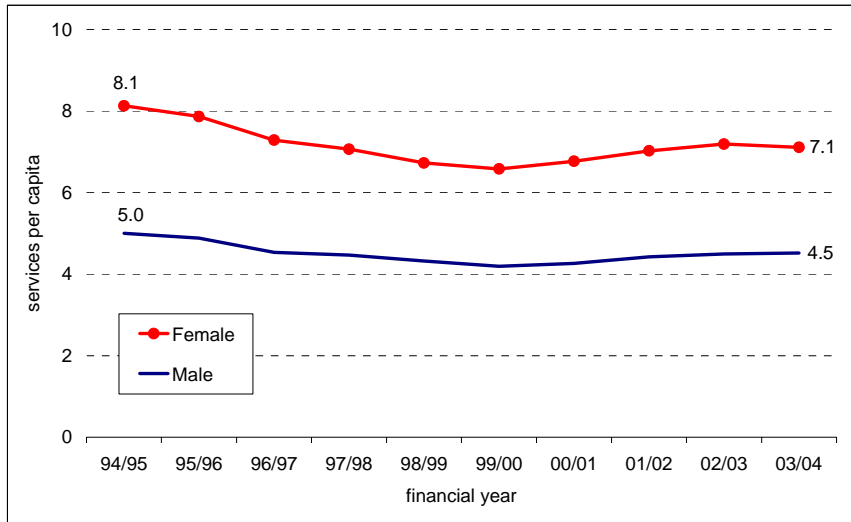
Figure 22: Medicare, annual growth in services by gender, Northern Territory, 1994/95 to 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

In 2003/04 females averaged 7.1 Medicare services per year compared to 4.5 services for males (see Figure 23). The female rate has dropped from 8.1 in 1994/95 and the male rate has dropped from 5.0 over the same period.

Figure 23: Medicare, services per capita by gender, Northern Territory, 1994/95 to 2003/04

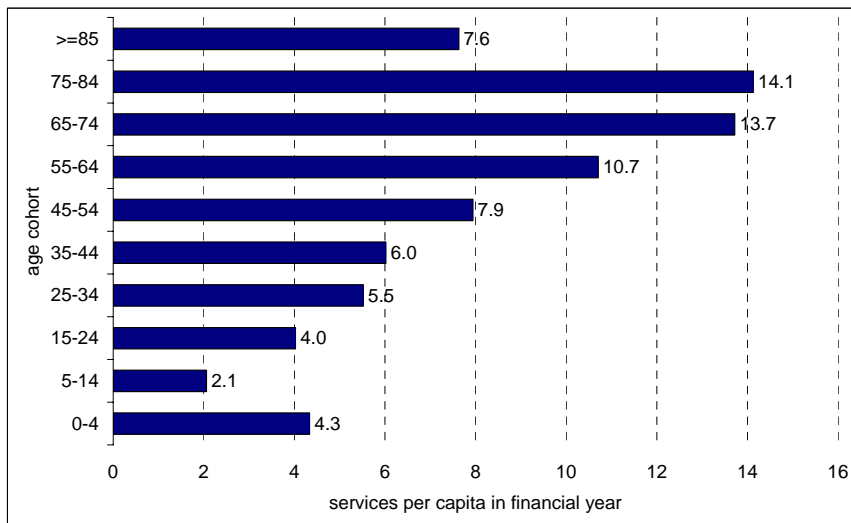


Source: HIC - MBS/PBS Group Statistics Report (online)

## 4.2 Medicare usage by age group

As expected, older age groups in the Northern Territory have higher usage rates of Medicare services. Figure 24 shows the number of Medicare services per capita for 2003/04 in the Northern Territory by age group. The higher usage age groups were the 75-84 years (14.1 services per capita), the 65-74 years (13.7) and the 55-64 years (10.7).

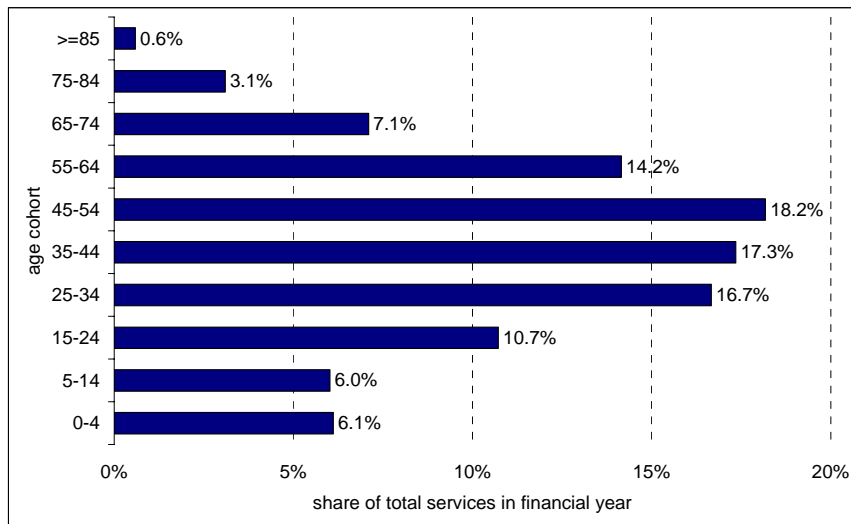
Figure 24: Medicare, services per capita by age cohort, Northern Territory, 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

Even though older age groups had a much higher usage rate, the overall population distribution across the age groups meant that the highest total consumption of Medicare services in 2003/04 in the Northern Territory was by 45-54 age group with 18.2 percent of all Medicare services. The 35-44 age group consumed 17.3 percent and the 25-34 age group consumed 16.7 percent (see Figure 25).

Figure 25: Medicare, share of total services by age cohort, Northern Territory, 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

In an earlier section of this paper it was identified that the Northern Territory Medicare usage level per capita is substantially less than the Australian level (refer to Figure 13). For example, in 2003/04 the Australian per capita average Medicare usage was 10.9 services. In comparison, over the same period, Northern Territory usage was equivalent to only 5.8 services.

It could be argued, on grounds of lower Medicare usage rates by the younger population groups (as seen in Figure 24 above), that the low Northern Territory Medicare usage may be attributed to the younger age distribution of the Northern Territory population in comparison to the rest of Australia. In 2001, the median age of the Northern Territory population was 30 years compared to the median age for all Australians of 35 years (see Table 1).

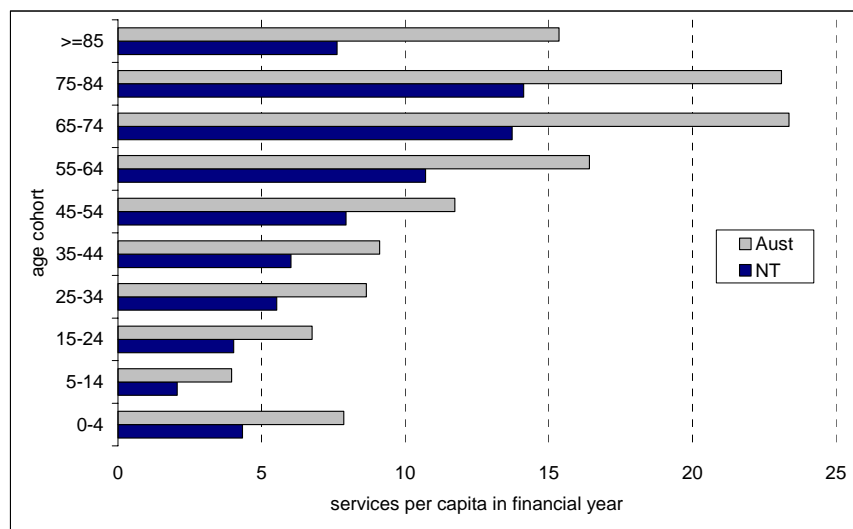
Table 1: Population median age, 2001 Census, by State/Territory and Australia

NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust.
35	35	35	37	34	36	30	32	35

Source: ABS 2001 Census Basic Community Profile and Snapshot.

However, as Figure 26 illustrates, the Northern Territory Medicare usage rates are substantially below the Australian usage rates for each and every age group. Taking the highest and lowest age groups as an example: for the 0-4 year group, the Northern Territory usage rate was 4.3 in 2003/04 compared to 7.9 for Australia; and for the 85 plus age group the Northern Territory usage rate was 7.6 or less than half the 15.4 usage rate for Australia.

Figure 26: Medicare, services per capita by age cohort, Northern Territory and Australia, 2003/04



Source: HIC - MBS/PBS Group Statistics Report (online)

## 5 Medicare Usage by Regions

The HIC website databases have only one type of sub-state regional break-up, which is by Divisions of General Practice. The Northern Territory has just two divisions, the Top End and Central Australia. The estimated populations in 2001 were 153,000 and 45,000 respectively. Fifty-five percent of the total Northern Territory population reside in Darwin urban areas, and these are located within the Top End Division. Only data from 2000/01 to 2002/03 are shown below, as these are the only three financial years for which accurate population figures for the divisions could be obtained.

### 5.1 Regional analysis – General Practice Divisions

Not all Medicare services are performed by Divisions of General Practice members. For example, pathology services are a large component of overall Medicare services but relatively few pathology services are performed by GP practices. Figure 27 shows that in 2002/03 general practitioners accounted for 42 percent of all Medicare services in the Northern Territory and 38 percent of all Medicare payments. However these data are very good indicators of primary health care attendance rates.

Figure 27: Medicare, share of services and payments by General Practitioners, Northern Territory, 2002/03

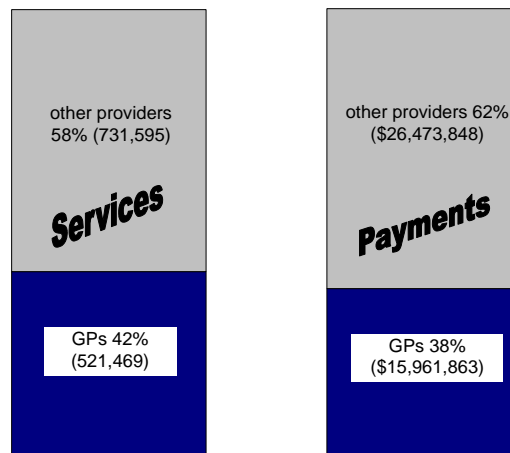
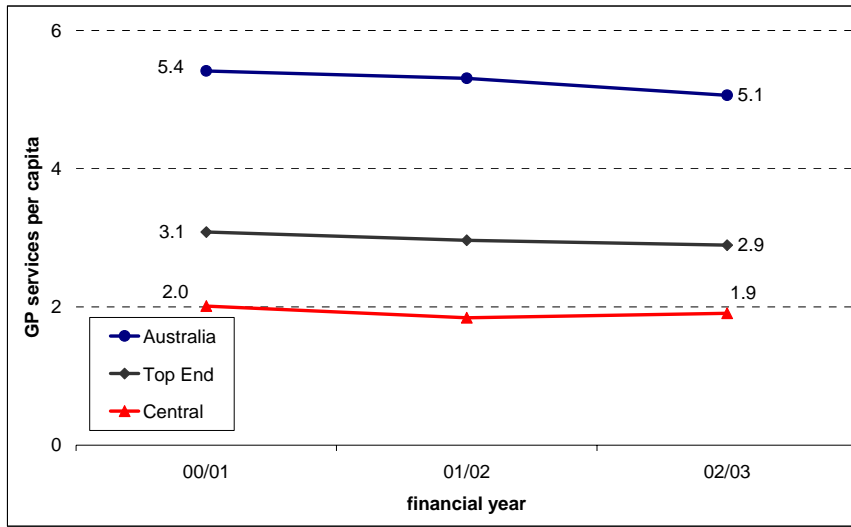


Figure 28 compares the two Northern Territory general practice divisions, as well as the total trend for all Australian divisions. In rounded terms, while the per capita average for Australia is 5 visits to a general practitioner each year, persons living in the Top End division visit only three times and persons living in the Central Australian division visit only twice each year.



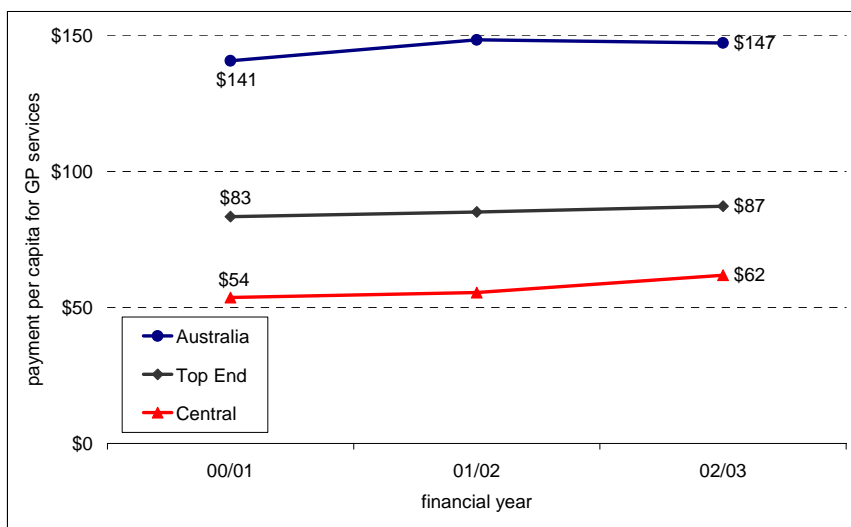
Figure 28: Medicare, GP services per capita by General Practice Division, Northern Territory and Australia, 2001/02 to 2002/03



Source: HIC - MBS/PBS Group Statistics Report (online)

The average annual per capita Medicare payment for general practice visits are shown in Figure 29. The relativities are more or less the same as that in Figure 28, which is understandable as the average costs per visit are similar across the various divisions. In 2002/03 the average cost per service in the Top End was \$30.2 and for Central Australia the average was \$32.4. This compared to the Australia average of \$29.1.

Figure 29: Medicare, payments per capita for GP services by General Practice Division, Northern Territory and Australia, 2001/02 to 2002/03

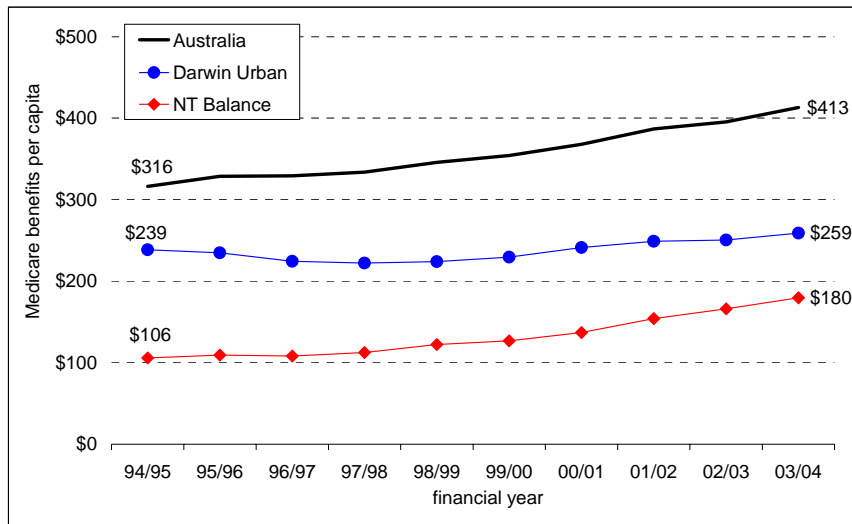


Source: HIC - MBS/PBS Group Statistics Report (online)

## 5.2 Regional analysis – Darwin versus Northern Territory balance

Information from DoHA enabled a comparison between Medicare payments and services within the Darwin urban areas with the balance of the Northern Territory. The comparison of per capita payment levels is shown in Figure 30. The figure reveals there has been a sustained rise in per capita payments of Medicare benefits in the rural/remote areas of the Northern Territory. This increase has coincided with the Medicare bulk billing initiatives undertaken by the District Medical Officers and the increasing availability of resident General Practitioners in some larger remote communities. There was only a slight increase in per capita Medicare benefits paid to residents of the Darwin urban areas.

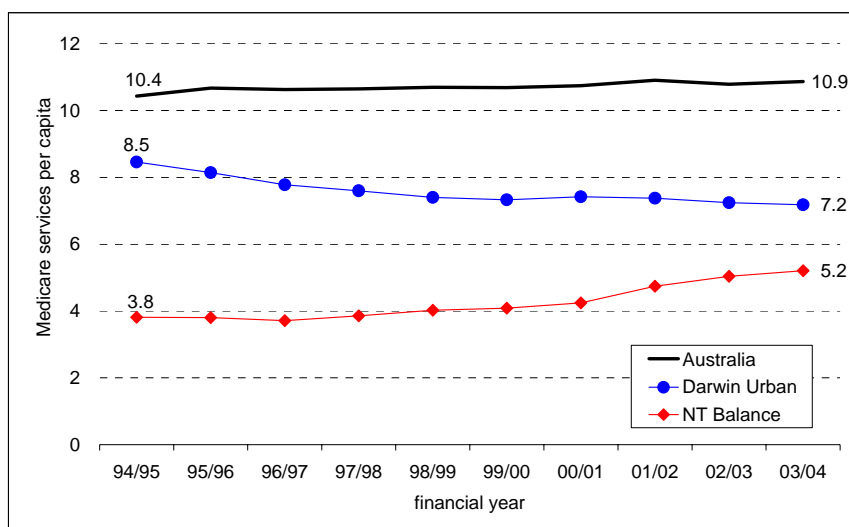
Figure 30: Medicare, payments per capita, Darwin, Northern Territory Balance and Australia, 1994/95 to 2003/04



Source: DoHA request

Medicare services per capita are shown in Figure 31. This shows a significant decrease in per capita Medicare services provided to residents of the Darwin urban areas during the period of study (from 8.5 to 7.2), over a period in which the national trend showed a slight increase (10.4 to 10.9) and the rate in the Northern Territory Balance area increased from 3.8 to 5.2.

Figure 31: Medicare, services per capita, Darwin, Northern Territory Balance and Australia, 1994/95 to 2003/04



Source: DoHA request

## 6 The Northern Territory's Primary Care Funding Gap

The previous section has shown that the Northern Territory has not experienced the inflow of Medicare funding that would be expected in relation to a population of the size of the Northern Territory. But a calculation of the size of the shortfall cannot be made simply on the crude usage rates as shown in the previous section, but on age-standardised rates. In the following analysis indirect sex and age standardised rates have been used to estimate expected Medicare benefit payments to the Northern Territory on the basis of Australian national average per capita payment. This involves matching the national per capita payment levels in each year by age and sex to the Northern Territory population structure.

### 6.1 The shortfall

Table 2 shows the results of this standardisation. For example, in 2003/04, if every age and sex cohort in the Northern Territory population received the same per capita payment as occurred nationally, then \$67.3 million dollars would have flowed into the Northern Territory. This compares to the actual amount of only \$44.2 million, or a deficit on the expected of \$23.1 million. In per capita terms this is equivalent to Medicare payments of \$116 per person less than expected.

**Table 2: Comparison between the actual and expected Medicare payments, Northern Territory 1994/95 to 2003/04**

Year	Expected*	Actual	NT deficit	NT per capita deficit
	\$m	\$m	\$m	\$
94/95	46.1	30.3	15.8	91.0
95/96	48.9	31.6	17.3	97.6
96/97	50.0	30.9	19.1	104.7
97/98	51.8	32.3	19.6	104.8
98/99	54.5	33.4	21.1	111.3
99/00	56.4	34.9	21.5	111.8
00/01	59.3	37.7	21.6	110.4
01/02	63.2	40.7	22.4	113.6
02/03	64.6	42.4	22.2	111.8
03/04	67.3	44.2	23.1	116.3
<b>Total</b>	<b>562.2</b>	<b>358.4</b>	<b>203.8</b>	<b>98.7</b>

\* expected benefits were estimated on the national average payment, standardised by sex and age.

Table 2 indicates that the deficit has been increasing over time. It has increased from \$15.8 million in 1994/95 to the 2003/04 level of \$23.1 million at an average annual compound rate of 4.3 percent. This is a shortfall of around \$100 per person per year. The Northern Territory has missed over \$200 million during the period 1994/95-2003/04 from direct Medicare payments.

This shortfall calculation is based on an equal per capita basis, it would be even greater if it was based on a needs basis. That is, it can be shown that the Northern Territory population is in greater need of primary health care services than the rest of Australia. The shortage figures shown above relate to just matching the Northern Territory services to those of Australia in general.

## 6.2 Additional funding programs

The actual size of the funding gap is partially overstated in the above table in that it does not include other funding streams provided either directly or indirectly by the Australian Government to compensate for the known shortfall in primary care funding.

Four Coordinated Care Trials (CCT) were conducted in Aboriginal communities between 1997 and 1999. The trials were located in Katherine (NT), the Tiwi Islands (NT), Wilcannia (NSW) and Perth/Bunbury (WA). The primary aim of the Coordinated Care Trials was to test whether coordinating care for people with complex needs through individual care plans and the pooling of funds from existing, Federal, State and joint programs, would result in improved client health and wellbeing within current resource levels.<sup>11</sup>

A separate initiative is the Primary Health Care Access Program (PHCAP),<sup>12</sup> which was announced in the 1999-2000 Federal Budget. PHCAP was initially funded with \$78.8 million over four years and was to be implemented in areas where joint regional planning had been completed as well as replacing the funding arrangements in the four Aboriginal Coordinated Care Trial sites. PHCAP is not a direct replacement for Medicare. It has been designed to cover more than just basic clinical and medical care but various other aspects including capital works (see Appendix 2). Table 3 shows that the Commonwealth Government's PHCAP expenditure in the Northern Territory has grown from \$8.998 million in 2002/03 to an expected \$16.621 million in 2004/05.

**Table 3: PHCAP, Commonwealth expenditure in Northern Territory and Australia, 2002/03 to 2004/05**

	02/03	03/04	04/05	Total
	\$m	\$m	\$m	\$m
NT	8.998	15.168	16.621	40.787
<b>Australia</b>	<b>13.861</b>	<b>35.455</b>	<b>55.586</b>	<b>104.902</b>

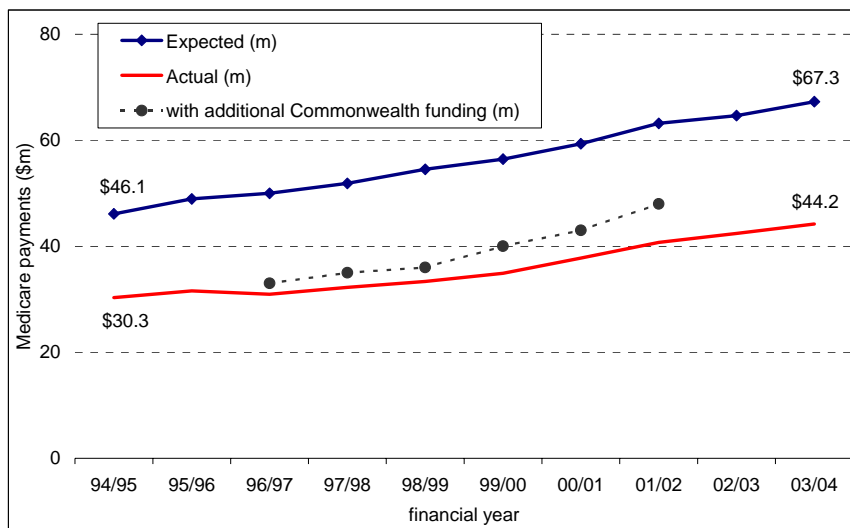
*Source: Senate Community Affairs Legislation Committee Budget Estimates 2004-2005. Volume 6 Feb 2005.*

This leads on to the question of whether the PHCAP and other Commonwealth funding initiatives have substantially closed the Medicare funding gap outlined above. To partially answer this we can examine medical services expenditure estimates as done by AIHW.

The AIHW has published health and welfare expenditure figures that include estimates of the distribution of various Commonwealth initiatives across the states and territories. That is, the AIHW method establishes expenditure levels by the Commonwealth Government on medical services where medical services are defined as “services listed in the Medical Benefits Schedule that are provided by registered medical practitioners”. These estimates include Medicare but are not only Medicare. However, the most recent data are for 2001/02 and so they do not cover the period where the PHCAP expenditure levels have substantially increased.

Figure 32 displays the initial gap based on the known Medicare payment rates. The AIHW estimates of total Commonwealth expenditure on medical services is also shown on the chart. This shows that for the years covered by the AIHW data, and taking into account the additional Commonwealth funding, the flow of funding to the Territory remained substantially below the expected levels in 2001/02. As it has not been determined what proportion of the recent PHCAP funding falls into the medical services category, the degree to which funding has closed the gap in more recent years cannot be confidently established.

**Figure 32: Medicare, actual payments compared to age-standardised expected payments, Northern Territory, 1994/95 to 2003/04**



Source: HIC - MBS/PBS Group Statistics Report (online). Additional Commonwealth funding sourced from AIHW, Health Expenditure Australia, various issues.<sup>13,14,15</sup>

## 7 Availability of general practitioner services

### 7.1 State and Territory level

An important aspect of any study of Medicare usage patterns is the availability of general practitioners. Variance in Medicare usage rates can be due to a number of factors but the presence of an over or under supply of general practitioners can be a major factor.

Table 4 lists the number of general practitioners by Australian state and territory for 2001/02. It shows that the Northern Territory had 281 general practitioners who had claimed against Medicare in the year. In relative terms this initially seems quite a high figure given the population of the Northern Territory. In fact, the Northern Territory had the highest ratio of the number of general practitioners to the general population. The ratio for the Northern Territory was 14.2 general practitioners for every 10,000 persons, whereas the national figure was 12.4.

However these data are misleading. Table 4 also shows an estimate of the number of full workload equivalent (FWE<sup>i</sup>) general practitioners. This is arguably a more accurate measure of the availability of general practitioners and is especially relevant where substantial numbers of general practitioners work part-time or casually or in some other way have a significantly reduced workload. While the Northern Territory may have had 281 general practitioners these equated to only 93 FWEs. And the ratio of FWEs to population shows that the Northern Territory had 4.7 FWEs per 10,000 persons, clearly the lowest ratio of all states and territories (see Table 4 and Figure 33).

**Table 4: General Practitioners by State/Territory 2001/02**

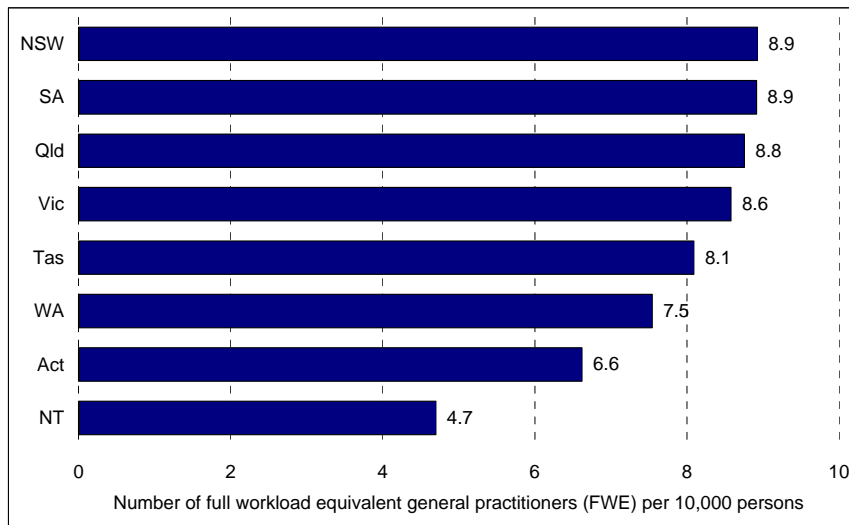
State/ Territory	GP	FWE*	Population**	GPs per 10,000 persons	FWEs per 10,000 persons
NSW	7,991	5,898	6,608,134	12.1	8.9
Vic	5,887	4,144	4,830,508	12.2	8.6
Qld	4,713	3,212	3,668,848	12.8	8.8
SA	2,023	1,351	1,515,523	13.3	8.9
WA	2,353	1,443	1,913,273	12.3	7.5
Tas	653	382	472,188	13.8	8.1
NT	281	93	197,970	14.2	4.7
Act	406	212	320,201	12.7	6.6
<b>Total</b>	<b>24,307</b>	<b>16,735</b>	<b>19,526,645</b>	<b>12.4</b>	<b>8.6</b>

\* FWE: see footnote. \*\* Population is as at December 2001 (ABS Cat No. 3101.0 Table 4) Source: DoHA.

So, by using the cruder measure of the ratio of general practitioners to the population, the Northern Territory has the highest (best) ratio, but by using the more accurate measure of FWEs to population, the Northern Territory has the lowest (worst) ratio.

<sup>i</sup> Full Workload Equivalent (FWE) is calculated by dividing each doctor's Medicare billing by the average billing of full-time doctors for the reference period.

Figure 33: General Practitioners – Full Workload Equivalents (FWEs) per 10,000 persons, 2001/02



Source: DoHA.

But, given the above, it would not be strictly correct to say that Northern Territory general practitioners are different *per se* from those in other states. Northern Territory general practitioners are much more likely to operate in a rural or remote area and, across Australia, general practitioners in these areas have much lower Medicare claiming rates than urban general practitioners. A 2001 DoHA report<sup>16</sup> found that in 1995/96 the urban population averaged 6.2 GP services compared to 3.6 services in the most remote areas. In addition, Pope and Deeble<sup>17</sup> found that Northern Territory has the highest proportion of rural and remote general practitioners whose primary source of income is either a government salary with right of private practice or a salary from an Aboriginal community controlled organisation. Such arrangements will influence general practitioners' Medicare claiming rate.

## 7.2 NT regional level

The above section looked at the level of general practitioner availability in the Northern Territory overall. This section examines Northern Territory regional data. The only regional information available from the HIC website is at the General Practice Division level. In the Northern Territory there are only two divisions, the Top End Division and the Central Australian Division. In June 2003 it is estimated that these serviced populations of 145,440 and 52,594 persons respectively. Table 5 shows that the number of Medicare-claiming general practitioners in the Territory increased from 240 in 1996/97 to 305 in 2003/04. This increase of 65 general practitioners equates to an increase of 27 percent over the period.

The number in the Central Australian Division grew from 56 to 94 over the same period, with an additional 38 general practitioners, equating to a 68 percent increase. The Top End Division level went from 184 to 211, an increase of 27 general practitioners, a 15 percent increase over the period.



**Table 5: General Practitioners (Medicare-claiming) in the Northern Territory by GP Division, 1996/97 to 2003/04**

GP Division	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04
Top End	184	191	191	189	189	196	210	211
Central	56	59	68	73	79	87	89	94
Total NT	240	250	259	262	268	283	299	305

Note that the 283 GPs figure for the Northern Territory for 2001/02 does not exactly match the figure of 281 as given in Table 4. Source: HIC - MBS/PBS Group Statistics Report (online)

The figures in Table 5 are headcounts only. Ideally, the data in that table would include full workload equivalents in order to give a fuller picture of general practitioner availability over time. Some limited estimates were obtained from the Primary Health Care Research and Information Service (PHCRIS) at Flinders University who in turn obtained the information from DoHA. However, their data do not agree fully with the data in Table 4, which is also sourced from DoHA. The PHCRIS information is shown in Table 4. The tables indicates that the FWE ratio for 10,000 persons was substantially lower in the Central Australian Division than it was for the Top End Division, 3.8 and 5.0 FWEs per 10,000 persons respectively in 2002/03.

**Table 6: General Practitioners (Medicare-claiming) - Full Workload Equivalent, Northern Territory GP Divisions 2000/01 to 2002/03**

GP Divisions	00/01	01/02	02/03
FWEs	FWEs	FWEs	FWEs
Top End	69.3	69.3	73.0
Central	18.9	18.1	20.0
NT	88.2	87.4	93.0
FWEs per 10,000 persons			
Top End	4.8	4.8	5.0
Central	3.6	3.4	3.8
NT	4.5	4.4	4.7

Source: PHCRIS and DoHA

Table 7 lists a number of comparisons for the general practitioners in the two Northern Territory Divisions in relation to Medicare billing patterns. These data are another way of indicating that Northern Territory billing patterns are vastly different from the rest of Australia and that within the Northern Territory there are further significant differences between the Top End and Central Australian divisions. For example:

- in 2003/04 the Australian average number of Medicare services billed per general practitioner was 4,816. The average was only 1,713 for the Northern Territory, with 1,979 for the Top End Division and 1,115 for the Central Australian Division.
- in 2003/04 the Australian average total Medicare payment per general practitioner was \$148,341. The average was only \$55,075 for the Northern Territory, with \$62,264 for the Top End Division and \$38,939 for the Central Australian Division.

Table 7: Medicare, usage by GP Divisions, Northern Territory, 1997/98 to 2003/04

GP Division	97/98	98/99	99/00	00/01	01/02	02/03	03/04
<b><u>Average Medicare services</u></b>							
Top End	2,417	2,320	2,326	2,346	2,195	2,004	1,979
Central	1,740	1,566	1,376	1,337	1,118	1,130	1,115
NT	2,257	2,122	2,061	2,048	1,864	1,744	1,713
Australia	5,084	5,053	4,977	4,884	4,820	4,705	4,816
<b><u>Average Medicare total payment</u></b>							
Top End	\$57,034	\$56,074	\$58,405	\$63,503	\$63,060	\$60,479	\$62,264
Central	\$40,510	\$37,878	\$34,248	\$35,644	\$33,689	\$36,642	\$38,939
NT	\$53,134	\$51,297	\$51,674	\$55,291	\$54,031	\$53,384	\$55,075
Australian	\$119,580	\$120,907	\$123,084	\$127,018	\$134,865	\$136,970	\$148,341
<b><u>Average payment per service</u></b>							
Top End	\$23.6	\$24.2	\$25.1	\$27.1	\$28.7	\$30.2	\$31.5
Central	\$23.3	\$24.2	\$24.9	\$26.7	\$30.1	\$32.4	\$34.9
NT	\$23.5	\$24.2	\$25.1	\$27.0	\$29.0	\$30.6	\$32.2
Australian	\$23.5	\$23.9	\$24.7	\$26.0	\$28.0	\$29.1	\$30.8

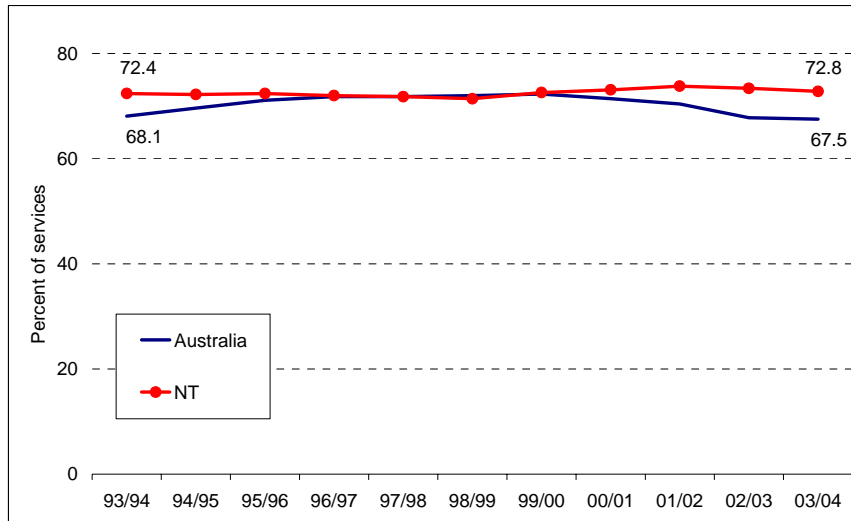
Source: HIC - MBS/PBS Group Statistics Report (online)

## 8 Medicare, billing types

### 8.1 Bulk-billing rates

Medicare was designed and developed as a universal health care system where ideally a patient is treated by a general practitioner and the general practitioner bills Medicare directly with no out-of-pocket cost (either temporarily or permanently) to the patient. The availability of bulk-billed primary care is especially important for lower income groups. The Northern Territory had a bulk-billing rate of 72.8 percent in 2003/04 and it has been very close to this level since 1993/94 (see Figure 34). The Northern Territory rate has been maintained while the Australian rate has declined substantially in recent years. The rate of bulk-billing for Australia dropped from 72.0 percent in 1998/99 to 67.5 percent in 2003/04.

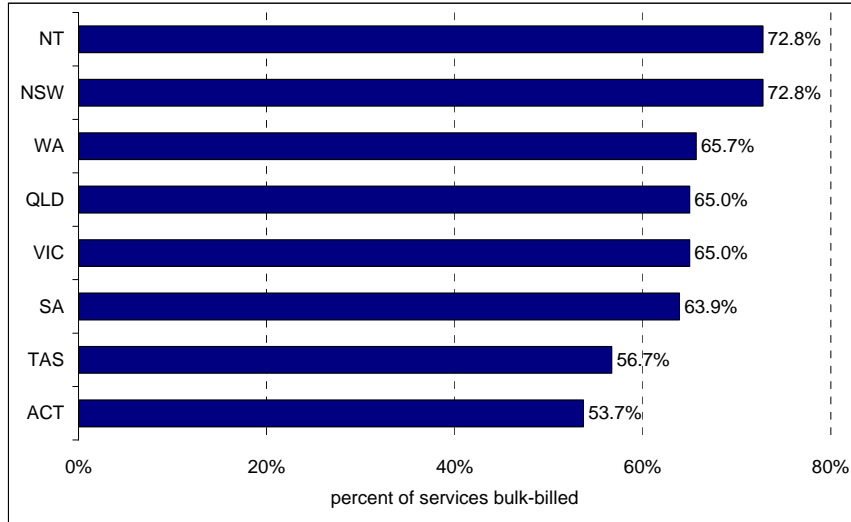
Figure 34: Medicare, percent of services by bulk billing payment, Australia and Northern Territory, 1993/94 to 2003/04



Source: HIC – MBS/PBS Group Statistics Report (online)

In 2003/04, the Northern Territory and NSW had the equal highest rate of bulk-billing of all the states and territories (see Figure 35).

Figure 35: Medicare, Bulk-billing rate per State/Territory, 2003/04



Source: HIC – MBS/PBS Group Statistics Report (online)

## 8.2 Bulk-billing, regional data

The HIC publish bulk-billing rates for federal electorates on a calendar year basis. The rates are not based on all Medicare services but those for non-referred (general practitioner) attendances so these rates are not comparable with those in Figure 34 above. The rates for the two federal electorates in the Northern Territory, Lingiari and Solomon, are shown in Table 8. The data indicate that bulk-billing rates are higher in the southern electorate (68.5% in 2002) compared to the northern electorate (55.7%).

Table 8: Medicare, bulk-billing rates for non-referred (general practitioner) attendances by federal electorate, Northern Territory, 2002 and 2003

Federal electorate	2002	2003
Solomon (northern NT)	58.4%	55.7%
Lingiari (southern NT)	70.1%	68.5%

Source: HIC – MBS/PBS Group Statistics Report (online)

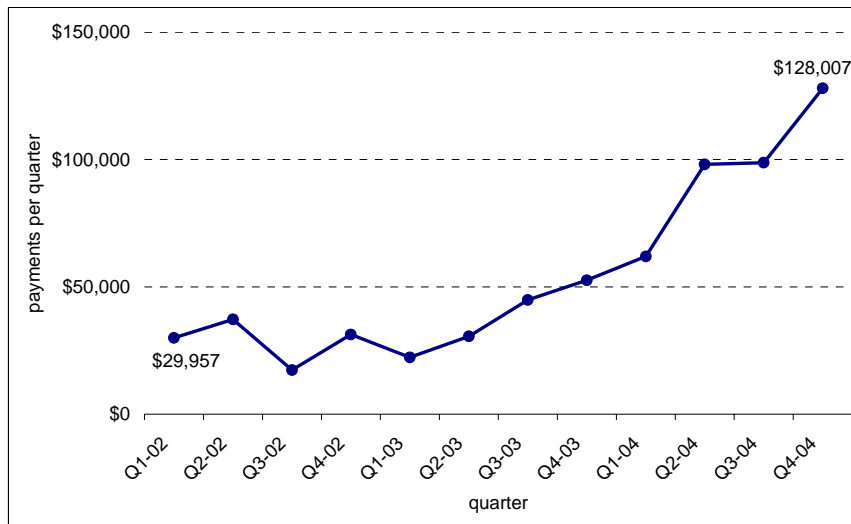
## 9 Enhanced Primary Care Plans

Although they are not new Medicare items, there has been increased emphasis in recent times in the Northern Territory on using the Medicare Enhanced Primary Care (EPC) items. An EPC multidisciplinary care plan is a written, comprehensive, longitudinal plan for the care of a patient with one or more chronic conditions and complex care needs. The relevant Medicare items are:

- items 720, 724 and 726 relate to patients who are not in-patients;
- items 722 and 728 relate to patients who are in-patients; and
- item 730 relates to EPC patients who are in a residential aged care facility.

Figure 36 shows that in the Northern Territory, the combined level of payments for items 720, 724 and 726 has increased dramatically in recent quarters. In the first quarter of 2002 payments were only \$29,957 but these had increased to \$128,007 by the fourth quarter of 2004. On a calendar year basis, Northern Territory payments increased in 2004 by 157 percent (see Table 9). The table also shows that the use of the EPC Medicare items increased dramatically right throughout Australia in 2002. Australian payments went from \$2.5 million to \$21.5 million. In 2004 Northern Territory had a 0.9 percent share of all Australian payments, up from 0.5 percent in the previous year.

**Figure 36: Medicare, enhanced primary care plans (items 720, 724 & 726), quarterly payments, Northern Territory, Qtr 1 2002 to Qtr 4 2004.**



Source: HIC - MBS/PBS Group Statistics Report (online)

Table 9: Medicare, enhanced patient care (items 720, 724 & 726), calendar year payments, Northern Territory and Australia, 2002 to 2004.

Year	NT		Australia		NT share
	\$	annual growth (%)	\$	annual growth (%)	
2000	33,828		2,475,675		1.4%
2001	104,541	209	21,486,081	768	0.5%
2002	115,722	11	34,550,014	61	0.3%
2003	150,265	30	29,042,339	-16	0.5%
2004	386,892	157	42,351,275	46	0.9%

Source: HIC - MBS/PBS Group Statistics Report (online)

## 10 Medicare Plus

Under Medicare Plus, six new items were introduced into the Medicare Benefits Schedule commencing February 2004 to further encourage bulk billing. These were restricted however to Australian Government concession cardholders and children aged less than 16 years. There were three new Medicare items to cover a \$5 billing incentive (items 10990, 64990 and 74990) and three to cover a higher \$7.50 bulk billing incentive for services provided in regional, rural and remote areas, and in Tasmania (items 10991, 64991 and 74991).

- **10990** - General Medical Services (\$5 item);
- **64990** - Diagnostic Imaging Services (\$5 item);
- **74990** - Pathology Services (\$5 item);
- **10991** - General Medical Services (\$7.50 item);
- **64991** - Diagnostic Imaging Services (\$7.50 item); and
- **74991** - Pathology Services (\$7.50 item).

The payments for these new items are shown in Table 10. The data are only for the first three quarters of 2004. For the Northern Territory the extra payments amounted to \$714,000 for the year up to September 2004.

**Table 10: Medicare, payments by new Medicare Plus items, first three quarters of 2004.**

Item	NSW	VIC	QLD	SA	WA	TAS	ACT	NT	Australia
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
10990	49.979	32.285	23.619	11.225	12.231	1.246	0.807	0.392	131.785
10991	10.322	8.209	12.076	3.385	3.330	3.338	0.124	0.307	41.091
64990	0.020	0.019	0.018	0.007	0.013	0.001	0.001	0.000	0.079
64991	0.001	0.003	0.022	0.006	0.005	0.002	0.000	0.000	0.040
74990	0.247	0.171	0.104	0.041	0.050	0.007	0.002	0.005	0.626
74991	0.043	0.059	0.054	0.009	0.011	0.014	0.000	0.010	0.199
<b>Total</b>	<b>60.612</b>	<b>40.745</b>	<b>35.894</b>	<b>14.674</b>	<b>15.640</b>	<b>4.607</b>	<b>0.933</b>	<b>0.714</b>	<b>173.820</b>
share	34.9%	23.4%	20.6%	8.4%	9.0%	2.7%	0.5%	0.4%	100.0%

Source: HIC - MBS/PBS Group Statistics Report (online)

As these are bulk-billing incentives, the question then is whether they had any effect on bulk-billing rates. Table 11 indicates that there was certainly an increase in the rate of bulk-billing in Australia between the September quarter 2004 and the same quarter in the previous year. The Australian rate increased by 2.4 percentage points to 69.1 percent. The Northern Territory bulk-billing rate increased from 71.5 percent to 74.0 percent, an increase of 2.5 percentage points.

**Table 11: Medicare, bulk-billing rates by State/Territory, Sept Qtr 2004.**

	Sept Qtr 2004 %	% points change on Sept Qtr 2003
NSW	73.6	1.1
Vic	66.6	2.2
Qld	67.2	3.6
SA	66.6	4.8
WA	67.2	2.5
Tas	61.9	6.7
NT	74.0	2.5
ACT	54.3	1.1
<b>AUST</b>	<b>69.1</b>	<b>2.4</b>

Source: DoHA website

A further question is whether the increase in bulk-billing had any effect on the number of Medicare services. Table 12 shows Medicare services data for the 6 month period covering the June and September quarters in years 2002, 2003 and 2004. In 2004 the number of Medicare services in Australia in that six month period was 4.2 percent above that in the same period in the previous year. Similarly, the number of services in the Northern Territory had risen by 4.0 percent. There are many factors in determining the level of Medicare usage and it would need more detailed analysis before it could be confidently stated that the increase in Medicare usage has been partly the result of the bulk-billing incentives. Even if the increased usage could be attributed to the incentives, they are not contributing in any substantial way to closing the gap between the Northern Territory usage rates and those of the rest of Australia.

**Table 12: Medicare, number of services for June and September quarters combined, 2002 to 2004**

June to Sept quarters combined	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust.
year	mill.	mill.	mill.	mill.	mill.	mill.	mill.	mill.	mill.
2002	41.446	29.264	21.012	8.981	10.136	2.614	0.619	1.546	115.618
2003	40.834	28.350	20.716	8.795	10.036	2.548	0.616	1.507	113.403
2004	42.186	29.501	22.304	8.970	10.406	2.610	0.641	1.530	118.149
growth	%	%	%	%	%	%	%	%	%
2003 on 2002	-1.5	-3.1	-1.4	-2.1	-1.0	-2.5	-0.4	-2.5	-1.9
2004 on 2003	3.3	4.1	7.7	2.0	3.7	2.5	4.0	1.5	4.2

Source: DoHA website

In addition to the bulk-billing incentives discussed above, two new items were also introduced in early 2004, an immunisations item (10993) and an item for wound treatment provided by practice nurses on behalf of general practitioners (10996). These are both \$8.50 items.



Details of the usage of these items are shown in Table 13. Their introduction goes some way to explain the increase in the number of Medicare services discussed above. Table 12 indicates that Medicare services increased by 25,000 for the six-month period of 2004 whereas Table 13 indicates that 7,395 of these additional services were due to these two new items.

**Table 13: Medicare, other new items for June and September quarters combined, 2002 to 2004**

	NT	Aust.
<i>Services</i>	no.	no.
Immunisation (10993)	5,714	778,581
Wound Treatment (10996)	1,681	443,877
Total	7,395	1,222,458
<i>Payments</i>	\$	\$
Immunisation (10993)	48,657	6,618,867
Wound treatment (10996)	14,289	3,774,613
Total	62,946	10,393,480

*Source: HIC - MBS/PBS Group Statistics Report (online)*

## 11 Pharmaceutical Benefits Schedule (PBS) historical trends

### 11.1 PBS and RPBS

There are two components to the Australian pharmaceutical benefits scheme, the main Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS). For the Northern Territory in 2003/04, the RPBS accounted for 4.5 percent of the total services (see Table 14). The analysis in this report pools the data from the PBS and RPBS and all further references to the PBS include both schemes.

**Table 14: Pharmaceutical Benefits Schemes – PBS and RPBS, number of services, Northern Territory, 1993/94 to 2003/04**

Year	Services			Share of services	
	PBS	RPBS	Total	PBS	RPBS
	no.	no.	no.	%	%
93/94	371,773	8,820	380,593	97.7	2.3
94/95	410,476	7,786	418,262	98.1	1.9
95/96	433,832	9,533	443,365	97.8	2.2
96/97	433,078	12,084	445,162	97.3	2.7
97/98	443,179	12,763	455,942	97.2	2.8
98/99	457,719	14,439	472,158	96.9	3.1
99/00	475,498	17,133	492,631	96.5	3.5
00/01	502,030	20,233	522,263	96.1	3.9
01/02	523,863	22,899	546,762	95.8	4.2
02/03	540,327	25,198	565,525	95.5	4.5
03/04	555,792	26,465	582,257	95.5	4.5

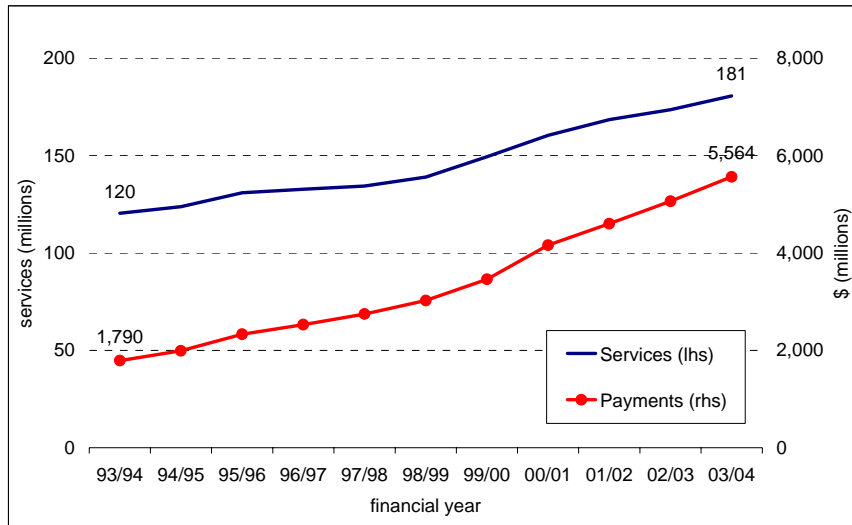
Source: HIC – MBS/PBS Group Statistics Report (online)

The information in the above table was drawn from the HIC website in late 2004. There are also a number of other published sources with slightly different totals. These minor variations are likely to be a result of two factors. The first is a result of corrections and other amendments. The second arises in that there appears to be some flexibility in what gets included in reports as part of PBS. A prime example is funding for the *Doctor's Bag*, which is included in PBS in some published reports and omitted in others. The differences resulting from this type of omission is not significant in relation to the discussion presented here. There is however one exception which is created by the reporting of Section 100 payments. This matter is discussed below.

### 11.2 PBS, Australian usage levels

The number of PBS services (ie scripts) in Australian increased from 120 million in 1993/94 to 181 million in 2003/04. This was an increase of 51 percent. The level of payments increased from \$1.790 billion to \$5.564 billion over the same period for an increase of 211 percent (see Figure 37).

Figure 37: PBS, Services and payments (current prices), Australia, 1993/94 to 2003/04

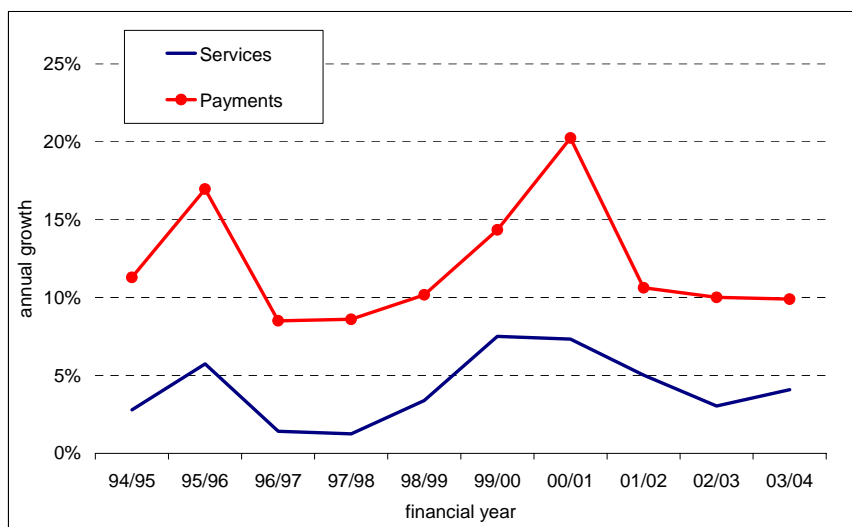


Source: HIC - MBS/PBS Group Statistics Report (online)

In annual terms, it was mentioned earlier that Medicare payments increased at an average annual rate of 4.8 percent over the period 1993/94 to 2003/04. PBS payments increased by an average annual rate of 12.0 percent over the same period. Individual annual growth rates are shown in Figure 38.

The much higher growth rates for PBS payments compared to Medicare payments has led to the PBS growing substantially in importance. In 1993/94 PBS payments were 25 percent of the total Australian Medicare/PBS payments. By 2003/04 the PBS share had grown to 39 percent.

Figure 38: PBS, Annual growth in services and payments (current prices), Australia, 1994/95 to 2003/04

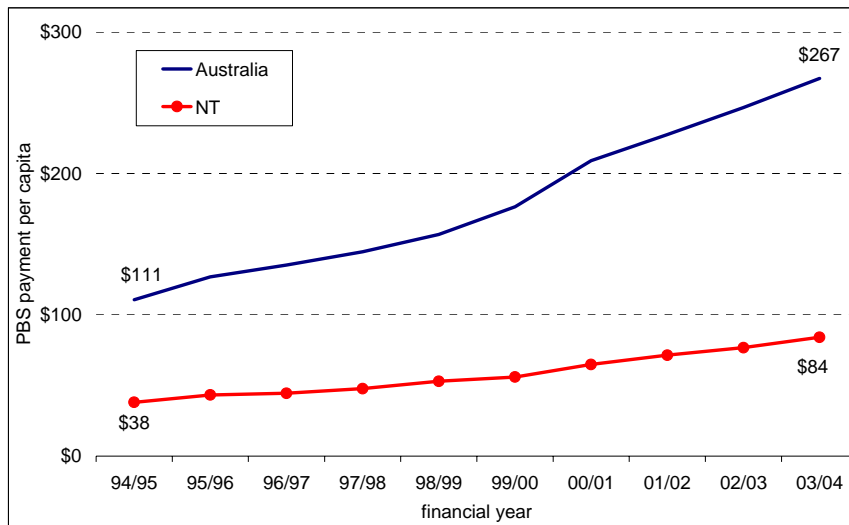


Source: HIC - MBS/PBS Group Statistics Report (online)

### 11.3 PBS, Northern Territory and Australia compared

As shown earlier (Figure 2), PBS payments for the Northern Territory increased from \$5.3 million in 1993/94 to \$18.2 million at an average annual compound rate of 13.2 percent. This compares to the Australian rate of 12.0 percent over the same period. In 1993/94 in the Northern Territory, PBS payments were 16 percent of the total Medicare/PBS payments but this proportion had grown to 29 percent in 2003/04. In per capita terms, PBS payments to Northern Territory residents are far below the national average (see Figure 39).

Figure 39: PBS payment per capita, Northern Territory and Australia, 1994/95 to 2003/04



Source: estimated from HIC information and do not match exactly levels shown earlier in Figure 1.

Generally, PBS payments per capita for the Northern Territory have been at a third of the Australian average. While this proportion has been fairly constant, it means that the gap between the Northern Territory rate and the Australian rate was increasingly widened in money terms as shown in Figure 39.

In the same way that the Medicare funding gap was estimated in an early part of this report, Figure 40 shows the estimated funding gap in relation to PBS usage. So that, on an age-standardised basis, the Northern Territory would have expected in 2003/04 an amount of \$44.0 million compared to the actual amount of \$18.2 million, that is, a gap of \$25.8 million in 2003/04. This showed a shortfall of \$183 per person (Table 15).

Figure 40: PBS: Estimated funding gap for the Northern Territory, 1994/95 to 2003/04.

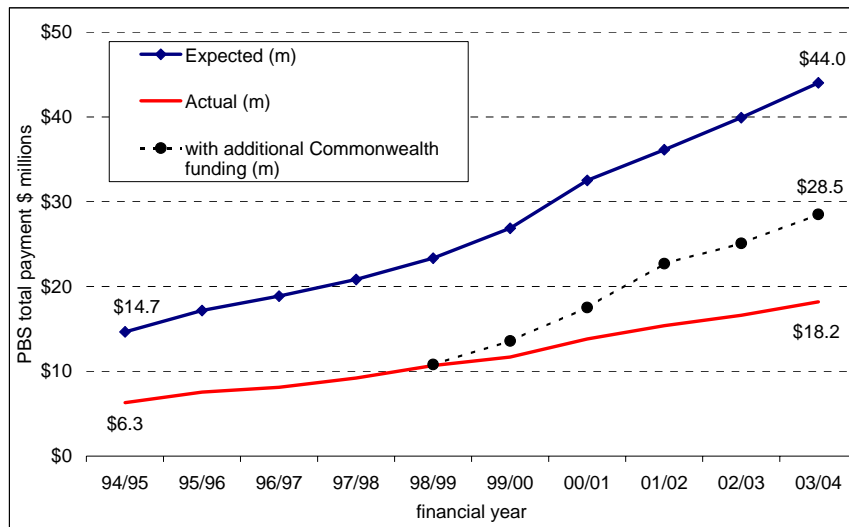


Table 15: Comparison between the actual and expected PBS payments, Northern Territory 1994/95 to 2003/04

Year	Expected*	Actual	NT deficit	NT per capita deficit
	\$m	\$m	\$m	\$
94/95	\$14.7	\$6.3	\$8.4	\$73
95/96	\$17.2	\$7.5	\$9.6	\$84
96/97	\$18.9	\$8.1	\$10.8	\$91
97/98	\$20.8	\$9.2	\$11.6	\$97
98/99	\$23.3	\$10.7	\$12.6	\$104
99/00	\$26.9	\$11.7	\$15.2	\$121
00/01	\$32.5	\$13.8	\$18.7	\$144
01/02	\$36.1	\$15.4	\$20.7	\$156
02/03	\$39.9	\$16.6	\$23.3	\$170
03/04	\$44.0	\$18.2	\$25.8	\$183
<b>Total</b>	<b>\$274.3</b>	<b>\$117.5</b>	<b>\$156.8</b>	<b>\$123</b>

\* expected benefits were estimated on the national average payment, standardised by Medicare age pattern.

## 11.4 PBS, Section 100 payments

Not all payments under the PBS are processed by the HIC. And generally, if the HIC does not process the payments, they are not included in the HIC data. Most of these types of payments fall under Section 100 of the *National Health Act (1953)*. An example is the Highly Specialised Drug Program for which the Australian Government provides funding directly to the States and Territories for certain drugs for chronic conditions which, because of their clinical use or other special features, are restricted to supply through hospitals having access to appropriate special facilities. Those drugs supplied through private hospitals are processed by HIC (approximately \$60m in 2003/04) whereas those supplied by public hospitals are not (approximately \$338m in 2003/04).

More relevant to this analysis are the payments made under Section 100 for Aboriginal health services. Table 16 shows that, in 2003/04, \$10.3 million (58%) of the Australian total of \$17.85 million, went to the Northern Territory. The degree to which these payments assist in closing the PBS funding shortfall are shown in Figure 40, where the dotted line represents these additional Section 100 payments.

**Table 16: PBS, Section 100, Aboriginal Health Services, Australia, 1998/99 to 2003/04**

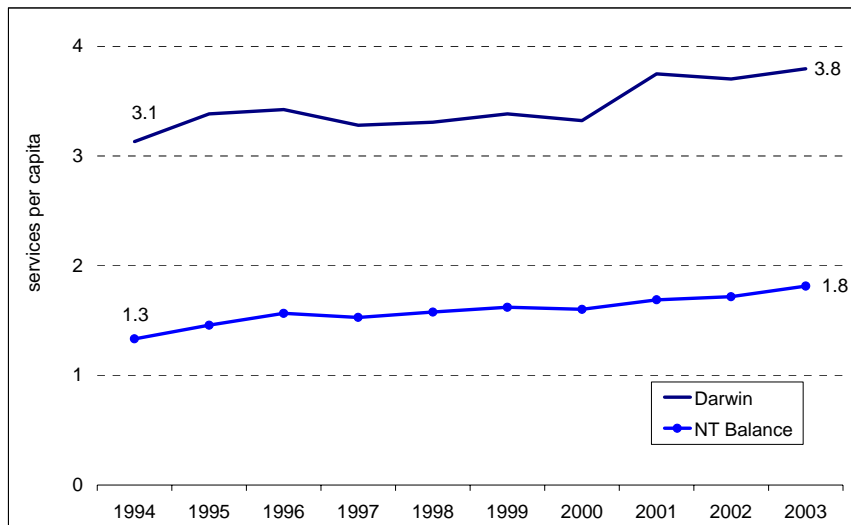
	98/99	99/00	00/01	01/02	02/03	03/04
	\$	\$	\$	\$	\$	\$
NSW	21,872	83,727	140,082	163,620	177,646	320,172
NT	115,092	1,902,923	3,718,281	7,301,291	8,491,490	10,300,283
QLD	-	26,653	17,734	1,762,604	2,684,639	2,974,823
SA	3,536	110,229	152,635	277,375	399,203	404,831
Tas	-	-	-	-	195,887	40,970
WA	233,979	1,756,597	1,970,454	2,597,043	3,177,596	3,809,705
Total	374,479	3,880,129	5,999,187	12,101,934	15,126,462	17,850,784

Source: DoHA special request

## 11.5 NT regional comparison

Regional information for the Northern Territory on PBS usage could only be obtained on a calendar year basis. Figure 41 shows that, as was the case with Medicare usage, PBS usage was far higher in the Darwin area compared to the rest of the Territory. In 2003, Darwin residents had an average of 3.8 scripts filled under the PBS scheme whereas the average for the balance of the Northern Territory was only 1.8 scripts.

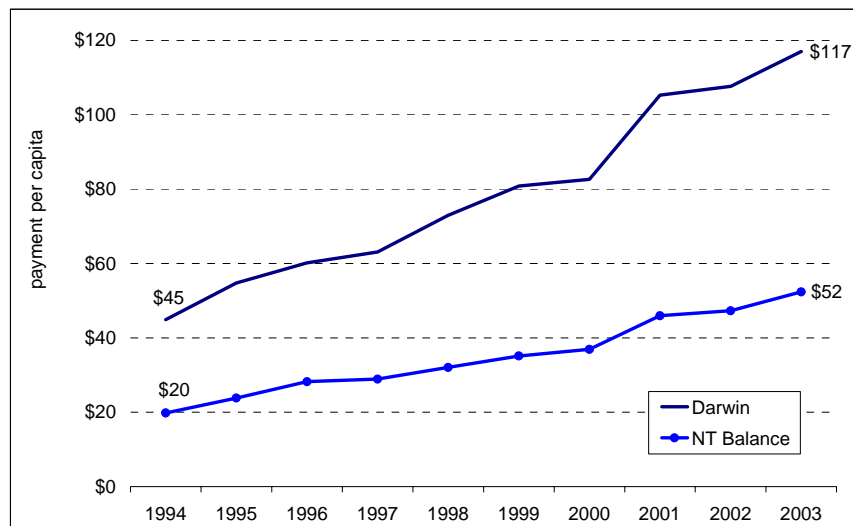
**Figure 41: PBS: service per capita, Darwin and Northern Territory Balance, 1994 to 2003.**



Source: DoHA request

The average annual PBS payments per capita are shown in Figure 42. The average payment per resident in the Darwin area was \$117 in 2003 compared to \$52 in the rest of the Territory.

Figure 42: PBS, payment per capita, Darwin and Northern Territory Balance, 1994 to 2003.



Source: DoHA request

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## Appendix 1: Aboriginal population Medicare usage rates

There is very limited information on Indigenous status in the HIC's Medicare data collection. HIC introduced a voluntary indigenous identifier in 2002/03, so it will be some time before a reliable time series emerges.<sup>18</sup> However, there have been a few studies focusing on or covering Aboriginal utilisation of Medicare services. The AIHW has published reports of expenditures on health services for Aboriginal and Torres Strait Islander people in 1998 and 2001.<sup>19,20</sup> The BEACH study commenced in 1998 and is an annual survey of a sample of general practitioners. This survey collects a significant amount of information about the use of Medicare services by the Aboriginal population.<sup>21,22</sup> Professor John Deeble has also conducted an expenditure analysis on primary health care services for Aboriginal people in the Darwin Health Zone in 2004.<sup>23</sup>

This study has utilised the results from the recent AIHW report and applied per capita expenditure estimates to the Northern Territory time series data on the basis of the ARIA geographical remoteness classification. Given the total expenditure on Medicare benefits is known, we have

$$E = P_A Y_A + P_N Y_N,$$

where  $P_A$  and  $P_N$  are Aboriginal and non-Aboriginal population, and  $Y_A$  and  $Y_N$  denote estimates on per capita Medicare benefits for Aboriginal and non-Aboriginal people respectively. The ratio ( $\alpha$ ) of per capita Medicare payments between Aboriginal and non-Aboriginal people has been estimated in a number of the studies mentioned above. It can be written as

$$Y_N = Y_A / \alpha$$

The per capita Medicare benefits estimate for Aboriginal people takes the form

$$Y_A = E / (P_A + P_N / \alpha).$$

Figure 43: Medicare, per capita payments, estimates based on AIHW results, by region and Aboriginality, Northern Territory 1994/95 to 2003/04

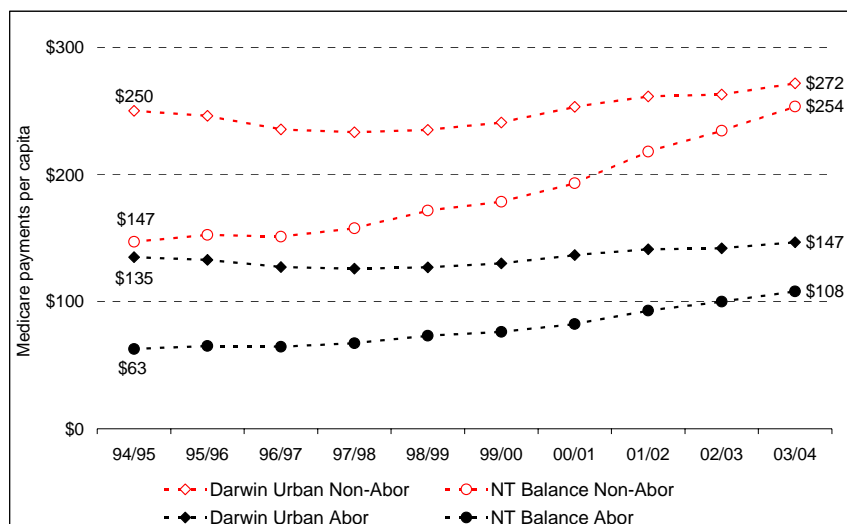


Figure 43 shows the per capita Medicare benefits by region and Aboriginality for the Northern Territory from 1994/05 to 2003/04. The estimates were derived by using Medicare payment time series data by region, and time series population data by region and Aboriginality. The ratios ( $\alpha$ ) were taken from AIHW expenditure report (pp101, Table 7.15) which listed ratios by ARIA level. Darwin's corresponding ARIA category is *Accessible* while the Northern Territory Balance ARIA category is *Remote and Very Remote*. The subsequent ratios were  $\alpha = 0.540$  for Darwin and  $\alpha = 0.426$  for the Northern Territory Balance.

The chart indicates that there was a sustained upward trend in per capita Medicare payments for remote and very remote areas in the Northern Territory started in 1997/98, for both the Aboriginal and non-Aboriginal populations. Since 1994/95 the non-Aboriginal average payment grew from \$147 to \$254 (a \$107 or 73% increase) while the Aboriginal payment level went from \$63 to \$108 (a \$45 or 71% increase).

The gap in Medicare payments between Darwin and the remote areas in the Northern Territory narrowed substantially. In 1994/95 the non-Aboriginal urban/remote payments ratio was  $(\$250/\$147) = 1.70$ . By 2003/04 the ratio was  $(\$272/\$254) = 1.07$ . Over the same period the Aboriginal urban/remote payments ratio went from  $(\$135/\$63) = 2.14$  to  $(\$147/\$108) = 1.36$ .

The estimates shown above relate to Medicare payments only, and are only a partial indicator of actual differences in primary health care access in various areas and between various groups. In recent years, additional funding programs have been directed at supplementing Medicare services. These are discussed elsewhere in this report.

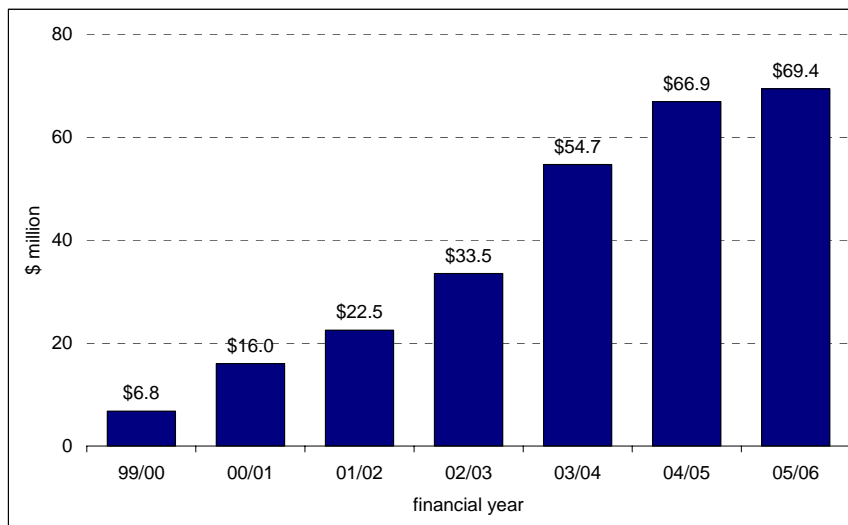
## Appendix 2: Primary Health Care Access Program

The Primary Health Care Access Program (PHCAP) is a program of health system reform designed to improve access to and provision of appropriate primary health care services for Aboriginal and Torres Strait Islander people at the local level. It is aimed at establishing a framework for the expansion of comprehensive primary health care services, including:

- Clinical/medical care;
- Illness prevention services;
- Specific programs for health gain;
- Facilitating access to secondary and tertiary health services;
- Client / community assistance and advocacy on health-related matters within the health and non-health sectors; and
- The management and support structure<sup>24</sup>.

The annual Commonwealth budget expenditure allocation for PHCAP for all states and territories has grown from \$6.8 million in 1999/00 to \$69.4 million in 2005/06 (see Figure 44). These levels are budget estimates and do not necessarily reflect actual expenditure levels

Figure 44: PHCAP, Commonwealth budget allocations, 1999/2000 to 2005/06.



Source: Commonwealth Budget Paper No.2, various years, and Senator Patterson 2003/04 Indigenous Affairs – Health Fact Sheet

The levels shown in Figure 44 are budget estimates and do not necessarily reflect actual expenditure levels, the *estimated actual* PHCAP expenditure in 2003/04 was \$50.6 million compared to the budgeted amount of \$54.7 million<sup>25</sup>.

PHCAP expenditure data by state/territory level have been listed in various Senate Community Affairs Legislation Committee Budget Estimates. The data shown here are drawn from Volume 6 of the 2004-2005 hearing of the committee.

Table 17 shows the 2002/03 PHCAP allocation to be \$13.861 million, with a further \$35.455 million in 2003/04. The estimate for 2004/05 was \$55.586 million but it should be noted that these were the expected allocations as of December 2004 and further allocations were expected. Expenditure levels in the Northern Territory were \$8.998 million in 2002/03 and \$15.168 million in 2003/04. They were expected to be \$16.621 million in 2004/05. Over the three years, expenditure in the Northern Territory will have totalled \$40.787 million. In 2002/03, the Northern Territory received 64.9 percent of all PHCAP expenditures. This dropped to 42.8 percent in 2003/04 and is expected to drop further to 29.9 percent in 2004/05 (see Table 18).

**Table17: PHCAP, expenditure by State/Territory, 2002/03 to 2004/05**

State	02/03	03/04	04/05	Total
	\$m	\$m	\$m	\$m
NT	8.998	15.168	16.621	40.787
WA	2.031	7.076	11.708	20.815
Qld	0.658	4.875	12.047	17.580
NSW	0.696	3.550	6.941	11.187
SA	0.733	2.243	5.230	8.207
Vic	0.000	1.582	2.295	3.876
Tas	0.000	0.187	0.465	0.651
ACT	0.000	0.180	0.279	0.459
national	0.744	0.594	0.000	1.338
<b>Total</b>	<b>13.861</b>	<b>35.455</b>	<b>55.586</b>	<b>104.902</b>

*Source: Senate Community Affairs Legislation Committee Budget Estimates 2004-2005. Volume 6 Feb 2005.*

The drop in the Northern Territory's share of funding is probably due mainly to the early take-up of PHCAP in the Northern Territory. Table 19 lists the number of PHCAP planning regions which have been approved funding. It shows that for the Northern Territory, while there are 21 planning regions, only 12 had been approved for funding as at November 2004. Queensland has 39 planning regions with only 17 so far approved for funding.

Table 18: PHCAP, share of Commonwealth expenditure by State/Territory, 2002/03 to 2004/05

State	02/03	03/04	04/05	Total
	percent	percent	percent	percent
NT	64.9	42.8	29.9	38.9
WA	14.7	20.0	21.1	19.8
Qld	4.7	13.8	21.7	16.8
NSW	5.0	10.0	12.5	10.7
SA	5.3	6.3	9.4	7.8
Vic	0.0	4.5	4.1	3.7
Tas	0.0	0.5	0.8	0.6
ACT	0.0	0.5	0.5	0.4
national	5.4	1.7	0.0	1.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: see Table 17

Table 19: PHCAP sites as at November 2004

State/Territory	No. of planning regions	No. of planning regions for which some PHCAP funding has been approved
Queensland	39	17
Northern Territory	21	12
New South Wales	17	9
Western Australia	12	7
South Australia	8	8
Victoria	6	5
Tasmania	3	2
ACT	1	1
Total	107	61

Source: Senate Committee Budget Estimates 2004-05, November 2004, Question E04-029

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You J, Guthridge S, Mortality, Morbidity & Health Care Costs of Injury in the Northern Territory 1991-2001, Health Gains Planning, Department of Health and Community Services, (2005).