Medicare Benefits Schedule and Pharmaceutical Benefits Scheme Utilisation in the Northern Territory, 1993-94 to 2008-09

Rosalyn Malyon
Yuejen Zhao
Steven Guthridge
Acknowledgements

The authors are grateful to the people who assisted in the production of this report. In particular, the authors thank Medicare Australia for the provision of advice and data for the report. Guidance and assistance with editing was provided by John Condon.

Cover photo: Finke Community, June 2008 – courtesy of Northern Territory Department of Lands and Planning, © Northern Territory of Australia

© Department of Health and Families, Northern Territory 2010

This publication is copyright. The information in this report may be freely copied and distributed for non-profit purposes such as study, research, health service management and public information subject to the inclusion of an acknowledgement of the source. Reproduction for other purposes requires the written permission of the Chief Executive of the Department of Health and Families, Northern Territory.

Suggested citation


ISBN 978 0 9805326 7 8

Printed by the Government Printer of the Northern Territory, 2010

An electronic version is available at:

General enquiries about this publication should be directed to:

Director, Health Gains Planning,
Department of Health and Families
PO Box 40596, Casuarina, NT 0811

Phone: (08) 8985 8074
Facsimile: (08) 8985 8075
Email: ntghealth.gains@nt.gov.au
# Table of contents

**Summary**
- Key findings v

**Introduction**
- 1

**Methods**
- 3
  - Data sources 3
  - Analyses 4
    - Per capita analyses 4

**Results**
- 6
  - Total MBS and PBS benefits and services in the NT 6
  - Comparison of MBS and PBS use in the NT and Australia 7
    - Growth in rates of service use 9
    - Frequency of use 14
    - Changes in service type 15
  - The NT’s primary care funding gap 19
  - New initiatives 22
    - Affordability of services 22
    - Improved access 25
    - Mental health 25
    - Chronic disease prevention and management 26
  - Demographic and regional characteristics of utilisation in the NT 28
    - Demographic patterns of use 28
    - Regional patterns of use 32
  - Access to service providers 34
    - General practitioners 34
    - Pharmacies 37

**Discussion**
- 38

**Appendix 1** State and territory comparisons 42

**References**
- 45

**List of tables**
- 50

**List of figures**
- 51

**Selected Health Gain Planning publications**
- 53
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ACCHO</td>
<td>Aboriginal community controlled health organisation</td>
</tr>
<tr>
<td>ACT</td>
<td>Australian Capital Territory</td>
</tr>
<tr>
<td>AHW</td>
<td>Aboriginal health worker</td>
</tr>
<tr>
<td>AIHW</td>
<td>Australian Institute of Health Welfare</td>
</tr>
<tr>
<td>ASD</td>
<td>Annual survey by Divisions of General Practice</td>
</tr>
<tr>
<td>ATC</td>
<td>Anatomical therapeutic chemical</td>
</tr>
<tr>
<td>CADGP</td>
<td>Central Australian Division of General Practice</td>
</tr>
<tr>
<td>DALYs</td>
<td>Disability adjusted life-years</td>
</tr>
<tr>
<td>DoHA</td>
<td>Department of Health and Ageing</td>
</tr>
<tr>
<td>EPC</td>
<td>Enhanced Primary Care program</td>
</tr>
<tr>
<td>FWE</td>
<td>Full workload equivalent</td>
</tr>
<tr>
<td>GP</td>
<td>General practitioner</td>
</tr>
<tr>
<td>MBS</td>
<td>Medicare Benefits Schedule</td>
</tr>
<tr>
<td>MLFS</td>
<td>Medical labour force survey</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
</tr>
<tr>
<td>NT</td>
<td>Northern Territory</td>
</tr>
<tr>
<td>PBS</td>
<td>Pharmaceutical Benefits Scheme</td>
</tr>
<tr>
<td>PHCAP</td>
<td>Primary Health Care Access Program</td>
</tr>
<tr>
<td>PHCRIS</td>
<td>Primary Health Care Research and Information Service</td>
</tr>
<tr>
<td>RPBS</td>
<td>Repatriation Pharmaceutical Benefits Scheme</td>
</tr>
<tr>
<td>SA</td>
<td>South Australia</td>
</tr>
<tr>
<td>TEDGP</td>
<td>Top End Division of General Practice</td>
</tr>
<tr>
<td>WA</td>
<td>Western Australia</td>
</tr>
</tbody>
</table>
Summary

In Australia, Medicare subsidises the cost of medical, hospital and other defined health services. The Medicare Benefits Schedule (MBS) and the Pharmaceutical Benefits Scheme (PBS) list the services and medicines provided by private health providers that are eligible for subsidies and the amount of the subsidy (benefit). This report builds on previous work by the Health Gains Planning branch of the Department of Health and Families, which investigated trends in the utilisation of primary care services subsidised through the MBS and PBS in the Northern Territory (NT) over the period 1993-94 to 2003-04. This report extends the previous analysis to include the period from 2004-05 to 2008-09. It compares the utilisation of MBS and PBS in the NT with the national average; estimates the gap between actual and expected (age-standardised) MBS and PBS benefits to NT residents; and assesses the impact on usage of recent Australian Government initiatives to improve the access to, and affordability of, primary care services. The report also presents key demographic and regional characteristics of MBS and PBS usage in the NT. The report’s purpose was to inform and facilitate discussion on Territorians’ access to primary care services, the mechanisms by which those services are funded and the adequacy of present levels of funding to the NT.

Key findings

- In 2008-09, NT residents used 1.7 million MBS services and 0.6 million PBS services.
- These amounts equated to 8.0 MBS services and 3.0 PBS services per person; levels well below the national average of 13.6 MBS services and 9.1 PBS services per person.
- A total of $98.7 million in benefits ($72.9 million for MBS and $25.8 million for PBS) was paid for these services.
- The NT’s share of total MBS and PBS benefits – 0.5 per cent and 0.3 per cent, respectively – was much less than its share of the Australian population (1.0 per cent).
- The lower level of benefits was not due to the younger age structure of the NT as usage rates were well below the national rates in all age groups.
- In 2008-09, NT residents used 2.5 more MBS services per person and 0.5 more PBS services than they did in 1994-95. The increase was much lower than nationally. Australians as a whole used 3.2 more MBS services and 2.2 more PBS services per person in 2008-09 than they did in 1994-95.
- Most of the growth in MBS service utilisation occurred between 2003-04 and 2008-09 coinciding with the introduction of a number of Australian Government initiatives to improve the affordability of, and access to, primary care services.
- Uptake of the new initiatives in the NT varied, but tended to be less than its population share so they did not narrow the gap in MBS utilisation between the NT and the national average.
- If NT residents received the same age-standardised benefits as nationally, the NT would have received an additional $50.2 million in MBS funding and $37.7 million in PBS funding in 2008-09.
This gap was greater than in previous years and understates the NT’s need as it does not allow for the poorer health of Indigenous Territorians and the additional costs of delivering services in remote locations.

Payments from other Australian Government programs reduce the gap; however, in 2007-08 there was still a shortfall of $20.9 million (96.11 per person) for medical services and $16.2 million ($74.56 per person) for pharmaceutical services.

The NT is more reliant on these Australian Government programs than other jurisdictions. They provided 24.1 per cent of total NT funding for medical services and 42.2 per cent of pharmaceutical funding in 2007-08.

A key constraint to increasing the NT’s share of MBS and PBS funding is the availability of general practitioners (GPs). The NT has about half the number of full-time workload equivalent GPs per 100,000 people as nationally despite having a rate of disease and injury that is 1.7 times the national average.
Introduction

Medicare provides Australians with health insurance cover by subsidising the cost of medical, hospital and other defined health services. The Medicare Benefits Schedule (MBS) and the Pharmaceutical Benefits Scheme (PBS) list the medical, optometry, dental and allied health services and prescribed medicines eligible for subsidies and the amount of the subsidy (benefit). People must be enrolled in the Medicare program before MBS and PBS benefits can be paid, but once registered the entitlement to benefits is only restricted by the clinical need for, and ability to access, the services of general practitioners and other approved health professionals. The Australian Government finances MBS and PBS benefits through general taxation and the Medicare levy.

In 2005, a report by the Health Gains Planning branch of the Northern Territory (NT) Department of Health and Families showed that the NT’s share of the pool of MBS and PBS benefits was substantially less than its population share. More specifically, NT residents accounted for about one per cent of the Australian population, but over the period 1993-94 to 2003-04 they received only 0.5 per cent of MBS benefits and 0.3 per cent of PBS benefits. Similar disparities were also noted by Russell in relation to mental health MBS items. The lower level of benefits could not be attributed to the relative youth of the NT population as the use of MBS services was substantially below Australian use in every age group. Even when additional streams of Australian Government funding on medical services and PBS Section 100 funding were taken into account, there was still a substantial gap between actual benefits and what would have been expected had NT residents received the average benefit for their age group.

The shortfall was in stark contrast to the need for health services. Indigenous people comprise 30 per cent of the NT population and their poor health outcomes are well documented. The relative size of this population and their level of ill-health should have meant that MBS, PBS and other primary care funding was higher than average. Moreover, for the gap in life expectancy between Indigenous Territorians and non-Indigenous Territorians to close, it is likely that an even larger investment would be needed.

Since the previous Health Gains Planning publication, there have been a number of Australian Government initiatives to expand access to, and improve the affordability of, MBS and PBS services. These initiatives include chronic disease management items; health assessments; new items and reforms to the PBS; and the Strengthening Medicare initiative, which began in 2004. Primary care services for Indigenous people have continued to be enhanced under the Primary Health Care Access Program (PHCAP) program, Healthy for Life, the Indigenous Chronic Disease Package and other Australian Government programs. For the NT specifically, there have been child health checks and referrals to specialist services under the Australian Government’s NT National Emergency Response and recently, the Expanding Health Service Delivery Initiative has increased the delivery of primary care services in the NT. For these initiatives to narrow the funding gap, the NT needs to receive a greater than average share of the additional funding.

This report investigated whether there has been a change in the NT’s relative circumstances since the end of the previous study by extending the analysis of trends in MBS and PBS utilisation to include the period between 2004-05 and 2008-09. The objectives of the report were to:
Compare the utilisation of MBS and PBS in the NT with the national average to determine whether trends identified in the previous report have changed;

Assess the extent of the gap between the level of actual and expected (age-standardised) MBS and PBS benefits;

Examine the impact of recent actions to increase access to health services both within the MBS/PBS framework and other funding initiatives; and

Provide information on key demographic and regional characteristics of MBS and PBS usage in the NT.

The report is structured as follows: first, the data sources and methods used in the analysis are outlined. Second, trends in total MBS and PBS benefits and services for the NT are presented. Benefits and services for the NT are then compared with the national average. Fourth, the extent of the shortfall in MBS and PBS benefits is quantified and consideration given to alternative streams of funding for medical services and pharmaceuticals. Next, the impact of recent MBS initiatives on the NT’s share of funding is assessed. Sixth, key demographic and regional characteristics of MBS use are shown. Finally, the results, policy implications and limitations of the study are discussed.
Methods

Data sources

The primary source of data for the study was information available from Medicare Australia through its statistical website. The website enables users to generate statistical reports online using data aggregated from the programs administered by Medicare Australia. The statistics were publicly available at no charge and could be downloaded into an Excel spreadsheet for further analysis. MBS data were available on the total number of services and benefits or the average number of services and benefits per 100,000 persons (per capita). Per capita figures were based on the Medicare population at the end of each month. PBS data were only available on the total number of services and benefits. Statistics for the Repatriation Pharmaceutical Benefits Scheme (RPBS), which is funded through the Department of Veterans’ Affairs, were separately identified, but the aggregated total was used in all the PBS analyses in this report. The RPBS covers people who have incurred injuries or conditions primarily through war service or other defence force activity and allows access to a broader range of medications and dressings than is available through the PBS.

Data on MBS and PBS benefits and services was downloaded from the Medicare Australia website in late 2009. Data on the total number of services and benefits was obtained by financial year for each year of the period 1993-94 to 2008-09. Per capita data were only available for MBS services and benefits and it was not available for the 1993-94 financial year. Data were obtained by state and territory at the following levels:

MBS
- patient age and gender
- category and selected group
- MBS item number for items relating to specific Australian Government initiatives

PBS
- patient type
- anatomical therapeutic chemical classification

Further information was sourced from other statistical reports by Medicare Australia and its annual reports. This data included MBS services by bill-type, MBS and PBS data by Division of General Practice, Medicare enrolments, the number of general practitioners (GPs) consulted by patients, the average value of benefits per service and the number of services by the proportion of users. Data were also obtained by special request from Medicare Australia on MBS and PBS services for Divisions of General Practice in the NT for the period 2004-05 to 2008-09.

Data on total funding from the Australian Government for medical and pharmaceutical services were sourced from the Australian Institute of Health and Welfare’s (AIHW’s) annual publications on health expenditure. This funding included benefits under the MBS and PBS programs and expenditure under other programs for similar services.
Analyses

For analyses based on the number of benefits or services, the study period was 1993-94 to 2008-09. For per capita analyses, the timeframe was shorter (1994-95 to 2008-09) because data were not available for 1993-94. Data for 1993-94 to 2003-04 were checked against that downloaded for the previous report and no substantive differences were found.

A simple time series was established for the NT and nationally for total and average numbers of benefits and services. Time series were also established based on service type, patient characteristics and Division of General Practice. Comparisons were based on the crude data. No adjustment was made for the annual indexation of benefits.

Indirect standardisation was used to determine the expected level of MBS and PBS benefits for the NT. The age and sex specific per capita benefits from the Australian population were used as the standard. The estimated resident population by age and sex were sourced from the ABS.6,15

Key initiatives and changes relevant to the provision of medical and pharmaceutical services were identified through a search of the Medicare Australia and Department of Health and Ageing (DoHA) websites and Australian Government budget papers. Where specific MBS and PBS items could be tied to initiatives, the uptake of these items was assessed against the NT’s population share.

Per capita analyses

The Medicare Australia website provides data on the number of services or benefits per 100,000 persons (per capita statistics) based on the enrolled Medicare population. DoHA also publishes per capita statistics, but the population estimate is based on demographic data from the Australian Bureau of Statistics (ABS).16 The DoHA figures for the NT tend to be lower than the Medicare figures at the beginning and end of the study period and higher during the middle of the period. Nationally, the DoHA figures tend to be higher.

Per capita estimates will vary depending on the population used in the calculation. The enrolled Medicare population tends to be higher than the Australian population because it includes visitors from countries with reciprocal rights to subsidised health care. It may also include people who have died and other records that are no longer valid. At a jurisdictional level, there may be variation depending on the level of movement in the population and Medicare Australia’s ability to capture current address details. Table 1 shows the variation in the populations between 1994-95 and 2008-09. The implied population was calculated based on MBS service counts and per capita MBS services and the ABS estimated residential population was the average of ABS quarterly estimates for the financial year.

In some years there were marked downward changes in the implied and enrolled populations in the NT and the figures differed markedly from the ABS estimates, which showed a steady rise in the NT population. The large increase in the NT’s implied population in the late 1990s may be due to the influx of spouses and children of defence personnel as the Australian Defence Force increased its presence in northern Australia.17 High turnover in the NT population and less rigorous maintenance of residential address information may have also boosted numbers. During 2004, Medicare enrolments were cleansed to remove people who had died or had no claims or other activity for a considerable period and this brought the population back to a
figure more similar to the ABS estimate. Since that time, however, growth in the ABS estimates has been higher than growth in the Medicare estimates.

Table 1 Population estimates

<table>
<thead>
<tr>
<th>Year</th>
<th>Implied population¹</th>
<th>Enrolled Medicare population at 30 June</th>
<th>ABS estimated resident population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NT</td>
<td>Australia</td>
<td>NT</td>
</tr>
<tr>
<td>1994-95</td>
<td>165,314</td>
<td>18,015,572</td>
<td>175,790</td>
</tr>
<tr>
<td>1995-96</td>
<td>174,173</td>
<td>18,366,795</td>
<td>180,543</td>
</tr>
<tr>
<td>1996-97</td>
<td>182,479</td>
<td>18,699,702</td>
<td>185,109</td>
</tr>
<tr>
<td>1997-98</td>
<td>192,583</td>
<td>18,982,516</td>
<td>188,770</td>
</tr>
<tr>
<td>1998-99</td>
<td>202,186</td>
<td>19,288,358</td>
<td>191,664</td>
</tr>
<tr>
<td>1999-2000</td>
<td>209,026</td>
<td>19,605,764</td>
<td>194,534</td>
</tr>
<tr>
<td>2000-01</td>
<td>213,143</td>
<td>19,909,193</td>
<td>196,764</td>
</tr>
<tr>
<td>2001-02</td>
<td>215,557</td>
<td>20,231,809</td>
<td>198,704</td>
</tr>
<tr>
<td>2002-03</td>
<td>216,176</td>
<td>20,527,429</td>
<td>216,077</td>
</tr>
<tr>
<td>2003-04</td>
<td>216,304</td>
<td>20,821,211</td>
<td>216,450</td>
</tr>
<tr>
<td>2004-05</td>
<td>212,370</td>
<td>20,905,623</td>
<td>203,466</td>
</tr>
<tr>
<td>2005-06</td>
<td>204,930</td>
<td>20,602,146</td>
<td>205,975</td>
</tr>
<tr>
<td>2006-07</td>
<td>207,578</td>
<td>20,934,591</td>
<td>214,284</td>
</tr>
<tr>
<td>2007-08</td>
<td>210,483</td>
<td>21,239,873</td>
<td>212,011</td>
</tr>
<tr>
<td>2008-09</td>
<td>214,016</td>
<td>21,558,571</td>
<td>215,911</td>
</tr>
</tbody>
</table>

Sources:
ABS. Australian demographic statistics, Cat. No. 3101.0, June 2009. Table 4, average across quarters.

The Medicare Australia estimates were used in this study for consistency with the previous Health Gains Planning report. They are also likely to better reflect the actual service population especially in recent years as Medicare Australia’s maintenance of enrollee’s information has been improved. Per capita figures for PBS were calculated based on the implied populations from MBS data.
Results

Total MBS and PBS benefits and services in the NT

Figure 1 shows the total amount of MBS and PBS benefits, in current price terms, to NT residents during the period 1993-94 to 2008-09. PBS benefits grew at a greater rate than MBS benefits, increasing from $5.3 million in 1993-04 to $25.8 million in 2008-09; an annual average compound rate of 11.2 per cent (total growth of 391.7 per cent). MBS benefits increased from $28.6 million in 1993-04 to $72.9 million in 2008-09; an annual average compound rate of 6.4 per cent (total growth of 154.6 per cent).

Figure 2 shows the increase in the number of MBS and PBS services over the 16 year period. The patterns of growth were less marked reflecting the removal of price effects such as the annual indexation of benefits. Without these effects, total growth between 1993-94 and 2008-09 was similar between MBS and PBS services. The number of PBS services increased from 380,593 in 1993-94 to 636,785 in 2008-09; an annual average compound rate of 3.5 per cent (total growth of 67.3 per cent). Over the same period, the number of MBS services increased from 1,045,563 to 1,703,527; an annual average compound rate of 3.3 per cent (total growth of 62.9 per cent).

Although episodes of service increased, there were differences in the key periods of growth between the MBS and PBS programs. For MBS, annual growth rates were greatest in the last five years of the period. In contrast, growth in PBS services was greatest during the first half of the study period.
Comparison of MBS and PBS use in the NT and Australia

The growth in MBS and PBS benefits at a national level was similar to those for the NT. This similarity meant that there was little change in NT’s share of MBS and PBS benefits over the study period. As shown in Figure 3, nationally MBS benefits increased by 166.5 per cent, from $5.4 billion in 1993-94 to $14.3 billion in 2008-09 and more than half of this growth occurred in the last four years of the period.

Figure 3 Total MBS and PBS benefits in Australia (current prices) and the proportion to the NT, 1993-94 to 2008-09

Growth in national PBS benefits was nearly twice as much (312.9 per cent), increasing from $1.8 billion in 1993-94 to $7.4 billion in 2008-09. Annual growth in PBS benefits tended to be highest during the middle of the period, although there was also a surge in the final two years. By the end of the study period, the national level of MBS benefits ($14.3 billion) was nearly double the national level of PBS benefits ($7.4 billion).

The NT received 0.5 per cent of the national pool of MBS benefits and 0.3 per cent of PBS benefits, respectively. These portions were much lower than the NT’s share of the Australian population (1.0 per cent). Allocations for other jurisdictions are shown in Appendix 1.

In terms of services, the NT proportion of MBS services was slightly higher than its proportion of national MBS benefits over much of the study period – 0.6 per cent compared to 0.5 per cent for benefits. Its proportion of PBS services was mostly the same as its proportion of benefits (0.3 per cent) except in three years (1998-99, 2005-06 and 2007-08) where the proportion of benefits was slightly higher (0.4 per cent).

One factor contributing to the lower share of MBS benefits compared to MBS services is the average benefit per service in the NT, which was lower than the national average in all years of the study period. The gap did narrow between 1993-94 and 2000-01 (from 91.9 per cent of the national average to 94.5 per cent), but since that time it has widened most noticeably between 2003-04 and 2004-05 (from 93.2 per cent of the national average to 90.6 per cent) and between 2007-08 and 2008-09 (from 90.7 per cent to 87.9 per cent). In these years, the increase in the average NT benefit was lower than the increase at a national level. In 2008-09, the average MBS benefit in the NT was $42.81 compared with the national average of $48.71 (Table 2). The average benefit per service varied across age cohorts ranging from $36.63 for 15-24 year olds to $45.59 for 65-74 year olds in the NT (a difference of $8.96). Nationally, the range in the average benefit was similar ($8.89), ranging from $43.11 for 15-24 year olds to $52.00 for 35-44 year olds. Although the age group with the highest average benefit per service differed, these two groups were ranked in the first two places for both the NT and at a national level.

### Table 2  Average benefit per service, NT and Australia, 2008-09

<table>
<thead>
<tr>
<th>Program</th>
<th>Average benefit per service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NT</td>
</tr>
<tr>
<td>MBS</td>
<td>$42.81</td>
</tr>
<tr>
<td>PBS</td>
<td>$40.59</td>
</tr>
</tbody>
</table>


In contrast, the average PBS benefit in the NT has been higher than the national average since 1998-99 and the gap has widened since that time. By 2008-09, the average PBS benefit in the NT was 107.2 per cent ($40.59) of the national average of $37.84 (Table 2). A breakdown by age group was not available.

The NT has a much younger age structure than Australia as a whole. In 2008, the median age in the NT was 31.1 years compared with 36.9 nationally. This difference could also contribute to a lower level of total payments as younger people are likely to use fewer services. As can be seen in Figure 4, however, the average benefit per person in the NT was well below the national average in all age groups and by an amount that can not be explained by the difference in the average benefit per service.
The pattern shown in Figure 4 is consistent with lower utilisation in all age groups, which is evidenced later in the report.

**Figure 4  MBS benefits per capita by age group, NT and Australia, 2008-09**

<table>
<thead>
<tr>
<th>Age group</th>
<th>MBS benefits per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=85</td>
<td></td>
</tr>
<tr>
<td>75-84</td>
<td></td>
</tr>
<tr>
<td>65-74</td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td></td>
</tr>
<tr>
<td>15-24</td>
<td></td>
</tr>
<tr>
<td>5-14</td>
<td></td>
</tr>
<tr>
<td>0-4</td>
<td></td>
</tr>
</tbody>
</table>


**Growth in rates of service use**

Benefits data reflect the impact of the annual indexation of benefits, growth in service utilisation from increases in population and individual utilisation and changes in the mix between higher and lower cost services. Per capita service utilisation show the average circumstances of NT residents and enable a comparison of their circumstances relative to the national average. Per capita usage was not available for 1993-94 so these analyses were conducted for the period 1994-95 to 2008-09.

Figure 5 shows the consumption of MBS services in the NT was far less than the national average in all years and the differential grew over the 15 year period. In 1994-95, NT residents used 6.5 services per person compared to 10.4 nationally, a difference of 3.9 services. By 2008-09, the gap had widened to 5.6 services with NT residents using 8.0 services per person compared to 13.6 nationally. The NT residents also used fewer PBS services (Figure 6) and identical to MBS, the gap widened by 1.7 services between 1994-95 and 2008-09. In 1994-95, NT residents used 2.5 PBS services per person compared to 6.9 nationally (4.4 fewer services). By 2008-09, NT residents were using only 3.0 PBS services per person compared to 9.1 nationally (6.1 fewer). Per capita usage for other states and territories is shown in Appendix 1.

Although there was growth in the use of MBS and PBS services between 1994-95 and 2008-09, it did not occur in a steady fashion, particularly in the NT where there were periods of marked decline. Figure 7 and Figure 8 show the change in per capita use of MBS and PBS services benchmarked against rates in 1994-95. Nationally, MBS usage was higher in all years following 1994-95 and increased notably after 2003-04 (from 10.9 to 13.6 services per person). In contrast, per capita usage in the NT fell after 1994-95 and did not reach a similar level again until 2004-05. Growth then followed the strong national trend, but the lower starting point meant that there was less growth in
average service utilisation relative to 1994-95 in the NT than there was nationally. A similar situation occurred for PBS, but the period where average utilisation fell was shorter. Growth in PBS usage in the NT was less in most years and the upturn in 2008-09 smaller than nationally.

**Figure 5** MBS services per capita, NT and Australia, 1994-95 to 2008-09

![Figure 5](image)


**Figure 6** PBS services per capita, NT and Australia, 1994-95 to 2008-09

![Figure 6](image)

Service use by age

Health service use increases with age so differences in the age structure of the Australian and NT populations will lead to differences in MBS and PBS utilisation. As evidenced by Figure 9, however, usage rates for MBS services in the NT were substantially below the national rates in all age groups. Data were not available to conduct a similar analysis for PBS services, but it is likely that there will be similar deficits across the age groups.
The difference in age structure may have contributed to the widening in the gap between the NT and national rates because usage did not increase evenly across the age groups. As noted previously, there was a substantial increase in the per capita use of MBS services between 2003-04 and 2008-09. When the change was examined by age group (Figure 10), the increase in consumption was similar between the NT and Australia except in the older age groups where growth at the national level was far higher than for the NT.
More specifically, by 2008-09 Australians aged between 75 and 84 used 12.4 more MBS services per person than they did in 2003-04. Australians aged 85 years and older used an additional 13.7 services per person. This increase was more than double that of the 65 to 74 year group, which had the next largest rise in consumption. In the NT, the increase in consumption was only 8.7 services per person in the 75-84 age group and 9.1 services per person in the 85+ age group.

People aged 65 years and older were the highest per capita consumers of MBS services. Nationally, this group consumed 30.2 per cent of MBS services.\(^\text{10}\) In the NT, they used only 13.0 per cent of MBS services, partly because older people comprise a lower proportion of the NT population (5.3 per cent compared with 13.3 per cent nationally\(^\text{5}\)). More than half of MBS services were consumed by people aged 25 to 64 years (NT: 64.6 per cent; Australia: 53.1 per cent).\(^\text{10}\)

**Service use by sex**

In addition to age differences, service utilisation also varied by sex. As shown in Figure 11, females were greater users of MBS services than males in both the NT and nationally in all years of the study period. Despite narrowing at times over the 15 year interval, the difference between the sexes in 2008-09 was greater than in 1994-95, both in the NT and nationally.

**Figure 11 MBS services per capita by gender, NT and Australia, 1994-95 to 2008-09**

![Graph showing MBS services per capita by gender, NT and Australia, 1994-95 to 2008-09](http://www.medicareaustralia.gov.au/about/stats/index.jsp)

Per capita use for both males and females at a national level was higher than for either sex in the NT. Indeed, the NT rates were so low that the national rate for males exceeded the NT rate for females. In 2008-09, females in the NT used 56.2 per cent more services than males (9.7 compared to 6.2 services), but their consumption was 38.4 per cent less than the national rate for females (15.8 services) and for males the NT rate was 45.4 per cent less than the national rate (11.4 services).

Even though females used more services than males, Figure 12 shows that growth in usage by males between 1994-95 and 2008-09 was greater than the growth for females. Despite this increase, the gap between the two did not narrow. Instead, it
widened slightly because males’ higher rate of growth was applied to a lower initial level of usage.

**Figure 12** Growth in MBS services per capita by gender relative to 1994-95 levels, NT and Australia

![Growth in MBS services per capita by gender relative to 1994-95 levels, NT and Australia](image)


**Frequency of use**

The per capita statistics average the number of services consumed across the entire Medicare population; however, not all people enrolled in Medicare will use MBS-funded services during the year. Figure 13 shows, for the period 2002-03 to 2007-08, the proportion of enrollees in the NT and nationally that did not consume a service. The proportions decreased over the period from 34.4 per cent in 2002-03 to 23.4 per cent in 2007-08, a fall of 11.0 percentage points. Nationally, the proportion of non-users was lower than in the NT in all years. It also reduced over time, but by a smaller amount from 19.9 per cent in 2002-03 to 13.6 per cent in 2007-08 (6.3 percentage points). The proportion of non-users in other states and territories is shown in Appendix 1.

At the opposite end of the demand continuum, the proportion of people using very large numbers of MBS-funded services was greater nationally than in the NT. In 2007-08, 13.9 per cent of enrollees nationally used 21 or more services during that year. In the NT, only 5.9 per cent of enrollees consumed that many services.
Changes in service type

MBS items are classified into eight broad categories and under each category there are further groupings. There is also a Dental Services Schedule, which separates items for dental services from the other MBS categories. Figure 14 shows the distribution of services in the NT and Australia by key categories in 2008-09. Of the 1.7 million MBS services used in the NT, 44.0 per cent were pathology services and 42.1 per cent were for professional attendances at general practitioners (GPs), specialists and other medical practitioners. This distribution differed to the national average where the majority (47.7 per cent) of services were professional attendances and pathology services comprised 34.2 per cent of total services.

Pathology services in the NT have, however, only achieved primacy in recent periods due to substantial growth (122.7 per cent) over the study period (Figure 15). A similar level of growth occurred nationally (134.6 per cent). The growth resulted in pathology services increasing as a proportion of total services by more than 10.0 percentage points in both the NT and nationally. Pathology services in the NT accounted for a greater proportion of total services than nationally in all years and the gap widened toward the end of the period.

In contrast, growth in professional attendances was less than a fifth of the growth in pathology services and the decline in professional attendances’ share of total services mirrored the increase for pathology services. Since 1993-94, professional attendances decreased as a proportion of services by more than 14.0 percentage points in the NT and nationally. They also accounted for a greater proportion of total services nationally than in the NT in all years.
Figure 14  MBS services by category, NT and Australia, 2008-09

MBS category
- Professional attendances
- Pathology services
- Therapeutic procedures
- Diagnostic procedures and investigations
- Diagnostic imaging services
- Other

Proportion of total MBS services


Figure 15  MBS, proportion of professional attendances and pathology services, 1993-94 to 2008-09, NT and Australia

Year
- 1993-94
- 1995-96
- 1997-98
- 1999-00
- 2001-02
- 2003-04
- 2005-06
- 2007-08

Proportion of total services
- Prof. attendances, NT
- Prof. attendances, Aust
- Pathology, NT
- Pathology, Aust


Figure 16 shows the change in per capita usage of professional attendances and pathology services over time. Between 1994-95 and 2003-04, there was a decline in the number of professional attendances per person both in the NT and nationally (from 3.9 to 2.9 services in the NT; from 6.6 to 5.9 services nationally), but after that time per capita usage rose and by 2008-09 had nearly returned to 1994-95 levels. In contrast, per capita usage of pathology services nationally rose steadily over the period. In the NT, usage initially declined until 1998-99. It then rose during the remainder of the period and in 2008-09, Territorians were consuming an additional 1.4 services than in 1994-95. This increase was, however, lower than the increase at a national level (2.1
Consumption of professional and pathology services was lower in the NT in all years and the gap is now wider than it was at the beginning of the study period.

**Figure 16** MBS, Proportion of professional attendances and pathology services, 1993-94 to 2008-09, NT and Australia

Within the professional attendance category, GP services accounted for up to three quarters of services. Their proportion in the NT has risen over time from 62.9 per cent in 1993-94 to 74.5 per cent in 2008-09. Nationally the pattern is less clear. In 1993-94, they comprised 70.8 per cent of professional attendances. During the remainder of the period they ranged between 69.3 per cent (2008-09) and 74.6 per cent (2003-04). Specialist services typically accounted for 6 per cent of professional attendances in the NT and 7 per cent nationally.

Within the pathology services category, three major service groups accounted for more than three quarters of services: services initiated by a patient episode; microbiology services; and chemical services. Patient episode initiations accounted for about a third of pathology services both in the NT and nationally and this proportion was reasonably consistent across time. Over time, chemical services increased in importance going from 18.1 per cent of pathology services in the NT and 25.3 per cent nationally in 1993-94 to 29.0 per cent and 35.0 per cent in the NT and Australia, respectively, in 2008-09. Microbiology services are more important in the NT than nationally. Their proportion of services in the NT declined from 23.0 per cent in 1993-94 to 16.9 per cent in 2003-04 before rising to stabilise at about 20.0 per cent of services. At a national level, there was a decline from 13.2 per cent down to a steady level of about 10.0 per cent.

PBS items are arranged into groups based on their anatomical therapeutic chemical (ATC) classification. Both nationally and in the NT, more than a third of PBS services in 2008-09 were for “cardiovascular system” pharmaceuticals (Figure 17). The next two largest categories were “nervous system” and “alimentary tract and metabolism” pharmaceuticals, which together accounted for another third of PBS services.
Two key changes occurred in the type of PBS services provided over the study period. As shown in Figure 18, the proportion of “cardiovascular system” pharmaceuticals rose while the proportion of “general anti-infectives for systemic use” declined. The proportion of these services in the NT also became more aligned with their share at a national level. More specifically, in 1993-94 cardiovascular pharmaceuticals comprised 16.2 per cent of total PBS services in the NT, but by 2008-09, they had increased to more than a third (35.3 per cent) of services. Nationally, they initially comprised a greater proportion (22.6 per cent), but from 2002-03 onward their share of services was
similar or lower than their share in the NT. By 2008-09, cardiovascular pharmaceuticals comprised 33.9 per cent of total PBS services in Australia. General anti-infectives accounted for a similar proportion of NT services (24.1 per cent) as cardiovascular pharmaceuticals in 1993-94, but by 2008-09, they accounted for only 7.5 per cent of PBS services. Nationally, the decline in this group was substantial but not as marked, reducing from 14.0 per cent to 7.1 per cent.

The NT’s primary care funding gap

As shown in prior sections of the report, NT residents have received less than the average level of services and benefits from the MBS and PBS programs and the gap has widened. The difference was not due to the younger age distribution of the NT population as all age groups were using fewer services than average. Table 3 shows the difference between actual benefits and expected benefits had each age and sex cohort in the NT received the same per capita benefit as occurred nationally.

Table 3  Deficit between actual and age-standardised expected MBS and PBS benefits, NT, 1994-95 to 2007-08

<table>
<thead>
<tr>
<th>Year</th>
<th>MBS</th>
<th>PBS</th>
<th>MBS</th>
<th>PBS</th>
<th>MBS</th>
<th>PBS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total deficit ($ million)</td>
<td>Annual growth</td>
<td>Per capita deficit ($)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-95</td>
<td>16.4</td>
<td>10.1</td>
<td>93.27</td>
<td>57.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-96</td>
<td>18.0</td>
<td>11.9</td>
<td>9.9%</td>
<td>17.0%</td>
<td>100.05</td>
<td>66.03</td>
</tr>
<tr>
<td>1996-97</td>
<td>19.8</td>
<td>13.2</td>
<td>10.2%</td>
<td>11.0%</td>
<td>107.48</td>
<td>71.43</td>
</tr>
<tr>
<td>1997-98</td>
<td>20.1</td>
<td>14.1</td>
<td>1.5%</td>
<td>6.8%</td>
<td>106.72</td>
<td>74.66</td>
</tr>
<tr>
<td>1998-99</td>
<td>21.7</td>
<td>15.1</td>
<td>7.9%</td>
<td>7.0%</td>
<td>113.43</td>
<td>78.67</td>
</tr>
<tr>
<td>1999-2000</td>
<td>22.2</td>
<td>17.8</td>
<td>2.2%</td>
<td>18.1%</td>
<td>114.25</td>
<td>91.57</td>
</tr>
<tr>
<td>2000-01</td>
<td>22.2</td>
<td>21.6</td>
<td>0.3%</td>
<td>21.6%</td>
<td>113.14</td>
<td>109.89</td>
</tr>
<tr>
<td>2001-02</td>
<td>23.1</td>
<td>23.8</td>
<td>3.7%</td>
<td>10.0%</td>
<td>116.20</td>
<td>119.74</td>
</tr>
<tr>
<td>2002-03</td>
<td>22.8</td>
<td>26.1</td>
<td>-1.1%</td>
<td>9.8%</td>
<td>114.29</td>
<td>130.67</td>
</tr>
<tr>
<td>2003-04</td>
<td>24.2</td>
<td>28.4</td>
<td>6.1%</td>
<td>8.8%</td>
<td>120.45</td>
<td>141.18</td>
</tr>
<tr>
<td>2004-05</td>
<td>29.3</td>
<td>29.4</td>
<td>20.9%</td>
<td>3.6%</td>
<td>143.37</td>
<td>143.94</td>
</tr>
<tr>
<td>2005-06</td>
<td>34.4</td>
<td>29.6</td>
<td>17.4%</td>
<td>0.7%</td>
<td>164.86</td>
<td>141.96</td>
</tr>
<tr>
<td>2006-07</td>
<td>37.9</td>
<td>31.1</td>
<td>10.2%</td>
<td>4.9%</td>
<td>178.06</td>
<td>146.01</td>
</tr>
<tr>
<td>2007-08</td>
<td>42.6</td>
<td>33.5</td>
<td>12.5%</td>
<td>7.9%</td>
<td>196.06</td>
<td>154.27</td>
</tr>
<tr>
<td>2008-09</td>
<td>50.2</td>
<td>37.7</td>
<td>17.9%</td>
<td>12.4%</td>
<td>225.87</td>
<td>169.43</td>
</tr>
</tbody>
</table>

Note: Expected benefits were calculated on the basis of the NT population receiving similar funds to the national per capita distribution (by age and sex)

Sources:
ABS, Australian historical population statistics 2006, Cat. no. 3105.065.001, Table 4.1
ABS. Australian demographic statistics, Cat. No. 3101.0, June 2009.
ABS. Population by age and sex, Australian states and territories, Jun 2009, Table 7.
With the exception of 2002-03, the deficit in total MBS benefits grew each year, increasing by 206.1 per cent from $16.4 million in 1994-05 to $50.2 million in 2008-09. The growth in the PBS deficit was even greater, increasing by 273.3 per cent from $10.1 million in 1994-05 to $37.7 million in 2008-09. The growth was not steady, however, with annual increases in the MBS deficit being greatest in the last five years of the period. Growth in the PBS deficit was greater in earlier years of the study period, which was consistent with trends discussed earlier in this report, but it has also increased markedly in the last two years to reach 12.4% in 2008-09.

The NT also received other funding from the Australian Government for primary care services through coordinated care trials, PHCAP, recurrent funding to remote community controlled health services and other strategies to address the gap in health outcomes for Indigenous Australians. This funding supports the provision of health services, but it is not necessarily a direct equivalent to MBS benefits as it may also finance items that may not be claimable under the MBS such as capital works, viability supplements and public health services. For pharmaceuticals there are fewer alternative streams of funding with the main source being special supply arrangements for remote health services under Section 100 of the PBS.

The AIHW allocates Australian Government funding across various categories of health expenditure including medical and pharmaceutical services. These estimates were used to determine the additional funding to the NT for primary care services from all Australian Government programs including MBS and PBS. Figure 19 and Figure 20 show the impact of these other funding streams on the gap between expected and actual MBS and PBS benefits. Data were only available up to 2007-08.

Figure 19 MBS, total funding compared to age-standardised expected benefits, NT, 1994-95 to 2008-09

Note: Total Australian Government funding for medical services as published by the AIHW (see reference below).

Sources:
AIHW. Health Expenditure Australia, various years, Appendix B, medical services expenditure
ABS. Australian historical population statistics 2008, Cat. no. 3105.065.001, Table 4.1
ABS. Australian demographic statistics, Cat. No. 3101.0, June 2009.
ABS. Population by age and sex, Australian states and territories, Jun 2009, Table 7.
The additional funding progressively narrowed the gap between expected and actual MBS funding, but did not eliminate it. By 2007-08, there was still a total shortfall of $20.9 million ($96.11 per person) in MBS benefits and $16.2 million ($74.56 per person) in PBS benefits. This analysis is somewhat misleading, however, because other jurisdictions are also receiving funding from these alternative streams. The NT’s share of the total Australian Government funding for medical and pharmaceutical services was 0.6 per cent for both types of service, amounts still well below the NT’s population share.

There is little information on how this funding translates to additional occasions of service. The only activity data that was available was episodes of care provided by Indigenous primary health care services that receive Australian Government funding. There may be some overlap between these services and MBS data if benefits were claimed for these services, but levels of claims have typically been low due to administrative and other barriers. In 2006-07, these services provided 352,000 episodes of care in the NT and 1,644,000 nationally. Adding these services to MBS services would have increased the NT’s share of services by one tenth of one percentage point from 0.6 per cent to 0.7 per cent, which is consistent with the increase in the proportion of benefits.

The NT is more reliant on these alternative funding sources than other jurisdictions. Table 4 shows that in 2007-08 only 75.9 per cent of benefits for medical services to the NT came from the MBS program and 57.8 per cent of benefits for pharmaceuticals came from the PBS program. Other states and territories received a much greater proportion of medical and pharmaceutical funding from the MBS and PBS programs – up to 93.2 per cent for medical services and 99.6 per cent for pharmaceuticals.
Table 4 Proportion of total funding for medical services and pharmaceuticals from MBS and PBS programs by state/territory, 2007-08

<table>
<thead>
<tr>
<th>State</th>
<th>MBS</th>
<th>PBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>93.2%</td>
<td>98.5%</td>
</tr>
<tr>
<td>Victoria</td>
<td>91.6%</td>
<td>99.4%</td>
</tr>
<tr>
<td>Queensland</td>
<td>88.3%</td>
<td>99.6%</td>
</tr>
<tr>
<td>SA</td>
<td>89.0%</td>
<td>98.5%</td>
</tr>
<tr>
<td>WA</td>
<td>89.4%</td>
<td>98.4%</td>
</tr>
<tr>
<td>Tasmania</td>
<td>86.5%</td>
<td>98.0%</td>
</tr>
<tr>
<td>ACT</td>
<td>78.5%</td>
<td>94.8%</td>
</tr>
<tr>
<td>NT</td>
<td>75.9%</td>
<td>57.8%</td>
</tr>
</tbody>
</table>

Sources:
AIHW, Health expenditure Australia 2007-08, Cat. No. HWE 46, Appendix B.

**New initiatives**

As shown earlier, there was a substantial increase in MBS funding over the study period, particularly in recent years. Recent growth is likely to reflect the impact of programs that introduced:

- measures to improve the affordability of medical services including bulk-billing incentives and a ‘safety net’ for high out-of-pocket expenses;25
- initiatives to improve the convenience of access including measures to address workforce issues, higher benefits for after hours services and specific programs to increase the availability of out-of-hospital medical services;25-27
- new MBS items that increased access to subsidised mental health services;28 and
- better arrangements for preventing and managing chronic disease including health checks, subsidised dental care for the chronically ill and a changeover to more flexible MBS items for the management of chronic disease.29-32

The following sections outline these initiatives and their relative contribution to the MBS funding pool. The NT’s share of MBS benefits under these programs and its likely impact on the funding gap is also explored.

**Affordability of services**

In 2004, a number of measures were introduced under the (now titled) Strengthening Medicare initiative to improve the affordability of medical services. These measures included increasing the subsidy for unreferred GP services from 85 per cent to 100 per cent of the schedule fee; incentives to encourage more service providers to offer bulk billing particularly in rural and remote areas; and safety net arrangements, which
reimburse 80 per cent of out-of-pocket expenses once certain thresholds are reached.\textsuperscript{25,33}

Assuming the higher subsidy was paid on all unreferred attendances including practice nurse items, this initiative would have increased benefits to the NT in 2008-09 by $4.1 million or 5.8 per cent of the national increase of $702.9 million.\textsuperscript{10} The additional funding accounted for 4.9 per cent of annual MBS benefits in 2008-09.

Table 5 shows the amount of benefits against the new bulk billing items for the NT and nationally between 2003-04 and 2008-09. For Australia as a whole, benefits against these items accounted for 3 per cent of the annual MBS benefits pool in each year after 2003-04\textsuperscript{a}. The NT’s share of the bulk billing benefits (0.5 per cent in most years) was consistent with its share of MBS benefits, but below its population share.

<table>
<thead>
<tr>
<th>Year</th>
<th>NT $ million</th>
<th>Australia $ million</th>
<th>NT Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>0.4</td>
<td>97.1</td>
<td>0.4%</td>
</tr>
<tr>
<td>2004-05</td>
<td>1.5</td>
<td>319.0</td>
<td>0.5%</td>
</tr>
<tr>
<td>2005-06</td>
<td>1.7</td>
<td>351.0</td>
<td>0.5%</td>
</tr>
<tr>
<td>2006-07</td>
<td>1.9</td>
<td>372.1</td>
<td>0.5%</td>
</tr>
<tr>
<td>2007-08</td>
<td>2.2</td>
<td>406.8</td>
<td>0.5%</td>
</tr>
<tr>
<td>2008-09</td>
<td>2.3</td>
<td>431.9</td>
<td>0.5%</td>
</tr>
</tbody>
</table>


Even though the bulk billing incentives were not specifically intended to lift the bulk billing rate, they may have had a positive effect on it. The bulk billing rate had been declining in the three years prior to the introduction of the bulk billing incentives (Figure 21). In the NT, it remained more stable over that time. After 2003-04, the rate lifted in the NT and nationally and in 2008-09, the rates reached their highest point during the study period. The NT rate was higher in 2008-09 than the national rate by 3.2 percentage points, but the gap has narrowed since its widest point in 2002-03 (5.6 percentage points). In 2008-09, the only state to have a higher bulk billing rate than the NT was New South Wales (NSW), but the difference was only slight (0.1 percentage point). The lowest bulk billing rate was 63.1 per cent in the Australian Capital Territory (ACT). Rates for other jurisdictions are shown in Appendix 1.

\textsuperscript{a} The incentives were introduced on 1 February 2004 so the first year of full effect was 2004-05
Affordability does not, however, appear to have improved for patients who are not bulk billed. The average out-of-pocket contribution per service tripled from the beginning of the study period to reach $38.38 person in the NT and $34.14 nationally in 2008-09 (Figure 22). The greatest annual increase in the average contribution occurred in 2006-07, after the introduction of the Strengthening Medicare package. In that year, patient contributions increased by 15.8 per cent in the NT and 16.4 per cent nationally. Contributions in the NT were higher than the national average in all years of the study.
Growth in out-of-pocket costs outstripped the community’s capacity to pay with the increase over the study period being greater than the growth in average weekly earnings. Compared to the three-fold increase (201.3 per cent) in out-of-pocket costs, the growth in average weekly earnings in the NT between the August quarters of 1994 and 2009 was only 80.6 per cent.\textsuperscript{34,35} The growth in out-of-pocket costs was also much greater than the increase in general prices with change in the all groups consumer price index for Darwin rising by only 49.8 per cent between the June quarters of 1993 and 2009.\textsuperscript{35}

**Improved access**

Since 2004 there has been a focus on improving after-hours access to GPs through Round the Clock Medicare: Investing in After Hours GP Services and the After Hours Primary Medical Care Programme.\textsuperscript{36,37} These initiatives provided start up grants and operational subsidies for new and existing practices to extent their hours of operation, establish after-hours services or provide medical deputising services. The MBS benefit for after-hours GP services was also increased.\textsuperscript{36} Recently, these initiatives have been merged and extended for a further four years (to 2011-12) under the General Practice After Hours Program.\textsuperscript{26} Service providers apply for funding under these programs and selection is based on merit with priority given to applications in regional, rural and remote areas and areas with socio-economic disadvantage.\textsuperscript{26} Although allocations of funding by state have not been published, applications by NT service providers should have been met with favour as most of the NT should be considered a priority area.

In 2007-08, the GP Super Clinics initiative was introduced to establish clinics that offer a multi-disciplinary range of services from a single location.\textsuperscript{27} Super clinics are encouraged to bulk bill patients and it is anticipated that they will take pressure off emergency departments in local public hospitals by providing an alternative for lower priority patients (triage category 4 and 5).\textsuperscript{27} Under the initiative, 35 super clinics will be established across Australia over a five year period: eight in NSW, eight in Victoria, nine in Queensland, three each in Western Australia, South Australia (SA) and Tasmania and one in the NT.

The establishment of after-hours services and super clinics would improve access to services and shift patient care from emergency departments to MBS-funded services. These changes will, in turn, increase the amount of MBS and PBS services and benefits. If more of these services are established in other jurisdictions then the gap in per capita service provision between the NT and Australia as a whole will widen rather than diminish.

**Mental health**

In 2006, the Better Access to Psychiatrists, Psychologists and GPs through the Medicare Benefits Schedule Initiative (Better Access Initiative) was introduced to improve the treatment and management of mental illness.\textsuperscript{38} New MBS items were introduced for GPs to coordinate the care needs of patients with mental disorders and to subsidise services provided by psychiatrists and allied mental health providers. Twenty-eight MBS items are grouped under the Better Access Initiative. Two items existed prior to the introduction of the Better Access Initiative, but the scheduled fee and amount of the benefit for these items were increased under the program.\textsuperscript{39}

\textsuperscript{b} Data were not available for 1993.
In 2008-09, the MBS items under the Better Access Initiative accounted for 3.0 per cent of total MBS benefits. Table 6 shows the growth in benefits for Better Access Initiative since its introduction in November 2006. The NT received only 0.3 per cent of benefits, an amount even less than its share of the total MBS pool. If this situation persists, it could erode the NT’s overall share in future years.

### Table 6  MBS benefits for items under the Better Access to Psychiatrists, Psychologists and GPs through the Medicare Benefits Schedule Initiative, NT and Australia, 2006-07 to 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>NT</th>
<th>Australia</th>
<th>NT Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ million</td>
<td>$ million</td>
<td></td>
</tr>
<tr>
<td>2006-07</td>
<td>0.4</td>
<td>126.5</td>
<td>0.3%</td>
</tr>
<tr>
<td>2007-08</td>
<td>1.1</td>
<td>325.1</td>
<td>0.3%</td>
</tr>
<tr>
<td>2008-09</td>
<td>1.4</td>
<td>434.4</td>
<td>0.3%</td>
</tr>
</tbody>
</table>


### Chronic disease prevention and management

In 1999, the Enhanced Primary Care (EPC) program was introduced to improve the prevention and management of chronic disease. Under the program, new MBS items were established to provide benefits for GPs to prepare management plans, team care arrangements and multidisciplinary care plans and to contribute as a member of a case conference team to manage patients with chronic, complex care needs. MBS items were also created to subsidise health assessments for people in high risk groups including the elderly and people of Aboriginal or Torres Strait Islander descent. Since its introduction, the program has been improved by reducing administrative and other barriers to use and making the subsidy available to a wider group of patients. The focus on chronic disease has also lead to a broadening of the type of services covered by the MBS to include allied health services, dental care and services provided by an Aboriginal Health Worker (AHW) or practice nurse on behalf of a medical practitioner.

Table 7 shows the amount of benefits for MBS items to better manage and prevent chronic disease. The categories are as follows:

- health assessments, which includes all items under Group A14 of the MBS;
- chronic disease management, which includes all items under Group A15 and old EPC items that were replaced in 2005;
- allied health services, which includes services for patients with chronic disease (items 10950 to 10970), follow-up allied health services for Indigenous people who have undergone a health assessment (items 81300 to 81360) and allied health services for patients with type 2 diabetes (items 81100 to 81125);
- GP-like services, which includes items in groups M2 and M5 of the MBS for services provided by practice nurses and AHWs; and
- Dental, which includes MBS items for dental services to patients with chronic disease including the more flexible items (85011 to 87111) introduced in 2008 and the items that they replaced (10975 to 10977).
The NT received a total of $12.6 million in benefits against the chronic disease items since the start of the program in 1999-00. This amount equated to 0.5 per cent of the national pool of benefits, an amount consistent with the NT’s annual share of total MBS benefits. The NT’s share varied across the years, increasing in most until 2008-09 when it dropped from 0.7 per cent to 0.4 per cent. The decline was due to a reduction in the amount of benefits paid for health assessments and services by practice nurses and AHWs (GP-like services) and a much larger uptake of dental items at a national level than in the NT.

Health assessments and chronic disease management jointly accounted for 80.4 per cent of the benefits ($5.0 million and $5.1 million, respectively). The NT’s share of national pool of benefits for health assessments was similar to its population share, but this was due to a large increase in benefits since 2005-06 coinciding with the introduction of health assessments targeting Indigenous people. For these items (704, 706, 708, 710), the NT’s share of total funding (all years) was greater than NT share of the Australian Indigenous people aged 55 years and older in 2006 (11.5 per cent\(^6\)). Prior to the introduction of these items, the NT received about 0.1 per cent of the benefits for health assessments.

### Table 7  Total NT benefits and share of national funding for MBS items to better prevent and manage chronic disease, 1999-00 to 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>Health assessments</th>
<th>Chronic disease management</th>
<th>Allied health services</th>
<th>GP-like services</th>
<th>Dental</th>
<th>Total</th>
<th>NT share of annual benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ thousand (000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999-00</td>
<td>4</td>
<td>15</td>
<td></td>
<td></td>
<td>19</td>
<td>0.2%</td>
<td></td>
</tr>
<tr>
<td>2000-01</td>
<td>18</td>
<td>81</td>
<td></td>
<td></td>
<td>99</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>2001-02</td>
<td>33</td>
<td>147</td>
<td></td>
<td></td>
<td>180</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>2002-03</td>
<td>30</td>
<td>129</td>
<td></td>
<td></td>
<td>159</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>2003-04</td>
<td>43</td>
<td>288</td>
<td>43</td>
<td></td>
<td>374</td>
<td>0.5%</td>
<td></td>
</tr>
<tr>
<td>2004-05</td>
<td>226</td>
<td>520</td>
<td>9</td>
<td>185</td>
<td>1</td>
<td>941</td>
<td>0.6%</td>
</tr>
<tr>
<td>2005-06</td>
<td>453</td>
<td>601</td>
<td>23</td>
<td>261</td>
<td>1</td>
<td>1,339</td>
<td>0.5%</td>
</tr>
<tr>
<td>2006-07</td>
<td>914</td>
<td>876</td>
<td>54</td>
<td>320</td>
<td>0</td>
<td>2,164</td>
<td>0.7%</td>
</tr>
<tr>
<td>2007-08</td>
<td>1,717</td>
<td>1,043</td>
<td>108</td>
<td>574</td>
<td>24</td>
<td>3,466</td>
<td>0.7%</td>
</tr>
<tr>
<td>2008-09</td>
<td>1,595</td>
<td>1,370</td>
<td>191</td>
<td>556</td>
<td>109</td>
<td>3,821</td>
<td>0.4%</td>
</tr>
<tr>
<td>Total</td>
<td>5,035</td>
<td>5,069</td>
<td>386</td>
<td>1,939</td>
<td>134</td>
<td>12,563</td>
<td></td>
</tr>
<tr>
<td>NT share of benefits, all years</td>
<td>1.1%</td>
<td>0.5%</td>
<td>0.2%</td>
<td>0.9%</td>
<td>0.0%</td>
<td>0.5%</td>
<td></td>
</tr>
</tbody>
</table>


The opposite occurred for chronic disease management where in early years the NT received a greater share of these benefits (more than 1.0 per cent in the first two years), but the volume of benefits in those years was small. The annual amount of chronic disease management benefits increased following the introduction of more flexible items in 2005. Despite the greater amount of benefits, the NT received a
smaller share of the national pool as uptake of the more flexible items at a national level was greater than in the NT.

The NT received 0.2 per cent of the benefits for allied health service items. In early years, this proportion was even lower, but since these items comprise a small amount of the total MBS benefit pool (0.6 per cent in 2008-09), their introduction had a relatively small impact on the gap in MBS benefits.

The NT received 0.9 per cent of benefits for services performed by practice nurses and AHWs and this was relatively stable in each year. Benefits for these items increased as a result of expansion in the number of items and growth in the uptake of practice nurse items.

There was little uptake of chronic care dental items under the initial arrangements, but with the introduction in 2007 of the more flexible items uptake increased markedly. The program, even after the introduction of the new items, has been of little benefit to the NT, which received only 0.03 per cent of benefits. The Australian Government intends to close these items and redirect the funding to its new dental programs – the Commonwealth Dental Health Program and the Medicare Teen Health Plan. These plans may improve the NT’s share of funding, but benefits under the Medicare Teen Dental Plan suggest that it may still receive less than its population share. In 2008-09, the first year of the Teen Health Plan, the NT received only 0.3 per cent of benefits (MBS item 88000).

Demographic and regional characteristics of utilisation in the NT

This section of the report provides information on MBS and PBS use in the NT. For MBS, differences between age groups and males and females were analysed and commentary is made on Indigenous use of MBS services. For PBS, analyses were based on patient billing type. Differences in MBS and PBS use between the northern and southern regions of the NT were analysed using data for the Divisions of General Practice.

Demographic patterns of use

NT MBS usage by age

As shown previously (Figure 9), per capita use of MBS services differs by age with older age groups using more services; however, the distribution of the population across the age groups means that older people consume only a small amount of total services. In 2008-09, Territorians aged 75 years and older consumed only 4.2 per cent of total MBS services (Figure 23). The 45-54 age group consumed the greatest share of services (17.4 per cent) followed by the 35 to 44 age group (16.5 per cent).

There was no change in the relative ranking of the age groups between 2003-04 and 2008-09, as shown in the previous report. There was, however, an increase in the share of services used by people aged 55 years and older and decreases in the age groups under 55 years except for the 15-24 age group. In 2003-04, Territorians aged 55 years and older used 25.0 per cent of MBS services. In 2008-09, their consumption had risen to 28.1 per cent. The share for the 15-24 age group rose from 10.7 to 11.5 per cent. The increases were driven by growth in the size and the changing age distribution of the NT population and relatively higher growth in per capita consumption.5,10,15
Figure 23  MBS, share of total services by age cohort, NT, 2008-09

<table>
<thead>
<tr>
<th>Age group</th>
<th>Share of total services</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=85</td>
<td>0.7%</td>
</tr>
<tr>
<td>75-84</td>
<td>3.5%</td>
</tr>
<tr>
<td>65-74</td>
<td>8.8%</td>
</tr>
<tr>
<td>55-64</td>
<td>15.1%</td>
</tr>
<tr>
<td>45-54</td>
<td>17.4%</td>
</tr>
<tr>
<td>35-44</td>
<td>16.5%</td>
</tr>
<tr>
<td>25-34</td>
<td>15.6%</td>
</tr>
<tr>
<td>15-24</td>
<td>11.5%</td>
</tr>
<tr>
<td>5-14</td>
<td>5.5%</td>
</tr>
<tr>
<td>0-4</td>
<td>5.5%</td>
</tr>
</tbody>
</table>


NT MBS usage by sex

Females tend to use more MBS services than males (Figure 24). In 2008-09, females in the NT consumed 1,023,894 MBS services (60.1 per cent) while males used 679,633 services (39.9 per cent). Only in the youngest age group (0-4 years) and in the 65-74 group did males consume more MBS services than females, despite their comprising a greater proportion of the population in each age group except the two oldest groups.

Consistent with their higher use of services, the average MBS benefit for females was greater than the average benefit for males. In 2008-09, the average per capita benefit for females in the NT was $416.13 and for males it was $268.13. Growth in per capita use of MBS services for both sexes was similar over the study period (refer Figure 12). Unless there is a marked change in these patterns, the differentials between the sexes are likely to remain.

Indigenous usage of MBS services

A voluntary Indigenous identifier (VII) was introduced into the Medicare database in November 2002. At 30 June 2009, 243,303 people in Australia had identified themselves as Indigenous in their Medicare enrolment, which represented about 44 per cent of the Indigenous population (ABS, B series estimate). AIHW data on VII enrollees for 2007 showed that the NT had a slightly higher enrolment rate than nationally and the proportion of people enrolled differed by age and sex. Indigenous females were more likely than males to be enrolled (46 per cent compared with 40 per cent). For both sexes, enrolments were greatest in the 0-4 year age group (78 for females and 77 per cent males) and lowest in the 10-14 year age group (27 and 26 per cent for females and males, respectively).
Deeble used the VII to assess Indigenous people’s use of MBS services in 2006-07 and 2007-08. He found that the proportion of VII enrolees who ever saw a GP or practice nurse and the frequency of visits to those health professionals was less than the national average. The pattern differed by age, however, with groups between 25 and 64 years of age having rates higher than the national average. There were also differences by location with usage declining with increasing remoteness.

In addition to the analysis of VII enrollees, Deeble considered the usage of people accessing the services of medical practitioners working in an Aboriginal community controlled health service (ACCHO). These doctors have a special provider number that enables MBS benefits to be claimed for their services. Patients who received treatments from these providers used MBS services at a rate similar to the national average. This group was also more likely than VII enrollees to access non-ACCHO services, which suggests that the inability to exclude non-Indigenous patients from ACCHOs may have contributed to the higher rates of use in this group.

The AIHW has also used the VII to estimate expenditure on MBS and PBS services for the whole of the Indigenous population. In 2006-07, it estimated that per capita MBS expenditure on Indigenous Australians was just over half (57.5 per cent) that for non-Indigenous Australians ($334 and $580 per person, respectively). Mainstream PBS expenditure (excluding RPBS) was under half (45.4 per cent) that for non-Indigenous Australians and even when Section 100 and other special supply arrangements were included, total pharmaceutical benefits expenditure (excluding RPBS) was still less than two thirds (60.4 per cent) that for non-Indigenous Australians ($175 and $290 per person, respectively).

Neither Deeble nor the AIHW published data for the NT and information was not available from the Department of Health and Ageing at the time of this report; however, it would be reasonable to expect that Indigenous usage in the NT would follow the patterns indicated by Deeble and the AIHW. Lower usage by Indigenous Territorians would contribute to the gap in MBS and PBS utilisation, but its extent and the interaction with other issues including workforce and geographic location are unclear. These issues will be examined in a subsequent report pending the availability of suitable data.
**NT PBS patterns of use**

Demographic data were not available for PBS services; however, data were available by patient type. There were three main types of patients:

- general patients who only hold a Medicare card;
- RPBS patients who are people who have incurred injuries or conditions as a result of war service or other defence force activity; and
- concessional patients who hold a Medicare and either a pensioner concession card, Commonwealth seniors health care or a health care card. This group will include elderly people and people below pension age who receive support from the Commonwealth government because of their financial, physical or social circumstances.47

Patient types were also further divided into those who are receiving the standard PBS subsidy (ordinary patients) and those who are receiving an additional subsidy through safety net arrangements (safety net arrangements). A final category is the Doctors bag, which refers to pharmaceuticals held by a medical practitioner for use during home visits or emergencies.

As Table 8 shows, concessional patients in the NT used 71.0 per cent of PBS services in 2008-09. This share was lower than the national share (79.0) because high use (safety net) patients used less services in the NT (8.6 per cent of services compared with 17.9 per cent nationally). General patients accounted for 24.2 per cent of services in the NT. Nationally, their share of services was much lower (13.4 per cent).

<table>
<thead>
<tr>
<th>Patient type</th>
<th>Proportion of total services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NT</td>
</tr>
<tr>
<td>General ordinary</td>
<td>21.1%</td>
</tr>
<tr>
<td>General safety net</td>
<td>3.1%</td>
</tr>
<tr>
<td>Concessional ordinary</td>
<td>62.4%</td>
</tr>
<tr>
<td>Concessional safety net</td>
<td>8.6%</td>
</tr>
<tr>
<td>Doctors bag</td>
<td>0.3%</td>
</tr>
<tr>
<td>RPBS ordinary</td>
<td>3.8%</td>
</tr>
<tr>
<td>RPBS safety net</td>
<td>0.7%</td>
</tr>
</tbody>
</table>


Concessional patients will be the elderly and poorer members of society. Ill-health tends to be higher in these groups so it is unsurprising that they account for a greater share of services than general patients. There was, however, some variation over the study period in the proportion of services consumed by general and concessional patients. The proportion of services used by general patients ranged between 22.0 per cent and 28.6 per cent. The proportion of services used by concessional patients ranged between 66.6 per cent and 74.4 per cent. Change in the relative proportion of services used by each group was due to variation in the amount of services consumed by general patients. Growth in their utilisation of services was inconsistent with the
number of services consumed declining in some years (1996-97, 1997-98, 2005-06 and 2006-07). In contrast, the number of services used by concessional patients grew each year and by 2008-09 they used 68.5 per cent more services than in 1993-94. Growth over the same period for general patients was only 54.5 per cent.

RPBS patients increased their share of services over the study period (Table 9). This group mainly comprises former and current defence force personnel who have been injured in war or the provision of other defence services and they can access a broader range of pharmaceuticals than other PBS patients. The RPBS share of PBS services nearly doubled in the NT, increasing from 2.3 per cent in 1993-94 to 4.5 per cent in 2008-09. The proportion and growth in the RPBS share of PBS services in the NT differed from that nationally where the RPBS share rose from 4.7 per cent in 1993-94 to a peak of 8.8 per cent in 2002-03 then fell steadily to 7.3 per cent in 2008-09.

Table 9  PBS and RPBS number and share of services by year, NT, 1993-94 to 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of services</th>
<th>Share of services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PBS</td>
<td>RPBS</td>
</tr>
<tr>
<td>1993-94</td>
<td>371,773</td>
<td>8,820</td>
</tr>
<tr>
<td>1994-95</td>
<td>410,476</td>
<td>7,786</td>
</tr>
<tr>
<td>1995-96</td>
<td>433,832</td>
<td>9,533</td>
</tr>
<tr>
<td>1996-97</td>
<td>433,078</td>
<td>12,084</td>
</tr>
<tr>
<td>1997-98</td>
<td>443,179</td>
<td>12,763</td>
</tr>
<tr>
<td>1998-99</td>
<td>457,719</td>
<td>14,439</td>
</tr>
<tr>
<td>1999-00</td>
<td>475,498</td>
<td>17,133</td>
</tr>
<tr>
<td>2000-01</td>
<td>502,030</td>
<td>20,233</td>
</tr>
<tr>
<td>2001-02</td>
<td>523,863</td>
<td>22,899</td>
</tr>
<tr>
<td>2002-03</td>
<td>540,327</td>
<td>25,198</td>
</tr>
<tr>
<td>2003-04</td>
<td>555,792</td>
<td>26,465</td>
</tr>
<tr>
<td>2004-05</td>
<td>583,994</td>
<td>28,279</td>
</tr>
<tr>
<td>2005-06</td>
<td>584,744</td>
<td>28,208</td>
</tr>
<tr>
<td>2006-07</td>
<td>566,625</td>
<td>27,360</td>
</tr>
<tr>
<td>2007-08</td>
<td>587,242</td>
<td>28,356</td>
</tr>
<tr>
<td>2008-09</td>
<td>608,115</td>
<td>28,670</td>
</tr>
</tbody>
</table>


Regional patterns of use

The Medicare Australia statistical website provides a regional split within the NT by Division of General Practice. Up to July 2008, there were two divisions in the NT – the Top End Division of General Practice (TEDGP) and the Central Australian Division of General Practice (CADGP). TEDGP covered the Darwin (urban and rural), Katherine and East Arnhem regions while CADGP covered Alice Springs (urban and rural) and
Barkly regions. In July 2008, the two divisions joined to form a single entity – GP Network NT – preventing further regional analysis. Only the last three years of MBS service and benefits data and two years of PBS data were available from the Medicare Australia statistical website. MBS data for the period 1996-97 to 2003-04 were available from the previous report and the remaining years were sourced by special request from Medicare Australia. PBS data were also sourced by special request, but it was only available for the past five years.

Estimates of regional populations by Health Gains Planning were used to derive the per capita utilisation of MBS and PBS services by division.48,49 The MBS usage for 2000-01 to 2002-03 differs from that shown in the previous report due to an update of the population estimates following the 2006 Census. The updated estimates resulted in a lowering of the MBS rates for TEDGP and an increase in the rates for CADGP.

As shown in Figure 25, at the start of the study period in 1996-97 people living in the northern regions covered by TEDGP used 3.3 MBS services per person compared with 2.2 MBS services per person for people living in the southern regions covered by CADGP. A steady decline in usage in northern regions and a slight rise in southern regions meant that by 2004-05 per capita usage was similar in both divisions (2.6 services per person). Over the remainder of the study period, a slight gap reappeared due to an increase in average usage in the northern regions. In 2007-08, people in northern regions used 2.9 MBS services per person compared with 2.6 MBS services per person in southern regions.

Trends in PBS usage by division during the period 2004-05 to 2007-08 were similar with both showing a decline in per capita usage (Figure 26). Per capita usage in northern regions was higher than in southern regions in all years and there was little change in the gap over time. In 2004-05, people in northern regions used an average...
of 2.7 services per person, but by 2007-08 this had declined to 1.7 services per person. In southern regions, people used an average of 1.9 services per person in 2004-05, but by 2007-08, it had declined to 1.1 services per person.

Figure 26  PBS, services per capita by Division of General Practice, NT, 2004-05 to 2007-08

Although the decline in usage could suggest that growth in service provision was not matching growth in population, it is likely to be too simplistic. Between 1996-97 and 2007-08, the population in northern regions increased each year, but growth in the number of MBS services did not follow a similar pattern. Instead, it decreased in most years until 2005-06. In southern regions, the population grew until 2001-02 when there were three consecutive years of decline before growth resumed in 2004-05. MBS services over the same period exhibited four waves of growth with the total number of services increasing for a few years before dropping markedly then growth resumed again from that lower point. These patterns could indicate that there are problems in the supply of services, in particular the number of health professionals available to provide services. This issue is examined in the next section of the report.

Access to service providers

General practitioners

General practitioners (GPs) activate the payment of MBS and PBS benefits through direct consultations with patients, referral of patients to other services such as diagnostic tests and imaging and specialist services, and the issuing of prescriptions for pharmaceuticals. There are four key sources for estimates of the number of GPs in the NT:

- DoHA provides statistics on the number of GPs who provided at least one MBS service during the year.\(^5^0\)
the AIHW provides estimates of primary care clinicians based on responses to annual medical labour force surveys (MLFS) by registered medical practitioners;\(^51\)

the AIHW also publishes numbers of general medical practitioners based on ABS Census data;\(^52\) and

the Primary Health Care Research and Information Service (PHCRIS) provides estimates of practicing GPs based on responses to an annual survey (ASD) by Divisions of General Practice.\(^53\)

The headcount estimates vary between the sources ranging from 257 GPs (PHCRIS) to 333 (MLFS) in 2006-07. These numbers represent 1.0 per cent or more of the national GP workforce and with the exception of the Census estimate, mean that the NT has a higher ratio of GPs per 100,000 population than the national average (Table 10). The Census estimate indicates that the ratio in the NT is similar to that nationally, but at a regional level it shows that access to GPs differs markedly (Table 11).

Table 10  Comparison of the number of general practitioners per 100,000 population by data source, 2006-07

<table>
<thead>
<tr>
<th>Source</th>
<th>NT</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoHA general practitioners (Medicare)</td>
<td>154.3</td>
<td>117.3</td>
</tr>
<tr>
<td>AIHW primary care clinicians (MLFS)</td>
<td>158.1</td>
<td>116.5</td>
</tr>
<tr>
<td>AIHW general medical practitioners (ABS Census)</td>
<td>142.4</td>
<td>144.6</td>
</tr>
<tr>
<td>PHCRIS general practitioners (ADP)</td>
<td>122.0</td>
<td>110.5</td>
</tr>
</tbody>
</table>

Sources:
AIHW, Medical labour force 2007. National health labour force series no. 44. Cat. no. HWL 45. Table 3.1.
AIHW, Health and community services labour force 2006. National health labour force series no. 42. Cat. no. HWL 43. Table 4.1.
ABS. Australian demographic statistics, Cat. No. 3101.0, June 2009. Table 4. Estimated Resident Population, States and Territories (number), June quarter estimate 2006.

Table 11  General practitioners per 100,000 population by remoteness area, 2006 Census

<table>
<thead>
<tr>
<th>Remoteness area</th>
<th>NT</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of population</td>
<td>GPs per 100,000 persons</td>
<td></td>
</tr>
<tr>
<td>Major cities</td>
<td>68.4%</td>
<td>163.3</td>
</tr>
<tr>
<td>Inner regional</td>
<td>19.7%</td>
<td>110.6</td>
</tr>
<tr>
<td>Outer regional</td>
<td>54.8%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Remote</td>
<td>21.7%</td>
<td>159.4</td>
</tr>
<tr>
<td>Very Remote</td>
<td>23.5%</td>
<td>42.4</td>
</tr>
</tbody>
</table>

Sources:
AIHW, Health and community services labour force 2006. National health labour force series no. 42. Cat. no. HWL 43. Table 4.1.

Access to GPs in Darwin (classified as outer regional) was slightly lower than the national average for major cities (159.4 GPs per 100,000 persons compared to 163.3


nationally), but much higher than the national average in regional areas. There were more GPs per capita in remote areas in the NT than in major cities and the rate of 199.1 GPs per 100,000 persons was more than twice the national rate of 96.6. People in very remote areas had the least access to GPs both in the NT and nationally (42.4 and 53.1 GPs per 100,000 persons, respectively), but nearly a quarter of the NT’s population lives in these areas compared with only 0.8% nationally.

These data were, however, based on headcount numbers of GPs and not all GPs work in the role on a full-time basis. DoHA provides estimates of full-time workload equivalents (FWE) to account for differences in working patterns. FWEs are calculated by dividing a GP’s Medicare billings by the average billing of full-time GPs for the year. For example, a GP whose billing was 70 per cent of the full-time average would be counted as 0.7 FWE while a GP whose billing was 120 per cent of the full-time average would be 1.2 FWE. In 2006-07, DoHA estimated that even though 325 GPs in the NT billed Medicare, the FWE number of GPs was a third of the headcount number at 104 (Table 12). Nationally, the difference was less with the headcount of 24,903 GPs reducing to 18,091 FWE GPs. In 2007-08, there was a notable increase in the FWE rate in the NT and it reached a high point of 53.2 FWE GPs per 100,000 people. This rate was, however, only 60.9 per cent of the national rate.

**Table 12 FWE general practitioners, count and rate by year, NT and Australia, 2000-01 to 2007-08**

<table>
<thead>
<tr>
<th>Year</th>
<th>NT FWE GPs</th>
<th>Australia FWE GPs</th>
<th>NT FWEs per 100,000 persons</th>
<th>Australia FWEs per 100,000 persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>94</td>
<td>16,493</td>
<td>47.8</td>
<td>85.4</td>
</tr>
<tr>
<td>2001-02</td>
<td>93</td>
<td>16,736</td>
<td>46.8</td>
<td>85.5</td>
</tr>
<tr>
<td>2002-03</td>
<td>97</td>
<td>16,772</td>
<td>48.6</td>
<td>84.7</td>
</tr>
<tr>
<td>2003-04</td>
<td>98</td>
<td>16,872</td>
<td>48.7</td>
<td>84.2</td>
</tr>
<tr>
<td>2004-05</td>
<td>95</td>
<td>17,273</td>
<td>46.4</td>
<td>85.1</td>
</tr>
<tr>
<td>2005-06</td>
<td>97</td>
<td>17,649</td>
<td>46.4</td>
<td>85.7</td>
</tr>
<tr>
<td>2006-07</td>
<td>104</td>
<td>18,091</td>
<td>48.8</td>
<td>86.4</td>
</tr>
<tr>
<td>2007-08</td>
<td>116</td>
<td>18,613</td>
<td>53.2</td>
<td>87.4</td>
</tr>
</tbody>
</table>

Sources:
ABS, Australian historical population statistics 2008, Cat. no. 3105.065.001, Table 4.1

The shortfall is even more concerning when matched to the burden of disease and injury in the NT. Over the period 1999 to 2003, the annual burden of disease and injury in the NT was 1.7 times the burden in the nation as a whole (227.2 age standardised disability adjusted life-years [DALYs] per 1000 population compared with 130.3 nationally). Table 13 shows that if there was no change in the incidence of disease and injury, the level of mortality and morbidity in the population in 2007-08 would equate to 49,373.1 DALYs in the NT and 2.8 million DALYs nationally. Matched to the primary care workforce, it means that there would be 2.3 FWE GPs in the NT for every 1000 DALYs compared with 6.0 FWE GPs nationally.
Table 13  Comparison of NT and national FWE GPs by population and burden of disease and injury, 2007-08

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>FWE GPs per 1000 population</th>
<th>Total DALYS</th>
<th>FWE GPs per 1000 DALYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>NT</td>
<td>0.5</td>
<td>49,373.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Australia</td>
<td>0.9</td>
<td>2,769,150.8</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Sources:
ABS, Australian historical population statistics 2008, Cat. no. 3105.065.001, Table 4.1

Pharmacies

Less access to GPs may also contribute the lower levels of PBS usage in the NT because people are less able to obtain prescriptions. In addition to that disadvantage, Territorians also have less access to pharmacies. In 2008, there were 18 urban pharmacies and nine (9) non-urban pharmacies in the NT, which translated to 4882 persons per pharmacy in urban areas and 11,451 persons per pharmacy in non-urban areas. In contrast, at a national level, the number of persons per pharmacy was 3863 in urban areas and 4436 in non-urban areas. The only jurisdiction where the number of persons per pharmacy was greater was the ACT at 5300 people per urban pharmacy (it had no non-urban pharmacies).
Discussion

MBS and PBS benefits to the NT have grown steadily over time and in the case of MBS, quite markedly over the period 2004-05 to 2008-09. There was, however, little change in the NT’s share of the total pool of these benefits, which continued to be well below its population share.

The NT’s younger population structure would be expected to reduce its share of benefits as younger people tend to consume fewer services. It does not, however, account for the differences seen in this study. If NT residents had received the same age-standardised benefit as nationally, the NT would have received another $50.2 million in MBS funding and $37.7 million in PBS funding in 2008-09. The Australian Government provided other funding for medical and pharmaceutical services, but the NT’s share of the total funding pool for each of these services was only 0.6 per cent, an amount still well below its population share. The lower share contrasts starkly with the need for health services. With a burden of disease and injury 1.7 times the national level, it would have been reasonable to expect that the NT’s share of funding would exceed its population share.

Drivers of growth

The amount of benefits to the NT increased over time even though its share remained static. A number of factors will have contributed to the growth in benefits: population growth; higher per capita consumption of services; changes in the service mix; and price adjustments including increases in the subsidised proportion of scheduled fees and allowances for inflation.

Price adjustments were universal so all jurisdictions would have been affected equally. Changes in the mix of services could, however, affect the NT’s share of benefits. The average MBS benefit in the NT was lower than the national average and the gap between the two widened over the study period. Contributing to the gap was a higher proportion of lower cost pathology services and less expensive substitutions such as AHW and practice nurses providing services instead of GPs. All other things being equal such a change would reduce the NT’s share of benefits. In contrast, the average PBS benefit was higher in the NT than nationally and the gap widened perhaps enhanced by a change in the proportion of services away from less expensive pharmaceuticals for simple conditions such as anti-infectives toward more expensive drugs for complex conditions such as cardiovascular system pharmaceuticals. Despite these changes in the average price per service, the NT maintained its share of MBS and PBS benefits, suggesting that these price effects were offset by growth effects.

ABS estimates indicated that the NT’s population grew consistently across the study period, but the NT Medicare population was more volatile even decreasing in some years. The number of services grew in each year despite decreases in per capita benefits in some years so usage by new members of the NT population and an increase in the proportion of the Medicare population who used services boosted benefits. More important, however, was the increase in the average number of MBS and PBS services per person during the study period. Additional demand arose from improved access to service providers. These improvements took a number of forms including expansion in the scope of services, numbers of GPs and after hours access, and the reduction of cost barriers. Despite growth in per capita usage, consumption in the NT remained well below the national average and for MBS services, the gap widened markedly between 2003-04 and 2008-09, which was the period following the
introduction of Australian Government initiatives to improve affordability and access to services.

One cause of the divergence between NT and national utilisation was the increase in utilisation by elderly people. They are likely to have been the major beneficiaries of initiatives to improve the treatment and management of chronic disease and facilitate access to primary care services for residents of aged care facilities.\textsuperscript{55} Nationally, the extra use of MBS services by people aged 75 years and older was more than twice that of other age groups. In the NT, consumption by this group was also higher than other age groups, but it was well below the growth at a national level. The NT was further disadvantaged by this trend because it only has a small proportion of its population in this age group.\textsuperscript{18}

Reliance on alternative sources of primary care funding

The NT is more reliant than other jurisdictions on alternative sources of funding for primary care services. Nearly a quarter of the NT’s funding for medical services and half of pharmaceutical services funding came from other Australian Government programs. Unlike MBS and PBS funding, there is no legislative basis for this funding that ensures continuity and defines entitlements. Furthermore, its availability is not driven by individuals’ clinical need for services. Rather, these sources are made available at the discretion of the Australian Government and the amount of funds available and its duration depends on the program’s budget and formulas for distributing the funding across recipients. The limitations of this form of funding can be seen in the lengthy roll-out, onerous planning and consultative requirements and definitive funding formulas of PHCAP.\textsuperscript{3,21} PHCAP has now been subsumed into the Office of Aboriginal and Torres Strait Islander Health’s core funding for primary care making it difficult to trace the growth and distribution of funding under the program.

Access and affordability

MBS and PBS funding is linked to patients’ health needs with the payment of benefits being activated when they consult general practitioners for treatments, referrals and prescriptions.\textsuperscript{3} Access to GPs is, however, likely to be a key barrier to increasing MBS and PBS utilisation. The number of FWE GPs was much lower in the NT than nationally and combined with high levels of ill health, it may be difficult for Territorians to readily access services. It may explain why a greater proportion of NT residents do not see a GP (31.4 per cent compared with 19.5 per cent nationally) and a much smaller proportion accessed the services of more than three different GPs in a year (19.0 per cent compared with 30.2 per cent nationally in 2007-08).\textsuperscript{13}

With access constraints, the growth in demand stimulated by recent Australian Government initiatives may have lead to the demand from existing patients ‘crowding out’ demand from new patients.\textsuperscript{56} Greater access to bulk billing and better insurance against high out-of-pocket expenses through the safety net would be expected to increase the number of times existing patients used MBS and PBS services.\textsuperscript{56,57} The increase in per capita service utilisation was consistent with this proposition. The proportion of non-users in the NT also fell in the first 2 years following the introduction of the bulk billing incentives then stabilised until 2007-08 when there was a further 2.0 percentage point drop in non-users. This further reduction coincided with an increase in the per capita number of FWE GPs suggesting that during the interim period growth in demand may have occurred mainly through existing rather than new patients.\textsuperscript{56} Also consistent with the possibility of crowding out was the steady growth in PBS services to concessional patients when services to general patients declined. Future research
could better identify and quantify these impacts, but it would require access to more
detailed data than presently available from the Medicare Australia website.

For NT residents who are not bulk-billed, affordability continued to worsen. Out-of-
pocket costs tripled over the study period and continued to be higher than the national
average. The growth in these costs was well in excess of general inflation and growth
in earnings. Consequently, fee-paying patients in the NT residents spent an ever
greater share of their earnings on primary care services over the study period, which
left them with less to spend on other goods and services. Cost increases are likely to
result in patients using fewer services or presenting at more advanced stages than
might be best for their long-term wellbeing.

Of further interest is the occurrence of the largest annual increase in out-of-pocket
costs after the introduction of the bulk billing incentives. Growth was also higher than
average in the years following that jump. This timing could suggest that the growth in
bulk billing has been cross-subsidised through higher charges to fee-paying patients.

High costs and demand for services may impede access and affordability, but more
problematic for many NT residents may be their geographical location. A third of the
population lives outside the two major urban areas of Darwin and Alice Springs. Communities in these areas tend to be too small to support the traditional model of
health care delivery by private practitioners. Instead, access to health care is
provided by health services, which are operated and funded by the NT Department of
Health and Families or government-funded ACCHOs. Larger health services may
have resident doctors, but most are staffed by remote area nurses and AHWs with
support from visiting medical practitioners. MBS benefits would not normally be paid
for services provided by staff in these services because they are employed by publicly
funded organisations. Remote health services can, however, claim MBS benefits for
some activities through Section 19.2 exemptions, but research suggests that claims
have been less than what they could be because activities do not fit within Medicare
specifications and there is a lack of incentive, knowledge or administrative ability to
make claims. There are also additional costs associated with providing services
that are not adequately covered by the MBS and PBS benefits, for example, scale
inefficiencies associated with servicing a small population, travel costs to provide
visiting services in outlying communities and higher staffing costs to attract and retain
staff in these locations. These issues mean that it would be uneconomic for GPs and
other private practitioners to provide services in small, remote communities because
MBS and PBS subsidies would not fully cover costs or the range of activities that need
to be delivered by these services. Further research to better identify and quantify these
costs and activities would be useful to assist policy makers determine how MBS and
PBS could accommodate the costs of delivering services in remote communities.

Limitations of study

Although it is clear that NT residents continued to receive a below average share of
medical and pharmaceutical services and funding, there are several limitations of the
study. First, a lack of demographic information on PBS utilisation means that little is
known about age and sex utilisation in the NT. Per capita utilisation of PBS services
was estimated using the implied Medicare population from the MBS data. This
population was the logical choice as Medicare enrolment is necessary for the payment
of benefits; however, some users of MBS services may not require pharmaceuticals
while others may require several different drugs and have repeat prescriptions.
Accordingly, it would have been useful if the per capita estimates could have been
supplemented with data on the proportions of non-users and high frequency users.
Second, the poor health of the NT Indigenous population is well documented, but
statistics on their relative utilisation of MBS and PBS services were not available from
the Medicare Australia website. National studies suggest that their usage is likely to be
well below the national average. Given the size of this group in the NT, any difference
in utilisation will have a substantial impact on the patterns of use for the NT as a whole.
Further research is needed to establish the extent of this impact and to identify whether
usage by non-Indigenous Territorians also varies from the national average. Third,
remoteness also impacts on utilisation, but geographic differences could only be
analysed by Division of General Practice, which limited the analysis to a comparison of
two regions. Furthermore, no further analysis using this source was possible after
2007-08 due to the amalgamation of the two NT divisions in 2008.

Policy implications

With the shortfall in MBS and PBS funding widening, the NT is becoming more reliant
on alternative streams of funding to provide its residents with similar rights and
entitlements to health care as other Australians. The amount, duration and purpose of
these alternative streams of funding are, however, at the discretion of the Australian
Government. This arrangement leaves NT residents disconnected from the open
ended fee-for-service system where service volumes can vary in accordance with their
health needs. Instead, they are increasingly dependent on the decisions of government
as to the extent and type of services that will be made available to them. Recent
Australian Government initiatives to improve affordability and access to MBS services
have not supported a narrowing of the gap in utilisation and have undermined any
 gains that might be made through additional funding from other sources by enhancing
national usage rates to even higher levels.

A key impediment to increasing the utilisation of MBS and PBS services in the NT
appears to be access to service providers and more incentives are needed to boost
their numbers to levels commensurate with health need. MBS also needs to better
accommodate the circumstances of remote communities by providing a framework of
subsidies that matches the services provided in those locations and the higher cost of
delivering services.
Appendix 1  State and territory comparisons

The following table and graphs show state and territory comparisons of MBS and PBS usage. Some major points are:

- Residents in NT, ACT, Queensland and Western Australia (WA) used less than their population share of MBS and PBS services in 2008-09 (Table 14).
- NSW had the highest number of MBS services per capita in 2008-09 at 14.8, an amount nearly twice that of the NT (Figure 27).
- Tasmania had the highest number of PBS services per capita in 2008-09 at 10.9, an amount more than three times that of the NT (Figure 28).
- Per capita usage in 2008-09 was lower in the territories than in the states, particularly for PBS.
- In 2008-09, NSW had the highest proportion of bulk billed services (Figure 29) at 77.2 per cent and the ACT the lowest at 63.1 per cent.
- The greatest contrast in the proportion of the Medicare population who did not use a service in 2007-08 was between the NT and South Australia (SA). In SA, there were only 125 people in 1000 who did not use a MBS-funded service compared with 254 in 1000 in the NT (Figure 30).

Table 14  Share of population, MBS services and PBS services by state and territory, 2008-09

<table>
<thead>
<tr>
<th>State/territory</th>
<th>Proportion of</th>
<th>Proportion of</th>
<th>Proportion of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>MBS Services</td>
<td>PBS Services</td>
</tr>
<tr>
<td>NSW</td>
<td>32.5%</td>
<td>35.6%</td>
<td>34.1%</td>
</tr>
<tr>
<td>Victoria</td>
<td>24.8%</td>
<td>24.9%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Queensland</td>
<td>20.1%</td>
<td>19.4%</td>
<td>19.5%</td>
</tr>
<tr>
<td>SA</td>
<td>7.4%</td>
<td>7.6%</td>
<td>8.4%</td>
</tr>
<tr>
<td>WA</td>
<td>10.2%</td>
<td>8.6%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Tasmania</td>
<td>2.3%</td>
<td>2.1%</td>
<td>2.8%</td>
</tr>
<tr>
<td>ACT</td>
<td>1.6%</td>
<td>1.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>NT</td>
<td>1.0%</td>
<td>0.6%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source:
ABS. Australian demographic statistics, Cat. No. 3101.0, June 2009. Table 4. Estimated resident population, states and territories (number), average across quarters 2008-09.
Figure 27  MBS, services per capita by state and territory, 2008-09

Jurisdiction

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>MBS services per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>14.8</td>
</tr>
<tr>
<td>Vic</td>
<td>13.7</td>
</tr>
<tr>
<td>Qld</td>
<td>13.3</td>
</tr>
<tr>
<td>SA</td>
<td>13.9</td>
</tr>
<tr>
<td>WA</td>
<td>11.6</td>
</tr>
<tr>
<td>Tas</td>
<td>12.2</td>
</tr>
<tr>
<td>ACT</td>
<td>11.0</td>
</tr>
<tr>
<td>NT</td>
<td>8.0</td>
</tr>
</tbody>
</table>


Figure 28  PBS, services per capita by state and territory, 2008-09

Jurisdiction

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>PBS services per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>9.4</td>
</tr>
<tr>
<td>Vic</td>
<td>9.2</td>
</tr>
<tr>
<td>Qld</td>
<td>8.8</td>
</tr>
<tr>
<td>SA</td>
<td>10.3</td>
</tr>
<tr>
<td>WA</td>
<td>7.7</td>
</tr>
<tr>
<td>Tas</td>
<td>10.9</td>
</tr>
<tr>
<td>ACT</td>
<td>6.2</td>
</tr>
<tr>
<td>NT</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Figure 29 Proportion of services bulk billed by state and territory, 2008-09

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Proportion of services</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>77.2%</td>
</tr>
<tr>
<td>Vic</td>
<td>72.0%</td>
</tr>
<tr>
<td>Qld</td>
<td>73.2%</td>
</tr>
<tr>
<td>SA</td>
<td>74.4%</td>
</tr>
<tr>
<td>WA</td>
<td>69.3%</td>
</tr>
<tr>
<td>Tas</td>
<td>71.2%</td>
</tr>
<tr>
<td>ACT</td>
<td>63.1%</td>
</tr>
<tr>
<td>NT</td>
<td>77.1%</td>
</tr>
</tbody>
</table>


Figure 30 Proportion of Medicare population who did not use a service by state and territory, 2007-08

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Proportion of Medicare population</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>13.7%</td>
</tr>
<tr>
<td>Vic</td>
<td>14.2%</td>
</tr>
<tr>
<td>Qld</td>
<td>15.0%</td>
</tr>
<tr>
<td>SA</td>
<td>12.5%</td>
</tr>
<tr>
<td>WA</td>
<td>16.7%</td>
</tr>
<tr>
<td>Tas</td>
<td>15.1%</td>
</tr>
<tr>
<td>ACT</td>
<td>16.7%</td>
</tr>
<tr>
<td>NT</td>
<td>25.4%</td>
</tr>
</tbody>
</table>

References


56. Day S, Alford K, Dunt D, Peacock S, Gurrin L, Voaklander D. Strengthening Medicare: will increasing the bulk-billing rate and supply of general practitioners increase access to Medicare-funded general practitioner services and does rurality matter? Australia and New Zealand Health Policy 2005;2(18).


List of tables

Table 1  Population estimates ........................................................................................ 5
Table 2  Average benefit per service, NT and Australia, 2008-09 ................................. 8
Table 3  Deficit between actual and age-standardised expected MBS and PBS benefits, NT, 1994-95 to 2007-08 ............................................................... 19
Table 4  Proportion of total funding for medical services and pharmaceuticals from MBS and PBS programs by state/territory, 2007-08 ........................................... 22
Table 5  Benefits for MBS bulk billing incentive items, NT and Australia, 2003-04 to 2008-09  ............................................................................................................. 23
Table 6  MBS benefits for items under the Better Access to Psychiatrists, Psychologists and GPs through the Medicare Benefits Schedule Initiative, NT and Australia, 2006-07 to 2008-09 ........................................... 26
Table 7  Total NT benefits and share of national funding for MBS items to better prevent and manage chronic disease, 1999-00 to 2008-09 ........................................ 27
Table 8  Proportion of PBS services by patient type, NT and Australia, 2008-09 .......... 31
Table 9  PBS and RPBS number and share of services by year, NT, 1993-94 to 2008-09 .................................................................................................................... 32
Table 10 Comparison of the number of general practitioners per 100,000 population by data source, 2006-07 ....................................................................................... 35
Table 11 General practitioners per 100,000 population by remoteness area, 2006 Census ......................................................................................................................... 35
Table 12 FWE general practitioners, count and rate by year, NT and Australia, 2000-01 to 2007-08 ............................................................................................................. 36
Table 13 Comparison of NT and national FWE GPs by population and burden of disease and injury, 2007-08 ..................................................................................... 37
Table 14 Share of population, MBS services and PBS services by state and territory, 2008-09 ................................................................................................................ 42
List of figures

Figure 1  MBS and PBS benefits to NT residents (current prices), 1993-94 to 2008-09  6
Figure 2  MBS and PBS services to NT residents, 1993-94 to 2008-09  ...............................7
Figure 3  Total MBS and PBS benefits in Australia (current prices) and the proportion to the NT, 1993-94 to 2008-09 .................................................................................7
Figure 4  MBS benefits per capita by age group, NT and Australia, 2008-09  .........................9
Figure 5  MBS services per capita, NT and Australia, 1994-95 to 2008-09  ........................10
Figure 6  PBS services per capita, NT and Australia, 1994-95 to 2008-09 ............................10
Figure 7  Growth in MBS services relative to 1994-95 levels, NT and Australia  ..................11
Figure 8  Growth in PBS services relative to 1994-95 levels, NT and Australia  ....................11
Figure 9  MBS services per capita by age group, NT and Australia, 2008-09  ....................12
Figure 10 MBS, comparison of additional services per capita by age group, 2003-04 to 2008-09, NT and Australia ........................................................................................................ 12
Figure 11 MBS services per capita by gender, NT and Australia, 1994-95 to 2008-09 ........13
Figure 12 Growth in MBS services per capita by gender relative to 1994-95 levels, NT and Australia ..........................................................................................................................14
Figure 13 Proportion of Medicare population who did not use a service, 2002-03 to 2007-08 ............................................................................................................................15
Figure 14 MBS services by category, NT and Australia, 2008-09 .......................................16
Figure 15 MBS, proportion of professional attendances and pathology services, 1993-94 to 2008-09, NT and Australia ..................................................................................................16
Figure 16 MBS, Proportion of professional attendances and pathology services, 1993-94 to 2008-09, NT and Australia ..........................................................................................17
Figure 17 PBS, proportion of services by anatomical therapeutic chemical (ATC) category, NT and Australia, 2008-09 ......................................................................................18
Figure 18 PBS, proportion of services by selected ATC category, 1993-94 to 2008-09, NT and Australia ................................................................................................................18
Figure 19 MBS, total funding compared to age-standardised expected benefits, NT, 1994-95 to 2008-09 ..............................................................................................................20
Figure 20 PBS, total funding compared to age-standardised expected benefits, NT, 1994-95 to 2008-09 ................................................................................................................21
Figure 21 Proportion of services bulk billed, NT and Australia, 1993-94 to 2008-09 ........24
Figure 22 Average patient contribution ($) per service, patient-billed out-of-hospital services, NT and Australia, 1993-94 to 2008-09 .......................................................................24
Figure 23 MBS, share of total services by age cohort, NT, 2008-09 .....................................29
Figure 24 MBS, share of total services by sex and age cohort, NT, 2008-09 .....................30
Figure 25 MBS, services per capita by Division of General Practice, NT, 1996-97 to 2007-08........................................................................................................................................33
Figure 26 PBS, services per capita by Division of General Practice, NT, 2004-05 to 2007-08 ..........................................................................................................................34
Figure 27 MBS, services per capita by state and territory, 2008-09 .....................................43
Figure 28 PBS, services per capita by state and territory, 2008-09 .....................................43
Figure 29 Proportion of services bulk billed by state and territory, 2008-09 .....................44
Figure 30  Proportion of Medicare population who did not use a service by state and territory, 2007-08 ............................................................ 44
Selected Health Gain Planning publications


Beaver C, Zhao Y. Investment analysis of the Aboriginal and Torres Strait Islander Primary Health Care Program in the Northern Territory. Aboriginal and Torres Strait Islander primary health care review: consultant report no. 2. Canberra: Commonwealth of Australia, 2004.