Chapter 6: Services

A key objective of Best Start is to ensure that all children have access to quality services that support their health, wellbeing and development. The indicators selected for measuring the effectiveness of these services are linked to the delivery of primary health care services, which are documented in the Best Start Indicators Project. Primary health care services are considered to be the most appropriate and effective platform for improving the health, development and wellbeing of children through early detection, prevention and health promotion.

Primary care services are generally those services that are widely available and used by a large percentage of the population. In Victoria, primary care services are provided by general practitioners, maternal and child health nurses, allied health professionals and alternative health care providers. The Best Start Indicators Project cites research demonstrating that these services are likely to be accessed by young children on a frequent basis, giving primary care providers the opportunity to engage in preventative health care. High quality primary care is defined as ‘the timely use of personal health services to achieve the best possible health outcomes’.

In measuring the effectiveness of these services, the potential barriers that families and children may encounter can be identified. These barriers can include issues relating to access, for example geographic distance, financial costs, cultural differences, and organisational impediments. Barriers affecting the quality of care can include personal differences; training; cultural bias; professional development; and time constraints.

Early detection strategies within the primary health care system mean that health problems – including both diseases and disabilities – can be identified in their earliest stages. The use of health promotion and health intervention strategies aim to tackle disease prevention and also raise awareness of health and wellbeing in the general population.

Health assessments for children at key stages of their development and the provision of breastfeeding services (covered previously under the domain of health nutrition) are two indicators that can be measured in the context of health promotion and health intervention strategies. The provision of immunisation services is considered to be one of the most effective indicators of health promotion and primary prevention within the Australian health care system.
Immunisation services

The Immunisation Australia Program

The Immunisation Australia Program is a joint Commonwealth-State/Territory Government program which aims to increase national childhood immunisation rates to reduce the incidence of vaccine preventable diseases in the Australian community. The program builds on initiatives developed under the National Childhood Immunisation Program, which includes the provision of free vaccines to all providers; the establishment of the Australian Childhood Immunisation Register (ACIR); provider and community education programs; and a national adverse events reporting scheme.

The Australian Childhood Immunisation Register (ACIR)

The ACIR, established in 1996, is the national immunisation database and was developed in response to a decline in childhood immunisation coverage in Australia and an increase in preventable childhood diseases. The National Health and Medical Research Council (NHMRC) (2001) assessed that the risks associated with immunisation are considered to be far less than the risks of disease if the population was not immunised. Current government policy provides incentives, such as direct links to family payments, to encourage the widespread vaccination of Australian children.

The ACIR is administered by the Health Insurance Commission on behalf of the Australian Government Department of Health and Ageing, with statistics published quarterly. The ACIR records details of vaccinations given to children under the age of seven enrolled in Medicare who live in Australia. Where children are not enrolled in Medicare, they are added to the ACIR when details of an immunisation are supplied by the provider (medical practitioners and community health clinics). A child is considered fully immunised when they have completed the number and type of vaccinations listed on the NHMRC standard vaccination schedule (see the Glossary under ‘Fully immunised’).

Vaccine coverage needs to exceed 90 per cent to achieve and maintain the level of community immunity necessary to interrupt the ongoing transmission of vaccine preventable diseases (Lister, McIntyre, Burgess & O’Brien, 1999 cited in DEECD, 2006). In 2005–06, immunisation coverage of children at 12–15 months was above 90 per cent across Victoria; however this decreases to 86.6 per cent at 72–75 months.
The following maps relate to children fully immunised in Victoria for the 2005–06 financial year. Data sourced from the ACIR, Health Insurance Commission are presented in the age groups of 12 to less than 15 months, 24 to less than 27 months and 72 to less than 75 months. Please see ‘fully immunised’ in the Glossary for further information.

The data provided by ACIR are based on outdated LGA boundaries. In 2002 the Shire of Delatite (S) was split into Benalla (RC) and Mansfield (S). In order to align with the 2006 ASGC, immunisation data for Delatite (S) have been distributed to Benalla (RC) and Mansfield (S) to calculate a 2005–06 immunisation rate for these LGAs.

Previous releases of immunisation data, used in the first edition atlas, contained only the data for the April–June quarter of each year. Immunisation reports have since been revised to include all data for the financial year. Therefore data are not directly comparable between the first and second editions of the Best Start Atlas.

Fully immunised children: 12 to less than 15 months

In 2005–06, the number of children aged 12 to 15 months in Victoria fully immunised was 56,621, an increase of 871 or 1.5 per cent since 2000–01. The percentage of children aged 12 to 15 months who were fully immunised in 2005–06 in Victoria was 91.5 per cent, (91.7 per cent in 2000–01). This was marginally higher in regional Victoria (92.1%) than in metropolitan Melbourne (91.3%) in 2005–06.

Fully immunised children: 24 to less than 27 months

The number of fully immunised children aged 24 to 27 months was 59,023 in 2005–06 representing an increase of 6,210 or 10.5 per cent since 2000–01. The percentage of fully immunised for this age group increased from 85.7 per cent in 2000–01 to 93.0 per cent in 2005–06. In 2005–06, the percentage of children aged 24 to 27 months who were fully immunised was higher in regional Victoria (94.4%) than in metropolitan Melbourne (92.6%).

Fully immunised children: 72 to less than 75 months

Immunisation data are available for children aged 72 to 75 months from the 2002–03 financial year. In 2005–06 there were 55,517 or 86.6 per cent fully immunised children. The percentage has increased marginally since 2002–03 (85.1 per cent). In 2005–06, the percentage of children aged 72 to 75 months who were fully immunised was slightly higher in regional Victoria (87.6%) than in metropolitan Melbourne (86.6%).
In regional Victoria the highest percentages of children aged 12 to 15 months who were fully immunised were recorded in West Wimmera (S) (100.0%), Horsham (RC) and Northern Grampians (S) (both 96.5%), Ararat (RC) (95.8%) and Towong (S) (95.7%).

The lowest percentages were recorded in Hepburn (S) (82.7%), Mount Alexander (S) (84.0%), Strathbogie (S) (87.4%), Buloke (S) (87.7%) and Moira (S) (88.3%).
In metropolitan Melbourne the highest percentages of fully immunised children aged 12 to 15 months, were recorded in Moonee Valley (C) (93.6%), Banyule (C) (93.2%), Kingston (C) (93.0%), Maribyrnong (C) (92.7%) and Hobsons Bay (92.3%).

The lowest percentages were recorded in Melbourne (C) (87.6%), Port Phillip (C) (88.7%), Yarra Ranges (S) (88.8%), Nillumbik (S) (88.9%) and Darebin (C) (89.6%).
Map 6.2a:
Fully immunised children, aged 24 to 27 months, within each LGA in Victoria, 2005–06
As a percentage of all children aged 24 to 27 months within each LGA

- In regional Victoria the highest percentages of children aged 24 to 27 months who were fully immunised were recorded in Northern Grampians (S) (99.4%), Wodonga (RC) (98.4%), Towong (S) (98.0%), Gannawarra (S) (97.4%) and Buloke (S) (97.1%).

- The lowest percentages were recorded in Mount Alexander (S) (84.5%), Hepburn (S) (88.9%), Alpine (S) (88.9%), Murrindindi (S) (89.3%) and Surf Coast (S) (89.6%).
Map 6.2b:
Fully immunised children, aged 24 to 27 months, within each LGA in Melbourne, 2005–06
As a percentage of all children aged 24 to 27 months within each LGA

- In metropolitan Melbourne the highest percentages of fully immunised children aged 24 to 27 months were recorded in Melton (S) (95.0%), Maribyrnong (C) (94.5%), Hume (C) (94.2%), Whittlesea (C) (94.0%) and Knox (C) (93.8%).
- The lowest percentages were recorded in Melbourne (C) (88.0%), Greater Dandenong (C) (89.0%), Port Phillip (C) (89.9%), Yarra (C) and Manningham (C) (both 91.2%).
Map 6.3a:
Fully immunised children, aged 72 to 75 months, within each LGA in Victoria, 2005–06
As a percentage of all children aged 72 to 75 months within each LGA

- In regional Victoria, the highest percentages of children aged 72 to 75 months who were fully immunised were recorded in West Wimmera (S) (96.7%), Hindmarsh (S) (93.3%), Campaspe (S) and Southern Grampians (both 92.5%) and Warrnambool (C) (92.3%).
- The lowest percentages were recorded in Mount Alexander (S) (74.6%), Hepburn (S) (75.6%), Alpine (S) (82.0%), Murrindindi (S) (82.3%) and Surf Coast (S) (83.3%).
In metropolitan Melbourne, the highest percentages of fully immunised children aged 72 to 75 months were recorded in Whitehorse (C) (90.2%), Wyndham (C) (89.1%), Hume (C) and Kingston (C) (both 88.8%) and Knox (C) (88.7%).

The lowest percentages were recorded in Melbourne (C) (73.8%), Greater Dandenong (C) (81.1%), Yarra (C) (81.8%), Bayside (C) (82.2%) and Port Phillip (C) (83.1%).
Maternal and child health

The Maternal and Child Health service is a universal primary care service for Victorian families with children aged birth to school age. All Maternal and Child Health centres are staffed by registered nurses with qualifications in midwifery and family and child health. The nurses have the knowledge and experience to deal with family health issues and concerns. Nurses are also able to link families to specialist services as required. The chief mechanism for delivery of the service is a program of ‘key ages and stages visits’. These are assessments carried out on the child at key developmental ages. Maternal health is also monitored and is assessed at certain key ages and stages checks.

The aims of the key ages and stages visits are to reduce preventable premature mortality, the impact of disability, the incidence of vaccine preventable diseases, the incidence of adult diseases which originate in childhood, and to enhance family functioning.

Research has shown that participation in the service declines as the child grows up. The 3.5 year visit, being the last of the key ages and stages visits, has therefore been chosen as a useful measure of primary health service involvement.

Data for maps 6.4a to 6.5b are sourced from Maternal and Child Health, of the Victorian Department of Education and Early Childhood Development. For details on how the data in these maps were calculated, see the Glossary under ‘Infant record card’ and ‘Key ages and stages visit (3.5 years old)/(Home consultation)’.

Home consultations

A home consultation is offered to every Victorian family once they are home from hospital with their new baby. The purpose of this visit is to introduce the Maternal and Child Health nurse to the new family, obtain a family health history and answer any queries that parents may have.

In some LGAs the Home Consultation participation rate may be above 100%. This is due to births occurring before the end of one financial year period and these infants not receiving a Home Consultation until the following financial year.

The total infant record cards for 0 to 1 year olds in Victoria for the 2005–06 financial year was 65,028. Of these 48,890 (75.2 per cent) were in metropolitan Melbourne and 16,138 (24.8 per cent) in regional Victoria.

In 2005–06, the percentage of children who were seen at the home consultation visit was 96.0 per cent and was lower in regional Victoria (93.9 per cent) than in metropolitan Melbourne (96.7 per cent).
3.5 year ages and stages visit

In the financial year 2005–06, the mean number of infant record cards for 3 to 5 year olds in Victoria was 64,473. Of these 47,364 (73.5%) were in metropolitan Melbourne and the remaining 17,109 (26.5%) were in regional Victoria.

The percentage of children who were seen at the 3.5 years ages and stages visit was 58.0 per cent in Victoria in 2005–06. This was higher in regional Victoria than in Melbourne in both 2001 and 2006. Between 2001 and 2006, the percentage of children seen at the 3.5 years ages and stages visit has increased from 53.0 per cent to 60.5 per cent in regional Victoria and from 48.2 per cent to 57.2 per cent in metropolitan Melbourne.

The total number and the percentage of children seen at MCH key ages and stages in Victoria decreases between the home consultation and 3.5 year visit. This is apparent in each financial year since 2000–01, however while the home consultation rate remains between 95.0 and 97.0 per cent there has been a steady increase in children seen at the 3.5 year consultation, from 49.5 per cent in 2000–01 to 58.0 per cent in 2005–06.
Map 6.4a:
Children who were seen at the home consultation visit, within each LGA in Victoria, 2005–06
As a percentage of the number of Infant Records Cards within each LGA

- In regional Victoria the highest percentages of children seen at the home consultation visit were in the LGAs of Southern Grampians (S) (105.0%), South Gippsland (S), Wodonga (both 104.2%), Loddon (S) (103.8%) and Hepburn (S) (102.1%).
- The lowest percentages were recorded in Mansfield (S) (68.5%), Yarriambiack (S) (73.9%), East Gippsland (S) (77.2%), Swan Hill (RC) (77.3%) and Moira (S) (77.9%).
In Metropolitan Melbourne the highest percentage of home visits were recorded in Nillumbik (S) (102.3%), Kingston (C) (102.0%), Brimbank (C) (101.1%), Cardinia (S) (100.8%) and Glen Eira (C) (100.6%).

The lowest attendances were recorded in Casey (C) (79.1%), Frankston (C) (92.6%), Melton (S) (92.9%), Greater Dandenong (C) and Whittlesea (C) (both 94.4%).
Map 6.5a:  
Children who were seen at the 3.5 years ages and stages visit, within each LGA in Victoria, 2005–06  
As a percentage of the mean number of Infant Record Cards within each LGA

- In regional Victoria, the highest percentages of children seen at the 3.5 years ages and stages visit were recorded in Moyne (S) (92%), Queenscliffe (B) (91.1%), Moira (S) (88.0%), Towong (S) (76.0%) and Gienelg (S) (75.4%).
- The lowest percentages were recorded in Moorabool (S) (40.1%), Warrnambool (C) (40.5%), Central Goldfields (S) (42.2%), Mount Alexander (S) (44.7%) and Loddon (S) (45.9%).
In Metropolitan Melbourne the highest percentages of children seen at the 3.5 years ages and stages visit were recorded in Hume (C) (72.6%), Bayside (C) and Maribyrnong (C) (both 71.8%), Kingston (C) (66.9%) and Banyule (C) (66.7%).

The lowest percentages were recorded in Casey (C) (28.9%), Melbourne (C) (37.5%), Wyndham (C) (38.0%), Port Phillip (C) (47.1%) and Greater Dandenong (C) (47.6%).
Children with ambulatory care sensitive conditions admitted to hospital

Ambulatory care sensitive conditions (ACSCs) are defined as those conditions for which hospitalisation are considered to be avoidable with the application of preventative care and early disease management. Rates of hospitalisation for ACSCs can be considered an indirect measure of patient access to primary health care.

ACSC data presented here have been obtained from the Victorian Admitted Episodes Dataset (VAED) and are collected by the Victorian Department of Human Services. The VAED includes morbidity data on all admitted patients from Victorian public and private acute hospitals, including rehabilitation centres, extended care facilities and day procedure centres.

The following maps show the number of asthma separations of children aged 0 to 8 years as a rate per 1,000 ERP in this age group, over the financial year 2005–06; and number of gastroenteritis separations of children aged 0 to 12 months as a rate per 1,000 ERP in this age group, over the financial year 2005–06.

In the first Best Start Atlas data were provided for 2000–01 to 2001–02. The number of separations for asthma and gastroenteritis has since been revised and should not be used to compare with 2006 data presented in this report. The following reference to change over time between 2000–01 and 2005–06 is based on revised data.

Asthma separations

Asthma is the most common long-term condition among Australian children aged under 14. It is also the most common cause of hospitalisation in this age group (AIHW, 2005e, AIHW, 2006a cited in DEECD, 2007). Asthma can have considerable impact on the physical, social and emotional life of those with asthma and their families. For the majority of people, asthma can be well controlled with the regular use of medication and the avoidance of trigger factors. However, asthma can have many ramifications for children as it can interfere with school and can create the need for urgent medical care and can even cause premature death (GINA (Global Initiative for Asthma), 2005).

The number of asthma separations of children aged 0 to 8 years in Victoria decreased from 4,553 in the 2000–01 reporting period to 4,203 in the 2005–06 financial year. This represents a decrease of 350 or 7.7 per cent since 2000–01 but a 4.9 per cent increase since the 2004–05 financial year.

The number of asthma separations of children aged 0 to 8 years in regional Victoria decreased from 1,502 in 2000–01 to 1,023 in 2005–06 (-479 or -31.9 per cent). However, the number in Melbourne was higher in 2005–06 (3,180) compared to 2000–01 (3,051), representing an increase of 129 or 4.2 per cent.

Following a drop between 2000–01 and 2001–02, there has been gradual growth in the number of asthma separations of children aged 0 to 8 years in Melbourne over the last five years while the number in regional Victoria has fluctuated slightly each year but generally been decreasing on average at a rate of -7.4 compared to Melbourne's average annual growth rate of 0.8 over the previous 5 years.
Gastroenteritis separations

The number of gastroenteritis separations of children aged 0 to 12 months has increased from 847 in Victoria in 2000–01 to 1,201 in the 2005–06 financial year. This represents an increase of 354 or 41.8 per cent. Between 2004–05 and 2005–06 the number of separations increased by 42.3 per cent. This increase is significantly greater than the average annual growth over the last five years.

In Regional Victoria, the number of gastroenteritis separations of children aged 0 to 12 months increased 10.3 per cent from 311 in 2000–01 to 343 in 2005–06.

The number in Melbourne was higher in 2005–06 (858) compared to 2000–01 (536), representing an increase of 60.1 per cent.

The average annual growth rate of the number of gastroenteritis separations for children aged 0 to 8 years in Melbourne over the 5 years to 2005–06 was 9.9 per cent compared to 2.0 per cent in regional Victoria.

See ‘average annual growth’ in the Glossary.
In Victoria, the rate of asthma separations of children aged 0 to 8 years in the financial year per 1,000 ERP aged 0 to 8 years at 30 June 2006, was 7.4 per 1,000 children.

The rate of asthma separations of children aged 0 to 8 years was lower in regional Victoria (6.5 per 1,000 children aged 0 to 8 years) than in Melbourne (7.8 per 1,000 children aged 0-8 years).

The LGAs in regional Victoria with the highest rates were Warrnambool (C) (11.7), Pyrenees (S) (10.7), Loddon (S) (10.3), Moira (S) (10.2) and Latrobe (C) (9.8).

The LGAs in regional Victoria with the lowest rates were Horsham (RC) (2.2), Indigo (S) (3.0), Wodonga (RC) (3.3) Colac-Otway (S) (3.8) and East Gippsland (S) (3.9).
Expressed as a rate per 1,000 ERP aged 0-8 years at 30 June 2006, the rate of asthma separations of children aged 0-8 years in the 2005-06 financial year was 7.8 per 1,000 children in Melbourne.

The LGAs in Melbourne with the highest rates were Moreland (C) and Brimbank (C) (13.1), Melbourne (C) (10.8), Wyndham (C) and Hobsons Bay (C) (both 10.7).

The LGAs in Melbourne with the lowest rates were Nillumbik (S) (3.4), Frankston (C) (4.3%), Cardinia (S) (4.7), Knox (C) (5.1) and Manningham (C) (5.7).
The rate of gastroenteritis separations of children in Victoria aged 0-12 months in the 2005-06 financial year per 1,000 ERP aged 0-12 months at 30 June 06, was 19.3 per 1,000 children.

In the 2005-06 financial year, the rate of gastroenteritis separations of children aged under one was greater in regional Victoria (21.3 per 1,000 children aged 0-8 years) than in Melbourne (18.6 per 1,000 children aged 0-8 years).

The LGAs in regional Victoria with the highest rates were Wangaratta (RC) (64.1), Latrobe (C) (52.3), Warrnambool (C) (48.6), Mount Alexander (S) (37.3) and East Gippsland (S) (35.0).

The LGAs in regional Victoria with the lowest rates were Wodonga (RC) (9.9), Ballarat (C) (12.8), Mildura (RC) (13.7), Macedon Ranges (S) (15.2) and Greater Bendigo (C) (15.4).
Expressed as a rate per 1,000 ERP aged 0-12 months at 30 June 2006, the rate of gastroenteritis separations of children aged 0-12 months in the 2005-06 financial year was 18.6 per 1,000 children in Melbourne.

The LGAs in Melbourne with the highest rates were Casey (C) (28.3), Banyule (C) (26.1), Whittlesea (C) (25.4), Frankston (C) (25.1) and Hume (C) (24.8).

The LGAs in Melbourne with the lowest rates were Kingston (C) (9.8), Whitehorse (C) (10.0), Monash (C) (10.5), Port Phillip (C) (10.9) and Bayside (C) (11.4).
Adequate family housing

Access to stable, adequate shelter is considered a basic human right. Stable housing can be associated with social cohesion, community participation and can be an important component of healthy living. Recent data have shown that housing affordability is a major concern for lower income families.

Public Housing

Finding affordable, secure and appropriate housing is becoming more difficult. This has significance as it can affect the national economy. When housing costs are high people have less residual income to spend on other essential items (Evidence manual for Indicators, DEECD, unpublished). The group that are most likely to experience housing stress include lone parents and families with young children on low incomes (Gabriel et al., 2005).

Public housing tenants are less likely to experience housing stress, however, the level of public housing has decreased and Community Housing Federation of Australia funding has also declined. There is little direct research on the impact of housing affordability on the wellbeing of children. There is however some evidence to suggest that stable and secure public housing can have positive impacts on children as well as families, especially in relation to educational improvements (Phibbs and Young, 2005).

The percentage of households with one or more children aged 0 to 8 years, who have remained in the same public housing tenancy for 12 months or more in Victoria at 30 June 2006, was 90.0 per cent, compared to 79.9 per cent in 2001.

This retention rate was higher in metropolitan Melbourne than regional Victoria in both 2001 and 2006 but increased from 87.4 per cent to 93.0 per cent in metropolitan Melbourne and 71.8 per cent to 86.0 per cent in regional Victoria.
Map 6.8a:
Households with one or more children aged 0 to 8, who have remained in the same public housing tenancy for 12 months or more, within each LGA in Victoria, 2005–06.

As a percentage of the number of public houses allocated to families with one or more children aged 0 to 8 years during the financial year 2005–2006, within each LGA in Victoria

- In regional Victoria the highest recordings of public housing tenancy retentions, for 12 months or more, for households with one or more children aged 0 to 8 years, were in the LGAs of South Gippsland (S) and Mount Alexander (S) (100.0%), Wellington (S) (96.6%), Baw Baw (S) (92.9%) and Moira (S) (90.5%).
- The lowest percentages were recorded in Ararat (RC) (58.3%), Southern Grampians (S) (66.7%), Gannawarra (S) (68.8%), Benalla (RC) (78.3%) and Glenelg (S) (79.2%).
Map 6.8b:
Households with one or more children aged 0 to 8, who have remained in the same public housing tenancy for 12 months or more, within each LGA in Melbourne, 2005–06.
As a percentage of the number of public houses allocated to families with one or more children aged 0 to 8 years during the financial year 2005–2006, within each LGA in Melbourne.

- In metropolitan Melbourne the highest percentages of public housing tenancy retentions for 12 months or more, for households with one or more children aged 0 to 8 years, were recorded in Frankston (C), Maroondah (C) and Knox (C) (100.0%), Banyule (C) (98.1%) and Brimbank (C) (98.0%).
- The lowest percentages were recorded in Maribyrnong (C) (83.0%), Boroondara (C) (84.0%), Port Phillip (C) (84.8%), Whitehorse (C) (86.2%) and Kingston (C) (86.7%).