

# **Health Expenditure Trends in New Zealand 1998–2008**

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## Foreword

This report, *Health Expenditure Trends in New Zealand 1998–2008*, is the latest in a regular series prepared by the Ministry of Health (the Ministry). The primary purpose of the series is to provide information on expenditure in the New Zealand health and disability sector. This document focuses on the 2007/08 expenditure. This series continues on from the 2007 publication and relates to all sources of health funding channelled through the public and private sectors.

The report has been prepared for use by interested individuals and agencies to foster informed debate on health funding and expenditure issues. The health system is an important and growing component of the national economy and provides essential services for the people of New Zealand.

The information in this report provides a basis for identifying and measuring trends and changes in the patterns of health and disability expenditure in New Zealand. This data is also useful in evaluating policies related to health and disability expenditure levels and patterns, plus it provides a basis for comparing New Zealand's expenditure with other nations.

As the purpose of this document is to present an estimate of current expenditure on health, it does not include any discussions on health service quality, efficiency or effectiveness. These financial estimates, together with other information supplied by the Ministry and others that do focus on qualitative issues, contribute information resources necessary for the public, researchers and policy makers to assess the performance of the health system over time. Readers interested in more qualitative aspects of the New Zealand health system can go to the quality improvement section of the Ministry's website (see <http://www.moh.govt.nz/quality>).

This report contains updated expenditure estimates for total current health and disability services in New Zealand at the aggregate level, on a per capita basis, by source of funds, and in nominal and real terms since 1997/98. The estimates include both public and private health expenditure. The public source of funding is predominately administered by the Ministry, primarily consisting of funding for services provided by the District Health Boards (DHBs). Other sources of public funding include social security, Accident Compensation Corporation (ACC), other central government agencies, (for example, Ministry of Justice) and local and regional councils. Private sector sources of health funding include private insurance, household out-of-pocket expenditure and non-governmental funding of not-for-profit organisations such as The Royal New Zealand Plunket Society and the National Heart Foundation of New Zealand.

In 2003/04, New Zealand adopted the System of Health Accounts (SHA) promulgated by the Organisation for Economic Co-operation and Development (OECD) for defining and aggregating total current health and health-related expenditure. This report contains five years of information using the SHA categories. New Zealand has not yet incorporated expenditure for capital items in the expenditure estimates. Using the SHA means that the New Zealand estimates now and in the future will be more comparable with other countries; however, for earlier years some consistency at a detailed level is lost. In order to assess the impact due to changing to SHA reporting in 2003/04, and other refinements undertaken in that year, one must read the Health Expenditure Trends in New Zealand (HET) report for 1994–2004.

This report follows the 1997–2007 report.

Please note that some of the data in this report has been collected by means of sample surveys and has consequently been estimated conservatively. Therefore, care should be taken in interpreting changes in individual categories of expenditure from year to year. In addition, future refinements in the accuracy of the estimates can be expected.

This document and prior editions in the series can be located on the Ministry's website at: <http://www.moh.govt.nz/publications>

The Ministry is grateful for the assistance of those who have contributed data and analysis used in preparing this report.

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## **Acknowledgements**

The author is indebted to the many individuals and organisations that provided information and gave generously of their time to assist with this study. The people and organisations involved are numerous and are named in Appendix 7: Contributors.

The author would like to thank all those people and organisations for their assistance.



# Contents

Foreword	iii
Executive Summary	xii
<b>1 Introduction</b>	<b>1</b>
1.1 Purpose	1
1.2 Background	1
1.3 Ministry responsibilities and funding levels	1
1.4 Structure of the New Zealand public health and disability sector	2
1.5 Other funders of the New Zealand public health and disability sector	4
<b>2 OECD System of Health Accounts Definitions and Classifications</b>	<b>5</b>
2.1 Health services	5
2.2 Functions of health care	5
2.3 Health-related functions	6
2.4 Providers of health-care services and goods	7
2.5 Sources of funding	7
<b>3 Methods and Conventions</b>	<b>8</b>
3.1 Report coverage	8
3.2 Categories of health expenditure	8
3.3 Funding sources	9
3.4 Sources and assumptions for Ministry-funded services	9
3.5 Ministry-funded services, excluding DHBs	9
3.6 DHB-funded services	10
3.7 Crown Health Enterprise/District Health Board deficit financing	10
3.8 Sources and assumptions related to services funded by other central government agencies	10
3.9 Sources and assumptions related to services funded by local government	10
3.10 Sources and assumptions related to services funded by the private sector	11
3.11 Real dollar health expenditure	11
3.12 Goods and services tax and overhead charges	11
3.13 Populations	11
<b>4 Trends in Total Current Health Expenditure by Funding Source</b>	<b>12</b>
4.1 Aggregate health expenditure	12
4.2 Trends in real per capita current expenditure on health	15
4.3 Pattern of health care funding, by source of funds	18
4.4 Trends in uses of aggregate health and health-related funds	19
<b>5 Public Sector Funding – Ministry of Health</b>	<b>22</b>
5.1 Ministry of Health funding	22

5.2	Ministry funding by major expenditure category	24
<b>6</b>	<b>Other Public Sector Funding</b>	<b>31</b>
6.1	Accident Compensation Corporation	31
6.2	Other government agencies	34
6.3	Regional and local authorities	40
6.4	Trends in the use of other public funding	42
<b>7</b>	<b>Private Sector Funding</b>	<b>44</b>
7.1	Out-of-pocket expenditure	44
7.2	Health insurance	46
7.3	Voluntary and not-for-profit organisations	48
7.4	Trends in uses of private source funding	49
<b>8</b>	<b>International Comparisons</b>	<b>55</b>
8.1	Data comparison issues	55
8.2	Per capita health expenditure in US dollar purchasing power parities	55
8.3	Health expenditure as a percentage of GDP	57
8.4	Publicly funded current health expenditure as a proportion of total health expenditure	58
8.5	Health expenditure and GDP per capita	60
<b>Appendices</b>		
Appendix 1:	OECD System of Health Accounts	64
Appendix 2:	Nominal and Real Health Expenditure (with 'non-health' items included for prior years) 1997/98–2007/08	72
Appendix 3:	Health Expenditure Trends in New Zealand (with 'non-health' items included for prior years)	73
Appendix 4:	Private Health Insurance Trends, 1997/98–2007/08 (\$000)	75
Appendix 5:	Current Expenditure on Health by Function of Care and Provider Industry (SHA Standard Table 2)	76
Appendix 6:	Current Expenditure on Health and Health-related by Function of Care and Funder (SHA Standard Table 5)	82
Appendix 7:	Contributors	85
<b>References</b>		<b>89</b>
	Information sources	89

## List of Tables

Table 4.1:	Real current expenditure trends, 1997/98–2007/08	16
Table 4.2:	Health expenditure by source of funds (%), 1997/98–2007/08	18
Table 4.3:	Destinations of total health funding (including health-related), 2003/04–2007/08	20
Table 5.1:	Ministry of Health expenditure, 1997/98–2007/08	23
Table 5.2:	Destinations of Ministry funding, 2003/04–2007/08	24
Table 5.3:	Destinations of DHB and non-DHB funding, 2003/04–2007/08	27
Table 5.4:	Ministry of Health expenditure, by output class, 2005/06–2007/08	30
Table 6.1:	ACC current health expenditure (\$ million), 2003/04–2007/08	32
Table 6.2:	Current health expenditure and health-related expenditure by other central government agencies, 2003/04–2007/08	39
Table 6.3:	Current health and health-related expenditure by local authorities, 2003/04–2007/08	41
Table 6.4:	Total other public funding (excluding the Ministry), 2003/04–2007/08	42
Table 7.1:	Survey responses for out-of-pocket expenditure, using SHA, 2003/04–2007/08	45
Table 7.2:	Destinations of insurance funding on personal health care (\$ million), 2001/02–2007/08	47
Table 7.3:	Proportion of the New Zealand population covered by medical insurance (by age group), 2005–2008.	48
Table 7.4:	Destination of private funding of health services, using SHA, 2003/04–2007/08	50
Table 7.5:	Destination of private funding of health services using SHA and funder, 2003/04–2007/08	52
Table 8.1:	Per capita current health expenditure (US\$ PPP) for OECD countries, 1998–2008	56
Table 8.2:	Current health expenditure as a percentage of GDP, 1998–2008	57
Table 8.3:	Publicly funded health expenditure as a proportion of total health expenditure, 1998–2008	59
Table 8.4:	Per capita GDP and per capita current health expenditure (US\$ PPP) for OECD countries, 2005–2008	62
Table A1:	Functions of health care	67
Table A2:	Health-related functions	69
Table A3:	OECD SHA provider industry	70
Table A4:	OECD SHA sources of funding	71

## List of Figures

Figure 1:	Percentage shares of New Zealand's total health funding, 1998 and 2008	xv
Figure 1.1:	Structure of the New Zealand health and disability sector, 2008	3
Figure 4.1:	Aggregate real (\$ million 2007/08) health expenditure, 1925–2008	13
Figure 4.1A:	Aggregate real (\$ million 2007/08) health expenditure, 1980–2008	13
Figure 4.1B:	Aggregate real (per capita 2007/08) health expenditure, 1980–2008	14
Figure 4.2:	Publicly and privately funded expenditure shares, 1925–2008	14
Figure 4.2A:	Publicly and privately funded expenditure shares, 1980–2008	15
Figure 4.3:	Trends in real total current expenditure on health, 1997/98–2007/08 (\$ million 2007/08)	17
Figure 4.4:	Trends in real per capita current expenditure on health, 1997/98–2007/08 (\$ million 2007/08)	17
Figure 4.5:	Percentage shares of New Zealand's total health funding, 1998 and 2008	19
Figure 8.1:	Relationship between current health expenditure and GDP in OECD countries, 2008	61





## Executive Summary

This report, *Health Expenditure Trends in New Zealand 1998–2008*, is the latest in a regular series prepared by the Ministry of Health (the Ministry). The primary purpose of the Health Expenditure Trends in New Zealand (HET) series is to provide information on the estimate of current expenditure in the health and disability sector with a focus on the 2007/08 estimates. This HET report provides updated estimates for total current health and disability services expenditure in New Zealand, at the aggregate level, on a per capita basis, by source of funds, and in nominal and real terms, since 1997/98.

In 2003/04, New Zealand implemented the System of Health Accounts (SHA) of the Organisation for Economic Co-operation and Development (OECD) in defining and aggregating total current health expenditure and 'health-related' expenditure for reporting to the OECD and HET. The New Zealand estimates now enable better comparisons to be made between countries; however, for years prior to 2003/04, some consistency at a detailed level is lost. Therefore, this report provides consistent information only at a summary level, with SHA details only for the five-year period 2003/04 to 2007/08.

This HET report follows the HET 1997–2007 report.

The most significant impact on the estimates due to implementing SHA is the broadening of the definition of 'health sector' to include additional disability and support and long-term care services. Prior to 2003/04, HET reports identified the funding transfer from social agencies, largely from the Ministry of Social Development to the Ministry of Health, and primarily in terms of disability support services, but excluded part of these services from the health expenditure. The bulk of health expenditure (mainly disability support services) previously administered by the Ministry of Social Development was transferred to the Ministry of Health between 1993/94 and 1995/96. For historical information covering the period 1995/96 to 2002/03, the estimates have been recalculated to include the previously excluded items.

The expanded definition of health functions takes into account recent changes in health care systems, especially the growing importance of services for the elderly (long-term care, including home care). Within the OECD, the most important factor affecting comparability remains the different treatment of long-term nursing care across countries (OECD 2005). New Zealand will continue to refine and improve estimates in this area in future HET editions.

Implementing the SHA provided an opportunity to review data collection sources, processes and assumptions involved in compiling health expenditure figures. As a result, several refinements have enhanced the accuracy of the estimates starting in 2003/04. In order to assess the impact due to changing to SHA reporting in 2003/04, and other refinements undertaken in that year, please refer to the HET report for 1994–2004.

The main focus of this report is on the SHA-based total current health expenditure figures for 2007/08. Trend information is also provided. Historical and current expenditure comparisons use the most appropriate points in time given changes in methodologies and assumptions. The health and disability expenditure presented in this report includes goods and services tax (GST) at its prevailing rate. The GST rate is 12.5%. Unless stated otherwise, all expenditure is expressed in nominal dollar values.

Chapter 1 provides an overview of New Zealand's health sector, which establishes the scope of the data in this report.

Chapter 2 sets out the approach and definitions used in preparing the report. It contains a brief overview of the SHA classifications, which cover three dimensions: health care by functions of care, providers of health care services and sources of funding. The set of core tables in the SHA addresses three basic questions.

1. What kind of services are performed and what types of goods are purchased?
2. Where does the money go to (provider of health care services and goods)?
3. Where does the money come from (source of funding)?

The implementation of SHA introduces the concept and estimates of 'health-related' functions that are distinguished from 'core health' care functions. Health-related functions can be closely linked to health care in terms of operations, institutions and personnel but are, as far as possible, excluded when measuring activities and expenditure belonging to core health care functions. They are mainly services that have a direct and beneficial impact on collective health and, if reported in historical HET reports, were included as public health services. For 2007/08, the estimate of health-related functions totals nearly \$2,818 million.

Estimates of health and health-related expenditure for this group of agencies were derived from annual reports and direct survey responses.<sup>1</sup>

Chapter 3 presents the methods and conventions followed in the report, along with a description of the types of data collected.

Chapter 4 discusses trends in nominal (actual dollars spent) and real (Consumers Price Index (CPI) adjusted dollars spent) total current expenditure and nominal and real total per capita current expenditure on health between 1998 and 2008. Summary information on the source and final use of funds is also provided. All indicators report significant increased funding of health services; in total, constant dollar terms (real dollars), on a per capita basis, as a percent of gross domestic product (GDP) and as a percent of government funding. As explained in Chapter 4, total current nominal health and disability expenditure rose 10.0% during 2007/08 to \$17,705.2 million, compared with \$16,091.6 million in 2006/07. Of this total, public funding increased to \$14,195.4 million in 2007/08. Real per capita aggregate expenditure increased by

<sup>1</sup> See Appendix 6.3 Current Expenditure on Health and Health-related by Function of Care and Funder (SHA Standard Table 5) 2007/08.

4.5% (an average of 3.9% per year) over these two years to \$4,136 per person per year. Total current health expenditure as a percentage of gross domestic product (GDP) was 9.8% in 2007/08 compared with 9.1% in 2006/07.

Chapters 5 to 7 present a more detailed discussion of expenditure by funding source covering the Ministry and other public and private funding channels for the years under review.

Chapter 5 provides detailed information on the Ministry's funding of health services. Separate profiles have been detailed for non-devolved services funded by the Ministry and devolved services funded through District Health Boards (DHBs). The Government's health funding through the Ministry's Vote Health, was the largest contributor to total health and disability funding, at \$12,136.9 million in 2007/08, or 68.5% of total funding. The 2007/08 nominal dollar expenditure represented an increase of \$1,178.2 million compared with 2006/07 expenditure. In 2007/08, Ministry-funded DHB devolved services represented \$9,843.7 million, of which personal health was the largest component at \$9,571.9 million.

Chapter 6 discusses other sources of public funding. The Accident Compensation Corporation (ACC) was the second largest public funder of health services at \$1,586.8 million in 2007/08 accounting for 9.0% of total current health expenditure. Other central government agencies contributing to direct health and indirect health-related expenditure that are included in this report are the Ministries or Departments of:

- Agriculture and Forestry
- Education
- Research, Science and Technology
- Defence
- Social Development
- Corrections
- Internal Affairs
- Te Puni Kōkiri (Māori Development)
- Pacific Island Affairs.

These other central government agency contributions to total current health expenditure totalled \$379.0 million in 2007/08. Regional and local councils funded \$92.7 million in current health expenditure in 2007/08 and a more significant \$1,654.3 million for health-related function.<sup>2</sup>

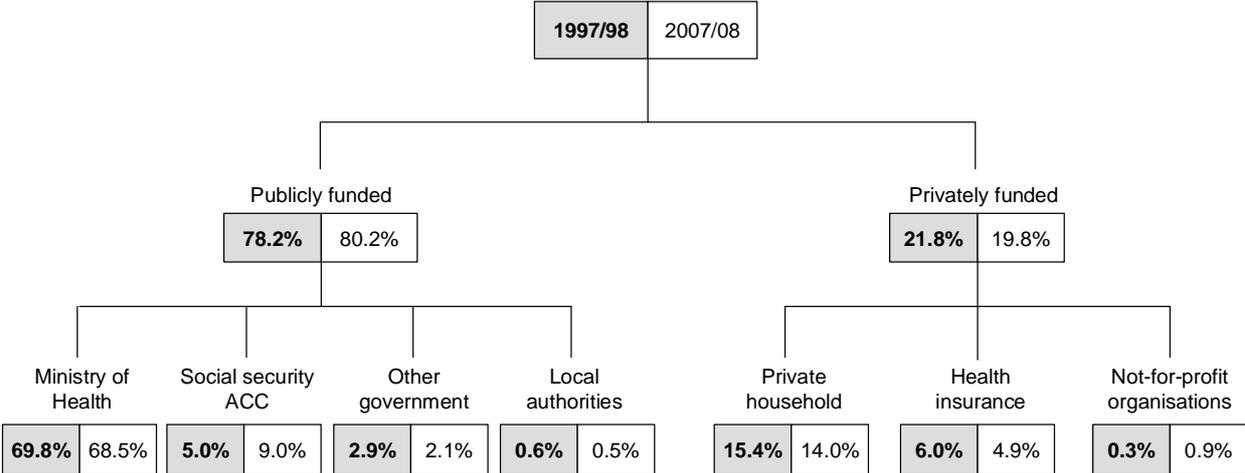
In Chapter 7, private sources of funding comprise household out-of-pocket expenditure, health insurance and non-governmental funding of not-for-profit organisations. In total, this expenditure accounted for approximately \$3,509.9 million or 19.8% of total current health expenditure in 2007/08. Within the private funding increase, private health insurance expenditure increased by an average annual growth rate of 6.5% since

<sup>2</sup> Estimates of health and health-related expenditure for this group of agencies were derived from annual reports and direct survey responses.

2003/04 to \$863.1 million in 2007/08. During the same period, private household spending grew 3.9% to \$2,485.2 million. Expenditure by the not-for-profit sector was estimated at \$162.5 million for 2007/08.

The following figure presents the major funder groups and their contribution to total current health expenditure in 1998 and 2008.

**Figure 1:** Percentage shares of New Zealand’s total health funding, 1998 and 2008



Source: Ministry of Health

Chapter 8 discusses New Zealand's current expenditure on health and disability services in the context of current health expenditure by other member countries of the OECD. The chapter provides comparisons of the level of current health expenditure, the proportion of current health expenditure to gross domestic product (GDP) and the percentage of publicly funded current health expenditure in OECD countries. One key finding from this analysis was that New Zealand’s proportion of current health expenditure to GDP increased from 8.5% in 1998 to 9.8% in 2008. In comparison, the OECD weighted average increased from 7.9% in 1998 to 9.4% in 2008.

Appendices 1 to 6 give more in-depth definitions and provide further detailed historical information on expenditure. Appendices 5 and 6 provide standard SHA tables that show what services are provided by whom, and what services are funded by whom. Appendix 7 lists the organisations and individuals who provided information for this report.

Please note that some of the data in this report has been collected by means of sample surveys and has consequently been estimated conservatively. Care should be taken when interpreting changes in individual categories of expenditure from year to year. In addition, future refinements in the accuracy of the estimates are to be expected. For comparative purposes and trend analysis, the five-year period 2003/04 to 2007/08 data provides consistent information using the SHA definitions and categories. Strict comparability for earlier years at the detailed level is no longer possible because of changes in scope and category definitions.



# 1 Introduction

## 1.1 Purpose

This Health Expenditure Trends (HET) report is the latest in a regular series prepared by the Ministry of Health (the Ministry). The series aims to provide information, including estimates of current expenditure, on the health and disability sector for use by interested agencies, individuals and the OECD. The expenditure estimates include all funding of health services in New Zealand channelled through the public and private sectors.

## 1.2 Background

The Ministry's role in the funding of health services has remained relatively stable over the past 27 years. The health reforms of the 1980s and 1990s were not of the same magnitude as the changes that occurred during the middle of the 20th century. Prior to World War II, private funding of health care dominated in New Zealand, accounting for around 57% of total funding in 1925. By 1945, however, the public share had grown to 74% of total expenditure and steadily increased to peak at 88% by the early 1980s.

Over the past 27 years, the percentage of total current funding from public sources gradually reduced from a high of 88% to within the range of 77% to 80% which has persisted since 1992. Of this public funding source, the Government's direct health funding through the Ministry is the largest contributor to the total health and disability funding, at approximately 68.5% in 2007/08 compared with 69.8% in 1997/98.

The organisation of publicly funded health and disability support services in New Zealand has undergone a number of changes in the last decade. These have ranged from a 'purchaser/provider' market-oriented model introduced in 1993 to the more community-oriented model that is currently in place. The current system was implemented through the New Zealand Public Health and Disability Act 2000 (NZPHD Act). This allowed for the creation of District Health Boards (DHBs), a key step in moving to a population-based health system. Figure 1.1, on page 3, shows the current structure of the New Zealand health and disability support sector.

## 1.3 Ministry responsibilities and funding levels

DHBs are responsible for providing, or funding the provision of, health and disability services in their geographic district. There are 21 DHBs in New Zealand that have existed since 1 January 2001. The activities of the DHBs are guided by two overarching strategies for the health and disability sector: the New Zealand Health Strategy and the New Zealand Disability Strategy. DHBs are supported by the Ministry, which provides national policy advice, regulation, funding and monitors the performance of each DHB.<sup>3</sup>

<sup>3</sup> See: <http://www.moh.govt.nz/healthsystem> for more detail.

The majority of the Ministry's health services funding is devolved to DHBs; making up 81.1% of Ministry expenditure in 2007/08. This equates to 69.4% of public expenditure and 55.6% of total current health expenditure in 2007/08.

The Minister of Health has overall responsibility for the health system. The Minister works through the Ministry to enter into accountability arrangements with DHBs and set health and disability strategies. The Minister also agrees, together with government colleagues, how much public money will be spent on the public health system.

The Ministry is responsible for ensuring the health and disability system works for New Zealanders. The Ministry is the government's primary advisor on health policy and disability support services and is responsible for:

- providing policy advice on improving health outcomes, reducing inequalities and increasing participation
- acting as the Minister's agent
- monitoring the performance of DHBs and other Crown entities in the health sector
- implementing, administering and enforcing relevant legislation and regulations
- providing health information and processing payments
- facilitating collaboration and co-ordination within and across sectors
- planning and maintaining service frameworks nationwide
- planning and funding public health services, disability support services and other service areas that are retained centrally.

To this end, the production and distribution of this HET document contributes to informed debate on health funding and expenditure issues.

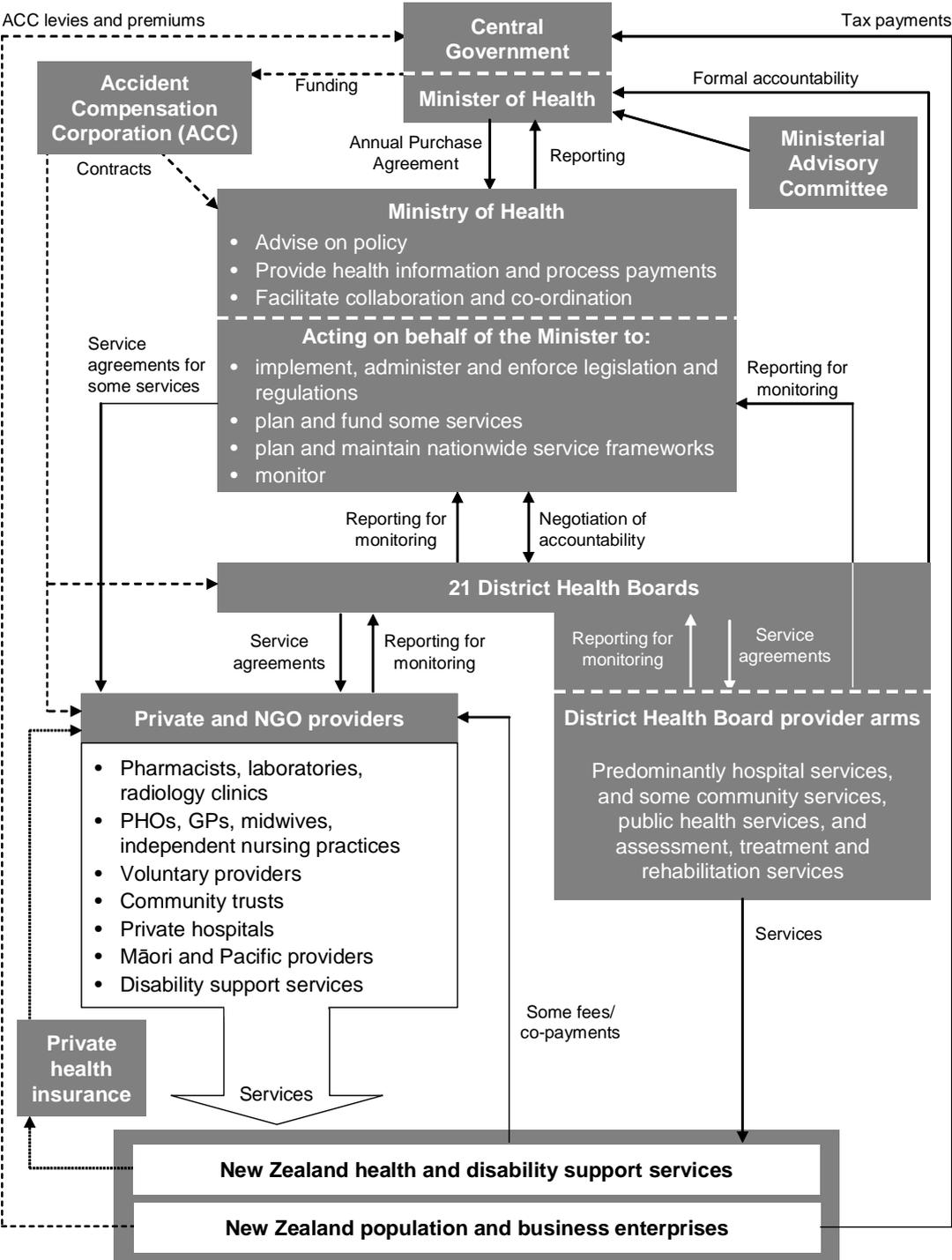
## **1.4 Structure of the New Zealand public health and disability sector**

DHBs are responsible for planning and purchasing health and disability services for their districts and are governed by community boards that consist of a mix of elected and appointed members, with the majority (seven) elected by the community. DHBs are Crown entities whose boards are responsible to the Minister. In recognition of the Crown's relationship with Māori, each board must have at least two Māori members or a greater number if Māori make up a higher proportion of the DHB's population. DHBs are also principal providers of secondary and tertiary hospital care.

DHBs are responsible for both funding health care services to a geographically defined population and providing acute hospital services. They are responsible for improving, promoting and protecting the health and independence of their populations. Each DHB must assess the health and disability support needs of the people of its region and manage its resources appropriately.

Central government provides broad guidelines on what services the DHBs must provide. National priorities in health have been identified in the New Zealand Health Strategy. In addition, the Minister's priorities and health targets are reflected in DHB plans and accountability arrangements. DHBs enter into service agreements with a range of providers, including public hospitals, not-for-profit health agencies, iwi groups and private organisations to meet the health needs of their geographic populations.

**Figure 1.1:** Structure of the New Zealand health and disability sector, 2008



## **1.5 Other funders of the New Zealand public health and disability sector**

In addition to the Ministry, a significant amount of public funding on health services comes from the Accident Compensation Corporation (ACC). ACC is a statutory insurance organisation owned by the state that provides compulsory, comprehensive, no-fault insurance cover for accident-related injuries to all New Zealanders. OECD defines ACC as 'social security'. In 2007/08, funding from ACC accounted for approximately 9.0% (\$1,586.8 million) of total current health expenditure.

In addition, relatively small amounts of personal health are funded by: the Department of Corrections in relation to prisoners, the New Zealand Defence Force in relation to active duty military personnel and Work and Income in relation to war pensioners. Other central government agencies fund prevention, public health, health administration and health-related services (see 6.2: Other government agencies).

The private funding of the health sector includes private insurance, household out-of-pocket spending and non-government funding of not-for-profit organisations. The expenditure estimates for private funding are largely based on surveys and sampling techniques. Consequently, this information is less consistent and reliable. Given this qualification, however, indications are that the private funding of health services has remained relatively stable over the past decade at approximately 20.0% of the total funding.

## 2 OECD System of Health Accounts Definitions and Classifications

Below are brief definitions of the OECD System of Health Accounts (SHA) for the expenditure reported since 2003/04. A more detailed discussion of the definitions of OECD health services and health-related categories (OECD 2000) is provided in Appendix 1.

### 2.1 Health services

At a fundamental level, expenditure on health care and health-related services included in HET reports conforms to the definition developed for the World Health Organization (WHO) (Abel-Smith 1963). In defining health services, Abel-Smith states that:

The purpose of health services is to promote health; to prevent, diagnose and treat diseases, whether acute or chronic, whether physical or mental in origin and to rehabilitate people incapacitated by disease or injury.

This general statement does not define which services are, or should be, included or excluded from SHA as 'total health expenditure' or 'health-related memorandum items'. Departing from the conventions of earlier HET reports, data starting in 2003/04 includes previously defined 'non-health' items transferred from social agencies to the Ministry. These services are now considered an integral part of health by the Ministry and the OECD.

Brief descriptions of the main service categories are given below.

The SHA cover three dimensions: health care by functions of care, providers of health care goods and services and sources of health funding. The provision of health care and its funding is a complex, multi-dimensional process. The set of core tables in the SHA address three basic questions.

- What kinds of services are performed and what types of goods are purchased (functions of health care)?
- Where does the money go to (providers of health care services and goods)?
- Where does the money come from (source of funding)?

### 2.2 Functions of health care

The broad underlying concept of health care is consistent with historical HET reports. Activities of health care comprise the sum of activities performed either by institutions or individuals pursuing, through the application of medical, paramedical and nursing knowledge and technology, the goals of:

- promoting health and preventing disease
- curing illness and reducing premature mortality
- caring for persons affected by chronic illness who require nursing care

- caring for persons with health-related impairment, disability and handicaps who require nursing care
- assisting patients to die with dignity
- providing and administering public health
- providing and administering health programmes, health insurance and other funding arrangements.

(OECD 2000, p 42)

‘Health care’ includes personal health care services provided directly to individual persons and collective health care services, covering the traditional tasks of public health such as health promotion and disease prevention, including setting and enforcing standards and health administration and health insurance.

## 2.3 Health-related functions

The OECD health-related functions are distinguished from the core health care functions. They are closely linked to health care in terms of operations, institutions and personnel but are, as far as possible, excluded when measuring activities and expenditure belonging to core health care functions. These are services that have a direct and beneficial impact on collective health and, when reported historically, were included in the HET reports as public health services.

The HET and OECD SHA categories include separate reporting for the following health-related functions:

- education and training of health personnel
- research and development in health
- food, hygiene and drinking water control
- environmental health.

The expenditure estimates are conservative because they do not fully include the administration and provision of social services and the provision of health-related cash benefits to private households. Furthermore, no provision has been made at this time for capital formation of health provider institutions (HC.R.1), administration and provision of social services in kind to assist living with disease and impairment (HC.R.6), and administration and provision of health-related cash-benefits (HC.R.7).<sup>4</sup> These are refinements that may be included in subsequent years and could be material.

<sup>4</sup> Codes come from the SHA functions (see Appendix 1.2: OECD System of Health Accounts: Health-related functions).

## **2.4 Providers of health-care services and goods**

The SHA include a dimension for the provider sector: 'Where does the money go', or 'Who provides the services?' This is a new element of expenditure reporting for New Zealand. The classifications used are based on draft common industrial classification of North American Free Trade Organization (NAFTA) countries and the North American Industrial Classification System (NAICS 1998). These detailed classifications are condensed into the following groups: hospitals, nursing, residential care facilities, ambulatory care, retail and other providers, administration and other.

## **2.5 Sources of funding**

The HET report contains a breakdown of expenditure on health by funder type as follows:

- government-provided health care, that is further segregated by government agency – the Ministry (including DHBs), ACC, other central government and regional and local government
- out-of-pocket expenditure by private households
- private insurance
- not-for-profit organisations.

This classification system corresponds to payer information contained in historical HET reports. The summary funder groups that remain intact are total public and total private funding.

## **3 Methods and Conventions**

### **3.1 Report coverage**

This chapter introduces the methods and conventions used in collating SHA expenditure and describes the types of data collected. As already noted, the analysis in this report is based on the OECD SHA, which defines what categories of expenditure should be included or excluded when comparing current health and health-related expenditure internationally. This report provides information and comments on health and disability expenditure within the OECD definition of 'health services'.

Appendices 5 and 6 cover two key OECD SHA tables: expenditure by function of care and provider industry and total current expenditure on health, including health-related functions by funder category. There are three tables under each of these appendices, one for each year 2005/06 to 2007/08.

### **3.2 Categories of health expenditure**

Trend information covering the full 10-year period is aggregated by public and private funding of health, including values preceding SHA implementation in 2003/04. Information for the five-year period from 2003/04 to 2007/08 is based on summary SHA information for the categories following.

#### **3.2.1 Personal health**

- Inpatient care – curative and rehabilitative, and long-term nursing care.
- Services of day care – curative, rehabilitative and long-term nursing care.
- Outpatient care – curative, rehabilitative, basic medical and diagnostic services, dental care, all other specialised care and all other outpatient care.
- Home care – curative, rehabilitative and long-term nursing care.
- Ancillary services to health care.
- Medical goods dispensed to outpatients – pharmaceuticals and other medical non-durables, and therapeutic appliances and other medical durables.

The above services are the components of personal health care. In addition, trend information is provided for two other components of current health expenditure and health-related functions.

#### **3.2.2 Collective health**

- Prevention and public health services.
- Health administration and health insurance.

### **3.2.3 Health-related**

- Education and training of health personnel.
- Research and development in health.
- Food, hygiene and drinking-water control.
- Environmental health.

New Zealand does not report on two health-related functions: capital formation of health care provider institutions and the administration and provision of health-related cash benefits. Caution should be exercised when interpreting the disaggregated information, because New Zealand has only recently implemented the SHA reporting, and refinements are expected.

### **3.3 Funding sources**

Public sector health funding includes the government's direct health expenditure through the Ministry (including DHBs), as well as other central government funding, including ACC, other government agencies (Agriculture and Forestry; Defence; Education; Internal Affairs; Corrections; Te Puni Kōkiri (Ministry of Māori Development); Pacific Island Affairs; Research, Science and Technology; and Social Development), and local authorities (regional, district and city councils).

Private-sector funding for health-related activities comes from out-of-pocket expenditure by private households, expenditure by health insurance companies on behalf of their policy-holders and health-related expenditure by not-for-profit organisations met by funds from non-governmental sources.

### **3.4 Sources and assumptions for Ministry-funded services**

Current Ministry expenditure is sourced and valued from internal financial records, segregated by services, and it relates to services purchased directly by the Ministry or via devolved purchasing through the DHBs. The Ministry head office departmental expenditure represents a third category of Ministry health funding.

### **3.5 Ministry-funded services, excluding DHBs**

The Ministry non-departmental expenditure for services purchased from non-DHB providers has been profiled according to SHA function codes in consultation with Ministry Corporate Finance. An apportionment was also performed for the SHA provider industry.

### **3.6 DHB-funded services**

The DHB-funded services are profiled directly from the DHB funder arm year-end financial templates as provided to the Ministry by DHBs. Expenditure within the funder arm represents the purchase of services from all providers, including the purchase of services from the respective DHBs' own provider arms and other DHBs. Revenues from other third-party purchasers, including other central or local government agencies, are not included in the funder arm, so there is no double counting of current health expenditure within DHB providers. The financial templates are at line-item level and thus match with SHA service function and SHA provider industry coding.

### **3.7 Crown Health Enterprise/District Health Board deficit financing**

Deficits of DHBs, previously known as Crown Health Enterprises (CHEs) and Hospital and Health Services (HHS), have been included in HET reports since 1997/98 as part of publicly funded health expenditure. The operating deficits incurred by DHBs and CHEs reflect the difference between operating income and operating expenses. These deficits were incorporated into the government accounts funded by the Ministry. Since 2003/04, the deficits have been added to the DHB funder arm expenditure.

The inclusion of this deficit funding is necessary to provide an accurate picture of the expenditure on current health and health-related expenditure in New Zealand in a given year. This is because these are publicly owned entities and the government is ultimately responsible for their financing. Publicly funded health expenditure, including DHB deficit financing, amounted to 80.2% of total expenditure in 2007/08.

### **3.8 Sources and assumptions related to services funded by other central government agencies**

Starting in 2003/04, the primary source for estimating other central government health expenditure changed from an annual survey conducted by the Ministry to the agencies' respective annual reports. This information is augmented by survey or direct responses when necessary. Additional information on the individual agencies is provided in 6.2: Other government agencies. These estimates are conservative in that they tend not to include an administrative component.

### **3.9 Sources and assumptions related to services funded by local government**

Starting in 2003/04, the primary source for estimating local government health expenditure has been their annual reports. Changing source data for local governments is similar to the change for central government agency estimates, and again, this information is augmented by survey or direct responses when necessary. Additional information pertaining to local government expenditure is provided in 6.3: Regional and local authorities.

### **3.10 Sources and assumptions related to services funded by the private sector**

Private sources of funding consist of out-of-pocket expenses, health insurance and not-for-profit organisations. The estimate for 2007/08 out-of-pocket expenditure is based on the Household Economic Survey (HES) for 2006/07.<sup>5</sup> This survey has consistently been the source of data for the estimate of out-of-pocket expenditure. Estimates of health insurers' total current expenditure on health care is based on data provided by the Health Funds Association of New Zealand Inc (HFANZ). This source also remains unchanged; however, from 2004/05, the estimates have been based on aggregate information,<sup>6</sup> whereas previous years' estimates were based on a direct survey. Estimates for the not-for-profit sector are based on an expanding sample of organisations' annual reports. Additional information pertaining to private sector expenditure is provided in Chapter 7: Private Sector Funding.

### **3.11 Real dollar health expenditure**

New Zealand has no index specific to health expenditure that can be used to remove the effect of price inflation from nominal expenditure on health and disability support services. As with previous reports in this series, the Consumer Price Index (CPI) has been used to inflate nominal dollars to 2008 real dollar value.

The CPI series used is given as part of Appendix 2. The series is based on the Statistics New Zealand long-term linked series for 'all groups'. Annual changes are based on the change from the previous June quarter.

### **3.12 Goods and services tax and overhead charges**

The health and disability expenditure presented in this HET report includes goods and services tax (GST) at its prevailing rate of 12.5%. Starting in 2005/06, central governmental financial reporting is GST exclusive. To retain consistency with prior years and report the full cost to consumers of health expenditure, a factor has been added when necessary for inclusion of this cost.

### **3.13 Populations**

The population data in this report is based on the definition of population commonly used by Statistics New Zealand. The estimated resident population is based on the census usual resident population count, with adjustments for residents missed or counted more than once by the census (net census undercount), and for residents temporarily overseas on census night.<sup>7</sup>

<sup>5</sup> The HES is a Statistics New Zealand survey that was conducted annually until 1998 but now takes the form of a tri-annual survey.

<sup>6</sup> Health insurance statistics, July 2008 (HFANZ 2008).

<sup>7</sup> See: <http://www.stats.govt.nz>

## 4 Trends in Total Current Health Expenditure by Funding Source

This chapter examines trends in New Zealand current health expenditure aggregated by public and private sources. This funding split has been consistent over the 10-year period and was not affected by the introduction of SHA definitions. The components of both public and private expenditure for 2003/04 to 2007/08 are examined in detail in the next three chapters and address trends for the five-year period since the change to SHA reporting in 2003/04.

### 4.1 Aggregate health expenditure

Long-term trends (1925–2008) in health expenditure in New Zealand are shown below in relation to funding source (Figure 4.1) and public and private shares (Figure 4.2). The estimates for the years from 1997/98 to 2007/08 include previously excluded non-health items, primarily disability support services.

Total current health care expenditure in New Zealand has risen from around \$7 million in 1925 to around \$17.7 billion<sup>8</sup> in 2008 in nominal terms.<sup>9</sup> In real terms, total current health expenditure rose during this period at an annual average rate of 5.1% (see Figure 4.1). Publicly funded expenditure grew at an annual average rate of 5.4%, and privately funded expenditure, starting from a higher base, grew at the slower rate of 4.1% per year during this period.

Figure 4.2 shows that prior to World War II private funding of health care dominated in New Zealand and accounted for around 57% of total funding in 1925. By 1945, however, the public share had grown to 74% of total expenditure and steadily increased to peak at 88% by the early 1980s, then gradually reduced to the range of 77% to 80% seen more recently.

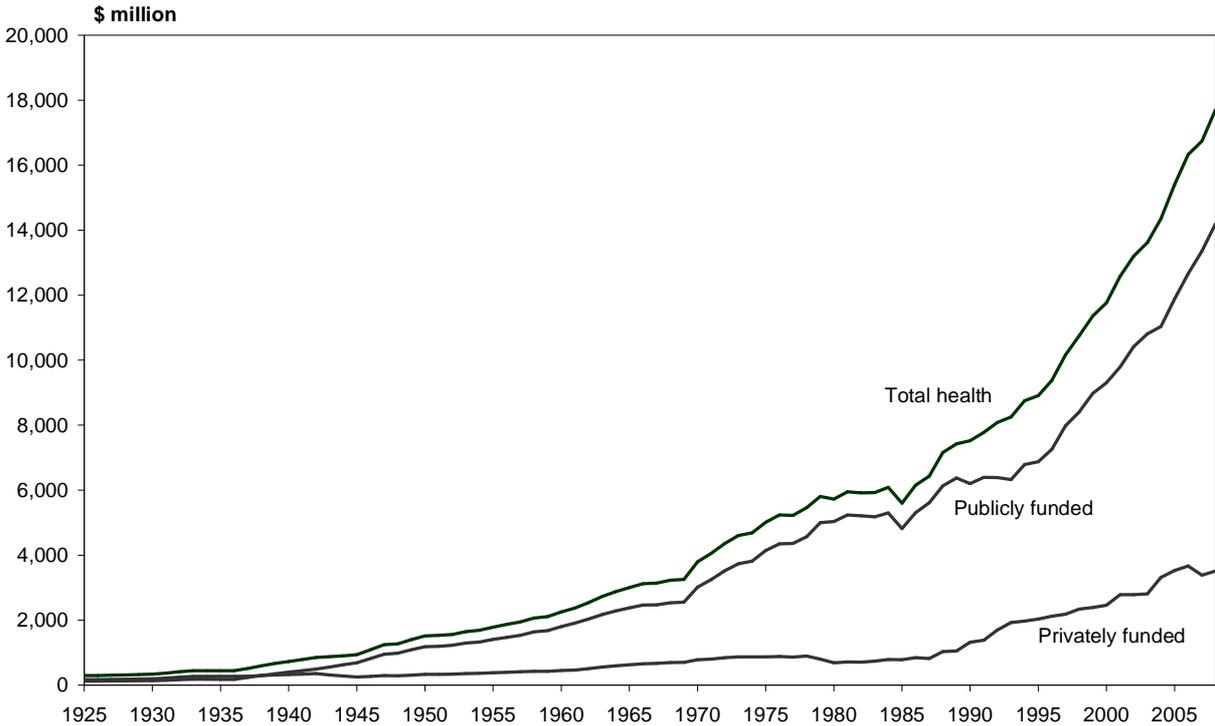
Public funding has remained stable within this narrow range since 1992 (see Figures 4.1A and 4.2A). The actual average growth rate of 5.1% (see above) exceeded the population growth rate. The impact on a per capita basis reflects the same expenditure pattern as for the entire population, but at a slightly lower rate of growth. Figure 4.1B presents the same information as Figure 4.1A but on a per capita basis. Since 1997/98, total real expenditure on health care has grown at an average annual compound rate of 5.1% per year. Public and private funding of health has grown by 5.4% and 4.1% respectively.

Between 1997/98 and 2007/08, publicly funded real expenditure on health care increased by \$5,791 million (83.2% of the total increase). Over the same period, privately funded real expenditure rose by \$1,168 million (10.9% of the total increase).

<sup>8</sup> This figure does not include OECD health-related expenditure.

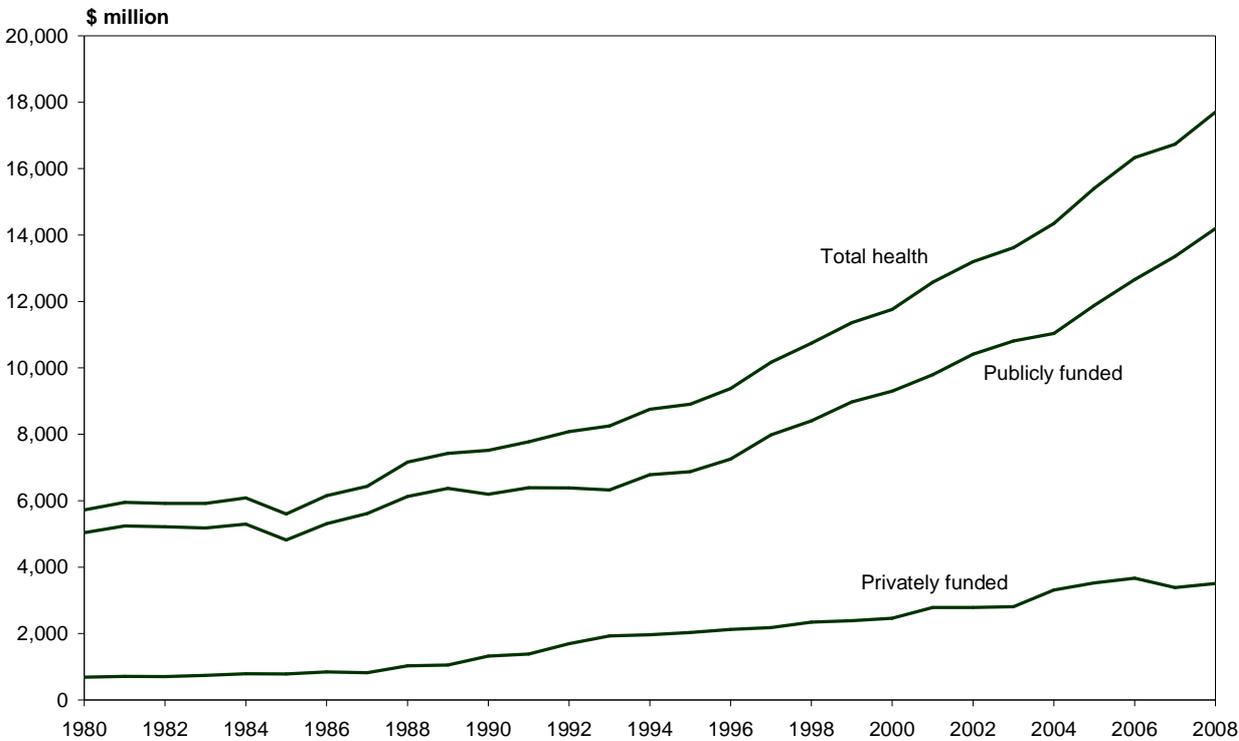
<sup>9</sup> See Appendix 6.3: Current expenditure on health and health-related by function of care and funder (SHA Standard Table 5) 2007/08.

**Figure 4.1:** Aggregate real (\$ million 2007/08) health expenditure, 1925–2008



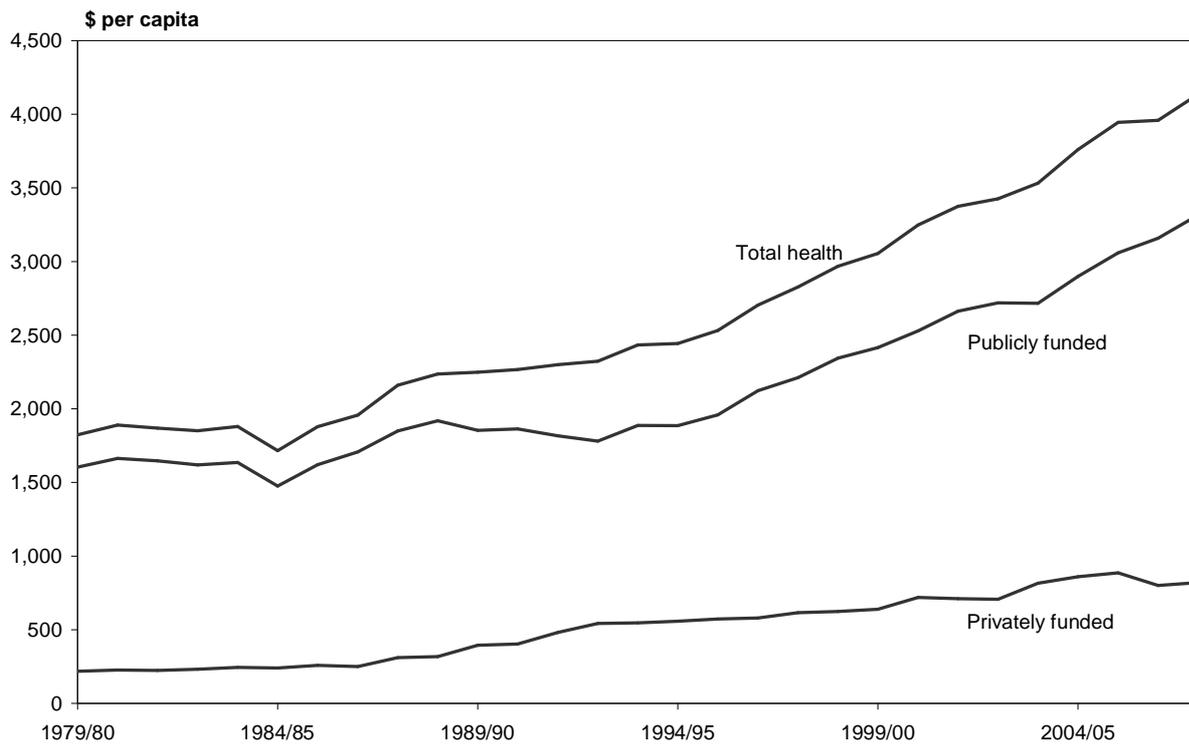
Source: Ministry of Health

**Figure 4.1A:** Aggregate real (\$ million 2007/08) health expenditure, 1980–2008



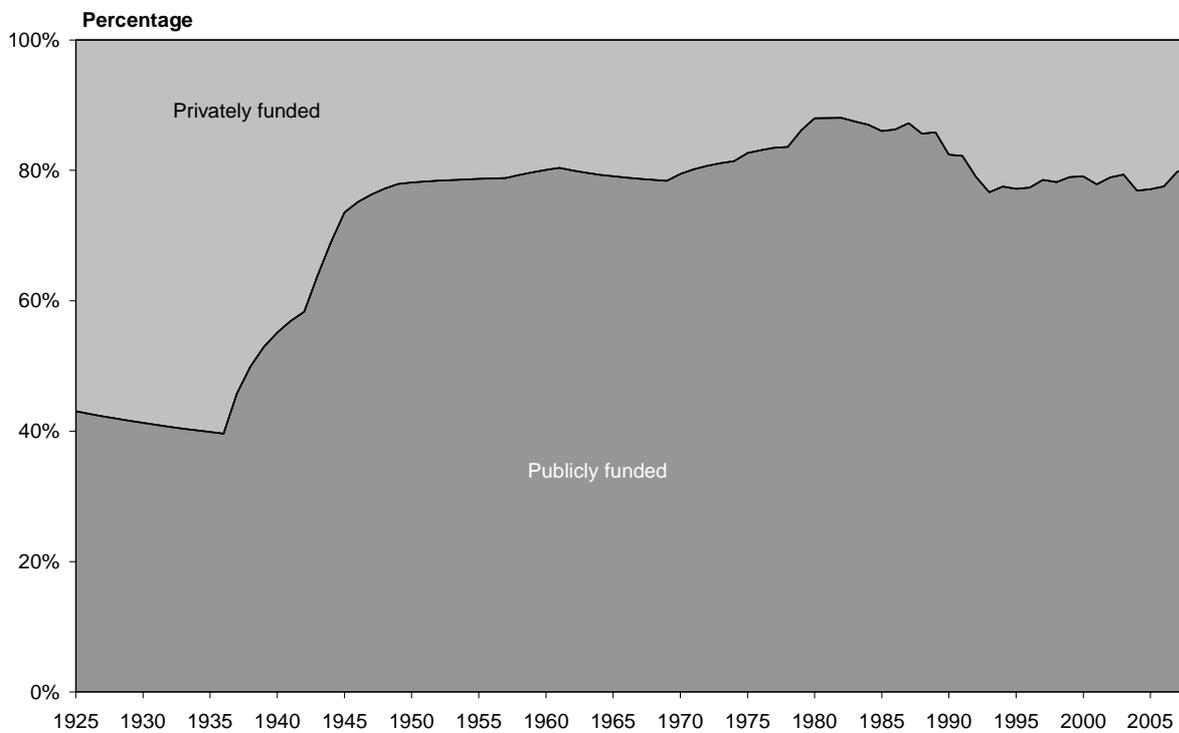
Source: Ministry of Health

**Figure 4.1B:** Aggregate real (per capita 2007/08) health expenditure, 1980–2008



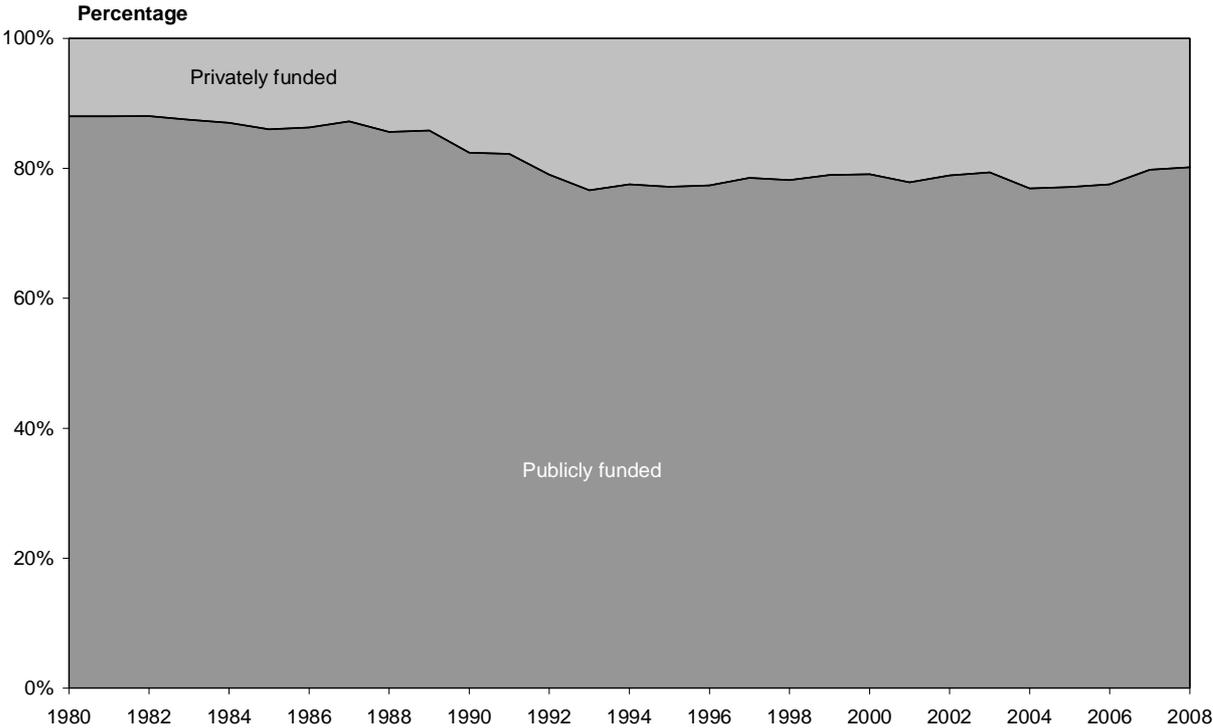
Source: Ministry of Health

**Figure 4.2:** Publicly and privately funded expenditure shares, 1925–2008



Source: Ministry of Health

**Figure 4.2A:** Publicly and privately funded expenditure shares, 1980–2008



Source: Ministry of Health

**4.2 Trends in real per capita current expenditure on health**

Table 4.1 and Figures 4.3 and 4.4 show the trends in real public and private current expenditure on health from 1997/98 to 2007/08. Table 4.1 also shows the gross domestic product (GDP) and the growth in GDP over this same period. As can be seen, the expenditure per capita is growing considerably faster than the growth in GDP.

**Table 4.1:** Real current expenditure trends, 1997/98–2007/08

Year	Total current health expenditure (\$ million June 2008)			Expenditure per capita (\$ June 2008) 'Resident' population			Real gross domestic product (\$ June 2008)	
	Public	Private	Total*	Public	Private	Total*	Total	Per capita
1997/98	8,405	2,342	10,747	2,211	616	2,827	131,424	34,570
1998/99	8,974	2,389	11,363	2,344	624	2,968	139,889	36,545
1999/00	9,300	2,459	11,759	2,416	639	3,055	144,892	37,639
2000/01	9,793	2,786	12,579	2,529	719	3,248	151,247	39,060
2001/02	10,414	2,783	13,197	2,663	712	3,375	154,265	39,444
2002/03	10,809	2,810	13,619	2,719	707	3,426	162,607	40,898
2003/04	11,035	3,313	14,348	2,716	816	3,532	170,140	41,881
2004/05	11,884	3,527	15,411	2,899	860	3,759	173,389	42,301
2005/06	12,662	3,669	16,331	3,059	886	3,945	175,410	42,375
2006/07	13,356	3,383	16,739	3,159	800	3,959	184,752	43,694
2007/08	14,195	3,510	17,705	3,316	820	4,136	179,912	42,026
RAAGR †	5.38%	4.13%	5.12%	4.14%	2.90%	3.88%	3.19%	1.97%

Source: Ministry of Health

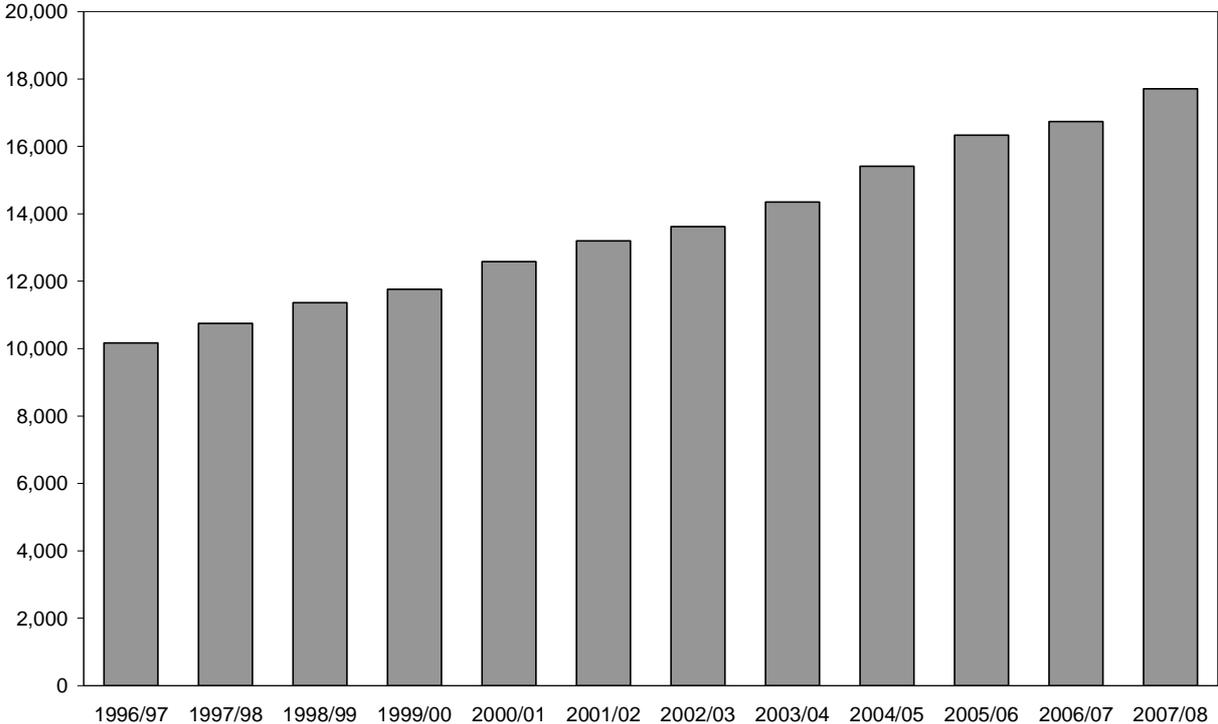
\* Totals may be affected by rounding.

† Real annual average growth rate (RAAGR) between 1997/98 and 2007/08.

Table 4.1 shows that from 1997/98 to 2007/08, total per capita real expenditure increased at an average annual compound rate of 3.88%, rising at an average annual compound rate of 4.1% per year for public expenditure and at a lower rate of 2.9% per year for private expenditure.

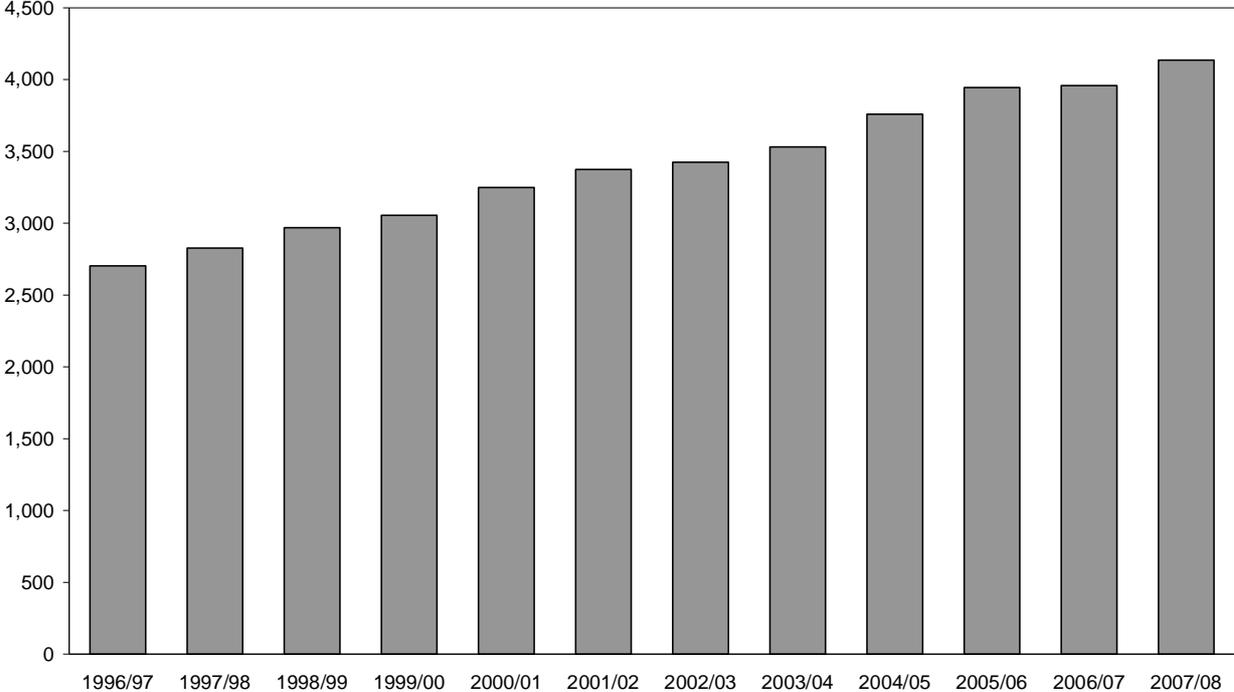
In 2007/08, aggregate current expenditure per capita amounted to \$4,136. Of this total, publicly funded current expenditure amounted to \$3,316 per capita and privately funded current expenditure amounted to \$820 per capita.

**Figure 4.3:** Trends in real total current expenditure on health, 1997/98–2007/08 (\$ million 2007/08)



Source: Ministry of Health

**Figure 4.4:** Trends in real per capita current expenditure on health, 1997/98–2007/08 (\$ million 2007/08)



Source: Ministry of Health

### 4.3 Pattern of health care funding, by source of funds

Table 4.2 shows the trend by source of funds for the period 1997/98 to 2007/08. Figure 4.5 compares 1997/98 and 2007/08 in terms of their breakdown of funding by source.

**Table 4.2:** Health expenditure by source of funds (%), 1997/98–2007/08

	Ministry of Health	Deficit funding	ACC – social security	Other government agencies	Local authority	Total public funding	Private household	Health insurance	Not-for-profit organisations	Total private funding	Total
1997/98	67.5	2.3	5.0	2.9	0.6	78.2	15.4	6.0	0.3	21.8	100.0
1998/99	69.6	0.4	5.5	2.8	0.7	79.0	14.8	5.9	0.3	21.0	100.0
1999/00	69.5	0.1	6.2	2.7	0.6	79.1	14.6	6.0	0.3	20.9	100.0
2000/01	66.9	0.7	6.8	2.7	0.6	77.9	16.0	5.9	0.3	22.1	100.0
2001/02	66.3	2.2	7.2	2.7	0.6	78.9	15.3	5.5	0.3	21.1	100.0
2002/03	66.3	1.8	7.9	2.7	0.6	79.4	14.9	5.5	0.3	20.6	100.0
2003/04	67.3	0.0	7.5	1.6	0.5	76.9	17.0	5.3	0.7	23.1	100.0
2004/05	67.0	0.0	8.1	1.6	0.4	77.1	16.9	5.0	1.1	22.9	100.0
2005/06	66.9	0.0	8.4	1.6	0.5	77.5	16.6	5.0	0.9	22.5	100.0
2006/07	68.1	0.0	9.1	1.9	0.7	79.8	14.3	4.9	1.0	20.2	100.0
2007/08	68.5	0.0	9.0	2.1	0.5	80.2	14.0	4.9	0.9	19.8	100.0

Source: Ministry of Health

Notes: Totals may be affected by rounding.

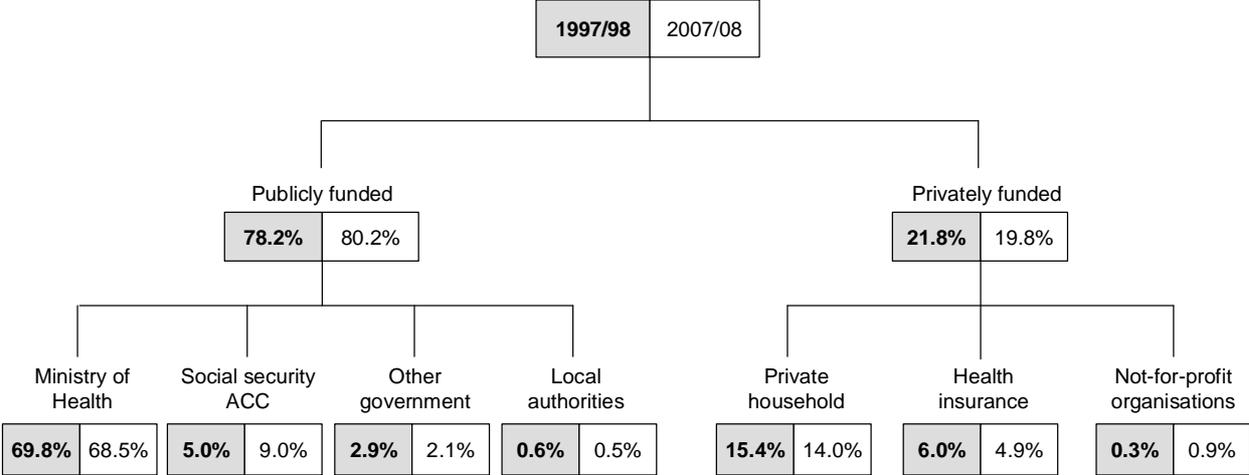
Starting in 2003/04, the DHB operating deficits are reflected in the Ministry figures.

Prior to 2003/04 ACC was classified as 'other government agencies'. Data series have been restated back to 1997 to reflect this reclassification.

Private funding as a percentage of total funding has remained between 20% and 22% from 1997/98 to 2007/08. Note, however, that estimates and not survey results were used for out-of-pocket expenditure for the years 1998/99, 1999/00, 2001/02, 2002/03, 2004/05, 2005/06 and 2007/08.<sup>10</sup> Actual survey results were used for between-year estimates.

<sup>10</sup> 1998 was the last year of an annual Household Economic Survey (HES), now conducted every three years.

**Figure 4.5:** Percentage shares of New Zealand’s total health funding, 1998 and 2008



Source: Ministry of Health

**4.4 Trends in uses of aggregate health and health-related funds**

The trends in total current expenditure for SHA health and health-related functions are shown in Table 4.3. These values have been estimated and reported in accordance with SHA definitions.

**Table 4.3:** Destinations of total health funding (including health-related), 2003/04–2007/08

Health care services and goods by function	ICHA-HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Increase 2006/07 to 2007/08 (000s)	Average annual growth rate
Services of curative and rehabilitative care	HC.1, HC.2	7,064,653	7,856,561	8,487,969	8,999,895	9,990,375	990,480	9.1%
Services of long-term nursing care	HC.3	1,880,804	1,894,026	2,150,621	2,305,805	2,551,131	245,326	8.0%
Ancillary services to health care	HC.4	580,655	680,293	771,136	761,899	850,164	88,265	10.2%
<b>Medical goods dispensed to outpatients</b>	HC.5	1,466,658	1,645,412	1,898,266	1,858,032	1,921,781	63,749	7.2%
Pharmaceuticals and other medical non-durables	HC.5.1	1,314,781	1,452,083	1,691,148	1,637,890	1,692,563	54,673	6.8%
Therapeutic appliances and other medical durables	HC.5.2	151,877	193,329	207,118	220,142	229,218	9,076	11.2%
<b>Total personal medical services and goods</b>	<b>HC.1–HC.5</b>	<b>10,992,770</b>	<b>12,076,292</b>	<b>13,307,992</b>	<b>13,925,631</b>	<b>15,313,451</b>	<b>1,387,820</b>	<b>8.7%</b>
Prevention and public health services	HC.6	699,248	871,029	945,390	996,900	1,084,187	87,287	11.8%
Health administration and health insurance	HC.7	952,342	1,025,055	1,138,299	1,169,267	1,307,602	138,335	8.3%
<b>Total current expenditure on health</b>		<b>12,644,360</b>	<b>13,972,376</b>	<b>15,391,681</b>	<b>16,091,798</b>	<b>17,705,240</b>	<b>1,613,442</b>	<b>8.8%</b>
<b>Memorandum items: further health-related functions</b>								
Education and training of health personnel	HC.R.2	497,862	534,097	577,111	624,911	670,691	45,780	7.7%
Research and development in health	HC.R.3	162,351	190,420	207,766	234,133	238,344	4,211	10.2%
Food, hygiene and drinking water control	HC.R.4	197,791	228,571	249,417	254,526	364,004	109,478	17.4%
Environmental health	HC.R.5	1,136,570	1,225,409	1,294,647	1,353,948	1,409,589	55,641	5.5%
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	46,074	70,730	70,171	100,577	135,848	35,271	32.8%
<b>Total health-related expenditures</b>		<b>2,040,648</b>	<b>2,249,227</b>	<b>2,399,112</b>	<b>2,568,095</b>	<b>2,818,476</b>	<b>250,381</b>	<b>8.4%</b>
<b>Total health and health-related expenditures</b>		<b>14,685,008</b>	<b>16,221,603</b>	<b>17,790,793</b>	<b>18,659,893</b>	<b>20,523,716</b>	<b>1,863,823</b>	<b>8.8%</b>

Overall, current health expenditure has increased on average by 8.8% per year for the five-year period 2003/04 to 2007/08. Total personal medical services/goods have increased on average by 8.7% and are the major contributors to total expenditure. Within personal health services, institutional services (curative, rehabilitative and long-term nursing care) have grown at a higher rate than community-based services. The health function with the highest rate of growth is therapeutic appliances and other medical durables at 11.2%, medical goods dispensed to outpatients have the lowest increase at 6.8%.

Expenditure on health-related functions is growing at a slower rate of 8.4%. Environmental health has consistently been the largest contributor in dollar values to this category, but shows one of the lowest increases of 5.5%.

## 5 Public Sector Funding – Ministry of Health

Public sector funding is the major source of health funding in New Zealand. In 2007/08 this amounted to \$14,195 million or 80.2% of the total health expenditure. Within this source, the government's direct health funding through the Ministry is the largest contributor at \$12,137 million, or 68.5% of the total health expenditure. ACC and other government agencies, including regional and local governments, provide an additional \$2,058 million or 11.6% of current health expenditure. Other government agencies also provide a significant amount of funding for health-related services (Appendix 6.3).

Funding of health-related services represents an additional \$2,818 million, of which \$2,498 million is publicly funded.

This chapter discusses the trends in Ministry funding. Expenditure trends by the other government agencies are discussed in Chapter 6: Other Public Sector Funding.

### 5.1 Ministry of Health funding

Health expenditure estimates for 2007/08 reflect total current expenditure on health and health-related services, conforming to SHA conventions. The vast majority of the Ministry expenditure relates to bulk funds devolved to DHBs for purchasing at a local level. For historical information covering the period 1997/98 to 2002/03, the total estimates have been recalculated to include the previously excluded non-health items, primarily disability support services. Unlike HET reports prior to 2003/04, annual expenditure is no longer analysed both inclusive and exclusive of these non-health items. The difference between the two categories amounted to \$563 million in 2002/03. These disability support services are now considered a core health service.

Expenditure growth by the Ministry has accelerated in recent years. To show the movements in the Ministry's current expenditure, Table 5.1 gives details in aggregate and per capita expenditure (both nominal and real dollars) and as a percentage of both GDP and government expenses for the period 1997/98 to 2007/08. The Ministry's current funding of health services has increased by over 1.0% of GDP and has increased as a proportion of total central government funding by 1.8%.

**Table 5.1: Ministry of Health expenditure, 1997/98–2007/08**

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Total (\$ million nominal)	5,906	6,245	6,550	7,030	7,662	7,990	8,507	9,362	10,303	10,959	12,137
Total real (June 2008)	7,504	7,964	8,186	8,514	9,033	9,285	9,654	10,325	10,931	11,399	12,137
<b>Per capita – resident population basis</b>											
Per capita (\$ nominal)	1,553	1,631	1,702	1,815	1,959	2,010	2,094	2,284	2,489	2,592	2,835
Per capita real (June 2008)	1,974	2,081	2,126	2,199	2,310	2,335	2,376	2,519	2,641	2,696	2,835
GDP (\$ million nominal)	103,430	109,696	115,941	124,875	130,856	139,925	149,935	157,210	165,325	177,613	179,912
GDP real (June 2008)	131,424	139,889	144,892	151,247	154,265	162,607	170,140	173,389	175,410	184,752	179,912
Per capita real GDP (June 2008)	34,570	36,545	37,639	39,060	39,444	40,898	41,881	42,301	42,375	43,694	42,026
Total as % of GDP	5.71%	5.69%	5.65%	5.63%	5.86%	5.71%	5.67%	5.95%	6.23%	6.17%	6.75%
Total as % of government outlays	15.98%	16.15%	16.86%	17.03%	17.94%	17.01%	18.17%	18.00%	18.35%	18.04%	17.90%

Sources: Ministry of Health, Statistics New Zealand, the Treasury<sup>11</sup>

Notes: Real dollars are expressed in June 2008 currency.

2003/04–2005/06 data restated due to revised DHB SHA classification of data.

Table 5.1 shows that the total Ministry expenditure over the 10 years ended June 2008 grew to \$12,137 million. This figure translates to an average annual compound rate of growth of 7.4% for this period.

The following trends are illustrated by Table 5.1.

- Nominal Ministry current expenditure grew steadily throughout the review period. Expenditure in 2007/08 was 105.5% higher than in 1997/98.
- Reflecting the trend in total Ministry current expenditure, nominal per capita spending increased throughout the period. Estimated 2007/08 per capita spending was 82.5% higher than in 1997/98 (up on average 6.2% per year).
- Total real current expenditure growth averaged 5.3% per year since 1997/98.
- Real per capita growth averaged 3.7% per year from 1997/98.
- During this 10-year period, the Ministry's current funding as a percentage of GDP was at its lowest at 5.6% in 2000/01. It has steadily increased to 6.8% in 2007/08.
- The Ministry's current funding as a percentage of total government expenditure was 16.0% in 1997/98. It has increased steadily to 17.9% of government current expenses in 2007/08.

<sup>11</sup> The source of total government outlays has changed from New Zealand Statistics to the Financial Statements of the Government of New Zealand for the Year Ended 30 June 2006.

## 5.2 Ministry funding by major expenditure category

The change in Ministry funding from 2003/04 to 2007/08 in accordance with SHA is presented in Table 5.2. Further detail dividing the total funding into subsets of funding by DHBs or other provider groups is given in Table 5.3. Expenditure is detailed for health and health-related functions.

**Table 5.2:** Destinations of Ministry funding, 2003/04–2007/08

Health care by function	ICHA-HC code	Total Ministry funding					Total change		Average annual growth rate
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2005/06 to 2006/07 (000s)	2006/07 to 2007/08 (000s)	
<b>Inpatient care</b>									
Curative and rehabilitative care	HC.1.1; 2.1	2,596,313	2,866,107	3,068,165	3,229,519	3,575,724	161,355	346,205	8.4%
Long-term nursing care	HC.3.1	858,169	895,851	1,019,181	1,050,072	1,137,838	30,891	87,766	7.4%
<b>Services of day-care</b>									
Curative and rehabilitative care	HC.1.2; 2.2	98,042	98,303	116,621	125,920	132,367	9,299	6,447	8.0%
Long-term nursing care	HC.3.2	67,886	72,618	89,380	100,314	104,449	10,934	4,135	11.6%
<b>Outpatient care</b>									
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>1,923,124</b>	<b>2,062,718</b>	<b>2,194,430</b>	<b>2,612,773</b>	<b>2,919,527</b>	<b>418,343</b>	<b>306,754</b>	<b>11.1%</b>
Basic medical and diagnostic services	HC.1.3.1	1,486,423	1,601,378	1,699,679	2,030,137	2,240,565	330,458	210,428	10.9%
Outpatient dental care	HC.1.3.2	114,296	125,118	128,899	136,291	161,965	7,392	25,674	9.3%
All other specialised health care	HC.1.3.3	–	–	–	–	–	–	–	–
All other outpatient care	HC.1.3.9	52,658	59,092	63,355	104,444	152,998	41,089	48,554	32.7%
Outpatient rehabilitative care	HC.2.3	269,747	277,130	302,497	341,901	363,999	39,404	22,098	7.8%
<b>Home care</b>									
Curative and rehabilitative care	HC.1.4; 2.4	176,707	297,348	329,484	340,588	422,766	11,104	82,178	26.6%
Long-term nursing care	HC.3.3	815,106	764,434	866,130	956,549	1,101,701	90,419	145,152	8.2%
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>417,870</b>	<b>490,663</b>	<b>512,402</b>	<b>495,080</b>	<b>527,706</b>	<b>-17,322</b>	<b>32,626</b>	<b>6.3%</b>
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>797,323</b>	<b>900,217</b>	<b>1,100,001</b>	<b>1,088,288</b>	<b>1,137,673</b>	<b>-11,713</b>	<b>49,385</b>	<b>9.6%</b>
Pharmaceutical and other medical non-durables	HC.5.1	747,542	841,654	1,033,562	1,021,988	1,070,265	-11,574	48,277	9.7%
Therapeutic appliances and other medical durables	HC.5.2	49,781	58,563	66,439	66,300	67,408	-139	1,108	8.1%
<b>Total expenditure on personal health care</b>		<b>7,750,540</b>	<b>8,448,259</b>	<b>9,295,794</b>	<b>9,999,103</b>	<b>11,059,751</b>	<b>703,309</b>	<b>1,060,648</b>	<b>9.3%</b>
Prevention and public health services	HC.6	415,862	550,294	594,470	572,597	621,862	-21,873	49,265	11.3%
Health administration and health insurance	HC.7	341,025	363,124	412,424	387,023	455,275	-25,401	68,252	7.9%
<b>Total current expenditure on health care</b>		<b>8,507,427</b>	<b>9,361,677</b>	<b>10,302,688</b>	<b>10,958,723</b>	<b>12,136,888</b>	<b>656,035</b>	<b>1,178,165</b>	<b>9.3%</b>

Health care by function	ICHA- HC code	Total Ministry funding					Total change		Average annual growth rate
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2005/06 to 2006/07 (000s)	2006/07 to 2007/08 (000s)	
<b>Memorandum items: further health-related functions</b>									
Education and training of health personnel	HC.R.2	115,572	122,222	126,771	139,994	154,277	13,223	14,283	7.5%
Research and development in health	HC.R.3	–	–	–	–	–	–	–	–
Food, hygiene and drinking water control	HC.R.4	–	–	–	–	–	–	–	–
Environmental health	HC.R.5	70	–	–	–	–	–	–	–
<b>Total health-related expenditure</b>		<b>115,642</b>	<b>122,222</b>	<b>126,771</b>	<b>139,994</b>	<b>154,277</b>	<b>13,223</b>	<b>14,283</b>	<b>7.5%</b>
<b>Total health and health- related expenditure</b>		<b>8,623,069</b>	<b>9,483,899</b>	<b>10,429,459</b>	<b>11,098,717</b>	<b>12,291,165</b>	<b>669,259</b>	<b>1,192,448</b>	<b>9.3%</b>

Note: 2003/04–2005/06 data restated due to revised DHB SHA classification of data.

### 5.2.1 Personal health

Funding for health services provided to individuals for the purpose of improving or protecting their health is identified as personal health expenditure. In 2007/08, the Ministry share of personal health expenditure totalled \$11,059.8 million or 72.2% of total personal health expenditure. With five years of consistently compiled data using SHA, some trends are starting to emerge. Total current expenditure has increased on average by 9.3% per year and personal health care (the largest component) has grown by 9.3%. Care provided in an institutional setting, both inpatient and day care, is growing at a lower rate than outpatient, home care and community-based services (ancillary services and medical goods dispensed to outpatients).

Outpatient curative and rehabilitative care have seen the largest increase at an average of 11.1%. This is the SHA function that includes the additional funding for primary health initiatives. In dollar terms, this function has increased by approximately \$996.4 million in the five-year period from 2003/04.

### 5.2.2 Public health

Public health funding, also known as collective health, is for services relating to the whole population or population groups. This broad focus distinguishes public health funding from funding for individual personal health services. Public health services are primarily concerned with health protection, improvement and/or promotion. With the change to OECD SHA definitions and reporting in 2003/04, certain services historically reported as public health are now reported as administration or included in the health-related areas.

Specific objectives of public health service delivery include:

- ensuring that health and disability services meet population needs, and that health gains are maximised and provided efficiently
- improving regulatory frameworks so that they better protect the health and safety of New Zealanders while minimising industry compliance costs
- improving the health status of at-risk groups, especially Māori, by increased responsiveness to their needs.

Within public health services, functions of prevention and public health have grown considerably, by an average of 11.3% per annum, while administrative and insurance costs have grown at a much lower rate, by an average of 7.9% per annum.

**Table 5.3:** Destinations of DHB and non-DHB funding, 2003/04–2007/08

Health care by function	ICHA-HC code	Ministry direct funding					DHB devolved funding				
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)
<b>Inpatient care</b>											
Curative and rehabilitative care	HC.1.1; 2.1	161,334	169,926	196,383	186,471	218,209	2,434,979	2,696,181	2,871,782	3,043,048	3,357,515
Long-term nursing care	HC.3.1	231,778	114,401	107,592	109,200	107,357	626,391	781,450	911,589	940,872	1,030,481
<b>Services of day-care</b>											
Curative and rehabilitative care	HC.1.2; 2.2	–	–	–	–	–	98,042	98,303	116,621	125,920	132,367
Long-term nursing care	HC.3.2	24,935	28,071	36,566	42,925	40,107	42,951	44,547	52,814	57,389	64,342
<b>Outpatient care</b>											
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>83,687</b>	<b>50,679</b>	<b>65,104</b>	<b>153,966</b>	<b>297,171</b>	<b>1,839,437</b>	<b>2,012,039</b>	<b>2,129,326</b>	<b>2,458,807</b>	<b>2,622,356</b>
Basic medical and diagnostic services	HC.1.3.1	324	363	14,338	60,786	161,378	1,486,099	1,601,015	1,685,341	1,969,351	2,079,187
Outpatient dental care	HC.1.3.2	25	678	354	258	4,757	114,271	124,440	128,545	136,033	157,208
All other specialised health care	HC.1.3.3	–	–	–	–	–	–	–	–	–	–
All other outpatient care	HC.1.3.9	11,844	19,986	17,629	54,852	97,467	40,814	39,106	45,726	49,592	55,531
All other outpatient care	HC.2.3	71,494	29,652	32,783	38,070	33,569	198,253	247,478	269,714	303,831	330,430
<b>Home care</b>											
Curative and rehabilitative care	HC.1.4; 2.4	14,385	15,831	16,800	16,959	18,302	162,322	281,517	312,684	323,629	404,464
Long-term nursing care	HC.3.3	557,549	432,286	506,966	548,327	629,975	257,557	332,148	359,164	408,222	471,726
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>110,669</b>	<b>164,645</b>	<b>167,891</b>	<b>123,969</b>	<b>144,018</b>	<b>307,201</b>	<b>326,018</b>	<b>344,511</b>	<b>371,111</b>	<b>383,688</b>
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>13,492</b>	<b>39,175</b>	<b>97,388</b>	<b>78,501</b>	<b>32,704</b>	<b>783,831</b>	<b>861,042</b>	<b>1,002,613</b>	<b>1,009,787</b>	<b>1,104,969</b>
Pharmaceutical and other medical non-durables	HC.5.1	12,321	39,175	97,388	78,501	32,704	735,221	802,479	936,174	943,487	1,037,561
Therapeutic appliances and other medical durables	HC.5.2	1,171	–	–	–	–	48,610	58,563	66,439	66,300	67,408
<b>Total expenditure on personal health care</b>		<b>1,197,829</b>	<b>1,015,014</b>	<b>1,194,690</b>	<b>1,260,318</b>	<b>1,487,843</b>	<b>6,552,711</b>	<b>7,433,245</b>	<b>8,101,104</b>	<b>8,738,785</b>	<b>9,571,908</b>
Prevention and public health services	HC.6	310,293	412,960	443,438	432,628	453,959	105,569	137,334	151,032	139,969	167,903
Health administration and health insurance	HC.7	263,747	279,088	338,760	293,646	351,430	77,278	84,036	73,664	93,377	103,845
<b>Total current expenditure on health care</b>		<b>1,771,869</b>	<b>1,707,062</b>	<b>1,976,888</b>	<b>1,986,592</b>	<b>2,293,232</b>	<b>6,735,558</b>	<b>7,654,615</b>	<b>8,325,800</b>	<b>8,972,131</b>	<b>9,843,656</b>

Health care by function	ICHA-HC code	Ministry direct funding					DHB devolved funding				
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)
<b>Memorandum items: further health-related functions</b>											
Education and training of health personnel	HC.R.2	92,116	116,080	120,227	130,043	146,226	23,456	6,142	6,544	9,951	8,051
Research and development in health	HC.R.3	–	–	–	–	–	–	–	–	–	–
Food, hygiene and drinking water control	HC.R.4	–	–	–	–	–	–	–	–	–	–
Environmental health	HC.R.5	70	–	–	–	–	–	–	–	–	–
<b>Total health-related expenditure</b>		<b>92,186</b>	<b>116,080</b>	<b>120,227</b>	<b>130,043</b>	<b>146,226</b>	<b>23,456</b>	<b>6,142</b>	<b>6,544</b>	<b>9,951</b>	<b>8,051</b>
<b>Total health and health-related expenditure</b>		<b>1,864,055</b>	<b>1,823,142</b>	<b>2,097,115</b>	<b>2,116,635</b>	<b>2,439,458</b>	<b>6,759,014</b>	<b>7,660,757</b>	<b>8,332,344</b>	<b>8,982,082</b>	<b>9,851,707</b>

Note: 2003/04–2005/06 data restated due to revised DHB SHA classification of data.

### 5.2.3 DHB and non-DHB expenditure

DHB expenditure as a percentage of Ministry funding increased from 79.2% in 2003/04 to 81.1% in 2007/08. This represents a funding shift and devolution of additional responsibilities to DHBs for the funding of health services. Over this five-year period, DHB expenditure increased by \$3,108.1 million, or 46.1%, while non-DHB funding increased by a smaller \$521.4 million, or 29.4%. The most significant items of non-DHB funding fall within long-term nursing care provided to individuals in their homes or the community; these consist largely of disability support services and prevention and public health services.

### 5.2.4 Ministry of Health

The Ministry of Health is the Government's primary agent in the health and disability system of New Zealand, having the overall responsibility for the management and development of that system.

The Ministry also acts as the Minister's principal advisor on health policy and is the main funder and regulator of health and disability services. It provides an important leadership role and is the primary means of driving performance improvements within the system.

The following core functions of the Ministry are incurred in the administration of, but not provision of, health services as defined by the SHA conventions;

- improve, promote and protect the health of New Zealanders
- advise the Minister on strategy, policy and system performance, including advice on improving health outcomes, reducing disparities, ensuring fairness and increasing participation
- act on behalf of the Minister to monitor and improve the performance of the health sector Crown agencies and DHBs, which are responsible for the health of their local communities
- administer legislation and regulations on behalf of the Crown, and meet legislative requirements
- fund and purchase health support services on behalf of the Crown, including the maintenance of service agreements, particularly for public health, disability support services and other services funded by the Ministry of Health
- service Minister's offices and ministerial advisory committees.

Table 5.4 provides a breakdown of funding by output class for the Ministry of Health in 2005/06, 2006/07 and 2007/08. Output class definitions were changed in the year to 30 June 2008 to reflect the above outputs as such some comparability to prior years has been lost.

Table 5.4 reflects the Ministry's 'head office' costs incurred in the administration of, but not provision of, health services. Information services are the largest output class, accounting for \$75.1 million or 31.8% in 2007/08, (\$71.7 million in 2006/07). Information services include the cost of administering the HealthPAC system, a claims payment facility. Administration of legislation and regulations is the second largest cost incurred at \$36.0 million or 15.2%.

**Table 5.4:** Ministry of Health expenditure, by output class, 2005/06–2007/08

Output class	2005/06		2006/07		2007/08	
	\$ million	% of total	\$ million	% of total	\$ million	% of total
Health and disability policy advice	13.2	7.0%	14.2	6.9%	32.5	13.7%
Performance management	18.8	9.9%	18.3	8.9%	14.1	6.0%
Ministerial support services	3.2	1.7%	3.4	1.6%	24.3	10.3%
Information services	60.0	31.7%	71.7	34.8%	75.1	31.8%
Administration of legislation and regulations	0.0	0.0%	0.0	0.0%	36.0	15.2%
Strategy, policy and systems performance	0.0	0.0%	0.0	0.0%	34.5	14.6%
Payment services	0.0	0.0%	0.0	0.0%	19.9	8.4%
Māori health	3.9	2.1%	4.4	2.1%	0.0	0.0%
Public health	47.8	25.2%	48.2	23.4%	0.0	0.0%
Disability issues	10.7	5.6%	11.4	5.5%	0.0	0.0%
Mental health	7.3	3.9%	8.9	4.3%	0.0	0.0%
Clinical services	14.4	7.6%	15.1	7.3%	0.0	0.0%
Screening programmes	10.2	5.4%	10.6	5.1%	0.0	0.0%
<b>Total</b>	<b>189.5</b>	<b>100.0%</b>	<b>206.0</b>	<b>100.0%</b>	<b>236.5</b>	<b>100.0%</b>
Biosecurity – policy advice	1.9	19.3%	1.8	100.0%	0.0	0.0%
Biosecurity – specific pest and disease response	8.0	80.7%	0.0	0.0%	0.0	0.0%
<b>Total</b>	<b>9.9</b>	<b>100.0%</b>	<b>1.8</b>	<b>100.0%</b>	<b>0.0</b>	<b>0.0%</b>

Source: Ministry of Health

Note: Totals may be affected by rounding.

Output class definitions changed at 30 June 2008.

## 6 Other Public Sector Funding

As discussed in Chapter 5, the main contribution to the public sector funding of health, comes from the government through the Ministry of Health. In addition, Accident Compensation Corporation (ACC) contributes a significant amount to public sector health expenditure.

ACC is a statutory insurance organisation, owned by the state, which provides compulsory, comprehensive no-fault insurance cover for accident-related injuries to all New Zealanders. Other central government agencies and local authorities also incur expenditure that directly or indirectly affects the health status of New Zealand residents.

In 2007/08, funding from ACC, at \$1,586.8 million, accounted for 9.0% of total current health expenditure. Other central government agencies provided an additional \$379.1 million, or 2.1%. Regional and local authorities contributed an additional \$92.7 million. Total other public funding for health services in 2007/08 (excluding the Ministry), amounted to \$2,058.5 million. Other central government agencies (excluding the Ministry and ACC) also contributed \$581.1 million to SHA health-related services.

Regional and local authorities contributed \$92.7 million, or 0.5% of total current health expenditure, plus \$1,654.3 million to health-related expenditure.

In this chapter, trends in expenditure by ACC, other government agencies and local authorities are discussed in more detail.

Total current health expenditure from other central government agencies increased from \$208.1 million in 2003/04 to \$379.1 million in 2007/08, an increase of \$171.0 million. Previous editions of HET combined ACC with other central governments. ACC is now reported separately with the prior years restated in this edition for comparison purposes. The Department of Corrections funds personal health in relation to prisoners, the New Zealand Defence Force provides funding for active duty military, plus Work and Income funds personal health for war veterans.

Estimates of current health and health-related expenditure by other central government agencies for the period 2003/04 to 2007/08 are shown in Table 6.2. Table 6.3 provides information on local government funding and Table 6.4 presents information from all public funds except for the Ministry.

### 6.1 Accident Compensation Corporation

The ACC compensation scheme is a 24-hour per day, seven-day per week, no-fault scheme that provides treatment, rehabilitation and compensation for New Zealand citizens, residents and temporary visitors to New Zealand who suffer personal injury through accident while in New Zealand. In return, people who have coverage under ACC legislation may not sue for personal injury, other than for exemplary damages.

OECD SHA defines ACC as 'social security', being a social insurance scheme covering the community as a whole or large section of the community and that is imposed and controlled by government units. Table 6.1 presents ACC's total current health expenditure from 2003/04 to 2007/08.

**Table 6.1:** ACC current health expenditure (\$ million), 2003/04–2007/08

Health care by function	ICHA-HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
<b>Inpatient care</b>									
Curative and rehabilitative care	HC.1.1; 2.1	79,796	89,663	100,891	113,041	141,935	12,150	28,894	15.6%
Long-term nursing care	HC.3.1	104	112	–	–	–	–	–	N/A
<b>Services of day-care</b>									
Curative and rehabilitative care	HC.1.2; 2.2	131,028	144,562	134,757	136,538	189,817	1,781	53,279	11.0%
Long-term nursing care	HC.3.2	–	–	–	–	–	–	–	N/A
<b>Outpatient care</b>									
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>294,630</b>	<b>351,511</b>	<b>430,967</b>	<b>496,174</b>	<b>439,667</b>	<b>65,207</b>	<b>(56,507)</b>	<b>11.4%</b>
Basic medical and diagnostic services	HC.1.3.1	263,764	311,938	370,286	422,564	357,930	52,278	(64,634)	8.9%
Outpatient dental care	HC.1.3.2	13,534	18,534	27,312	30,795	27,960	3,483	(2,835)	22.0%
All other specialised health care	HC.1.3.3	17,332	21,039	33,369	42,815	53,777	9,446	10,962	33.5%
All other outpatient care	HC.1.3.9	–	–	–	–	–	–	–	N/A
<b>Home care</b>									
Curative and rehabilitative care	HC.1.4; 2.4	104,019	135,900	135,452	160,872	194,318	25,420	33,446	17.5%
Long-term nursing care	HC.3.3	–	–	–	–	–	–	–	N/A
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>77,670</b>	<b>94,742</b>	<b>160,024</b>	<b>175,115</b>	<b>223,881</b>	<b>15,091</b>	<b>48,766</b>	<b>32.0%</b>
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>76,047</b>	<b>105,563</b>	<b>105,440</b>	<b>122,435</b>	<b>111,336</b>	<b>16,995</b>	<b>(11,099)</b>	<b>11.4%</b>
Pharmaceutical and other medical non-durables	HC.5.1	16,777	17,708	17,341	27,462	16,908	10,121	(10,554)	5.9%
Therapeutic appliances and other medical durables	HC.5.2	59,270	87,855	88,099	94,973	94,428	6,874	(545)	13.9%
<b>Total expenditure on personal health care</b>		<b>763,294</b>	<b>922,053</b>	<b>1,067,531</b>	<b>1,204,175</b>	<b>1,300,954</b>	<b>136,644</b>	<b>96,779</b>	<b>14.4%</b>
Prevention and public health services	HC.6	44,250	44,795	44,500	45,008	44,798	508	(210)	0.3%
Health administration and health insurance	HC.7	138,065	162,743	185,000	215,741	241,015	30,741	25,274	15.0%
<b>Total current expenditure on health care</b>		<b>945,609</b>	<b>1,129,591</b>	<b>1,297,031</b>	<b>1,464,924</b>	<b>1,586,767</b>	<b>167,893</b>	<b>121,843</b>	<b>13.9%</b>

Health care by function	ICHA-HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
<b>Memorandum items: further health-related functions</b>									
Education and training of health personnel	HC.R.2	–	–	–	–	–	–	–	N/A
Research and development in health	HC.R.3	–	–	–	–	–	–	–	N/A
Food, hygiene and drinking water control	HC.R.4	–	–	–	–	–	–	–	N/A
Environmental health	HC.R.5	–	–	–	–	–	–	–	N/A
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	46,074	66,937	70,171	84,856	108,671	14,685	23,815	24.8%
<b>Total health-related expenditure</b>		<b>46,074</b>	<b>66,937</b>	<b>70,171</b>	<b>84,856</b>	<b>108,671</b>	<b>14,685</b>	<b>23,815</b>	<b>24.8%</b>
<b>Total health and health-related expenditure</b>		<b>991,683</b>	<b>1,196,528</b>	<b>1,367,202</b>	<b>1,549,780</b>	<b>1,695,438</b>	<b>182,577</b>	<b>145,658</b>	<b>14.4%</b>

Source: ACC surveys and annual reports

\* Values include a factor for GST at 12.5%.

Note: These figures include an estimate for accident prevention and administration and exclude public health acute services now included in the DHB funder arm expenditure.

ACC is the Crown entity responsible for administering the Accident Compensation Scheme. Responsibilities include:

- preventing injury
- collecting accident levies
- determining whether claims for injury are covered by the scheme and providing entitlements to people who are eligible
- paying compensation
- buying health and disability support services to treat, care for and rehabilitate injured people
- advising the government.

ACC is funded principally by levies collected from a range of sources, including employers, self-employed people, employees and motor vehicle licensing. ACC also receives direct government funding to cover people who are not earning an income. ACC is not funded from the Ministry of Health; however, ACC does provide funding to the Ministry for acute services. This funding is now reported in the funder arm of the DHBs.

ACC health expenditure information used in the HET reports is obtained by direct response from ACC. In addition, starting in 2003/04, the estimate for ACC current expenditure was increased to include components for accident prevention and ACC

administration. These functions are estimated at \$44.8 million and \$241.0 million respectively for 2007/08.

In a broader context, one could include all ACC expenditure in health or health-related categories; however, this approach has not been taken for estimates based on SHA definitions at this time. Various WHO and OECD documents address how countries could classify various income-related benefits (sickness, accident, age-related, other social benefits). These services are likewise not included in these estimates as of 2007/08.

## 6.2 Other government agencies

Other central government agencies contributing to direct health and indirect health-related expenditure included in this report are the ministries or departments of Agriculture and Forestry (MAF); Education; Internal Affairs; Research, Science and Technology; Defence; Social Development; Corrections; Te Puni Kōkiri; and Pacific Island Affairs. Estimates of current health and health-related expenditure for this group of agencies were derived from annual reports and by direct surveys.

### 6.2.1 Biosecurity

Vote Biosecurity brings together the biosecurity activities of the ministries or departments of (MAF), Health, Fisheries and Conservation. Expenditure by the Ministry of Health is discussed in Chapter 5: Public Sector Funding – Ministry of Health. Total Current Health expenditure incurred by Fisheries and Conservation appears to relate more directly to biodiversity than to public health, and totalled approximately \$10.0 million in 2007/08. This expenditure has been excluded from this HET report. Starting in 2003/04, current expenditure by MAF is sourced from their annual reports.

One strategic area that receives a large proportion of MAF's expenditure is vector control. Key responsibilities for this service include:

- developing and implementing strategies for managing risks posed by pests, weeds and diseases to the economy, biological diversity and people's health
- monitoring the effectiveness of policy and legislative frameworks for managing the risks posed by pests, weeds and diseases to the economy, biological diversity and people's health.

Current health expenditure incurred by MAF for biosecurity in 2007/08 totalled \$181.0 million, compared with \$197.5 million in 2006/07, and covers the cost of the following services and activities:

- **Border inspection and quarantine services** control quarantine risks at the border and undertake post-entry quarantine in line with the provisions of the Biosecurity Act 1993. Health activities include border clearance procedures for aircraft and vessels (including for passengers), investigating suspected illegal imports and the identifying intercepted organisms. In 2007/08, MAF expenditure in this area came to \$51.1 million.

- **Pest and disease surveillance services** maintain the health of domestic animal and plant populations, report internationally on the health status of domestic animals and plants and detect unwanted organisms. Pest and disease emergency response services maintain a capability (personnel and diagnostic capacity) to respond to the introduction of unwanted organisms that are harmful to animals and plants. In 2007/08, MAF's combined expenditure on these services was \$95.4 million.
- **Control of tuberculosis vectors** covers the government contribution to implementing the bovine tuberculosis national pest management strategy. The objective of the strategy is to reduce the number of bovine tuberculosis-infected cattle and deer herds. This objective is jointly funded by government and industry. MAF expenditure in 2007/08 totalled \$34.5 million.

### 6.2.2 The New Zealand Food Safety Authority (NZFSA)

NZFSA was established as a standalone Government department from 1 July 2007, with the main aims being to:

- provide a coherent and seamless food regulatory regime
- reduce the incidence of domestic food-borne illness
- retain and develop policy and technical expertise in food safety
- create a centre for excellence in risk-management based food safety administration
- provide advice and acknowledge the whole-of-government interest in food administration.

Expenditure on food safety amounted to \$100.6 million in 2007/08 compared with \$91.2 million in 2006/07. The most significant spending was on regulatory programmes and regulatory standards, at \$45.1 million and \$41.1 million respectively. Other expenditure included food safety policy advice, response to food safety emergencies, consultation and food safety information. These activities are reported as a health-related service under food, hygiene and drinking-water control in SHA.

### 6.2.3 Education

Ministry of Education spending on current health-related activities includes the cost of providing tertiary training and education for doctors, nurses, dentists, dieticians, physiotherapists, clinical psychologists, audiologists, pharmacists, midwives and occupational and speech therapists. Starting in 2003/04, the estimates represent a significant change in the magnitude of the expenditure on educating health professionals and clinical research. The change involves a move to estimate the full cost of tertiary education not limited to the costs incurred by the Ministry of Education.

The source for these estimates has changed to the Tertiary Education Statistics on the Ministry of Education website<sup>12</sup> and the annual reports from four leading tertiary institutions:<sup>13</sup> Massey University, Auckland University of Technology (AUT), The University of Auckland, and University of Otago. An adjustment for GST has been included (12.5%). The estimate is conservative as only the University of Otago provided a separate cost for their medical programme; these costs are significantly higher per pupil than those incurred for other programmes. For all other tertiary institutions, an unweighted cost per pupil was used.

The total estimates for 2007/08 are \$484.8 million for educating health professionals and \$118.5 million for clinical research undertaken by tertiary institutions. An estimate for the non-government portion of this funding is attributed to out-of-pocket private funding.

In accordance with SHA definitions and classifications, this function is a health-related expenditure.

#### **6.2.4 Research, Science and Technology**

In July 1997, part of the public investment in health research was transferred from the Ministry of Health to the Ministry of Research, Science and Technology (MoRST). Health research is now included in the priority setting and management process applied to other public-good science and technology investments. In 2007/08, expenditure on health research was \$83.8 million, compared with \$74.5 million in 2006/07.

The 2007/08 estimate is sourced from the MoRST annual report. To conform to SHA definitions and classifications, research is now reported as a health-related service and not a core health service.

#### **6.2.5 Defence**

The Ministry of Defence provides funding for health care services to army, navy and air force personnel. The estimate of current health expenditure includes the cost of medical and dental treatments carried out within the Defence service branches, as well as payments for services obtained from external professionals and organisations. The estimate excludes expenditure relating to medical examinations.

The estimated expenditure on health care for 2007/08 is \$34.9 million compared with \$28.8 million in 2006/07. The estimate for 2004/05 was sourced by direct response. The total expenditure was distributed to SHA personal health functions in proximity to expenditure patterns in the previous year.

<sup>12</sup> See: [http://www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education)

<sup>13</sup> Prior estimates were sourced from the annual survey and included Ministry of Education bulk subsidies only.

### **6.2.6 Social Development**

The bulk of health expenditure (mainly disability support services) previously administered by the Ministry of Social Development was transferred to the Ministry of Health between 1993/94 and 1995/96.<sup>14</sup> However, a provision remains within the Ministry of Social Development for Vote Veterans' Affairs to fund assistance to war pension recipients by meeting the costs of medical treatment or equipment required as a result of a disability caused or aggravated by war service.

The estimated total expenditure in 2007/08 is \$21.6 million, compared with \$19.4 million in 2006/07. Since 2003/04, the source for these estimates has been from the Ministry of Social Development annual report. The expenditure has been distributed across SHA health functions of outpatient and home care for acute, rehabilitative and long-term care services.

The Ministry of Social Development also administers the Community Services Card programme. Expenditure in 2007/08 for administering this programme amounted to \$6.1 million, compared with \$6.3 million in 2006/07. In accordance with SHA definitions this activity is considered part of government administration of health services and is therefore part of core health expenditure. Funding for youth suicide prevention has been transferred to the Ministry of Health.

### **6.2.7 Corrections**

The Department of Corrections incurs costs relating to the provision of health care services for prison inmates and those held in judicial custody. The total estimated cost of \$40.8 million for 2007/08 covers expenditure on general medical treatment \$27.1 million and psychiatric treatment \$13.8 million. This represents an increase of \$5.0 million or 14.0%, compared with the 2006/07 expenditure of \$35.8 million.

The current health expenditure estimates are consistently sourced by direct response. Starting in 2003/04, the expenditure has been distributed across SHA health functions of outpatient and home care for acute, rehabilitative and long term-care services. There has been no change in methodology for this estimate.

### **6.2.8 Internal Affairs**

The New Zealand Lottery Grants Board, which is administered by The Department of Internal Affairs, funded health and health-related projects amounting to \$46.2 million during 2007/08. The data source for these estimates is the New Zealand Lotteries Commission 2007/08 Lottery Grants record.

<sup>14</sup> Work and Income, however, retains a significant disability funding capacity.

Included in the above estimate are direct grants made to individuals with disabilities to purchase disability support equipment, not funded by other sources, to increase and maintain their participation, fulfilment, enjoyment and achievement in the community. These grants totalled \$19.8 million in 2007/08. Additional lottery grants totalling \$6.2 million were distributed to fund health research and are attributed to a health-related function. Grants to seniors are no longer separately identifiable and are not included in these estimates.

### **6.2.9 Te Puni Kōkiri (Māori Development)**

Health expenditure under Te Puni Kōkiri contributes to policy advice to the Government's objective of reducing inequalities between Māori and non-Māori in the delivery of health and disability services.

The policy advice has focused on three main areas:

- how to make progress towards reducing inequalities in health status between Māori and non-Māori
- how to improve Māori health outcomes by increasing Māori participation in the purchase and provision of health services
- the development of new Māori health initiatives for the wellbeing of Māori, including the development of strategies to increase Māori access to health services and the adoption of healthy lifestyle choices.

### **6.2.10 Pacific Island Affairs**

During 2007/08, the Ministry of Pacific Island Affairs incurred health expenditure of \$0.2 million for the provision of health policy advice. This service has been attributed to the SHA function: health administration, health expenditure. Starting in 2003/04, this information has been sourced from the Ministry of Pacific Island Affairs annual report, whereas earlier estimates came from direct survey responses.

**Table 6.2:** Current health expenditure and health-related expenditure by other central government agencies, 2003/04–2007/08

Health care by function	ICHA-HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
<b>Inpatient care</b>									
Curative and rehabilitative care	HC.1.1; 2.1	1,520	1,565	1,875	2,213	2,465	338	252	13.0%
Long-term nursing care	HC.3.1	306	316	411	475	950	64	475	37.2%
<b>Services of day-care</b>									
Curative and rehabilitative care	HC.1.2; 2.2	1,520	1,540	1,875	2,185	2,398	310	213	12.3%
Long-term nursing care	HC.3.2	306	316	411	475	528	64	53	15.0%
<b>Outpatient care</b>									
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>21,941</b>	<b>24,820</b>	<b>28,623</b>	<b>32,626</b>	<b>37,253</b>	<b>4,003</b>	<b>4,627</b>	<b>14.2%</b>
Basic medical and diagnostic services	HC.1.3.1	3,602	4,073	4,093	4,293	4,733	200	440	7.2%
Outpatient dental care	HC.1.3.2	2,490	2,462	3,126	3,653	4,249	527	596	14.8%
All other specialised health care	HC.1.3.3	2,558	1,456	3,140	3,336	3,696	196	360	22.4%
All other outpatient care	HC.1.3.9	10,633	14,980	14,611	17,075	19,794	2,464	2,719	17.8%
Outpatient rehabilitative care	HC.2.3	2,658	1,849	3,653	4269	4,781	616	512	24.0%
<b>Home care</b>									
Curative and rehabilitative care	HC.1.4; 2.4	14,901	11,319	19,480	20,926	22,231	1,446	1,305	15.4%
Long-term nursing care	HC.3.3	10,797	7,094	14,272	15,130	17,198	858	2,068	21.6%
<b>Ancillary services to health care</b>									
	HC.4	1,148	1,591	1,281	2,016	3,443	735	1,427	36.8%
<b>Medical goods dispensed to outpatients</b>									
Pharmaceutical and other medical non-durables	HC.5.1	1,040	1,336	1,864	2,079	2,268	215	189	22.2%
Therapeutic appliances and other medical durables	HC.5.2	7,475	7,486	8,341	9,889	15,977	1,548	6,088	22.9%
<b>Total expenditure on personal health care</b>		<b>60,954</b>	<b>57,383</b>	<b>78,433</b>	<b>88,014</b>	<b>104,711</b>	<b>9,581</b>	<b>16,697</b>	<b>15.5%</b>
<b>Prevention and public health services</b>									
Prevention and public health services	HC.6	140,640	157,914	166,938	215,127	267,759	48,189	52,632	17.8%
Health administration and health insurance	HC.7	6,490	6,433	6,297	6,813	6,578	516	(235)	0.4%
<b>Total current expenditure on health care</b>		<b>208,084</b>	<b>221,730</b>	<b>251,668</b>	<b>309,954</b>	<b>379,048</b>	<b>58,286</b>	<b>69,094</b>	<b>16.4%</b>
<b>Memorandum items: further health-related functions</b>									
Education and training of health personnel	HC.R.2	184,290	197,700	216,163	232,591	232,591	16,429	–	6.1%
Research and development in health	HC.R.3	142,085	159,934	177,941	202,918	206,484	24,977	3,566	9.9%
Food, hygiene and drinking water control	HC.R.4	74,187	83,008	86,152	91,214	100,602	5,062	9,388	8.0%
Environmental health	HC.R.5	20,333	27,098	17,162	17,344	18,717	182	1,373	1.4%
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	–	3,793	–	11,421	22,735	11,421	11,314	N/A

Health care by function	ICHA-HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
Total health-related expenditure		420,895	471,533	497,418	555,489	581,130	58,071	25,641	8.5%
Total health and health-related expenditure		628,979	693,263	749,087	865,442	960,180	116,355	94,738	11.2%

### 6.2.11 Other central government expenditure trends

In 2007/08, total current health expenditure by all the other central government agencies, excluding the Ministry of Health and ACC, totalled \$379.0 million, compared with \$310.0 million in 2006/07, an increase of approximately \$69.0 million or 22.2%. As presented in Table 6.2 above, prevention and public health services expenditure represents the majority of current health expenditure by other central government agencies at \$267.8 million, or 70.6% of the total health expenditure. This pattern is heavily influenced by MAF. For the five-year period, the SHA functions reflect a fairly consistent increase of approximately 16.4% across all functions.

## 6.3 Regional and local authorities

Prior to 2003/04, estimates for local government were based on the Ministry sample survey, with the results extrapolated to calculate an estimate for the total population of New Zealand. Starting in 2003/04, expenditure has been estimated by compiling information from local government annual reports. Regional governments, which are largely responsible for environmental services and in some cases water and sewage, had been excluded from the sample prior to 2003/04. Consequently the expenditure estimates for local government services were significantly undervalued for the periods before 2003/04.

As has been consistently stated from the inception of HET reporting in the early 1980s, health-related expenditure had been significantly under-reported. This was due to the application of the narrow WHO definition of public health prior to 2003/04. Examples of services previously excluded include: control of foul water, drainage, sewerage collection and treatment, rubbish collection and disposal, overflow prevention, stagnation of flood water and water purification. The estimate now includes these and other services. Specific services not included by the SHA definitions are civil defence and road safety. Consequently the original definitions have not been retained and internal consistency has been lost. The estimates have, however, gained greater international comparability and are now more accurate and complete.

The estimates since 2003/04 have been sourced from annual reports, augmented by survey responses where appropriate and necessary. An estimate for GST has been included by increasing the values by 12.5%. Significant activities, such as sewage systems and rubbish collection and disposal, are easily identified in annual reports. Other activities that are more on a line-item level are not consistently identified in regional or local government annual reports. Examples of this latter group include: swimming pool testing and treatment and road-cleaning costs. These less material

services are included in the overall estimates, using the survey results if they did not appear to be duplicative.

The estimates are conservative as most annual reports do not include an allocation of support and administration costs to services. In addition, if there was doubt as to whether a service should be included in the estimate, it was excluded. Appendix 7 contains a complete list of the regional and local authorities included in the 2007/08 sample.

The sample represents regional authorities covering approximately 94% and local authorities covering approximately 66% of the total New Zealand population. There is currently a mix of services being provided at regional and local levels, primarily for water and sewage services. It was therefore necessary to estimate intermediate per capita expenditure on a regional basis before the final extrapolation of the single national per capita cost estimate to a total national value.

**Table 6.3:** Current health and health-related expenditure by local authorities, 2003/04–2007/08

Health care by function	ICHA- HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07	Change 2006/07 to 2007/08	Average annual growth rate
<b>Total expenditure on personal health care</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>N/A</b>
Prevention and public health services	HC.6	63,242	61,882	82,371	106,072	92,672	23,701	(13,400)	11.8%
Health administration and health insurance	HC.7	0	0	0	0	0	0	0	N/A
<b>Total current expenditure on health care</b>		<b>63,242</b>	<b>61,882</b>	<b>82,371</b>	<b>106,072</b>	<b>92,672</b>	<b>23,701</b>	<b>(13,400)</b>	<b>11.8%</b>
<b>Memorandum items: Further health-related functions</b>									
Education and training of health personnel	HC.R.2	0	0	0	0	0	0	0	N/A
Research and development in health	HC.R.3	0	0	0	0	0	0	0	N/A
Food, hygiene and drinking water control	HC.R.4	123,604	145,563	163,265	163,312	263,402	47	100,090	22.8%
Environmental health	HC.R.5	1,116,167	1,198,311	1,277,485	1,336,604	1,390,872	59,119	54,268	5.7%
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	0	0	0	0	0	0	0	N/A
<b>Total health-related expenditure</b>		<b>1,239,771</b>	<b>1,343,874</b>	<b>1,440,750</b>	<b>1,499,916</b>	<b>1,654,273</b>	<b>59,166</b>	<b>154,358</b>	<b>7.5%</b>
<b>Total health and health-related expenditure</b>		<b>1,303,013</b>	<b>1,405,756</b>	<b>1,523,121</b>	<b>1,605,988</b>	<b>1,746,946</b>	<b>82,867</b>	<b>140,958</b>	<b>7.6%</b>

### 6.3.1 Regional and local authorities expenditure trends

As Table 6.3 above shows, total current health and health-related expenditure by regional and local authorities increased from \$1,303.0 million in 2003/04 to \$1,746.9 million in 2007/08. However, only a relatively small portion of this expenditure

is health expenditure: prevention and public health services amount to \$92.7 million in 2007/08.

## 6.4 Trends in the use of other public funding

Table 6.4 presents the trends in other public funding, ACC, other central agencies and regional and local authorities, excluding the Ministry. Other public funding for current health expenditure in 2007/08 is estimated at \$2,058.5 million, an increase of \$177.5 million or 9.4% from 2006/07.

The five-year period reflects an average annual increase of 14.1% per annum on health expenditure, with the largest dollar value increases in ancillary services to health care, \$148.5 million. The expenditure pattern and increases are heavily influenced by ACC purchasing.

**Table 6.4:** Total other public funding (excluding the Ministry), 2003/04–2007/08

Health care by function	ICHA-HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
<b>Inpatient care</b>									
Curative and rehabilitative care	HC.1.1; 2.1	81,316	91,228	102,766	115,254	144,400	12,488	29,146	15.6%
Long-term nursing care	HC.3.1	410	428	411	475	950	64	475	29.0%
<b>Services of day-care</b>									
Curative and rehabilitative care	HC.1.2; 2.2	132,548	146,102	136,632	138,723	192,215	2,091	53,492	11.0%
Long-term nursing care	HC.3.2	306	316	411	475	528	64	53	15.0%
<b>Outpatient care</b>									
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>316,571</b>	<b>376,331</b>	<b>459,590</b>	<b>528,800</b>	<b>476,920</b>	<b>69,210</b>	<b>(51,880)</b>	<b>11.6%</b>
Basic medical and diagnostic services	HC.1.3.1	267,366	316,011	374,379	426,857	362,663	52,478	(64,194)	8.9%
Outpatient dental care	HC.1.3.2	16,024	20,996	30,438	34,448	32,209	4,010	(2,239)	20.7%
All other specialised health care	HC.1.3.3	19,890	22,495	36,509	46,151	57,473	9,642	11,322	31.6%
All other outpatient care	HC.1.3.9	10,633	14,980	14,611	17,075	19,794	2,464	2,719	17.8%
All other outpatient care	HC.1.3.9	2,658	1,849	3,653	4,269	4,781	616	512	24.0%
<b>Home care</b>									
Curative and rehabilitative care	HC.1.4; 2.4	118,920	147,219	154,932	181,798	216,549	26,866	34,751	16.4%
Long-term nursing care	HC.3.3	10,797	7,094	14,272	15,130	17,198	859	2,068	21.6%
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>78,818</b>	<b>96,333</b>	<b>161,305</b>	<b>177,131</b>	<b>227,324</b>	<b>15,826</b>	<b>50,193</b>	<b>32.0%</b>
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>84,562</b>	<b>114,385</b>	<b>115,645</b>	<b>134,403</b>	<b>129,581</b>	<b>18,758</b>	<b>(4,822)</b>	<b>12.3%</b>
Pharmaceutical and other medical non-durables	HC.5.1	17,817	19,044	19,205	29,541	19,176	10,336	(10,365)	6.6%
Therapeutic appliances and other medical durables	HC.5.2	66,745	95,341	96,440	104,862	110,405	8,422	5,543	14.5%

Health care by function	ICHA-HC code	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
<b>Total expenditure on personal health care</b>		<b>824,248</b>	<b>979,436</b>	<b>1,145,964</b>	<b>1,292,189</b>	<b>1,405,665</b>	<b>146,225</b>	<b>113,476</b>	<b>14.3%</b>
Prevention and public health services	HC.6	248,132	264,591	293,809	366,207	405,2229	72,398	39,023	13.2%
Health administration and health insurance	HC.7	144,555	169,176	191,297	222,554	247,593	31,257	25039	14.4%
<b>Total current expenditure on health care</b>		<b>1,216,935</b>	<b>1,413,203</b>	<b>1,631,070</b>	<b>1,880,950</b>	<b>2,058,487</b>	<b>249,880</b>	<b>177,537</b>	<b>14.1%</b>
<b>Memorandum items: further health related functions</b>									
Education and training of health personnel	HC.R.2	184,290	197,700	216,163	232,591	232,591	16,428	-	6.1%
Research and development in health	HC.R.3	142,085	159,934	177,941	202,918	206,484	24,977	3,566	9.9%
Food, hygiene and drinking water control	HC.R.4	197,791	228,571	249,417	254,526	364,004	5,109	109,478	17.4%
Environmental health	HC.R.5	1,136,500	1,225,409	1,294,647	1,353,948	1,409,589	59,301	55,641	5.5%
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	46,074	70,730	70,171	96,277	131,406	26,106	35,129	31.6%
<b>Total health-related expenditure</b>		<b>1,706,740</b>	<b>1,882,344</b>	<b>2,008,339</b>	<b>2,140,260</b>	<b>2,344,074</b>	<b>131,921</b>	<b>203,814</b>	<b>8.3%</b>
<b>Total health and health-related expenditure</b>		<b>2,923,675</b>	<b>3,295,547</b>	<b>3,639,409</b>	<b>4,021,210</b>	<b>4,402,561</b>	<b>381,801</b>	<b>381,351</b>	<b>10.8%</b>

## 7 Private Sector Funding

Private sector funding sources were the major contributors to total current health funding in the early years of the New Zealand health services. However, since the end of World War II, public sector funding has dominated.

Private sources of funding consist of out-of-pocket, health insurance and not-for-profit organisations. Together, they accounted for approximately 19.8% of total current health expenditure in 2007/08, compared with 23.1% in 2003/04 – considerably higher than the low of 12% in 1979/80 (see Figures 4.2 and 4.2A). Out-of-pocket expenditure by private households is the largest component of private sector funding, contributing approximately 14.0% to total current health expenditure in 2007/08, while health insurance and not-for-profit organisations contributed 4.9% and 0.9% respectively.

A minimal estimate has been included for privately funded long-term nursing care. This estimate is likely to be understated and is subject to refinement.

### 7.1 Out-of-pocket expenditure

Data on out-of-pocket expenditure for 2007/08 is based on the 2006 Household Economic Survey (HES) produced by Statistics New Zealand.<sup>15</sup> Surveys were conducted for 2000/01, 2003/04 and 2006/07. The figures for 2001/02, 2002/03, 2004/05 and 2005/06 had been estimated based on the Consumers Price Index (CPI), which did not adequately address the actual growth in out-of-pocket expenditure known once the 2003/04 and 2006/07 survey responses were available.

Household consumption expenditure covers expenditure by resident households, whether this occurs in New Zealand or overseas. Resident households include individuals living in private dwellings or in non-private dwellings, such as boarding houses, rest homes and prisons.<sup>16</sup>

Out-of-pocket HES data is collected in three ways:

- a 12-month recall (for single payments of \$200 or more); \$100 for medical services
- latest payment (for regular commitments such as electricity, telephone, rates, rent)
- 14-day diary keeping.

It is believed that the HES under-estimates expenditure in a number of areas, such as contributions to health insurance. This is because payments are often deducted at source from salaries, etc, and are sometimes overlooked in the survey data collection.<sup>17</sup> Health insurance payments are covered under the 'health service costs net' (not elsewhere classified) in the HES.

<sup>15</sup> An annual survey until 1998.

<sup>16</sup> See: <http://www.stats.govt.nz>

<sup>17</sup> See: <http://www.stats.govt.nz>

Consequently the HES produce conservative estimates. Use of this survey as a data source for out-of-pocket expenses remains unchanged. Table 7.1 presents the trends for out-of-pocket expenditure for 2003/04 to 2007/08 by health care function. During this period, total out-of-pocket expenditure on total health and health-related services increased on average by 4.4% per annum. All other specialised health care increased more significantly by 17.3%.

For 2007/08, the major components of out-of-pocket expenditure on health were outpatient care (29.7%), pharmaceuticals (21.8%) and health insurance (20.0%); most of these services were provided by the private sector.

**Table 7.1:** Survey responses for out-of-pocket expenditure, using SHA, 2003/04–2007/08

Health care by function	ICHA-HC code	Out-of-pocket					Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)			
<b>Inpatient care</b>									
Curative and rehabilitative care	HC.1.1; 2.1	267,591	305,006	330,650	333,620	342,054	2,970	8,434	6.5%
Long-term nursing care	HC.3.1	80,158	87,059	94,379	102,314	104,901	7,935	2,587	7.0%
<b>Services of day care</b>									
Curative and rehabilitative care	HC.1.2; 2.2	24,915	28,399	30,787	31,063	31,849	276	786	6.5%
Long-term nursing care	HC.3.2	–	–	–	–	–	–	–	–
<b>Outpatient care</b>									
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>786,823</b>	<b>847,955</b>	<b>919,249</b>	<b>698,386</b>	<b>820,901</b>	<b>(220,863)</b>	<b>122,515</b>	<b>3.1%</b>
Basic medical and diagnostic services	HC.1.3.1	62,288	70,997	76,967	77,658	79,621	691	1,963	6.5%
Outpatient dental care	HC.1.3.2	385,300	422,208	457,706	349,541	358,377	(108,165)	8,836	(0.8)%
All other specialised health care	HC.1.3.3	161,274	179,466	194,555	151,637	260,331	(42,918)	108,694	17.3%
All other outpatient care	HC.1.3.9	159,961	175,284	190,021	119,550	122,572	(70,471)	3,022	(4.1)%
<b>Home care</b>									
Curative and rehabilitative care	HC.1.4; 2.4	–	–	–	–	–	–	–	–
Long-term nursing care	HC.3.3	–	–	–	–	–	–	–	–
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>31,675</b>	<b>33,448</b>	<b>36,261</b>	<b>25,941</b>	<b>26,597</b>	<b>(10,320)</b>	<b>656</b>	<b>(3.0)%</b>
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>548,573</b>	<b>594,836</b>	<b>644,849</b>	<b>589,505</b>	<b>604,408</b>	<b>(55,344)</b>	<b>14,903</b>	<b>2.7%</b>
Pharmaceutical and other medical non-durables	HC.5.1	519,804	563,508	610,886	551,936	565,889	(58,950)	13,953	2.4%
Therapeutic appliances and other medical durables	HC.5.2	28,769	31,328	33,963	37,569	38,519	3,606	950	7.6%
<b>Total expenditure on personal health care</b>		<b>1,721,735</b>	<b>1,896,703</b>	<b>2,056,175</b>	<b>1,780,829</b>	<b>1,930,710</b>	<b>(275,346)</b>	<b>149,881</b>	<b>3.4%</b>
Health administration and health insurance	HC.7	433,716	457,998	496,505	514,841	554,442	18,336	39,601	6.4%

Health care by function	ICHA-HC code	Out-of-pocket					Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)			
<b>Total current expenditure on health care</b>		<b>2,155,451</b>	<b>2,354,701</b>	<b>2,552,680</b>	<b>2,295,670</b>	<b>2,485,152</b>	<b>(257,010)</b>	<b>189,482</b>	<b>3.7%</b>
<b>Memorandum items: further health-related functions</b>									
Education and training of health personnel	HC.R.2	198,000	214,175	234,177	251,974	283,471	17,797	31,497	9.4%
<b>Total health-related expenditure</b>		<b>198,000</b>	<b>214,175</b>	<b>234,177</b>	<b>251,974</b>	<b>283,471</b>	<b>17,797</b>	<b>31,497</b>	<b>9.4%</b>
<b>Total health and health-related expenditure</b>		<b>2,353,451</b>	<b>2,568,876</b>	<b>2,786,857</b>	<b>2,547,644</b>	<b>2,768,623</b>	<b>(239,213)</b>	<b>220,979</b>	<b>4.4%</b>

Source: Statistics New Zealand, Household Economic Survey 2006.

### 7.1.1 Out-of-pocket expenditure trends

The trends in total out-of-pocket expenditure from 1997/98 to 2007/08 are reported in Appendix 3.1. Total out-of-pocket expenditure on health increased from \$1,305.4 million in 1997/98 to \$2,485.2 million in 2007/08. In nominal terms, the rate of this increase was approximately 7.0% per year (5.4% in real terms). The actual growth rate from 2000/01 to 2007/08 (actual survey years) was used to project the expenditure for the non-survey years; 2004/05, 2005/06 and 2007/08.

In 2007/08, the total out-of-pocket funder category also included \$283.5 million for the cost of educating health professionals not covered by the government subsidy. This is a health-related function.

## 7.2 Health insurance

Estimates of health insurers' total current expenditure on health care during the review year are based on data provided by the executive director of the Health Funds Association of New Zealand Inc (HFANZ). The 2007/08 estimates show that current health expenditure by the insurance industry has increased from \$510.9 million in 1997/98 to \$863.1 million in 2007/08. During 2007/08, health insurance accounted for 4.9% of all current spending on health, compared with 6.0% in 1997/98.

Table 7.2 provides the 2001/02–2007/08 estimated destinations of insurance funding on personal health care based on aggregate information from the HFANZ statistics, whereas the earlier years' estimates were based on direct survey.

**Table 7.2:** Destinations of insurance funding on personal health care (\$ million), 2001/02–2007/08

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Change 2006/07–2007/08	Average annual growth rate
Public institutions	0.415	0.714	0.673	0.622	0.600	0.750	0.815	0.066	17.0%
Private institutions	385.552	418.270	454.240	485.765	548.839	546.363	593.924	47.561	7.1%
Community care	226.348	221.648	216.725	209.299	212.636	246.837	268.324	21.488	2.7%
<b>Total</b>	<b>612.315</b>	<b>640.632</b>	<b>671.638</b>	<b>695.686</b>	<b>762.075</b>	<b>793.950</b>	<b>863.063</b>	<b>69.114</b>	<b>5.4%</b>

Source: Annual Survey and Health Insurance Association – Health Insurance Statistics July 2008.

Note: 2003/04–2005/06 data restated for an estimate of health administration.

### 7.2.1 Expenditure trends

Aggregate health insurance expenditure grew from \$510.9 million in 1997/98 to \$863.1 million in 2007/08. The average annual compound growth in insurance expenditure during the period was 5.4% (3.0% in real terms). A breakdown by category of trends in health insurance expenditure since 1997/98 is provided in Appendix 4.

The trend over the 10-year period to 2007/08 reflects an increase in ‘major medical’ insurance but a decline in comprehensive medical policies. This is in line with the Ministry’s capitated primary practice services funding (subsidised GP visits for registered patients).

Table 7.3 gives details of insurance coverage by age group across the population for 2004/05 to 2007/08. There has been no material change in age distribution over this period.

**Table 7.3:** Proportion of the New Zealand population covered by medical insurance (by age group), 2005-2008.

Age	2005	2006	2007	2008	Change 2007 to 2008	Percent % 2007 to 2008	Average annual growth rate
0-4	58,475	58,970	62,125	64,930	2,805	4.5%	7.4%
5-9	82,360	82,219	82,324	82,143	(181)	(0.2)%	0.4%
10-14	96,969	95,312	94,185	92,991	(1,194)	(1.3)%	(0.6)%
15-19	95,570	97,487	99,202	99,887	685	0.7%	1.6%
20-24	66,917	67,315	69,965	73,244	3,279	4.7%	3.5%
25-29	61,369	62,416	63,991	66,059	2,068	3.2%	1.7%
30-34	89,989	88,146	85,042	83,258	(1,784)	(2.1)%	(1.5)%
35-39	108,675	109,518	111,280	111,180	(108)	(0.1)%	1.1%
40-44	125,109	124,057	122,011	120,618	(1,393)	(1.1)%	0.3%
45-49	125,305	126,591	129,583	130,872	1,289	1.0%	3.0%
50-54	120,908	121,069	121,532	122,037	505	0.4%	0.9%
55-59	115,470	117,936	116,679	114,785	(1,894)	(1.6)%	3.9%
60-64	78,750	81,501	87,677	93,999	6,322	7.2%	5.8%
65-69	45,417	49,975	55,125	56,178	1,053	1.9%	6.5%
70-74	29,005	29,378	30,571	31,440	869	2.8%	0.2%
75-79	21,160	21,922	22,152	21,988	(164)	(0.7)%	(0.1)%
80-84	13,905	14,363	15,095	15,369	274	1.8%	5.2%
85-89	4,944	5,519	6,063	6,438	375	6.2%	5.3%
90-94	1,342	1,475	1,652	1,710	58	3.5%	7.4%
95-99	132	146	209	261	52	24.9%	20.4%
100+	30	20	21	18	1	5.9%	11.3%
Unknown	57	47	48	31	(17)	(35.4)%	17.1%
<b>Total</b>	<b>1,341,858</b>	<b>1,355,382</b>	<b>1,376,536</b>	<b>1,389,436</b>	<b>12,900</b>	<b>0.9%</b>	<b>2.0%</b>

Source: Health Funds Association, Health Insurance Statistics August 2008

### 7.3 Voluntary and not-for-profit organisations

In order to estimate the voluntary and not-for-profit contribution to health funding, a large sample was compiled with data sourced from annual reports.<sup>18</sup> (See Appendix 7 for a list of the organisations.) The not-for-profit estimate represents funding from non-governmental sources, primarily contributions, donations, corporate grants and earnings on investments.<sup>19</sup> The sample of not-for-profit organisations is increasing as additional entities providing health and health-related services are located. An estimate for GST has been included by increasing the values by 12.5%.

<sup>18</sup> Sourced from the Ministry of Economic Development website: [http://www.companies.govt.nz/cms/banner\\_template/OBNAME](http://www.companies.govt.nz/cms/banner_template/OBNAME)

<sup>19</sup> Many of these organisations received income from the Ministry of Health, DHBs and other central or local government sources. To avoid double counting, revenues from these sources are not included.

The majority of this estimate has been attributed to SHA health expenditure as the main contributions of not-for-profit organisations are in primary health care, disability support and public health promotion and protection functions. Some organisations also contribute to health research, a health-related activity; this has been recognised on an organisational basis. For example, a portion of the Cancer Society's total funding has been apportioned to research.

This estimate remains conservative as it still reflects only a sample of the sector, with the full extent of this sector remaining unknown. The sample may be missing some key organisations that provide significant levels of service. For example, it is likely that patient transportation, especially fixed-wing and rotary-flight air transportation, is underestimated. Also, significant contributions for hospice services are also likely to be missing. In addition, where there has been doubt as to whether a revenue source should be included in the estimates, such sources have been excluded.

Major not-for-profit organisations include the Cancer Society of New Zealand, The Royal New Zealand Plunket Society, the National Heart Foundation of New Zealand, CCS Disability Action (formerly Crippled Children's Society), Presbyterian Support New Zealand, Arthritis New Zealand, Barnardos New Zealand, Asthma and Respiratory Foundation of New Zealand and many others that provide voluntary health or health-related services.

### **7.3.1 Expenditure trends**

Estimates for the not-for-profit sector have increased from \$27.1 million in 1997/98 to \$161.7 million in 2007/08. The values reported for periods prior to 2003/04 are significantly underestimated as they were based on a very small sample without an extrapolation to a national level. Each year, additional organisations are located, and the sample grows. Therefore the year-on-year change reflects both organisations being added to the sample and the change in funding by previously identified organisations.

## **7.4 Trends in uses of private source funding**

The estimates for total private source funding by SHA from 2003/04 to 2007/08 are shown in Table 7.4. Details for 2007/08 by individual funder group are presented in Table 7.5.

**Table 7.4:** Destination of private funding of health services, using SHA, 2003/04–2007/08

Health care by function	ICHA-HC code	Total private sector							
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
<b>Inpatient care</b>									
Curative and rehabilitative care	HC.1.1; 2.1	604,320	663,720	734,775	738,125	780,664	3,350	42,539	6.7%
Long-term nursing care	HC.3.1	80,158	87,059	94,379	106,746	109,333	12,367	2,587	8.1%
<b>Services of day-care</b>									
Curative and rehabilitative care	HC.1.2; 2.2	109,186	118,188	131,959	132,306	141,628	347	9,322	6.8%
Long-term nursing care	HC.3.2	17	22	29	22	24	(7)	2	11.6%
<b>Outpatient care</b>									
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>881,426</b>	<b>965,355</b>	<b>1,035,830</b>	<b>826,492</b>	<b>955,575</b>	<b>(209,338)</b>	<b>129,083</b>	<b>3.1%</b>
Basic medical and diagnostic services	HC.1.3.1	89,006	92,977	94,830	105,755	110,087	10,925	4,332	6.5%
Outpatient dental care	HC.1.3.2	409,798	446,657	483,496	377,953	389,185	(105,543)	11,232	(0.4)%
All other specialised health care	HC.1.3.3	185,995	204,577	221,544	205,003	316,137	(16,541)	111,134	16.3%
All other outpatient care	HC.1.3.9	194,729	218,995	233,399	133,794	137,611	(99,605)	3,817	(5.2)%
Outpatient rehabilitative care	HC.2.3	1,898	2,149	2,561	3,987	2,555	1,426	(1,432)	13.0%
<b>Home care</b>									
Curative and rehabilitative care	HC.1.4; 2.4	26,180	23,943	22,783	29,596	32,042	6,813	2,446	6.2%
Long-term nursing care	HC.3.3	47,957	66,205	66,429	76,022	79,111	9,593	3,089	14.2%
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>83,967</b>	<b>93,297</b>	<b>97,429</b>	<b>89,689</b>	<b>95,134</b>	<b>(7,740)</b>	<b>5,445</b>	<b>3.5%</b>
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>584,773</b>	<b>630,810</b>	<b>682,620</b>	<b>635,341</b>	<b>654,527</b>	<b>(47,279)</b>	<b>19,186</b>	<b>3.1%</b>
Pharmaceutical and other medical non-durables	HC.5.1	549,422	591,385	638,381	586,361	603,122	(52,020)	16,761	2.6%
Therapeutic appliances and other medical durables	HC.5.2	35,351	39,425	44,239	48,980	51,405	4,741	2,425	9.9%
<b>Total expenditure on personal health care</b>		<b>2,417,984</b>	<b>2,648,599</b>	<b>2,866,233</b>	<b>2,634,339</b>	<b>2,848,038</b>	<b>(233,320)</b>	<b>215,131</b>	<b>4.4%</b>
Prevention and public health services	HC.6	35,254	56,144	57,111	58,096	57,096	985	(1,000)	15.2%
Health administration and health insurance	HC.7	466,762	492,755	534,578	559,690	604,734	25,112	45,044	6.7%
<b>Total current expenditure on health care</b>		<b>2,920,000</b>	<b>3,197,498</b>	<b>3,457,922</b>	<b>3,252,125</b>	<b>3,509,868</b>	<b>(205,797)</b>	<b>257,743</b>	<b>4.9%</b>

Health care by function	ICHA-HC code	Total private sector							
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	Change 2005/06 to 2006/07 (000s)	Change 2006/07 to 2007/08 (000s)	Average annual growth rate
<b>Memorandum items: further health-related functions</b>									
Education and training of health personnel	HC.R.2	198,000	214,175	234,177	252,326	283,823	18,149	31,497	9.4%
Research and development in health	HC.R.3	20,266	30,486	29,825	31,215	31,859	1,390	644	13.7%
Food, hygiene and drinking water control	HC.R.4	–	–	–	–	–	–	–	n/a
Environmental health	HC.R.5	–	–	–	–	–	–	–	n/a
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	–	–	–	4,300	4,442	4,300	142	3.3%
<b>Total health-related expenditure</b>		<b>218,266</b>	<b>244,661</b>	<b>264,002</b>	<b>287,841</b>	<b>320,124</b>	<b>23,839</b>	<b>32,283</b>	<b>10.1%</b>
<b>Total health and health-related expenditure</b>		<b>3,138,266</b>	<b>3,442,159</b>	<b>3,721,924</b>	<b>3,539,966</b>	<b>3,829,992</b>	<b>(181,958)</b>	<b>290,026</b>	<b>5.3%</b>

Over the five-year period, the total private funding of health care services has grown by 5.3% on average. Although this reflects significant growth, it is less than the total public funding growth rate of 8.0%. Within private funding, the growth on personal health care is slightly lower than the total at 4.4%, although this figure is skewed by the expansion of not-for-profit organisations in the sample and their significant contribution to prevention and public health functions. The range in growth is from a low of (5.2%) to a high of 16.3% for all other outpatient health care, and all other specialised health care respectively.

**Table 7.5:** Destination of private funding of health services using SHA and funder, 2003/04–2007/08

Health care by function	ICHA-HC code	Not-for-profit					Insurance					Out-of-pocket				
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)
<b>Inpatient care</b>																
Curative and rehabilitative care	HC.1.1; 2.1	-	-	-	-	-	336,729	358,714	404,125	404,505	438,610	267,591	305,006	330,650	333,620	342,054
Long-term nursing care	HC.3.1	-	-	-	4,432	4432	-	-	-	-	-	80,158	87,059	94,379	102,314	104,901
<b>Services of day care</b>																
Curative and rehabilitative care	HC.1.2; 2.2	-	-	-	-	-	84,271	89,789	101,172	101,243	109,779	24,915	28,399	30,787	31,063	31,849
Long-term nursing care	HC.3.2	-	-	-	-	-	17	22	29	22	24	-	-	-	-	-
<b>Outpatient care</b>																
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>27,178</b>	<b>35,113</b>	<b>33,133</b>	<b>30,870</b>	<b>29,241</b>	<b>85,425</b>	<b>82,287</b>	<b>83,448</b>	<b>97,235</b>	<b>105,433</b>	<b>768,823</b>	<b>847,955</b>	<b>919,249</b>	<b>698,386</b>	<b>820,901</b>
Basic medical and diagnostic services	HC.1.3.1	-	-	-	-	-	26,718	21,980	17,863	28,097	30,466	62,288	70,997	76,967	77,658	79,621
Outpatient dental care	HC.1.3.2	-	-	-	-	-	24,498	24,449	25,790	28,412	30,808	385,300	422,208	457,706	349,541	358,377
All other specialised health care	HC.1.3.3	-	-	-	24,424	24,424	24,721	25,111	26,989	28,942	31,382	161,274	179,466	194,555	151,637	260,331
All other outpatient care	HC.1.3.9	27,178	35,113	33,133	4,817	4,817	7,590	8,598	10,245	9,427	10,222	159,961	175,284	190,021	119,550	122,572
Outpatient rehabilitative care	HC.1.3.9	-	-	-	1,630	-	1,898	2,149	2,561	2,357	2,555	-	-	-	-	-
<b>Home care</b>																
Curative and rehabilitative care	HC.1.4; 2.4	-	-	-	585	585	26,180	23,943	22,783	29,011	31,457	-	-	-	-	-
Long-term nursing care	HC.3.3	21,793	42,284	43,675	47,033	47,678	26,164	23,921	22,754	28,989	31,433	-	-	-	-	-
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>8,685</b>	<b>13,570</b>	<b>9,251</b>	<b>11,455</b>	<b>11,835</b>	<b>43,607</b>	<b>46,279</b>	<b>51,917</b>	<b>52,293</b>	<b>56,702</b>	<b>31,675</b>	<b>33,448</b>	<b>36,261</b>	<b>25,941</b>	<b>26,597</b>

Health care by function	ICHA-HC code	Not-for-profit					Insurance					Out-of-pocket				
		2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)	2003/04 (000s)	2004/05 (000s)	2005/06 (000s)	2006/07 (000s)	2007/08 (000s)
<b>Medical goods dispensed to outpatients</b>	HC.5	-	-	-	3,947	4,699	36,200	35,974	37,771	41,889	45,420	548,573	594,836	644,849	589,505	604,408
Pharmaceutical and other medical non-durables	HC.5.1	-	-	-	1,112	1,112	29,618	27,877	27,495	33,313	36,121	519,804	563,508	610,886	551,936	565,889
Therapeutic appliances and other medical durables	HC.5.2	-	-	-	2,835	3,587	6,582	8,097	10,276	8,576	9,299	28,769	31,328	33,963	37,569	38,519
<b>Total expenditure on personal health care</b>		<b>57,656</b>	<b>90,967</b>	<b>86,059</b>	<b>98,323</b>	<b>98,470</b>	<b>638,593</b>	<b>660,929</b>	<b>723,999</b>	<b>755,187</b>	<b>818,858</b>	<b>1,721,735</b>	<b>1,896,703</b>	<b>2,056,175</b>	<b>1,780,829</b>	<b>1,930,710</b>
Prevention and public health services	HC.6	35,254	56,144	57,111	58,096	57,096	-	-	-	-	-	-	-	-	-	-
Health administration and health insurance	HC.7	-	-	-	6,087	6,087	33,046	34,757	38,073	38,762	44,205	433,716	457,998	496,505	514,841	554,442
<b>Total current expenditure on health care</b>		<b>92,910</b>	<b>147,111</b>	<b>143,170</b>	<b>162,506</b>	<b>161,653</b>	<b>671,639</b>	<b>695,686</b>	<b>762,072</b>	<b>793,949</b>	<b>863,063</b>	<b>2,155,451</b>	<b>2,354,701</b>	<b>2,552,680</b>	<b>2,295,670</b>	<b>2,485,152</b>
<b>Memorandum items: further health-related functions</b>																
Education and training of health personnel	HC.R.2	-	-	-	352	352	-	-	-	-	-	198,000	214,175	234,177	251,974	283,471
Research and development in health	HC.R.3	20,266	30,486	29,825	31,215	31,859	-	-	-	-	-	-	-	-	-	-
Food, hygiene and drinking water control	HC.R.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental health	HC.R.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	-	-	-	4,300	4,442	-	-	-	-	-	-	-	-	-	-
<b>Total health-related expenditure</b>		<b>20,266</b>	<b>30,486</b>	<b>29,825</b>	<b>35,867</b>	<b>36,653</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>198,000</b>	<b>214,175</b>	<b>234,177</b>	<b>251,974</b>	<b>283,471</b>
<b>Total health and health-related expenditure</b>		<b>113,176</b>	<b>177,597</b>	<b>172,995</b>	<b>198,373</b>	<b>198,306</b>	<b>671,639</b>	<b>695,686</b>	<b>762,072</b>	<b>793,949</b>	<b>863,063</b>	<b>2,353,451</b>	<b>2,568,876</b>	<b>2,786,857</b>	<b>2,547,644</b>	<b>2,768,623</b>

The not-for-profit estimate increased significantly from 2003/04 to 2004/05 as additional entities providing health and health-related services were located. This estimate remains conservative as it reflects only a sample of the sector, with the full extent of the sector remaining unknown.

Insurance expenditure increase is attributable to both an increase in the number of claims and an increase in the cost of treatment. This is in line with a shift away from comprehensive insurance products towards major medical coverage only.<sup>20</sup>

Out-of-pocket expenditure by private households is the largest component of private sector funding, contributing on average 70.8% of total private health funding with nominal dollar growth of 7.9% over this five-year period.

<sup>20</sup> HFANZ, health insurance statistics, July 2008.

## 8 International Comparisons

### 8.1 Data comparison issues

Health expenditure is determined by a mix of social, political and economic factors, which means that no single figure represents the 'right' amount to spend on health. Therefore, care should be exercised when comparing data on international health expenditure, as these comparisons do not indicate whether:

- a country should spend more or less on health
- the mix of health care services is appropriate or directly comparable
- the production of health care services is technically efficient
- quality of care, equity and access considerations are appropriate
- the right quantity of health care reaches the right consumers.

Technical issues also mean that this data should be interpreted cautiously. The most important limitation is the lack of consistent and reliable time-series information on health expenditure for some countries. Some of the factors contributing to such technical limitations are:

- there are differences in the definitions of the variables included in the various categories of health expenditure, leaving open the possibility of differing interpretations between countries, especially as this relates to long-term nursing
- countries do not have formal requirements for reporting health expenditure
- it is difficult to measure and control social, medical, cultural, demographic and economic differences between countries
- there are problems measuring health outcomes.

With this HET report, all tables reflect data from 1997/98 to 2007/08, or the most recent year with complete data for OECD countries. The following comparisons of health expenditure in OECD countries should be viewed with these limitations in mind.

Two modifications have been made to the historical OECD data. The first modification is to remove the capital component from total health expenditure for those countries reporting capital expenditure. This results in greater comparability with New Zealand. The second modification is to recalibrate the values reported for New Zealand to include previously excluded non-health expenditure, primarily disability support services directly funded by the Ministry. These modifications have been made for all the following OECD data.

### 8.2 Per capita health expenditure in US dollar purchasing power parities

The concept of purchasing power parities (PPPs) provides a mechanism for comparing the health spending of different countries on a common basis. PPPs are the rates of currency conversion that equalise the purchasing power of different currencies. Table 8.1 presents this information.

**Table 8.1:** Per capita current health expenditure (US\$ PPP) for OECD countries, 1998–2008

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Rank 2007	Rank 2008
Australia	1833	1975	2135	2244	2408	2531	2715	2812	2980	3168	DNR	14th	DNR
Austria	2450	2568	2701	2753	2912	3047	3224	3281	3448	3588	3757	5th	5th
Belgium	1923	2048	2246	2365	2543	2911	3120	3154	3174	3452	3677	9th	7th
Canada	2246	2319	2414	2614	2747	2919	3074	3288	3506	3685	3866	4th	4th
Chile	565	578	613	654	670	682	709	746	772	865	999	30th	26th
Czech Republic	843	894	932	1039	1138	1286	1341	1422	1474	1568	1737	25th	20th
Denmark	2111	2217	2322	2449	2625	2712	2913	3014	3242	3389	DNR	10th	DNR
Estonia	DNR	502	511	514	568	664	754	826	929	1078	1210	28th	24th
Finland	1588	1665	1764	1866	2024	2129	2331	2455	2557	2733	2857	16th	14th
France	2253	2344	2492	2665	2863	2912	3034	3212	3326	3492	3595	8th	10th
Germany	2381	2477	2565	2683	2815	2965	3041	3225	3347	3495	3610	7th	9th
Greece	1324	1402	1383	1655	1856	1930	1998	2260	2446	2588	DNR	18th	DNR
Hungary	721	774	820	932	1064	1240	1256	1368	1404	1348	1400	27th	23rd
Iceland	2415	2603	2673	2780	3078	3136	3289	3247	3140	3240	3300	11th	11th
Ireland	1387	1488	1652	1919	2175	2391	2610	2787	2977	3187	3633	13th	8th
Israel	1417	1578	1753	1869	1869	1747	1835	1830	1914	2083	2175	22nd	19th
Italy	1754	1798	1969	2127	2141	2172	2277	2406	2542	2579	2750	19th	16th
Japan	1655	1752	1898	2010	2079	2160	2282	2417	2531	2687	DNR	17th	DNR
Korea	566	656	782	911	955	1027	1105	1235	1418	1582	1694	24th	20th
Luxembourg*	2082	2373	2527	2710	3039	3516	3993	3951	4132	DNR	DNR	DNR	DNR
Mexico*	434	470	508	552	580	629	689	731	761	824	852	31st	27th
Netherlands	1964	2076	2224	2440	2700	2847	3017	3171	3318	3532	3728	6th	6th
New Zealand	1451	1522	1607	1708	1841	1847							
New Zealand restated	1596	1622	1689	1787	1889	1893	2043	2202	2418	2471	2683	21st	17th
Norway	2357	2565	2836	3029	3398	3587	3811	4030	4226	4490	4713	2nd	2nd
Poland	524	552	561	623	705	717	770	807	861	983	1133	29th	25th
Portugal	1171	1287	1446	1505	1601	1726	1820	1998	2057	DNR	DNR	DNR	DNR
Slovak Republic*	584	586	591	653	725	757	970	1091	1259	1493	1652	26th	22nd
Slovenia	1228	1304	1453	1583	1612	1658	1770	1883	1936	1978	2208	23rd	18th
Spain	1342	1406	1491	1576	1682	1951	2062	2195	2388	2565	2803	20th	15th
Sweden	1894	2015	2177	2401	2574	2708	2832	2845	2994	3191	3295	12th	12th
Switzerland	2981	3073	3221	3428	3673	3777	3936	4015	4150	4469	4627	3rd	3rd
Turkey*	295	357	414	413	432	436	496	556	647	701	DNR	32nd	DNR
United Kingdom*	1481	1587	1753	1925	2091	2216	2445	2586	2755	2851	2966	15th	13th
United States	4027	4228	4479	4825	5205	5589	5913	6259	6612	6928	7164	1st	1st
Unweighted mean	1567	1677	1789	1920	2065	2183	2338	2450	2578	2538	2297		
Weighted mean	2019	2117	2248	2400	2588	2744	2913	3027	3167	3313	3542		
Average annual growth rate								6.0%	5.8%	5.7%	5.8%		

Source: OECD health data, July 2010, and Ministry of Health

\* Does not report investment on medical facilities for this period.

DNR: Did not report.

New Zealand restated: Includes previously reported 'non-health' items now included in core health, primarily disability support services funded by the Ministry of Health.

Note: Includes impact of Greece upward revision of GDP of 26% as reported in May 2007.

In 2008, the United States had the highest per capita health expenditure of the OECD countries, followed by Norway, Switzerland and then Canada. Of the 27 countries

reporting in 2008, New Zealand ranked 17th, after Italy and before Slovenia, and 21st of the 32 OECD countries reporting in 2007.

The complete listing of countries can be found in Table 8.1 above. For the 10-year period ending 2008, New Zealand's rate of growth increased to 5.4% and is comparable to the OECD 10-year average of 5.8%.

### 8.3 Health expenditure as a percentage of GDP

Table 8.2 presents information by country for the period 1998 to 2008 for the percentage of GDP spent on health.

**Table 8.2:** Current health expenditure as a percentage of GDP, 1998–2008

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Rank 2007	Rank 2008
Australia	7.6%	7.8%	8.0%	8.1%	8.4%	8.3%	8.5%	8.4%	8.5%	8.5%	DNR	16th	DNR
Austria	10.0%	10.1%	9.9%	10.1%	10.1%	10.3%	10.4%	10.4%	10.3%	10.3%	10.5%	5th	4th
Belgium	8.7%	8.9%	9.0%	9.1%	9.3%	9.6%	10.0%	9.8%	9.5%	10.0%	10.2%	7th	7th
Canada	9.0%	8.9%	8.8%	9.3%	9.6%	9.8%	9.8%	9.9%	10.0%	10.1%	10.4%	6th	6th
Chile	6.4%	6.6%	6.6%	6.8%	6.7%	6.5%	6.3%	6.1%	5.9%	6.2%	6.9%	29th	24th
Czech Republic	6.6%	6.6%	6.5%	6.7%	7.1%	7.4%	7.2%	7.2%	7.0%	6.8%	7.1%	26th	22nd
Denmark	8.3%	8.5%	8.3%	8.6%	8.8%	9.3%	9.5%	9.5%	9.6%	9.7%	DNR	8th	DNR
Estonia	DNR	5.9%	5.3%	4.9%	4.8%	5.0%	5.1%	5.0%	5.1%	5.3%	6.1%	32nd	26th
Finland	7.4%	7.4%	7.2%	7.4%	7.8%	8.2%	8.2%	8.4%	8.4%	8.2%	8.4%	19th	17th
France	10.1%	10.1%	10.1%	10.2%	10.5%	10.9%	11.0%	11.1%	11.1%	11.0%	11.2%	2nd	2nd
Germany	10.2%	10.3%	10.3%	10.4%	10.6%	10.8%	10.6%	10.7%	10.5%	10.4%	10.5%	4th	5th
Greece	8.4%	8.6%	7.9%	8.8%	9.1%	8.9%	8.7%	9.5%	9.7%	9.7%	DNR	9th	DNR
Hungary	7.1%	7.2%	7.0%	7.2%	7.5%	8.3%	8.0%	8.3%	8.1%	7.4%	7.3%	25th	21st
Iceland	8.9%	9.6%	9.5%	9.3%	10.2%	10.4%	9.9%	9.4%	9.1%	9.1%	9.1%	11th	11th
Ireland	6.1%	6.1%	6.1%	6.8%	7.1%	7.4%	7.6%	7.5%	7.5%	7.5%	8.7%	24th	14th
Israel	7.8%	7.5%	7.5%	8.0%	7.9%	7.8%	7.8%	7.8%	7.6%	7.8%	7.8%	21st	19th
Italy	7.7%	7.8%	8.1%	8.2%	8.3%	8.3%	8.7%	8.9%	9.0%	8.7%	9.1%	15th	12th
Japan	7.3%	7.5%	7.7%	7.9%	8.0%	8.1%	8.0%	8.2%	8.1%	8.1%	DNR	20th	DNR
Korea	4.2%	4.5%	4.8%	5.3%	5.1%	5.4%	5.4%	5.7%	6.1%	6.3%	6.5%	28th	25th
Luxembourg	5.7%	5.8%	5.8%	6.4%	6.8%	7.5%	8.1%	7.7%	7.2%	DNR	DNR	DNR	DNR
Mexico	4.9%	5.1%	5.1%	5.5%	5.6%	5.8%	6.0%	5.9%	5.7%	5.8%	5.9%	31st	27th
Netherlands	8.1%	8.1%	8.0%	8.3%	8.9%	9.8%	10.0%	9.8%	9.7%	9.7%	9.9%	10th	8th
New Zealand	7.8%	7.6%	7.7%	7.8%	8.2%	8.0%							
New Zealand restated	8.5%	8.3%	8.1%	8.2%	8.4%	8.2%	8.4%	8.9%	9.3%	9.1%	9.8%	12th	9th
Norway	9.3%	9.3%	8.4%	8.8%	9.8%	10.0%	9.7%	9.1%	8.6%	8.9%	8.5%	14th	16th
Poland	5.9%	5.7%	5.5%	5.9%	6.3%	6.2%	6.2%	6.2%	6.2%	6.4%	7.0%	27th	23rd
Portugal	8.0%	8.2%	8.8%	8.8%	9.0%	9.7%	10.0%	10.2%	9.9%	DNR	DNR	DNR	DNR
Slovak Republic	5.7%	5.8%	5.5%	5.5%	5.6%	5.8%	7.2%	7.0%	7.3%	7.7%	7.8%	23rd	20th
Slovenia	7.9%	7.9%	8.3%	8.6%	8.6%	8.6%	8.4%	8.4%	8.2%	7.8%	8.3%	22nd	18th
Spain	7.3%	7.3%	7.2%	7.2%	7.3%	8.2%	8.2%	8.3%	8.4%	8.4%	9.0%	17th	13th
Sweden	8.2%	8.3%	8.2%	9.0%	9.3%	9.4%	9.2%	9.2%	9.1%	9.1%	9.4%	13th	10th
Switzerland	10.1%	10.2%	10.2%	10.6%	10.9%	11.3%	11.3%	11.2%	10.8%	10.6%	10.7%	3rd	3rd
Turkey	3.6%	4.8%	4.9%	5.2%	5.4%	5.3%	5.4%	5.4%	5.8%	6.0%	DNR	30th	DNR
United Kingdom	6.7%	6.9%	7.0%	7.3%	7.6%	7.8%	8.0%	8.3%	8.5%	8.4%	8.7%	18th	15th
United States	13.4%	13.4%	13.4%	14.1%	14.8%	15.3%	15.4%	15.4%	15.5%	15.7%	16.0%	1st	1st
Unweighted mean	7.5%	7.8%	7.7%	8.0%	8.3%	8.5%	8.6%	8.6%	8.6%	8.1%	7.1%		
Weighted mean	7.9%	8.0%	7.9%	8.2%	8.5%	8.8%	9.1%	9.1%	9.0%	9.0%	9.4%		
Average annual growth rate									1.6%	1.5%	1.7%		

Source: Copyright OECD health data July 2010, and Ministry of Health

DNR: Did not report.

New Zealand restated: Includes previously reported 'non-health' items now included in core health, primarily disability support services funded by the Ministry of Health.

Note: Includes impact of Greece upward revision of GDP of 26% in May 2007.

New Zealand spent 9.8% on health in 2008 compared with 9.1% of GDP in 2007, better than the weighted OECD average of 9.4% and 9.0% for 2008 and 2007 respectively (not all countries have reported for 2008). The actual weighted average for 2008 is subject to change once all countries provide information. Table 8.2 shows that New Zealand's health expenditure as a percentage of GDP was the 12th highest of the 32 OECD member countries reporting in 2007 and 9th of the 27 reporting for 2008. In 2008, the United States had the highest proportion of current health expenditure to GDP at 16.0%, while Mexico, at 5.9%, had the lowest proportion.

For New Zealand, the proportion of current health expenditure to GDP increased from 8.5% in 1998 to 9.8% in 2008. In comparison, the OECD weighted average over the same period increased from 7.9% to 9.4%. New Zealand's rate of growth over the 10-year period was 1.4% compared to the OECD average annual 10-year growth rate of 1.7%.

Current health expenditure as a proportion of GDP is often used in international comparisons. However, given that expenditure contains price and volume components, high ratios of health expenditure to GDP could reflect a higher price rather than a higher volume of health care services, so this measure should be used with caution. Partly for this reason, there is no 'right' or 'wrong' proportion of a country's GDP to be spent on health.

#### **8.4 Publicly funded current health expenditure as a proportion of total health expenditure**

Table 8.3 shows the trends in publicly funded current health expenditure as a proportion of total current health expenditure.

**Table 8.3:** Publicly funded health expenditure as a proportion of total health expenditure, 1998–2008

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Rank 2007	Rank 2008
Australia	66.4	68.4	66.8	66.3	66.9	66.1	66.7	66.9	66.6	67.5	DNR	23rd	DNR
Austria	76.0	76.7	76.8	76.1	75.8	75.5	75.7	76.1	76.0	76.4	76.9	12th	10th
Belgium	DNR	DNR	DNR	DNR	DNR	74.1	74.8	75.4	75.9	73.5	72.6	16th	14th
Canada	70.6	70.0	70.4	70.0	69.6	70.2	70.3	70.3	69.9	70.3	70.2	21st	19th
Chile	48.1	49.9	52.1	53.5	54.5	56.0	55.9	56.6	57.8	58.7	59.4	27th	21st
Czech Republic	90.4	90.5	90.3	89.8	90.5	89.8	89.2	87.3	86.7	85.2	82.5	1st	4th
Denmark	82.0	82.2	82.4	82.7	82.9	83.9	83.8	83.7	84.1	84.5	DNR	2nd	DNR
Estonia	DNR	77.5	77.2	78.6	77.1	77.0	75.5	76.7	73.3	75.6	77.8	14th	7th
Finland	71.8	71.5	71.1	71.8	72.3	72.5	73.0	73.5	74.6	74.5	74.2	15th	13th
France	79.5	79.4	79.4	79.4	79.7	79.4	79.3	79.3	78.4	78.3	77.8	9th	8th
Germany	80.2	80.1	79.8	79.6	79.3	78.8	76.9	76.8	76.7	76.7	76.8	11th	12th
Greece	52.1	53.4	60.0	60.8	58.0	59.8	59.1	60.1	62.0	60.3	DNR	25th	DNR
Hungary	74.8	72.4	70.7	69.0	70.2	72.8	72.4	72.3	72.6	70.4	71.0	20th	18th
Iceland	80.4	82.2	81.1	81.0	81.9	81.7	81.2	81.4	82.0	82.5	83.2	4th	2nd
Ireland	75.0	75.5	75.3	76.1	76.4	76.4	77.0	76.6	76.3	76.8	76.9	10th	11th
Israel	63.7	63.8	62.1	61.6	62.9	62.2	60.5	58.7	58.4	56.0	57.0	28th	23rd
Italy	70.4	70.7	72.5	74.6	74.5	74.5	76.0	76.2	76.6	76.4	77.2	13th	9th
Japan	80.8	81.1	81.3	81.7	81.5	81.5	81.7	82.7	81.3	81.9	DNR	6th	DNR
Korea	46.4	47.4	45.5	52.3	51.3	50.4	51.1	52.1	54.7	55.2	55.3	29th	24th
Luxembourg	92.4	89.8	89.3	87.9	90.3	89.8	90.1	90.2	90.9	DNR	DNR	DNR	DNR
Mexico	46.0	47.8	46.6	44.8	43.9	44.2	45.2	45.0	45.2	45.4	46.9	31st	25th
Netherlands	64.1	62.7	63.1	62.8	62.5	DNR	DNR						
New Zealand	77.0	77.5	78.0	76.4	77.9	78.3							
New Zealand restated	78.2	79.0	79.1	77.9	78.9	79.4	76.9	78.9	79.1	79.8	80.4	8th	6th
Norway	82.2	82.6	82.5	83.6	83.5	83.7	83.6	83.5	83.8	84.1	84.2	3rd	1st
Poland	65.4	71.1	70.0	71.9	71.2	69.9	68.6	69.3	69.9	70.8	72.2	19th	17th
Portugal	67.1	67.6	72.5	71.5	72.2	73.3	72.0	71.8	71.5	DNR	DNR	DNR	DNR
Slovak Republic	91.6	89.6	89.4	89.3	89.1	88.3	73.8	74.4	68.3	66.8	69.0	24th	20th
Slovenia	75.5	75.7	74.0	73.3	73.4	71.9	72.9	71.9	72.4	72.0	72.3	17th	16th
Spain	72.2	72.0	71.6	71.2	71.3	70.5	70.6	70.6	71.3	71.8	72.5	18th	15th
Sweden	85.8	85.7	84.9	81.8	82.1	82.5	81.8	81.6	81.6	81.7	81.9	7th	5th
Switzerland	54.7	55.1	55.4	56.9	57.7	58.3	58.4	59.5	59.1	59.1	59.1	26th	22nd
Turkey	71.9	61.1	62.9	68.1	70.7	71.9	71.2	67.8	68.3	67.8	DNR	22nd	DNR
United Kingdom	80.3	80.6	79.3	79.9	79.9	80.1	81.4	81.9	81.9	82.0	82.6	5th	5th
United States	43.5	43.1	43.2	44.2	44.1	43.9	44.3	44.4	45.3	45.5	46.5	30th	26th
Weighted mean	73.8	73.8	73.8	73.8	74.1	74.4	73.6	73.7	73.5	72.8	73.0		

Source: OECD health data July 2010, and Ministry of Health

New Zealand restated: Includes previously reported 'non-health' items now included in core health, primarily disability support services funded by the Ministry of Health.

Notes: Public expenditure percentages reported by OECD is stated in US\$PPP.

Includes impact of Greece upward revision of GDP of 26% as reported in May 2007.

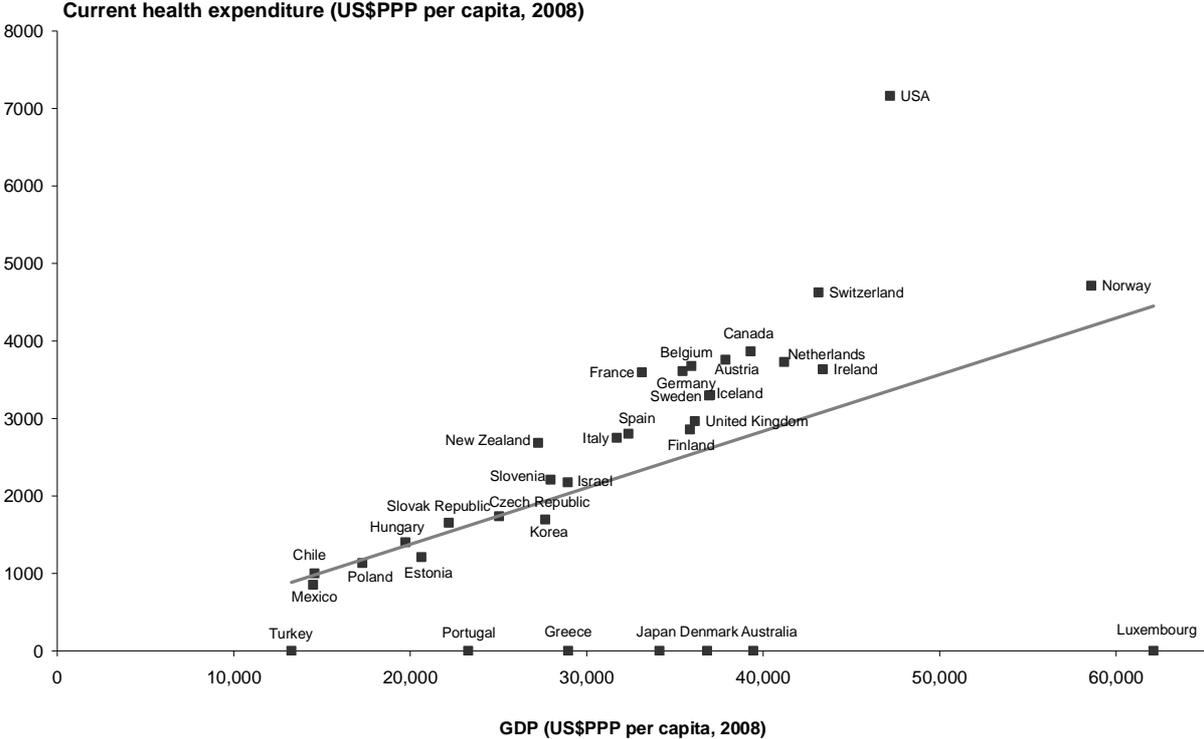
As shown in Table 8.3, current public health expenditure in the OECD accounts for 73.0% of total health expenditure. Over the 10-year period under review, Luxembourg had the highest public expenditure as a proportion of total current health expenditure (90.1%). As Luxembourg is yet to report for 2008, Norway had the highest public expenditure as a proportion of total current health expenditure (84.2%) in 2008, while Mexico and United States had the lowest at (46.9%) and (46.5%) respectively. New Zealand was ranked 6th, with public funding accounting for (80.4%) of total health spending for the 26 countries reporting to date with 2008 information. New Zealand's position and ranking is not likely to change significantly when more recent information becomes available for other countries.

During the 1960s, there was a shift among OECD countries towards more public funding of health care. This pattern stabilised during the late 1970s and early 1980s and has reversed slightly in more recent years. Since 1992, New Zealand has remained within the narrow range of 77% to 80% and continues within this range to 2007/08.

## **8.5 Health expenditure and GDP per capita**

Figure 8.1 and Table 8.4 show the positive relationship between health expenditure and GDP for 30 OECD countries. There is a well-established relationship between GDP per capita and health expenditure per capita; the higher a country's GDP per capita, the greater its health expenditure per capita is likely to be compared with other countries. Figure 8.1 presents data for all countries in 2008.

**Figure 8.1:** Relationship between current health expenditure and GDP in OECD countries, 2008



Source: OECD health data July 2010 and Ministry of Health

Note: Zero is the countries yet to report.

As Figure 8.1 shows, New Zealand expenditure on health care is similar to what could be expected for another OECD country with a similar level of GDP. There is no agreed optimal level of health care spending relative to GDP. However, as New Zealand’s economy continued to grow through to 2008, it is expected that health expenditure per capita will increase proportionally and then drop back in the 2010/11 year owing to the financial impacts of the global recession.

Table 8.4 shows, with increases in GDP and health expenditure, that New Zealand has ‘moved up the line’ in the OECD rankings of countries reporting GDP per capita and health expenditure per capita.

**Table 8.4:** Per capita GDP and per capita current health expenditure (US\$ PPP) for OECD countries, 2005–2008

Country	GDP per capita 2005	GDP per capita 2006	GDP per capita 2007	GDP per capita 2008	Current health expenditure per capita 2005	Current health expenditure per capita 2006	Current health expenditure per capita 2007	Current health expenditure per capita 2008
Australia	35,344	37,460	39,414	39,439	2,812	2,980	3,168	DNR
Austria	33,377	35,252	36,775	37,873	3,281	3,448	3,588	3,757
Belgium	32,127	33,349	34,653	35,930	3,154	3,174	3,452	3,677
Canada	35,033	36,821	38,448	39,288	3,288	3,506	3,685	3,866
Chile	12,172	13,004	13,894	14,579	746	772	865	999
Czech Republic	20,366	21,827	23,995	25,033	1,422	1,474	1,568	1,737
Denmark	33,214	35,199	36,343	36,828	3,014	3,242	3,389	DNR
Estonia	16,539	18,462	20,613	20,640	826	929	1,078	1,210
Finland	30,684	32,321	35,322	35,853	2,455	2,557	2,733	2,857
France	29,780	30,893	32,574	33,134	3,212	3,326	3,492	3,595
Germany	31,364	32,900	34,682	35,436	3,225	3,347	3,495	3,610
Greece	24,641	26,356	27,793	28,946	2,260	2,446	2,588	DNR
Hungary	16,952	17,920	18,774	19,738	1,368	1,404	1,348	1,400
Iceland	35,026	34,971	36,523	36,994	3,247	3,140	3,240	3,300
Ireland	38,814	41,425	44,564	43,381	2,787	2,977	3,187	3,633
Israel	24,224	26,000	27,763	28,924	1,830	1,914	2,083	2,175
Italy	28,144	29,517	31,030	31,709	2,406	2,542	2,579	2,750
Japan	30,312	31,936	33,635	34,132	2,417	2,531	2,687	DNR
Korea	22,783	24,661	26,574	27,658	1,235	1,418	1,582	1,694
Luxembourg	52,275	58,409	61,469	62,119	3,951	4,132	DNR	DNR
Mexico	12,447	13,383	14,115	14,502	731	761	824	852
Netherlands	35,104	37,162	39,585	41,189	3,171	3,318	3,532	3,728
New Zealand	24,877	26,068	27,248	27,245	2,202	2,418	2,471	2,683
Norway	47,306	52,045	53,636	58,596	4,030	4,226	4,490	4,713
Poland	13,786	14,715	16,312	17,294	807	861	983	1,133
Portugal	20,656	21,662	22,638	23,289	1,998	2,057	DNR	DNR
Slovak Republic	16,163	17,955	20,265	22,193	1,091	1,259	1,493	1,652
Slovenia	23,490	24,867	26,672	27,958	1,883	1,936	1,978	2,208
Spain	27,377	29,638	31,469	32,366	2,195	2,388	2,565	2,803
Sweden	32,300	34,330	36,785	36,946	2,845	2,994	3,191	3,295
Switzerland	35,784	38,577	42,174	43,131	4,015	4,150	4,469	4,627
Turkey	10,841	11,973	12,707	13,270	556	647	701	DNR
United Kingdom	32,724	34,084	35,452	36,128	2,586	2,755	2,851	2,966
United States	42,514	44,639	46,452	47,193	6,259	6,612	6,928	7,164

Source: OECD health data July 2010 and Ministry of Health

Shaded fill: Does not report investment on medical facilities for this period.

DNR: Did not report.

New Zealand restated: Includes previously reported 'non-health' items now included in core health, primarily disability support services funded by the Ministry of Health.

Note: Includes impact of Greece upward revision of GDP of 26% in May 2007.

Reasons for differences in international health spending and performance are outlined below.

- Some differences result from health service cost (and price) variations. Richer countries pay a higher price per unit of medical care consumed, given the higher labour costs and higher prices for services.
- The intensity of treatment differs between countries.
- The rates at which various invasive procedures are performed differ widely between countries.
- The rapid and extensive introduction of new medical technologies in the United States in particular explains a significant part of the difference in growth of expenditure outlays between the United States and elsewhere.
- As major determinants of health expenditure, demographic characteristics also vary significantly between countries. Some countries have high life expectancies and relatively old populations and therefore need to spend more on older people, whose health care costs are the highest per capita. (The converse is true of countries with younger populations.)
- Cultural and religious factors result in differences not only in the perception of morbidity but also in the choice of therapeutic responses.
- Variations in welfare philosophies and private insurance coverage affect public provision and the level of health care assistance provided in different countries.
- Differences between countries in the origin of funding can also significantly affect the demand for health care and expenditure.
- The incidence of litigation against health providers varies between countries. In countries with a higher incidence (as in the United States in particular), providers of health care are more likely to take out expensive insurance cover, complete higher levels of diagnostic testing to reduce this litigation risk.

# Appendix 1: OECD System of Health Accounts

## A1.1 Functions of health care

Health care refers to the sum of activities performed either by institutions or individuals pursuing, through the application of medical, paramedical and nursing knowledge and technology, the goals of:

- promoting health and preventing disease
- curing illness and reducing premature mortality
- caring for persons affected by chronic illness who require nursing care
- caring for persons with health-related impairment, disability and handicaps who require nursing care
- assisting patients to die with dignity
- providing and administering public health
- providing and administering health programmes, health insurance and other funding arrangements.

Health care can be divided into personal health care services provided directly to individual persons and collective health care services covering the traditional tasks of public health such as health promotion and disease prevention, including setting and enforcing standards, and health administration and health insurance.

Within the System of Health Accounts (SHA), personal health care services are defined as:

- 1 curative care
- 2 rehabilitative care
- 3 services of a (long-term) nursing type care
- 4 ancillary services to health care
- 5 medical goods dispensed to outpatients, which include self-medication and other goods consumed by households with or without a prescription from medical or paramedical professionals.

Much of personal health care (functions 1–5 above) is two-dimensional, combining the ‘basic function of service’ (curative, rehabilitative and long-term) with the ‘mode of production’ or settings of care (inpatient, day care, outpatient or home-based care).

### Basic function of care

Definitions of the components of the basic function of care have been developed by the Australian Health Data Committee and the United States Joint Commission on Accreditation of Healthcare Organisations (OECD 2000).

## **Curative**

An episode of curative care has the purpose of relieving symptoms of illness or injury, reducing the severity of an illness or injury, or protecting against exacerbation and/or complication of an illness or injury that threatens life or normal function.

## **Rehabilitative**

An episode of rehabilitative care has the purpose of improving the functional level of the individual, where the limitations either are due to a recurrent event of illness or injury or are of a recurrent nature. Rehabilitative care is generally less intensive than curative care but more intensive than long-term care. It requires frequent and recurrent patient assessment and progresses in accordance with a treatment plan for a limited period.

## **Long-term**

Long-term care is not episodic. It consists of ongoing care of individuals who need assistance on a continuing basis due to chronic impairments and a reduced degree of independence, including activities of daily living. Long-term care is typically a mix of clinical and social services. Only clinical care expenditure is included as health expenditure.

## **Mode of production**

SHA functions of care are further stratified into modes of care based on the essential differences in the technical and managerial organisations of care. The fundamental differences relate to the substantially different information systems, including the administrative paperwork and statistics that are in place within these types of organisations.

## **Inpatient**

This is care provided to patients who are formally admitted to an institution for treatment and stay for a minimum of one night. Accommodation in institutions providing social services where health care is an important but not predominant component of care should not be included as a health function.

## **Day care**

This is care delivered to patients who are formally admitted to an institution and the intention is to discharge the patient on the same day. These patients are usually admitted and discharged after staying between three and eight hours.

## **Outpatient**

This care is delivered to patients who are not formally admitted and do not stay overnight. The boundary is wider than for institutional care and covers services provided at physician's offices and ambulatory care centres.

## **Home-based care**

This is care delivered to an individual in their own home. The New Zealand interpretation is that an individual's home is not limited to a private residence.

## **Other personal health functions**

### **Ancillary**

This covers a variety of services, mainly performed by paramedical or medical technical personnel, including diagnostic imaging, laboratory work and patient transport. These services can be provided either with or without referral and direct supervision by a medical doctor.

### **Medical goods dispensed to outpatients**

These services involve goods bought by a private household at their own initiative for the purpose of home care and cover items purchased with and without prescription.

### **Other health functions**

Health functions undertaken for the public, as opposed to the individual, are described below.

### **Prevention and public health**

Public health services are primarily preventative in nature and comprise a wide range of services with intended benefits for the public, or groups within the public, rather than the individual. Examples include epidemiological surveillance, disease prevention and the promotion of good health.

Health and safety is not covered under prevention and public health. Examples of functions specifically excluded are occupational health services relating to improving the working environment, such as ergonomics, environmental protection and accident prevention; road safety; product safety monitoring; and civil defence (OECD 2000). Some safety services are covered later at A1.2 Health-related Functions.

### **Administration and health insurance**

This service includes the planning, management, regulation and collection of funds and handling claims of the health delivery system. It includes both public governmental agencies and the private insurance sector.

**Table A1: Functions of health care**

<b>HC.1</b>	<b>Services of curative care</b>
HC.1.1	Inpatient curative care
HC.1.2	Day cases of curative care
HC.1.3	Outpatient curative care
HC.1.3.1	Basic medical and diagnostic services
HC.1.3.2	Outpatient dental care
HC.1.3.3	All other specialised health care
HC.1.3.9	All other outpatient curative care
HC.1.4	Services of curative home care
<b>HC.2</b>	<b>Services of rehabilitative care</b>
HC.2.1	Inpatient rehabilitative care
HC.2.2	Day cases of rehabilitative care
HC.2.3	Outpatient rehabilitative care
HC.2.4	Services of rehabilitative home care
<b>HC.3</b>	<b>Services of long-term nursing care</b>
HC.3.1	Inpatient long-term nursing care
HC.3.2	Day cases of long-term nursing care
HC.3.3	Long-term nursing care; home care
<b>HC.4</b>	<b>Ancillary services to health care</b>
HC.4.1	Clinical laboratory
HC.4.2	Diagnostic imaging
HC.4.3	Patient transport and emergency rescue
HC.4.9	All other miscellaneous ancillary services
<b>HC.5</b>	<b>Medical goods dispensed to outpatients</b>
HC.5.1	Pharmaceuticals and other medical non-durables
HC.5.1.1	Prescribed medicines
HC.5.1.2	Over-the-counter medicines
HC.5.1.3	Other medical non-durables
HC.5.2	Therapeutic appliances and other medical durables
HC.5.2.1	Glasses and other vision products
HC.5.2.2	Orthopaedic appliances and other prosthetics
HC.5.2.3	Hearing aids
HC.5.2.4	Medico-technical devices, including wheelchairs
HC.5.2.9	All other miscellaneous medical durables
<b>HC.6</b>	<b>Prevention and public health services</b>
HC.6.1	Maternal and child health; family planning and counselling
HC.6.2	School health services
HC.6.3	Prevention of communicable diseases
HC.6.4	Prevention of non-communicable diseases
HC.6.5	Occupational health care
HC.6.9	All other miscellaneous public health services

**HC.7 Health administration and health insurance**

HC.7.1	General government administration of health
HC.7.1.1	General government administration of health (except social security)
HC.7.1.2	Administration, operation and support activities of social security funds
HC.7.2	Health administration and health insurance: private
HC.7.2.1	Health administration and health insurance: social insurance
HC.7.2.2	Health administration and health insurance: other private

**A1.2 Health-related functions**

The OECD health-related functions are distinguished from the core health care functions. They are closely linked to health care in terms of operations, institutions and personnel but are, as far as possible, excluded when measuring activities and expenditure belonging to core health care functions. For the most part, these are services that have a direct and beneficial impact on public health.

**Capital formation**

This health-related function encompasses gross capital formation of domestic health care provider institutions (not all facilities), such as hospitals and nursing homes. New Zealand has not conducted an estimate of capital costs.

**Education and training**

This health-related function covers the education and training of health professionals. The expenditure should include administration, inspection and support services but should distinguish between training and health service provision.

**Research and development**

This health-related function covers many programmes directed towards the protection and improvement of human health, including good hygiene, biochemical engineering, medical information, rationalisation of treatment and pharmacology as well as research relating to epidemiology, prevention of industrial diseases and drug addiction (OECD 2000, p 125). Government involvement in health research and development is often classified as a health function and is split between health administration and research and development.

**Food, hygiene and drinking water**

This health-related function comprises a variety of activities of public health concern. The boundaries as applied in New Zealand between health-related expenditure and non health-related expenditure draw the distinction between supply and safety. For example, provision of the water supply is not included, but water testing and treatment to ensure safety for human consumption are included in this health-related function. The same boundary applies to other testing and treatment services.

## **Environmental health**

This health-related function includes a number of activities, including monitoring the environment and environmental control, when the specific focus of the service is a public health concern. Examples of these types of services are waste management, waste water and pollution abatement.

## **Administration and provision of social services in kind to assist living with disease and impairment**

This health-related function consists of non-medical social services in kind provided to people with health problems, functional impairments or limitations, where the primary goal is the social or vocational rehabilitation or integration of the individual. At the current time, New Zealand has not conducted an estimate for this function.

## **Administration and provision of health-related cash benefits**

This health-related function consists of non-medical social services in kind provided to people with health problems, functional impairments or limitations, where the primary goal is the social or vocational rehabilitation or integration of the individual. At the current time, New Zealand has not calculated an estimate for this function.

**Table A2:** Health-related functions

HC.R.1	Capital formation of health care provider institutions
HC.R.2	Education and training of health personnel
HC.R.3	Research and development in health
HC.R.4	Food, hygiene and drinking water control
HC.R.5	Environmental health
HC.R.6	Administration and provision of social services in kind to assist living with disease and impairment
HC.R.7	Administration and provision of health-related cash benefits

## **A1.3 Provider industry**

The SHA includes a dimension for the provider sector 'Where does the money go?' or 'Who provides the services?'. The classifications used are based on the North American Industrial Classification System, a draft common industrial classification of NAFTA countries (NAICS 1998).

**Table A3:** OECD SHA provider industry

<b>HP.1</b>	<b>Hospitals</b>
HP.1.1	General hospitals
HP.1.2	Mental health and substance abuse hospitals
HP.1.3	Speciality (other than mental health and substance abuse) hospitals
<b>HP.2</b>	<b>Nursing and residential care facilities</b>
HP.2.1	Nursing care facilities
HP.2.2	Residential mental retardation, mental health and substance abuse facilities
HP.2.3	Community care facilities for the elderly
HP.2.9	All other residential care facilities
<b>HP.3</b>	<b>Providers of ambulatory health care</b>
HP.3.1	Offices of physicians
HP.3.2	Offices of dentists
HP.3.3	Offices of other health practitioners
HP.3.4	Outpatient care centres
HP.3.5	Medical and diagnostic laboratories
HP.3.6	Providers of home health-care services
HP.3.9	Other providers of ambulatory health care
<b>HP.4</b>	<b>Retail sales and other providers of medical goods</b>
HP.4.1	Dispensing chemists
HP.4.2	Retail sales and other suppliers of optical glasses and other vision products
HP.4.3	Retail sales and other suppliers of hearing aids
HP.4.4	Retail sales and other suppliers of medical appliances (not glasses and hearing aids)
HP.4.9	All other miscellaneous sales and other suppliers of pharmaceuticals and medical goods
<b>HP.5</b>	<b>Provision and administration of public health programmes</b>
<b>HP.6</b>	<b>Health administration and insurance</b>
HP.6.1	Government administration of health
HP.6.2	Social security funds
HP.6.3	Other social insurance
HP.6.4	Other (private) insurance
HP.6.9	All other providers of health administration
<b>HP.7</b>	<b>Other industries (rest of the economy)</b>
HP.7.1	Establishments as providers of occupational health-care services
HP.7.2	Private households as providers of home care
HP.7.9	All other industries as secondary producers of health care
<b>HP.9</b>	<b>Rest of the world</b>

## A1.4 Sources of funding

This system provides a breakdown of expenditure on health into a range of third-party-payment arrangements plus direct payments by households or other direct funders, for example, government-provided health care.

**Table A4:** OECD SHA sources of funding<sup>21</sup>

<b>HF.1</b>	<b>General government</b>
HF.1.1	General government excluding social security funds
HF.1.1.1	Central government
HF.1.1.2	State/provincial government
HF.1.1.3	Local/municipal government
HF.1.2	Social security funds
<b>HF.2</b>	<b>Private sector</b>
HF.2.1	Private social insurance
HF.2.2	Private insurance (other than social insurance)
HF.2.3	Private households
HF.2.4	Non-profit institutions serving households (other than social insurance)
HF.2.5	Corporations (other than health insurance)
<b>HF.3</b>	<b>Rest of the world</b>

<sup>21</sup> Directly comparable with New Zealand historical funder groups

## Appendix 2: Nominal and Real Health Expenditure (with 'non-health' items included for prior years) 1997/98–2007/08

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
<b>Nominal expenditure (\$ million)</b>											
Public	6,614	7,037	7,442	8,086	8,834	9,302	9,724	10,775	11,934	12,840	14,195
Private	1,843	1,873	1,968	2,300	2,361	2,418	2,920	3,197	3,458	3,252	3,510
Total	8,458	8,910	9,410	10,386	11,194	11,719	12,644	13,972	15,392	16,092	17,705
Percentage change	7.46%	5.35%	5.60%	10.37%	7.79%	4.69%	7.89%	10.50%	10.16%	4.55%	10.03%
<b>Real expenditure (2008 \$ million)</b>											
Public	8,405	8,974	9,300	9,793	10,414	10,809	11,035	11,884	12,662	13,356	14,195
Private	2,342	2,389	2,459	2,786	2,783	2,810	3,313	3,527	3,669	3,383	3,510
Total	10,747	11,363	11,760	12,579	13,197	13,619	14,348	15,410	16,331	16,739	17,705
Percentage change	5.70%	5.73%	3.49%	6.97%	4.91%	3.20%	5.35%	7.40%	5.97%	2.50%	5.77%
<b>Real per capita expenditure (2008 \$ million) – resident population</b>											
Public	2,211	2,344	2,416	2,529	2,663	2,719	2,716	2,899	3,059	3,159	3,316
Percentage change	4.12%	6.05%	3.05%	4.69%	5.28%	2.10%	(0.09)%	6.74%	5.50%	3.27%	4.98%
Private	616	624	639	719	712	707	816	860	886	800	820
Percentage change	6.17%	1.28%	2.38%	12.60%	(1.10)%	(0.68)%	15.42%	5.48%	3.01%	(9.73)%	2.48%
Total	2,827	2,968	3,055	3,249	3,374	3,425	3,532	3,760	3,945	3,959	4,136
Percentage change	4.56%	5.01%	2.91%	6.34%	3.87%	1.51%	3.11%	6.45%	4.93%	0.35%	4.47%

Source: Ministry of Health

Notes:

- 1 Totals may be affected by rounding.
- 2 GST inclusive.
- 3 CPI for June 2008.
- 4 Nominal dollars are actual dollars spent. Real dollars have been adjusted to 2008 dollar value by CPI.
- 5 2003/04 to 2005/06 public expenditure data restated for DHB and ACC revised coding to SHA.

## Appendix 3: Health Expenditure Trends in New Zealand (with 'non-health' items included for prior years)

### 3.1 Nominal dollars, 1997/98–2007/08

Sources of funds	1997/98		1998/99		1999/00		2000/01		2001/02		2002/03		2003/04		2004/05		2005/06		2006/07		2007/08	
	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total	(\$000)	% of total
Ministry of Health	5,707,629	67.5	6,205,456	69.6	6,543,778	69.5	6,952,914	66.9	7,418,078	66.3	7,773,876	66.3	8,507,429	67.3	9,361,675	67.0	10,302,689	66.9	10,958,724	68.1	12,136,887	68.5
Deficit financing	198,032	2.3	39,600	0.4	6,413	0.1	76,837	0.7	244,125	2.2	216,337	1.8	–	0.0	–	0.0	–	0.0	–	0.0	–	0.0
ACC – social security	419,741	5.0	487,044	5.5	581,078	6.2	709,561	6.8	801,330	7.2	924,253	7.9	945,609	7.5	1,129,591	8.1	1,297,032	8.4	1,464,925	9.1	1,586,767	9.0
Other government agencies	242,050	2.9	245,948	2.8	250,230	2.7	282,226	2.7	302,011	2.7	313,386	2.7	208,084	1.6	221,730	1.6	251,668	1.6	309,954	1.9	379,048	2.1
Local authorities	46,900	0.6	59,292	0.7	60,374	0.6	64,243	0.6	68,381	0.6	73,792	0.6	63,242	0.5	61,882	0.4	82,371	0.5	106,072	0.7	92,672	0.5
<b>Public total</b>	<b>6,614,352</b>	<b>78.2</b>	<b>7,037,340</b>	<b>79.0</b>	<b>7,441,873</b>	<b>79.1</b>	<b>8,085,781</b>	<b>77.9</b>	<b>8,833,925</b>	<b>78.9</b>	<b>9,301,644</b>	<b>79.4</b>	<b>9,724,361</b>	<b>76.9</b>	<b>10,774,878</b>	<b>77.1</b>	<b>11,933,760</b>	<b>77.5</b>	<b>12,839,675</b>	<b>79.8</b>	<b>14,195,374</b>	<b>80.2</b>
Out-of-pocket	1,305,404	15.4	1,316,021	14.8	1,375,165	14.6	1,656,853	16.0	1,714,843	15.3	1,740,565	14.9	2,155,452	17.0	2,354,702	16.9	2,552,678	16.6	2,295,671	14.3	2,485,150	14.0
Health insurance	510,871	6.0	527,114	5.9	560,857	6.0	610,198	5.9	612,315	5.5	640,632	5.5	671,638	5.3	695,686	5.0	762,074	5.0	793,949	4.9	863,063	4.9
Not-for-profit organisations	27,055	0.3	29,954	0.3	31,952	0.3	32,943	0.3	33,355	0.3	36,591	0.3	92,910	0.7	147,111	1.1	143,169	0.9	162,506	1.0	161,653	0.9
<b>Private total</b>	<b>1,843,330</b>	<b>21.8</b>	<b>1,873,089</b>	<b>21.0</b>	<b>1,967,974</b>	<b>20.9</b>	<b>2,299,994</b>	<b>22.1</b>	<b>2,360,513</b>	<b>21.1</b>	<b>2,417,788</b>	<b>20.6</b>	<b>2,920,000</b>	<b>23.1</b>	<b>3,197,499</b>	<b>22.9</b>	<b>3,457,921</b>	<b>22.5</b>	<b>3,252,126</b>	<b>20.2</b>	<b>3,509,865</b>	<b>19.8</b>
<b>Total from all sources</b>	<b>8,457,682</b>	<b>100.0</b>	<b>8,910,429</b>	<b>100.0</b>	<b>9,409,847</b>	<b>100.0</b>	<b>10,385,775</b>	<b>100.0</b>	<b>11,194,438</b>	<b>100.0</b>	<b>11,719,432</b>	<b>100.0</b>	<b>12,644,361</b>	<b>100.0</b>	<b>13,972,377</b>	<b>100.0</b>	<b>15,391,681</b>	<b>100.0</b>	<b>16,091,801</b>	<b>100.0</b>	<b>17,705,239</b>	<b>100.0</b>
<b>% of GDP</b>	<b>8.2%</b>		<b>8.1%</b>		<b>8.1%</b>		<b>8.3%</b>		<b>8.6%</b>		<b>8.4%</b>		<b>8.4%</b>		<b>8.9%</b>		<b>9.3%</b>		<b>9.1%</b>		<b>9.8%</b>	

Source: Ministry of Health

Notes:

- 1 Totals may be affected by rounding
- 2 GST inclusive
- 3 Nominal dollars are actual dollars spent
- 4 2003/04 to 2005/06 public expenditure data restated for DHB and ACC revised coding to SHA.

### 3.2 Real dollars, 1997/98–2007/08

Sources of funds	1997/98		1998/99		1999/00		2000/01		2001/02		2002/03		2003/04		2004/05		2005/06		2006/07		2007/08	
	(\$000)	% of total																				
Ministry of Health	7,252,448	67.5	7,913,448	69.6	8,177,796	69.5	8,421,281	66.9	8,745,090	66.3	9,034,044	66.3	9,653,881	67.3	10,325,091	67.0	10,931,153	66.9	11,399,222	68.1	12,136,887	68.5
Deficit financing	251,631	2.3	50,500	0.4	8,014	0.1	93,064	0.7	287,796	2.2	251,406	1.8	–	–	–	–	–	–	–	–	–	–
ACC – social security	533,348	5.0	621,098	5.5	726,176	6.2	859,411	6.8	944,679	7.2	1,074,077	7.9	1,073,039	7.5	1,245,838	8.1	1,376,151	8.4	1,523,809	9.1	1,586,767	9.0
Other government agencies	307,563	2.9	313,643	2.8	312,714	2.7	341,829	2.7	356,037	2.7	364,187	2.7	236,125	1.6	244,548	1.6	267,020	1.6	322,413	1.9	379,048	2.1
Local authorities	59,594	0.6	75,612	0.7	75,450	0.6	77,810	0.6	80,614	0.6	85,754	0.6	71,764	0.5	68,250	0.4	87,396	0.5	110,336	0.7	92,672	0.5
<b>Public total</b>	<b>8,404,584</b>	<b>78.2</b>	<b>8,974,300</b>	<b>79.0</b>	<b>9,300,150</b>	<b>79.1</b>	<b>9,793,395</b>	<b>77.9</b>	<b>10,414,216</b>	<b>78.9</b>	<b>10,809,468</b>	<b>79.4</b>	<b>11,034,810</b>	<b>76.9</b>	<b>11,883,727</b>	<b>77.1</b>	<b>12,661,720</b>	<b>77.5</b>	<b>13,355,780</b>	<b>79.8</b>	<b>14,195,374</b>	<b>80.2</b>
Out-of-pocket	1,658,723	15.4	1,678,243	14.8	1,718,551	14.6	2,006,759	16.0	2,021,609	15.3	2,022,716	14.9	2,445,919	17.0	2,597,026	16.9	2,708,391	16.6	2,387,948	14.3	2,485,150	14.0
Health insurance	649,143	6.0	672,197	5.9	700,906	6.0	739,064	5.9	721,851	5.5	744,480	5.5	762,148	5.3	767,279	5.0	808,561	5.0	825,863	4.9	863,062	4.9
Not-for-profit organisations	34,378	0.3	38,199	0.3	39,391	0.3	39,900	0.3	39,322	0.3	42,523	0.3	105,430	0.7	162,250	1.1	151,902	0.9	169,038	1.0	161,653	0.9
<b>Private total</b>	<b>2,342,243</b>	<b>21.8</b>	<b>2,388,639</b>	<b>21.0</b>	<b>2,459,388</b>	<b>20.9</b>	<b>2,785,723</b>	<b>22.1</b>	<b>2,782,783</b>	<b>21.1</b>	<b>2,809,719</b>	<b>20.6</b>	<b>3,313,497</b>	<b>23.1</b>	<b>3,526,556</b>	<b>22.9</b>	<b>3,668,854</b>	<b>22.5</b>	<b>3,382,849</b>	<b>20.2</b>	<b>3,509,865</b>	<b>19.8</b>
<b>Total from all sources</b>	<b>10,746,827</b>	<b>100.0</b>	<b>11,362,939</b>	<b>100.0</b>	<b>11,759,538</b>	<b>100.0</b>	<b>12,579,118</b>	<b>100.0</b>	<b>13,196,999</b>	<b>100.0</b>	<b>13,619,187</b>	<b>100.0</b>	<b>14,348,307</b>	<b>100.0</b>	<b>15,410,283</b>	<b>100.0</b>	<b>16,330,574</b>	<b>100.0</b>	<b>16,738,628</b>	<b>100.0</b>	<b>17,705,239</b>	<b>100.0</b>

Source: Ministry of Health

Notes:

- 1 Totals may be affected by rounding
- 2 GST inclusive
- 3 CPI for June 2008
- 4 Real dollars have been adjusted to 2008 dollar value by CPI
- 5 2003/04 to 2005/06 Public expenditure data restated for DHB and ACC revised coding to SHA.

## Appendix 4: Private Health Insurance Trends, 1997/98–2007/08 (\$000)

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
<b>Institutional care</b>											
Public	389	624	643	227	415	714	673	622	600	750	815
Private	300,091	307,093	339,616	371,350	385,552	418,270	454,240	485,765	548,839	546,363	593,924
<b>Subtotal – institutional care</b>	<b>300,480</b>	<b>307,717</b>	<b>340,259</b>	<b>371,577</b>	<b>385,967</b>	<b>418,984</b>	<b>454,913</b>	<b>486,387</b>	<b>549,438</b>	<b>547,112</b>	<b>594,739</b>
<b>Community care</b>											
General practitioners and maternity	73,732	67,767	69,025	70,880	66,074	63,349	54,732	44,883	36,230	57,424	62,423
Specialist services and referral services	88,233	87,099	88,971	108,322	106,651	109,367	116,371	122,814	137,028	138,966	151,063
Dental services	3,809	22,311	21,164	18,277	16,541	16,389	14,472	12,259	10,436	15,425	16,767
Medicaments	44,617	42,211	41,424	41,142	37,082	32,543	31,151	29,343	28,941	35,022	38,071
<b>Subtotal – community care</b>	<b>210,390</b>	<b>219,387</b>	<b>220,584</b>	<b>238,621</b>	<b>226,348</b>	<b>221,648</b>	<b>216,725</b>	<b>209,299</b>	<b>212,636</b>	<b>246,837</b>	<b>268,324</b>
<b>Total</b>	<b>510,871</b>	<b>527,104</b>	<b>560,843</b>	<b>610,198</b>	<b>612,315</b>	<b>640,632</b>	<b>671,638</b>	<b>695,686</b>	<b>762,074</b>	<b>793,949</b>	<b>863,063</b>

Source: Ministry of Health and HFANZ

Note: Totals may be affected by rounding.

2003/04–2005/06 data has been restated for an estimate of health administration.

# Appendix 5: Current Expenditure on Health by Function of Care and Provider Industry (SHA Standard Table 2)

## 5.1 2005/06

Health care by function	Function and industry codes	Hospitals	Nursing and residential care facilities	Providers of ambulatory health care	Offices of physicians	Offices of dentists	Offices of other health practitioners	Outpatient care centres	Medical and diagnostic laboratories	Providers of home health-care services	All other providers of ambulatory health care	Retail sale and other providers of medical goods	Dispensing chemists	All other sales of medical goods	Provision and administration of public health programmes	General health administration and insurance	Government administration of health	Social security funds	Other (private) insurance	All other health administration	All other industries	Totals
		HP.1	HP.2	HP.3	HP.3.1	HP.3.2	HP.3.3	HP.3.4	HP.3.5	HP.3.6	HP.3.9	HP.4	HP.4.1	HP.4.2-4.9	HP.5	HP.6	HP.6.1	HP.6.2	HP.6.4	HP.6.9	HP.7	
<b>Inpatient care</b>																						
Curative and rehabilitative care	HC.1.1; 2.1	3,647,172	135,388	123,146	123,146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,905,706
Long-term nursing care	HC.3.1	82,417	1,027,554	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,113,971
<b>Services of day care</b>																						
Curative and rehabilitative care	HC.1.2; 2.2	304,877	43,256	37,078	30,786	-	-	6,292	-	-	-	-	-	-	-	-	-	-	-	-	-	385,211
Long-term nursing care	HC.3.2	34,028	55,792	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89,820
<b>Outpatient care</b>																						
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>1,330,614</b>	<b>58,020</b>	<b>2,267,500</b>	<b>630,552</b>	<b>627,846</b>	<b>518,654</b>	<b>452,809</b>	<b>4,042</b>	<b>-</b>	<b>33,597</b>	<b>584</b>	<b>-</b>	<b>584</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>33,133</b>	<b>3,689,851</b>
Basic medical and diagnostic services	HC.1.3.1	1,052,932	16,691	1,099,266	473,041	-	172,300	417,941	3,275	-	32,709	-	-	-	-	-	-	-	-	-	-	2,168,889
Outpatient dental care	HC.1.3.2	15,875	-	626,958	-	626,958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	642,833
All other specialised health care	HC.1.3.3	13,063	314	244,675	104,521	157	139,652	188	-	-	157	-	-	-	-	-	-	-	-	-	-	258,052
All other outpatient care	HC.1.3.9	30,168	12,893	235,172	14,836	731	195,874	23,000	-	-	731	-	-	-	-	-	-	-	-	-	33,133	311,366
Outpatient rehabilitative care	HC.2.3	218,576	28,122	61,429	38,154	-	10,828	11,680	767	-	-	584	-	584	-	-	-	-	-	-	-	308,711
<b>Home care</b>																						
Curative and rehabilitative care	HC.1.4; 2.4	142,011	29	331,889	21,469	-	1,224	138,213	-	170,983	-	-	-	-	-	-	-	-	-	-	33,269	507,198
Long-term nursing care	HC.3.3	57,672	39,809	808,799	28,122	-	-	10,679	-	728,305	41,693	-	-	-	-	-	-	-	-	-	40,551	946,831

Health care by function	Function and industry codes	Hospitals	Nursing and residential care facilities	Providers of ambulatory health care	Offices of physicians	Offices of dentists	Offices of other health practitioners	Outpatient care centres	Medical and diagnostic laboratories	Providers of home health-care services	All other providers of ambulatory health care	Retail sale and other providers of medical goods	Dispensing chemists	All other sales of medical goods	Provision and administration of public health programmes	General health administration and insurance	Government administration of health	Social security funds	Other (private) insurance	All other health administration	All other industries	Totals
		HP.1	HP.2	HP.3	HP.3.1	HP.3.2	HP.3.3	HP.3.4	HP.3.5	HP.3.6	HP.3.9	HP.4	HP.4.1	HP.4.2-4.9	HP.5	HP.6	HP.6.1	HP.6.2	HP.6.4	HP.6.9	HP.7	
Ancillary services to health care	HC.4	22,344	-	706,366	-	-	-	-	463,479	106,880	136,007	-	-	-	-	18,676	-	-	-	18,676	23,750	771,136
Medical goods dispensed to outpatients	HC.5	1,100	-	-	-	-	-	-	-	-	-	1,897,166	1,435,238	461,928	-	-	-	-	-	-	-	1,898,266
Pharmaceutical and other medical non-durables	HC.5.1	1,100	-	-	-	-	-	-	-	-	-	1,690,048	1,435,238	254,810	-	-	-	-	-	-	-	1,691,148
Therapeutic appliances and other medical durables	HC.5.2	-	-	-	-	-	-	-	-	-	-	207,118	-	207,118	-	-	-	-	-	-	-	207,118
<b>Total expenditure on personal health care</b>		<b>5,626,235</b>	<b>1,359,848</b>	<b>4,274,778</b>	<b>834,075</b>	<b>627,846</b>	<b>519,878</b>	<b>607,993</b>	<b>467,521</b>	<b>1,006,168</b>	<b>211,297</b>	<b>1,897,750</b>	<b>1,435,238</b>	<b>462,512</b>	<b>-</b>	<b>18,676</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>18,676</b>	<b>130,703</b>	<b>13,307,990</b>
Prevention and public health services	HC.6	7,565	1	268,294	81,988	-	31,428	154,878	-	-	-	-	-	-	517,976	6,881	6,881	-	-	-	144,673	945,390
Health administration and health insurance	HC.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,138,298	418,720	185,000	534,578	-	-	1,138,298
<b>Total current expenditure on health care</b>		<b>5,633,800</b>	<b>1,359,849</b>	<b>4,543,072</b>	<b>916,063</b>	<b>627,846</b>	<b>551,306</b>	<b>762,871</b>	<b>467,521</b>	<b>1,006,168</b>	<b>211,297</b>	<b>1,897,750</b>	<b>1,435,238</b>	<b>462,512</b>	<b>517,976</b>	<b>1,163,855</b>	<b>425,601</b>	<b>185,000</b>	<b>534,578</b>	<b>18,676</b>	<b>275,376</b>	<b>15,391,678</b>

Note: Public expenditure data restated for DHB and ACC revised coding to SHA.

Insurance data restated for an estimate of Health administration.

## 5.2 2006/07

Health care by function	Function and industry codes	Hospitals	Nursing and residential care facilities	Providers of ambulatory health care	Offices of physicians	Offices of dentists	Offices of other health practitioners	Outpatient care centres	Medical and diagnostic laboratories	Providers of home health care services	All other providers of ambulatory health care	Retail sale and other providers of medical goods	Dispensing chemists	All other sales of medical goods	Provision and administration of public health programmes	General health administration and insurance	Government administration of health	Social security funds	Other (private) insurance	All other health administration	All other industries	Totals
		HP.1	HP.2	HP.3	HP.3.1	HP.3.2	HP.3.3	HP.3.4	HP.3.5	HP.3.6	HP.3.9	HP.4	HP.4.1	HP.4.2-4.9	HP.5	HP.6	HP.6.1	HP.6.2	HP.6.4	HP.6.9	HP.7	
<b>Inpatient care</b>																						
Curative and rehabilitative care	HC.1.1; 2.1	3,831,842	126,804	124,254	124,254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,082,900
Long-term nursing care	HC.3.1	91,906	1,065,388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,157,294
<b>Services of day care</b>																						
Curative and rehabilitative care	HC.1.2; 2.2	312,555	46,648	37,748	31,064	-	-	6,684	-	-	-	-	-	-	-	-	-	-	-	-	-	396,951
Long-term nursing care	HC.3.2	36,982	63,829	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100,811
<b>Outpatient care</b>																						
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>1,542,165</b>	<b>70,374</b>	<b>2,354,844</b>	<b>683,898</b>	<b>535,973</b>	<b>481,149</b>	<b>576,709</b>	<b>896</b>	<b>18</b>	<b>76,201</b>	<b>683</b>		<b>683</b>								<b>3,968,066</b>
Basic medical and diagnostic services	HC.1.3.1	1,236,036	21,768	1,304,946	545,071	-	220,807	499,578	-	-	39,490	-	-	-	-	-	-	-	-	-	-	2,562,750
Outpatient dental care	HC.1.3.2	13,741	-	534,952	-	534,952	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	548,693
All other specialised health care	HC.1.3.3	13,668	334	237,153	78,325	167	130,192	334	-	-	28,135	-	-	-	-	-	-	-	-	-	-	251,155
All other outpatient care	HC.1.3.9	33,334	14,106	207,874	16,481	854	120,445	63,215	-	18	6,681	-	-	-	-	-	-	-	-	-	-	255,314
Outpatient rehabilitative care	HC.2.3	245,386	34,166	69,919	44,021	-	9,705	13,582	896	-	1,715	683	-	683	-	-	-	-	-	-	-	350,154
<b>Home care</b>																						
Curative and rehabilitative care	HC.1.4; 2.4	103,839	5,187	398,351	13,288	-	14,068	180,462	-	190,533	-	-	-	-	-	-	-	-	-	-	44,603	551,980
Long-term nursing care	HC.3.3	69,845	90,276	887,579	47,454	-	14,067	15,704	-	760,695	49,659	-	-	-	-	-	-	-	-	-	-	1,047,700
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>20,664</b>	<b>-</b>	<b>715,273</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>480,902</b>	<b>109,842</b>	<b>124,529</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,646</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,646</b>	<b>21,318</b>	<b>761,901</b>

Health care by function	Function and industry codes	Hospitals	Nursing and residential care facilities	Providers of ambulatory health care	Offices of physicians	Offices of dentists	Offices of other health practitioners	Outpatient care centres	Medical and diagnostic laboratories	Providers of home health care services	All other providers of ambulatory health care	Retail sale and other providers of medical goods	Dispensing chemists	All other sales of medical goods	Provision and administration of public health programmes	General health administration and insurance	Government administration of health	Social security funds	Other (private) insurance	All other health administration	All other industries	Totals
		HP.1	HP.2	HP.3	HP.3.1	HP.3.2	HP.3.3	HP.3.4	HP.3.5	HP.3.6	HP.3.9	HP.4	HP.4.1	HP.4.2-4.9	HP.5	HP.6	HP.6.1	HP.6.2	HP.6.4	HP.6.9	HP.7	
Medical goods dispensed to outpatients	HC.5	11,023	-	-	-	-	-	-	-	-	-	1,847,009	1,396,274	450,735	-	-	-	-	-	-	-	1,858,032
Pharmaceutical and other medical non-durables	HC.5.1	11,023	-	-	-	-	-	-	-	-	-	1,626,868	1,394,274	230,594	-	-	-	-	-	-	-	1,637,891
Therapeutic appliances and other medical durables	HC.5.2	-	-	-	-	-	-	-	-	-	-	220,141	-	220,141	-	-	-	-	-	-	-	220,141
<b>Total expenditure on personal health care</b>		<b>6,020,821</b>	<b>1,486,506</b>	<b>4,518,049</b>	<b>899,958</b>	<b>535,973</b>	<b>509,284</b>	<b>779,559</b>	<b>481,798</b>	<b>1,061,088</b>	<b>250,389</b>	<b>1,847,692</b>	<b>1,396,274</b>	<b>451,418</b>	<b>-</b>	<b>4,646</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,646</b>	<b>65,921</b>	<b>13,925,635</b>
Prevention and public health services	HC.6	7,675	38	210,037	47,741	-	31,686	126,119	-	-	4,491	-	-	-	608,088	3,491	3,491	-	-	-	167,574	996,903
Health administration and health insurance	HC.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,163,180	393,836	215,741	553,603	-	6,087	1,169,267
<b>Total current expenditure on health care</b>		<b>6,028,496</b>	<b>1,468,544</b>	<b>4,728,086</b>	<b>947,699</b>	<b>535,973</b>	<b>540,970</b>	<b>905,678</b>	<b>481,798</b>	<b>1,061,088</b>	<b>254,880</b>	<b>1,847,692</b>	<b>1,396,274</b>	<b>451,418</b>	<b>608,088</b>	<b>1,171,317</b>	<b>397,327</b>	<b>215,741</b>	<b>553,603</b>	<b>4,646</b>	<b>239,582</b>	<b>16,091,805</b>

Note: Public expenditure data restated for DHB and ACC revised coding to SHA.

Insurance data restated for an estimate of Health administration.

### 5.3 2007/08

Health care by function	Function and industry codes	Hospitals	Nursing and residential care facilities	Providers of ambulatory health care	Offices of physicians	Offices of dentists	Offices of other health practitioners	Outpatient care centres	Medical and diagnostic laboratories	Providers of home health-care services	All other providers of ambulatory health care	Retail sale and other providers of medical goods	Dispensing chemists	All other sales of medical goods	Provision and administration of public health programmes	General health administration and insurance	Government administration of health	Social security funds	Other (private) insurance	All other health administration	All other industries	Totals
		HP.1	HP.2	HP.3	HP.3.1	HP.3.2	HP.3.3	HP.3.4	HP.3.5	HP.3.6	HP.3.9	HP.4	HP.4.1	HP.4.2-4.9	HP.5	HP.6	HP.6.1	HP.6.2	HP.6.4	HP.6.9	HP.7	
<b>Inpatient care</b>																						
Curative and rehabilitative care	HC.1.1; 2.1	4,116,902	256,491	127,394	127,394	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,500,787
Long-term nursing care	HC.3.1	99,580	1,148,539	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,248,119
<b>Services of day care</b>																						
Curative and rehabilitative care	HC.1.2; 2.2	381,121	47,913	37,174	31,848	-	-	5,326	-	-	-	-	-	-	-	-	-	-	-	-	-	466,208
Long-term nursing care	HC.3.2	41,451	63,551	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105,002
<b>Outpatient care</b>																						
<b>Outpatient curative and rehabilitative care</b>	<b>HC.1.3; 2.3</b>	<b>1,572,726</b>	<b>74,001</b>	<b>2,703,355</b>	<b>859,393</b>	<b>569,635</b>	<b>513,573</b>	<b>691,730</b>	<b>1,004</b>	<b>19</b>	<b>68,001</b>	<b>1,940</b>		<b>1,940</b>								<b>4,352,022</b>
Basic medical and diagnostic services	HC.1.3.1	1,229,664	21,943	1,461,708	709,781	-	140,742	582,990	-	-	28,195	-	-	-	-	-	-	-	-	-	-	2,713,315
Outpatient dental care	HC.1.3.2	14,899	-	568,460	-	568,480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	583,359
All other specialised health care	HC.1.3.3	22,327	370	350,728	80,360	185	239,491	185	-	-	30,507	185	-	185	-	-	-	-	-	-	-	373,610
All other outpatient care	HC.1.3.9	37,663	15,862	255,888	23,708	990	123,606	100,126	-	19	7,439	990	-	990	-	-	-	-	-	-	-	310,403
Outpatient rehabilitative care	HC.2.3	268,173	35,826	66,571	45,544	-	9,734	8,429	1,004	-	1,860	765	-	765	-	-	-	-	-	-	-	371,335
<b>Home care</b>																						
Curative and rehabilitative care	HC.1.4; 2.4	166,542	4,748	445,122	14,410	-	15,254	189,342	-	226,116	-	-	-	-	-	-	-	-	-	-	54,948	671,360
Long-term nursing care	HC.3.3	73,372	93,823	1,030,815	50,235	-	15,253	13,311	-	892,305	59,711	-	-	-	-	-	-	-	-	-	-	1,198,010
<b>Ancillary services to health care</b>	<b>HC.4</b>	<b>23,150</b>	<b>-</b>	<b>782,770</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>503,070</b>	<b>129,831</b>	<b>149,869</b>	<b>1,762</b>	<b>-</b>	<b>1,762</b>	<b>-</b>	<b>9,999</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9,999</b>	<b>32,483</b>	<b>850,164</b>

Health care by function	Function and industry codes	Hospitals	Nursing and residential care facilities	Providers of ambulatory health care	Offices of physicians	Offices of dentists	Offices of other health practitioners	Outpatient care centres	Medical and diagnostic laboratories	Providers of home health-care services	All other providers of ambulatory health care	Retail sale and other providers of medical goods	Dispensing chemists	All other sales of medical goods	Provision and administration of public health programmes	General health administration and insurance	Government administration of health	Social security funds	Other (private) insurance	All other health administration	All other industries	Totals
		HP.1	HP.2	HP.3	HP.3.1	HP.3.2	HP.3.3	HP.3.4	HP.3.5	HP.3.6	HP.3.9	HP.4	HP.4.1	HP.4.2-4.9	HP.5	HP.6	HP.6.1	HP.6.2	HP.6.4	HP.6.9	HP.7	
Medical goods dispensed to outpatients	HC.5	-	-	-	-	-	-	-	-	-	-	1,921,782	1,455,933	465,849	-	-	-	-	-	-	-	1,921,782
Pharmaceutical and other medical non-durables	HC.5.1	-	-	-	-	-	-	-	-	-	-	1,692,564	1,455,933	236,631	-	-	-	-	-	-	-	1,692,564
Therapeutic appliances and other medical durables	HC.5.2	-	-	-	-	-	-	-	-	-	-	229,218	-	229,218	-	-	-	-	-	-	-	229,218
<b>Total expenditure on personal health care</b>		<b>6,474,844</b>	<b>1,689,066</b>	<b>5,126,630</b>	<b>1,083,280</b>	<b>569,635</b>	<b>544,080</b>	<b>899,709</b>	<b>504,074</b>	<b>1,248,271</b>	<b>277,581</b>	<b>1,925,484</b>	<b>1,455,933</b>	<b>469,551</b>	-	<b>9,999</b>	-	-	-	<b>9,999</b>	<b>87,431</b>	<b>15,313,454</b>
Prevention and public health services	HC.6	9,974	60	261,403	51,248	-	50,321	126,555	-	-	33,279	-	-	-	594,181	85,604	40,806	44,798	-	-	132,965	1,084,187
Health administration and health insurance	HC.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,301,514	461,853	241,014	598,647	-	6,087	1,307,601
<b>Total current expenditure on health care</b>		<b>6,484,818</b>	<b>1,689,126</b>	<b>5,388,033</b>	<b>1,134,528</b>	<b>569,635</b>	<b>594,401</b>	<b>1,026,264</b>	<b>504,074</b>	<b>1,248,271</b>	<b>310,860</b>	<b>1,925,484</b>	<b>1,455,933</b>	<b>469,551</b>	<b>594,181</b>	<b>1,397,117</b>	<b>502,659</b>	<b>285,812</b>	<b>598,647</b>	<b>9,999</b>	<b>226,483</b>	<b>17,705,242</b>

## Appendix 6: Current Expenditure on Health and Health-related by Function of Care and Funder (SHA Standard Table 5)

### 6.1 2005/06

Function	ICHA-HC code	Total public	Ministry of Health	Other central government	Regional and local government	Social security funds	Total private	Private insurance	Private household out-of-pocket payments	Non-profit institutions (other than social insurance)	Totals
	Function and funder code	HF.1	HF.1.1.1	HF.1.1.2	HF.1.1.3	HF.1.2	HF.2	HF.2.1 + HF.2.2	HF.2.3	HF.2.4	
<b>Health care services and goods by function</b>											
Services of curative and rehabilitative care	HC.1, HC.2	6,562,621	5,708,700	51,853	–	802,068	1,925,347	611,529	1,280,685	33,133	8,487,968
Services of long-term nursing care	HC.3	1,989,785	1,974,691	15,094	–	–	160,837	22,783	94,379	43,675	2,150,622
Ancillary services to health care	HC.4	673,707	512,402	1,281	–	160,024	97,429	51,917	36,261	9,251	771,136
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>1,215,646</b>	<b>1,100,001</b>	<b>10,205</b>	<b>–</b>	<b>105,440</b>	<b>682,620</b>	<b>37,771</b>	<b>644,849</b>	<b>–</b>	<b>1,898,266</b>
Pharmaceuticals and other medical non-durables	HC.5.1	1,052,767	1,033,562	1,864	–	17,341	638,381	27,495	610,886	–	1,691,148
Therapeutic appliances and other medical durables	HC.5.2	162,879	66,439	8,341	–	88,099	44,239	10,276	33,963	–	207,118
<b>Personal medical services and goods</b>	<b>HC.1–HC.5</b>	<b>10,441,759</b>	<b>9,295,794</b>	<b>78,433</b>	<b>–</b>	<b>1,067,532</b>	<b>2,866,233</b>	<b>724,000</b>	<b>2,056,174</b>	<b>86,059</b>	<b>13,307,992</b>
Prevention and public health services	HC.6	888,279	594,470	166,938	82,371	44,500	57,111	–	–	57,111	945,390
Health administration and health insurance	HC.7	603,721	412,424	6,297	–	185,000	534,578	38,073	496,505	–	1,138,299
<b>Total current expenditure on health</b>		<b>11,933,759</b>	<b>10,302,688</b>	<b>251,668</b>	<b>82,371</b>	<b>1,297,032</b>	<b>3,457,922</b>	<b>762,073</b>	<b>2,552,679</b>	<b>143,170</b>	<b>15,391,681</b>
Gross capital formation	HC.R.1	–	–	–	–	–	–	–	–	–	–
<b>Total expenditure on health</b>		<b>11,933,759</b>	<b>10,302,688</b>	<b>251,668</b>	<b>82,371</b>	<b>1,297,032</b>	<b>3,457,922</b>	<b>762,073</b>	<b>2,552,679</b>	<b>143,170</b>	<b>15,391,681</b>
<b>Memorandum items: further health related functions</b>											
Education and training of health personnel	HC.R.2	342,934	126,771	216,163	–	–	234,177	–	234,177	–	577,111
Research and development in health	HC.R.3	177,941	–	177,941	–	–	29,825	–	–	29,825	207,766
Food, hygiene and drinking water control	HC.R.4	249,417	–	86,152	163,265	–	–	–	–	–	249,417
Environmental health	HC.R.5	1,294,647	–	17,162	1,277,485	–	–	–	–	–	1,294,647
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	70,171	–	–	–	70,171	–	–	–	–	70,171
Administration and provision of health-related cash benefits	HC.R.7	–	–	–	–	–	–	–	–	–	–
<b>Total health-related expenditure</b>		<b>2,135,110</b>	<b>126,771</b>	<b>497,418</b>	<b>1,440,750</b>	<b>70,171</b>	<b>264,002</b>	<b>–</b>	<b>234,177</b>	<b>29,825</b>	<b>2,399,112</b>
<b>Total health and health-related expenditure</b>		<b>14,068,869</b>	<b>10,429,459</b>	<b>749,086</b>	<b>1,523,121</b>	<b>1,367,203</b>	<b>3,721,924</b>	<b>762,073</b>	<b>2,786,856</b>	<b>172,995</b>	<b>17,790,793</b>

## 6.2 2006/07

Function	ICHA-HC code	Total public	Ministry of Health	Other central government	Regional and local government	Social security funds	Total private	Private insurance	Private household out-of-pocket payments	Non-profit institutions (other than social insurance)	Totals
	Function and funder code	HF.1	HF.1.1.1	HF.1.1.2	HF.1.1.3	HF.1.2	HF.2	HF.2.1 + HF.2.2	HF.2.3	HF.2.4	
<b>Health care services and goods by function</b>											
Services of curative and rehabilitative care	HC.1, HC.2	7,273,376	6,308,800	57,950	–	906,626	1,726,519	631,994	1,063,070	31,455	8,999,895
Services of long-term nursing care	HC.3	2,123,015	2,106,935	16,080	–	–	182,790	29,011	102,314	51,465	2,305,805
Ancillary services to health care	HC.4	672,211	495,080	2,016	–	175,115	89,690	52,293	25,941	11,456	761,901
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>1,222,691</b>	<b>1,088,288</b>	<b>11,968</b>	<b>–</b>	<b>122,435</b>	<b>635,341</b>	<b>41,889</b>	<b>589,505</b>	<b>3,947</b>	<b>1,858,032</b>
Pharmaceuticals and other medical non-durables	HC.5.1	1,051,529	1,021,988	2,079	–	27,462	586,361	33,313	551,936	1,112	1,637,890
Therapeutic appliances and other medical durables	HC.5.2	171,162	66,300	9,889	–	94,973	48,980	8,576	37,569	2,835	220,142
<b>Personal medical services and goods</b>	<b>HC.1–HC.5</b>	<b>11,291,293</b>	<b>9,999,103</b>	<b>88,014</b>	<b>–</b>	<b>1,204,176</b>	<b>2,634,340</b>	<b>755,187</b>	<b>1,780,830</b>	<b>98,323</b>	<b>13,925,633</b>
Prevention and public health services	HC.6	938,804	572,597	215,127	106,072	45,008	58,096	–	–	58,096	996,900
Health administration and health insurance	HC.7	609,577	387,023	6,813	–	215,741	559,690	38,762	514,841	6,087	1,169,267
<b>Total current expenditure on health</b>		<b>12,839,674</b>	<b>10,958,723</b>	<b>309,954</b>	<b>106,072</b>	<b>1,464,925</b>	<b>3,252,126</b>	<b>793,949</b>	<b>2,295,671</b>	<b>162,506</b>	<b>16,091,800</b>
Gross capital formation	HC.R.1	–	–	–	–	–	–	–	–	–	–
<b>Total expenditure on health</b>		<b>12,839,674</b>	<b>10,958,723</b>	<b>309,954</b>	<b>106,072</b>	<b>1,464,925</b>	<b>3,252,126</b>	<b>793,949</b>	<b>2,295,671</b>	<b>162,506</b>	<b>16,091,800</b>
<b>Memorandum items: further health-related functions</b>											
Education and training of health personnel	HC.R.2	372,585	139,994	232,591	–	–	252,326	–	251,974	352	624,911
Research and development in health	HC.R.3	202,918	–	202,918	–	–	31,215	–	–	31,215	234,133
Food, hygiene and drinking water control	HC.R.4	254,526	–	91,214	163,312	–	–	–	–	–	254,526
Environmental health	HC.R.5	1,353,948	–	17,344	1,336,604	–	–	–	–	–	1,353,948
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	96,277	–	11,421	–	84,856	4,299	–	–	4,299	100,576
Administration and provision of health-related cash benefits	HC.R.7	–	–	–	–	–	–	–	–	–	–
<b>Total health-related expenditure</b>		<b>2,280,254</b>	<b>139,994</b>	<b>555,488</b>	<b>1,499,916</b>	<b>84,856</b>	<b>287,840</b>	<b>–</b>	<b>251,974</b>	<b>35,866</b>	<b>2,568,094</b>
<b>Total health and health-related expenditure</b>		<b>15,119,928</b>	<b>11,098,717</b>	<b>865,442</b>	<b>1,605,988</b>	<b>1,549,781</b>	<b>3,539,966</b>	<b>793,949</b>	<b>2,547,645</b>	<b>198,372</b>	<b>18,659,894</b>

## 6.3 2007/08

Function	ICHA-HC code	Total public	Ministry of Health	Other central government	Regional and local government	Social security funds	Total private	Private insurance	Private household out-of-pocket payments	Non-profit institutions (other than social insurance)	Totals
	Function and funder code	HF.1	HF.1.1.1	HF.1.1.2	HF.1.1.3	HF.1.2	HF.2	HF.2.1 + HF.2.2	HF.2.3	HF.2.4	
<b>Health care services and goods by function</b>											
Services of curative and rehabilitative care	HC.1, HC.2	8,080,468	7,050,384	64,347	–	965,737	1,909,907	685,278	1,194,803	29,826	9,990,370
Services of long-term nursing care	HC.3	2,362,663	2,343,987	18,676	–	–	188,468	31,457	104,901	52,110	2,551,131
Ancillary services to health care	HC.4	755,030	527,706	3,443	–	223,881	95,134	56,702	26,597	11,835	850,164
<b>Medical goods dispensed to outpatients</b>	<b>HC.5</b>	<b>1,267,254</b>	<b>1,137,673</b>	<b>18,245</b>	–	<b>111,336</b>	<b>654,526</b>	<b>45,420</b>	<b>604,407</b>	<b>4,699</b>	<b>1,921,780</b>
Pharmaceuticals and other medical non-durables	HC.5.1	1,089,441	1,070,265	2,268	–	16,908	603,121	36,121	565,888	1,112	1,692,562
Therapeutic appliances and other medical durables	HC.5.2	177,813	67,408	15,977	–	94,428	51,405	9,299	38,519	3,587	229,218
<b>Personal medical services and goods</b>	<b>HC.1–HC.5</b>	<b>12,465,415</b>	<b>11,059,750</b>	<b>104,711</b>	–	<b>1,300,954</b>	<b>2,848,035</b>	<b>818,857</b>	<b>1,930,708</b>	<b>98,470</b>	<b>15,313,450</b>
Prevention and public health services	HC.6	1,027,091	621,862	267,759	92,672	44,798	57,096	–	–	57,096	1,084,187
Health administration and health insurance	HC.7	702,868	455,275	6,578	–	215,015	604,734	44,205	554,442	6,087	1,307,602
<b>Total current expenditure on health</b>		<b>14,195,374</b>	<b>12,136,887</b>	<b>379,048</b>	<b>92,672</b>	<b>1,586,767</b>	<b>3,509,865</b>	<b>863,062</b>	<b>2,485,150</b>	<b>161,653</b>	<b>17,705,239</b>
Gross capital formation	HC.R.1	–	–	–	–	–	–	–	–	–	–
<b>Total expenditure on health</b>		<b>14,195,374</b>	<b>12,136,887</b>	<b>379,048</b>	<b>92,672</b>	<b>1,586,767</b>	<b>3,509,865</b>	<b>863,062</b>	<b>2,485,150</b>	<b>161,653</b>	<b>17,705,239</b>
<b>Memorandum items: further health-related functions</b>											
Education and training of health personnel	HC.R.2	386,868	154,277	232,591	–	–	283,823	–	283,471	352	670,691
Research and development in health	HC.R.3	206,485	1	206,484	–	–	31,859	–	–	31,859	238,344
Food, hygiene and drinking water control	HC.R.4	364,004	–	100,602	263,402	–	–	–	–	–	364,004
Environmental health	HC.R.5	1,409,589	–	18,717	1,390,872	–	–	–	–	–	1,409,589
Administration and provision of social services in kind to assist living with disease and impairment	HC.R.6	131,406	–	22,735	–	108,671	4,442	–	–	4,442	135,848
Administration and provision of health-related cash benefits	HC.R.7	–	–	–	–	–	–	–	–	–	–
<b>Total health-related expenditure</b>		<b>2,498,352</b>	<b>154,278</b>	<b>581,129</b>	<b>1,654,274</b>	<b>108,671</b>	<b>320,124</b>	<b>–</b>	<b>283,471</b>	<b>36,653</b>	<b>2,818,476</b>
<b>Total health and health-related expenditure</b>		<b>16,693,726</b>	<b>12,291,165</b>	<b>960,177</b>	<b>1,746,946</b>	<b>1,695,438</b>	<b>3,829,989</b>	<b>863,062</b>	<b>2,768,621</b>	<b>198,306</b>	<b>20,523,715</b>

## Appendix 7: Contributors

The following organisations contributed information used in the compilation of *Health Expenditure Trends in New Zealand 1997–2007*.

### Annual reports for other central government agencies

Organisation	Supplemental information from survey
Accident Compensation Corporation	Yes
Department of Conservation	N/A
Department of Corrections	Yes
New Zealand Defence Force	No
Ministry of Education	No
Ministry of Health	N/A
Department of Labour	N/A
New Zealand Lottery Grants Board	No
Ministry of Agriculture and Forestry	No
Ministry of Research, Science and Technology	No
Ministry of Pacific Island Affairs	No
Ministry of Social Development	No
Auckland University of Technology	No
Massey University	No
University of Otago	No
University of Auckland	No

### Health insurance industry

The Health Funds Association of New Zealand Inc (HFANZ) Statistics July 2007 are aggregated to produce estimates of total expenditure by the health insurance industry. The following health insurers are member organisations of the HFANZ.

HFANZ members in 2007/08	
AA-GIO Insurance Ltd	Manchester Unity Friendly Society
American International Assurance (AIA New Zealand)	Police Health Plan Ltd
EBS Health Care	Southern Cross Healthcare
Health Service Welfare Society	Sovereign Assurance Company Ltd
ING Life (NZ) Limited	Tower Limited
IOOF Friendly Society	Union Medical Benefits Society Ltd
IAG New Zealand Limited	

## Annual reports for regional and local government authorities

Organisation	Supplemental information from survey
Auckland City Council	Yes – health inspectors, public conveniences and pool treatment
Auckland Regional Council	No
Water Care Services Limited	No
Christchurch City Council	Yes – street cleaning
Dunedin City Council	Yes – health inspectors, street cleaning, public conveniences and pool treatment
Environment Bay of Plenty	No
Environment Canterbury	No
Environment Waikato Regional Council	No
Greater Wellington Regional Council	No
Hamilton City Council	Yes – street cleaning and pool treatment
Hawke's Bay Regional Council	No
Horizons Regional Council	No
Hutt City Council	Yes – street cleaning and public conveniences
Kapiti Coast District Council	No
Manawatu District Council	No
Manukau City Council	Yes – street cleaning, public conveniences and pool treatment
Napier City Council	Yes – street cleaning and pool treatment
Nelson City Council	Yes – street cleaning
New Plymouth District Council	Yes – street cleaning and pool treatment
Northland Regional Council	No
North Shore City Council	Yes – street cleaning, public conveniences and pool treatment
Otago Regional Council	No
Palmerston North City Council	Yes – street cleaning and pool treatment
Porirua City Council	Yes – street cleaning, public conveniences and sewage
Rodney District Council	Yes – street cleaning, public conveniences and pool treatment
Rotorua District Council	Yes – street cleaning
Taranaki Regional Council	No
Tasman District Council	Yes – public conveniences
Taupo District Council	Yes – street cleaning
Tauranga City Council	No
Timaru District Council	Yes – street cleaning
Waikato District Council	No
Waimakariri District Council	Yes – street cleaning and public conveniences
Wellington City Council	No
Whangarei District Council	Yes – environmental health and safety, health inspectors

## Annual reports for not-for-profit organisations

Key organisations	Annual reports
Alcohol & Drug Services	2008 multiple branches
Alzheimers New Zealand	2008 multiple branches
Ambulance – Wellington Free	2008 report
Ambulance – St Johns	2008 report
Ambulance and other patient transport	Not found, used Lions grants
Amputee Society	2008 multiple branches
Arthritis New Zealand	2008 multiple branches
Asthma & Respiratory Foundation of New Zealand	2008 multiple branches
Barnardos New Zealand	2008 report
The Brain Injury Association of New Zealand	2008 multiple branches
Brain Research (Australasian) Inc	2008 report
Breast Cancer Network NZ	2008 report
Cancer Society of New Zealand	2008 multiple branches
Cancer Support Group	2008 report
CanTeen	2008 report
Child Cancer Foundation	2008 report
Cerebral Palsy Society of New Zealand	2008 multiple branches
CCS Disability Action	2008 report
Deaf Association of New Zealand	2008 multiple branches
Deaf-blind New Zealand Incorporated	2008 report
Diabetes New Zealand	2008 multiple branches
Disabled Persons Association (DPA New Zealand)	2008 multiple branches
Downtown Community Ministry	2008 report
Epilepsy Association of New Zealand Inc	2008 report
Epilepsy Foundation of New Zealand	2008 report
Family Planning	2008 report
Heart Foundation	2008 report
Hearing Association New Zealand	2008 multiple branches
Hospice – Bay of Plenty	2008 report
Hospice – Bay of Island	2008 report
Hospice – Friends of Taupo	2008 report
Hospice – North Haven	2008 report
Hospice – New Zealand Inc	2008 report
Hospice – Taranaki	2008 report
Hospice – South Canterbury	2008 report
Hospice – Waipuna	2008 report
IHC (Intellectual Handicapped) NZ Inc	2008 report
Lion Foundation	Grants awarded 2007
Medic Alert Foundation New Zealand Inc	2008 report
Multiple Sclerosis Society of New Zealand	2008 multiple branches
Muscular Dystrophy Association of New Zealand	2008 multiple branches

<b>Key organisations</b>	<b>Annual reports</b>
New Zealand Breastfeeding Authority	2008 report
Ozanam House	2008 report
Parkinsonism Society of New Zealand	2008 multiple branches
Patients Aid Community Trust	2008 report
Royal New Zealand Plunket Society, The	2008 report
Presbyterian Support New Zealand	2008 multiple branches
Spinal Cord Society New Zealand	2008 multiple branches
Stroke Foundation of New Zealand	2008 multiple branches

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