

# ECONOMIC IMPACT OF DEMENTIA IN NEW ZEALAND 2012

## Executive Summary



Alzheimers New Zealand  
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Deloitte Access Economics

# About Alzheimers New Zealand

Alzheimers New Zealand Incorporated is a not-for-profit organisation and the national body of 21 member organisations located throughout New Zealand. Alzheimers New Zealand was established in 1986 and its member organisations have been delivering quality services to their communities since.

These services may include:

- day and home care for people with dementia
- educational programmes about understanding diagnosis, caring for a person with dementia, communication, and dementia care management
- support and befriending services to help spouses, partners, families and friends cope with the demands of caring
- help with coping with the financial challenges and support

Alzheimers New Zealand is committed to delivering quality leadership, representing people with dementia, their carers and families and whānau, through advocacy, raising public awareness and providing information such as resources, a library and the quarterly publication Alzheimers News. Another major function of Alzheimers New Zealand's National Office is to support the work of our member organisations.

Alzheimers New Zealand aims to:

- Provide information and promote high standards of education for people with dementia, their carers and families and health professionals
- Provide national advocacy, and raise government awareness of the needs of people with dementia and their carers
- Provide support to all member organisations
- Honour the Treaty of Waitangi by developing a working relationship with Māori in the provision of dementia services



# Foreword

Dementia is on the rise – in numbers of people who have dementia, in numbers involved in the care of people with dementia, and in numbers of family and whanau affected by dementia. It is indiscriminate, with no preference of ethnicity, religion, location, gender, education, profession or income. Its devastating reach is broad, interweaving itself within the very fibre of our community.

As we open the conversation about dementia, there are very few who do not have a personal story to share. People asked about their experiences are often brutally honest; raw, aggrieved, burdened by the weight of concern or grief. There are also many moving stories of family unity, moments of tenderness, courage, generosity and support. These conversations help others to understand the personal and social impacts of the disease. They help build understanding of the confusion and fear of the unknown, prior to diagnosis; the rush of emotion at diagnosis; the wave of relief when support is found; the mounting grief at daily deterioration – and then the false hope of the good days that seem to turn back the clock. These conversations help those who have never journeyed with dementia understand the inevitable fatality – the mix of grief, and relief, and exhaustion.

To fully map the social impacts of dementia would be to document every one of these stories. The job would be relentless; as each journey concludes, many more are only just beginning. The amount of data would be overwhelming, but its conclusion and recommendations would be very clear: a journey with dementia is a difficult one, which comes with a great human cost. It is one that needs the support of community and experts, and deserves our attention and investment.

This report does not measure the social impacts of dementia. It doesn't measure the personal commitment or sacrifice of carers, or the daily challenge on family and whanau. It does, however, deliver the same conclusion: That dementia deserves attention and investment. This report describes the economic impact of dementia, on individuals, the community, and the New Zealand health system. It has been developed to help us anticipate what the future needs of people with dementia may look like in economic terms, so that sound strategy and investment can be made today in preparation.

There has been much talk of the tsunami of people with dementia expected in our very near future, and it being our biggest looming health crisis. This forecast is evidenced globally and is undisputed here in New Zealand, where we have an ageing population. As we have the benefit of this foresight, we must use all available information, expertise, and collaborative efforts of the aged care and primary health sectors and the Ministry of Health to prepare for this crisis. Understanding the economic impact of dementia and then using this information to appropriately allocate resources where it is most needed is the best way that we can ensure that the needs of people affected by dementia, their carers, family/whanau, and their communities will be met today and in the future.

I thank our friends at Pub Charity for funding this report, Deloitte Access Economics for their body of work, and all who contributed to the Economic Impact Report 2012.



Martin Brooks  
Board Chairman  
Alzheimers New Zealand

# Executive Summary

Alzheimers New Zealand commissioned this report to update the statistics presented in the earlier Dementia Economic Impact Report 2008. The prevalence and incidence rates are applied to current New Zealand demographic data with projections to 2050. The cost elements (using health cost inflation, wage inflation and consumer price inflation) are inflated to take account of price and prevalence changes and provide an estimate of economic impact for the year 2011. The 2008 report contains more detailed background information regarding dementia, its effects and treatments.

This report shows predictably increasing costs as compared to 2008 and highlights the urgent need to develop sustainable support for people with dementia and their families. Alzheimers New Zealand National Dementia Strategy 2010-2015 strongly advocates for cross sector collaboration and commitment from key organisations including Government, District Health Boards and community organisations in order to provide effective services now and into the future. The Strategy's first strategic goal is getting official recognition of dementia as a national health priority as has recently occurred in Australia. Achievement of this goal is a pivotal step in ensuring the voices of people with dementia and their families are heard, acknowledged and acted upon in policy development and action. The other key areas requiring investment identified in the Strategy include early diagnosis and disease management, dementia specific services that are appropriate for the range of people affected by dementia and better support for families who provide much of the care.

The Strategy also advocates for the development of a research evidence base to support planning and innovation. Alzheimers New Zealand recognises the gaps in definitive New Zealand data to inform policy development and the resourcing of dementia services. The 2008 Dementia Economic Impact Report along with this 2011 update highlights the need for a systemic and ongoing programme of research to identify and monitor the provision of support and treatment with the goal of reducing the impact of dementia on those affected. The individual and collective challenges presented by the many diseases that are subsumed under the umbrella term of dementia will increase over time as the proportion of older people in the population increases. Planning for effective services for people with dementia requires accurate information about prevalence of cognitive impairment and economic data about health system and social support costs.

## OCCURRENCE OF DEMENTIA

In 2011, it was estimated that 48,182 New Zealanders have dementia - 1.1% of the New Zealand (NZ) population - an increase of over 18% in three years ( 40,746 people in 2008).Of the total 59.9% are female – 28,864 NZ women have dementia compared to 19,318 NZ men.

- There were an estimated 13,486 new cases of dementia in 2011.
- No epidemiological studies of dementia incidence or prevalence in the New Zealand population or in specific ethnic groups within the population were identified in researching this report. There is a need for incident and prevalence studies particularly in ethnic groups such as Maori and Pacific Island people.

By 2050, an estimated 147,359 New Zealanders will have dementia -2.6% of the population and more than triple current numbers.

- Of the total, 87,145 (59%) will be female and 60,214 (41%) male. The annual incidence (onset) of dementia will also more than triple, to 41,008 new cases by the year 2050.

A greater share of those with dementia will be made up of those with non-European backgrounds.

- By 2026, the last year for which ethnic splits are available, there will be a higher share of Māori, Asian and Pacific Island people with dementia in the total, due to demographic changes in the population.
- Māori with dementia will increase from 4.0% of the total of people with dementia in 2011 to 5.7% in 2026.
- Asian people will increase from 3.7% in 2011 to 8.4% of the total of people with dementia in 2026.
- Pacific Island people will increase from 1.9% in 2011 to 2.6% of all New Zealanders with dementia in 2026.

## FINANCIAL COSTS

The total financial cost of dementia in 2011 was estimated as \$954.8 million.

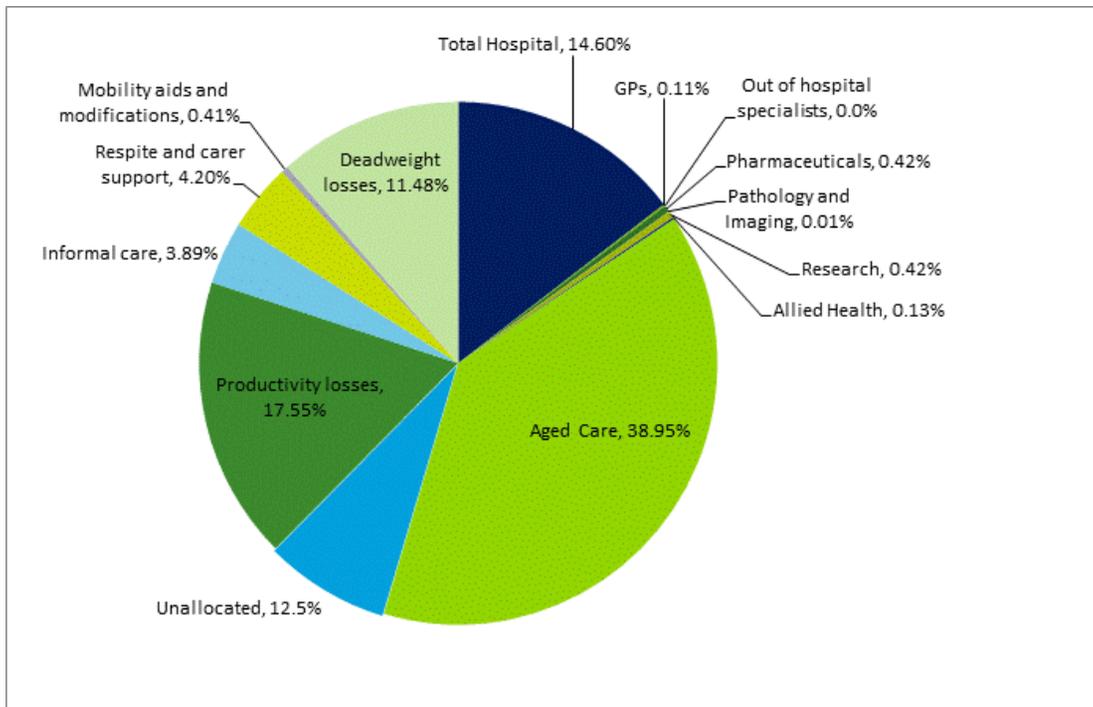
Health system expenditure was \$596.3 million (62.5% of the total) in 2011.

- Total health system expenditure (\$596.3 million) is dominated by the cost of residential aged care estimated at \$371.9 million in 2011 (62.4% of health expenditure).
- Hospital costs were estimated as \$139.4 million (21.4%), comprising \$127.3 million of inpatient costs (\$92.1 million in 2008) and around \$12.1 million in outpatient costs.
- Pharmaceuticals and health research were estimated as around \$4.0 million each.
- Overhead costs of administering health systems, capital expenditures, and public health programs were an estimated \$74.6 million.
- General practitioner visits due to dementia in 2011 were estimated at \$1.02 million. No data were available on the numbers of people with dementia who receive Care Plus, or the average subsidy per GP visit under Care Plus.
- These costs only include the additional expenditure on people with dementia over and above that of people of the same age and gender.

Other financial costs are estimated to be \$358.5 million (37.5% of total) .

- Productivity losses due to dementia comprise the lower employment participation of people with dementia (\$157.7 million), higher rates of being absent from work (\$2.9 million) and premature mortality (\$6.9 million).
- Carers also participate less in the workforce, and the opportunity cost of their informal care is valued at \$37.2 million.
- Other real costs are the cost of respite and support services (\$40.1 million), the cost of mobility aids and home modifications (\$4.0 million) and the deadweight efficiency losses from welfare transfers, government expenditures and taxation revenues forgone (\$109.6 million).

**Figure i:** Distribution of the financial costs of dementia, NZ, 2011



## LOSS OF WELLBEING AND QUALITY OF LIFE

In addition to the financial cost of dementia, there is also the cost of the loss of wellbeing and quality of life measured using disability adjusted life years (DALYs) which measures the mortality and morbidity impact of disease and injury.

- In 2011, 32,649 years of healthy life were lost due to dementia.
- The majority of the burden was due to morbidity (lost wellbeing and quality of life), comprising 23,017 years of healthy life lost to disability or 70% of the DALYs. The remaining 30% of the burden was due to the estimated 9,633 years of life lost to premature death from dementia.
- The burden of disease from dementia is disproportionately carried by women. While the burden for males was 12,689 DALYs (39% of total), the female burden was 19,960 DALYs (61% of total).
- The burden of disease from dementia is converted into a dollar value, by multiplying the total DALYs from dementia by the value of a statistical life year (VSLY), which was estimated from meta-analysis of the literature as \$387,674 in 2011.
- After subtracting costs borne by the individual already calculated and included in the financial cost estimates, the net value of the burden of disease was estimated as \$12.4 billion in 2011, more than 12 times the financial costs.

## THE ECONOMIC IMPACT OF DEMENTIA

The total financial cost of dementia in 2011 was estimated as \$954.8 million, \$596.3 million for health system expenditures and \$358.5 million for other financial costs.

The value of the healthy life lost was estimated as a further \$12.4 billion bring the total to an estimated \$13.4 billion.

Individuals with dementia and their carers bore 33% of the financial costs of dementia in 2011, the Government bore 55 % of the costs, and the remaining 12% of financial costs were borne by other payers in society.

If the value of healthy life lost is included in the estimation, 95% of the economic costs are borne by the person with dementia and their family, 4% by the Government and 1% by other societal payers.

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