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# The Menzies Centre for Health Policy

## CHRONIC ILLNESS – PREVENTION AND MANAGEMENT

### Policy Issues Paper

#### What is a chronic illness?

There are a range of definitions for chronic illness (also referred to as chronic disease or chronic condition).

This is the definition preferred by the Chronic Illness Alliance:

*"...an illness that is permanent or lasts a long time. It may get slowly worse over time. It may lead to death, or it may finally go away. It may cause permanent changes to the body. It will certainly affect the person's quality of life."*

The focus in this Fact Paper is on the chronic illnesses that have the largest on the health and quality of life of Australians, as assessed by the Australian Institute of Health and Welfare. These are coronary heart disease, stroke, lung cancer, colorectal cancer, depression, diabetes, asthma, chronic obstructive pulmonary disease (COPD), chronic kidney disease, oral diseases, arthritis and osteoporosis. Obesity, high blood pressure and high cholesterol are conditions which contribute to the risk and impact of chronic illness.

#### The issue

Chronic illnesses are a major health problem in all developed countries, accounting for a high proportion of deaths, disability and illness, and they are an increasing problem in developing countries. Yet many of these illnesses are preventable, or their onset can be delayed, by relatively simple measures.

Chronic illnesses are not new, but due to the ageing of the population and other factors, they have increased in prevalence. In 2004-05, 77% of Australians had at least one long-term condition; most common were asthma (10.0% of the total population), osteoarthritis (7.9%), depression (5.3%), and diabetes (3.5%).

Chronic illnesses can be a problem at all ages. Some chronic illnesses such as asthma are most common in children, while others such as depression emerge in adolescence and early adulthood. For most other illnesses, such as coronary heart disease, stroke and osteoporosis, age is a primary risk factor, but actions taken earlier in life can prevent them or mitigate their impact. Almost 10% of children 0–14 years have three or more long-term conditions; this figure increases to more than 80% for those aged 65 years and over.

Some of these illnesses can be immediately life-threatening, such as heart attack and stroke; others such as cancer, COPD and diabetes can lead to early death. Chronic illnesses are not always the cause of death, but their persistence has a major impact on the lives on the affected individual, their families and carers, the health system and the economy.



Chronic illnesses are the major cause of disease burden and will continue to be so in the decades ahead.

**Leading causes of burden (DALYs\*) in Australia 2003-2023**  
(adapted from AIHW 2007 *Burden of disease and injury in Australia 2003*)

Cause	Rank			
	Male		Female	
	2003	2023	2003	2023
Ischaemic heart disease	1	2	2	4
Type 2 diabetes	2	1	4	2
Anxiety & depression	3	3	1	1
Lung cancer	4	6	8	7
Stroke	5	7	3	5
COPD	6	11	7	8
Prostate / breast cancer	9	8	6	6
Colorectal cancer	10	9	10	12
Dementia	11	4	5	3
Asthma	13	12	9	9

\*DALY counts equivalent years of 'healthy life' lost due to poor health or disability and potential years of life lost due to premature death.

### Why is action needed?

Significant disparities exist in rates of chronic illnesses between different population groups. Many of these illnesses share common risk factors, and a large proportion of the disease burden could be prevented through changes in lifestyle, early detection of health problems and other measures.

In 2003, 1.1 million people (27% of all people with a disability) had a chronic illness as their main disabling condition. Arthritis, asthma, depression and stroke were the most likely cause of disability. Many of these people are unable to participate fully in society or in the workplace.

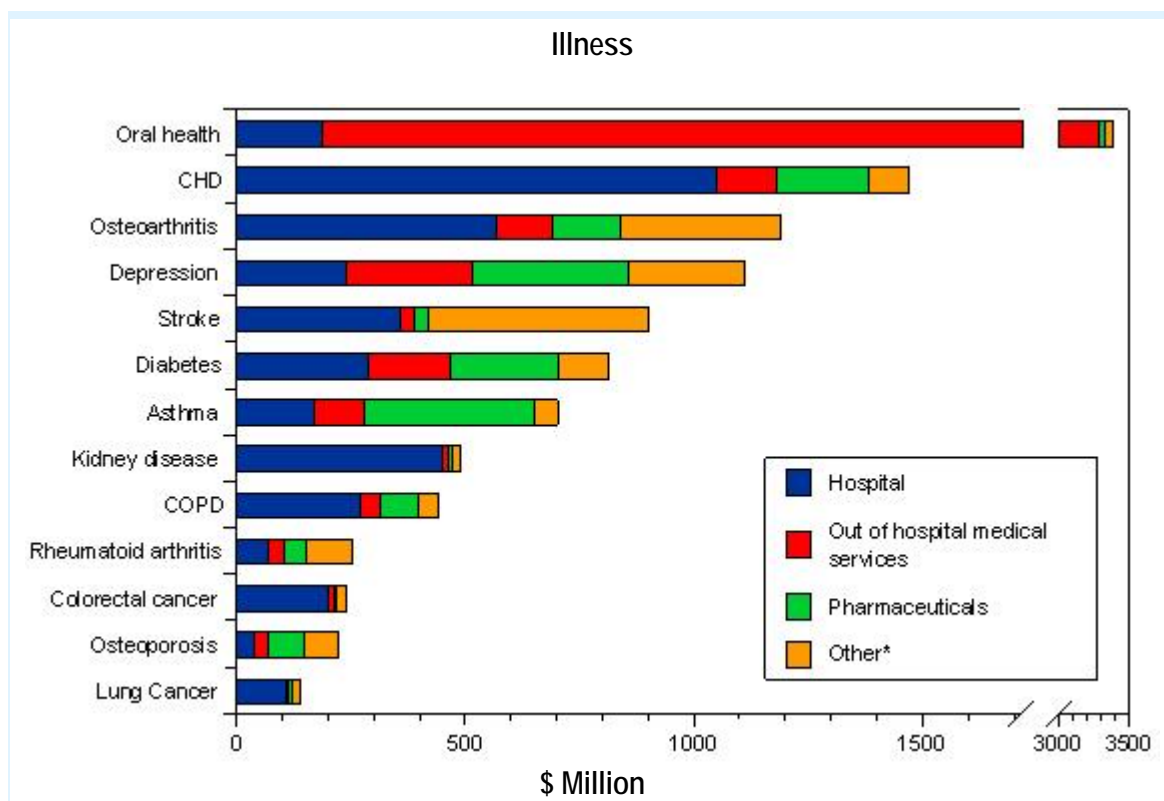
It is estimated that 90% of type 2 diabetes, more than 50% of cardiovascular disease and 50% of cancers are preventable. Effective preventive action on a national basis therefore has the potential to make a significant contribution to improving health outcomes and health related quality of life, reducing inequalities in health, minimising unnecessary demand for health care services and improving productivity.

### Health care costs for chronic illnesses

Chronic illnesses are a drain on the health system: in 2000–01 they accounted for nearly 70% of the total health expenditure that can be allocated to diseases. About \$30 billion is spent on treating the top seven chronic illnesses.

### Health expenditure on chronic illnesses, by area of expenditure, 2000-01<sup>1</sup>

<sup>1</sup> This is the most recent data available.



Note:

\* Other includes areas of allied health services, aged care homes, research, and community mental health services for depression.

Source: The AIHW disease expenditure database.


About \$22 billion, which is 45.3% of allocated health system expenditure, goes to the National Health Priority (NHP) areas, which include cardiovascular disease, asthma and diabetes. Fifty percent of this spending goes to hospital treatment, particularly for admitted patients, and about 14% of the spending goes to pharmaceuticals.

In 2003-04 chronic illnesses accounted for 21.6% (1.5 million) hospital admissions. The single greatest reason for hospital admission was for 'care involving dialysis', an indicator for chronic kidney disease, which accounted for nearly 800,000 admissions. Other chronic illnesses causing more than 100,000 admissions were coronary heart disease and oral diseases. Some illnesses like stroke, colorectal cancer, lung cancer and COPD had fewer admissions but were associated with long lengths of stay.

About half of potentially preventable hospitalisations are due to chronic illnesses. In 2001-02 such hospitalisations cost the system around \$828 million<sup>2</sup>. The rate of such potentially preventable hospitalisations is increasing at around 2.8% a year, and at 8.6% a year for diabetes.

People with a chronic illness are a significant proportion of the patients visiting General Practitioners. High blood pressure was the leading chronic condition managed by GPs, at a rate of 9.2 per 100 encounters. Other chronic illnesses with high rates of GP management were depression, arthritis, diabetes and asthma. Such GP visits generate costs to Medicare and the PBS and often have substantial out-of-pocket costs for the patient.

<sup>2</sup> Calculated as  $0.5 \times 552000 \times \$3000$  (av cost of hospital stay)



A Victorian study found that rural patients with a chronic illness spent an average of \$4000 out-of-pocket on their health care needs each year. This was as much as 27.5% of income for those households living in poverty.

## Risk factors for chronic illness

Risk factors for chronic illness include:

- [poor diet and nutrition](#)
- [physical inactivity](#)
- [tobacco smoking](#)
- [alcohol misuse](#)
- [high blood pressure](#)
- [high blood cholesterol](#)
- [excess weight](#).

Compared with major cities, regional areas of Australia experience higher prevalence of many of the risk factors for chronic illness, such as smoking (11% higher) and excess weight (7% higher); have higher death rates for coronary heart disease, COPD and diabetes; but have lower prevalence of asthma.

Compared with areas of high socioeconomic status, the least advantaged areas of Australia have higher levels of smoking, physical inactivity and obesity; experience higher prevalence of diabetes, behavioural problems, asthma, heart disease and arthritis; and have higher mortality across most chronic conditions.

Compared with other Australians, Aboriginal and Torres Strait Islander persons have higher prevalence of smoking, risky alcohol use and excess weight, and have higher rates of asthma, arthritis and diabetes.

**Relationships between various chronic illnesses and risk factors**  
From AIHW 2002. *Chronic diseases and associated risk factors in Australia, 2001.*

	Risk factor						
	Behavioural				Biomedical		
	<u>Poor diet</u>	<u>Physical inactivity</u>	<u>Tobacco</u>	<u>Alcohol misuse</u>	<u>Excess weight</u>	<u>High blood pressure</u>	<u>High blood cholesterol</u>
<a href="#">Coronary heart disease</a>	✓	✓	✓	✓	✓	✓	✓
<a href="#">Stroke</a>	✓	✓	✓	✓	✓	✓	✓
<a href="#">Lung cancer</a>			✓				
<a href="#">Colorectal cancer</a>	✓	✓		✓	✓		
<a href="#">Depression</a>		✓		✓	✓		
<a href="#">Diabetes</a>	✓	✓			✓		
<a href="#">Asthma</a>			✓		✓		
<a href="#">Chronic obstructive pulmonary disease</a>			✓				
<a href="#">Chronic kidney disease</a>	✓				✓	✓	
<a href="#">Oral diseases</a>	✓		✓	✓			
<a href="#">Osteoarthritis</a>		✓			✓		
<a href="#">Osteoporosis</a>	✓	✓	✓	✓			

**Problems with current approaches to preventing and managing chronic illnesses**

Important gains have been made in the prevention and control of chronic illness – for example, through the significant reduction in smoking rates – but not all population groups have benefited equally from these improvements.

Differential rates of chronic illness are the cause of the most significant health inequalities between different groups in Australian society. “Closing the gap” requires new approaches which more effectively respond to the needs and interconnected problems faced by many disadvantaged groups.

The increasing prevalence of risk factors such as obesity and chronic illnesses such as depression requires a multifaceted response involving both prevention and management strategies within the health system and across a range of other jurisdictions.

However the current way in which the health system is organized and funded means that services are provided as isolated episodes of care, with access dependent on ability to find a GP and afford the associated costs, rather than on need. Care is less likely to be collaborative, comprehensive and on-going and more likely to be fragmented and lacking coherence.

There is no ability in the current system to collect data to measure the impact of current interventions in the management of chronic conditions, other than services provided and their cost to Medicare. In addition, there is no national e-health system to assist the ability of health providers to share information about patients to improve care and ensure efficiencies.

### Suggested Areas for Policy Action

1. There needs to be a greater focus on prevention within the healthcare system so that fewer people develop chronic illnesses. This requires a national chronic illness prevention strategy with strong leadership from the Commonwealth Government to bring together all relevant public and private sectors in a national and co-ordinated effort.

This should involve a dual approach:

- developing individual, professional and community awareness and education; and
- addressing the physical and social environment to reduce toxins and pollution, facilitate increased exercise and healthy eating, and address social isolation and stress.

2. The healthcare system must ensure:
  - early diagnosis;
  - assessment, appropriate initial treatment and patient information and education;
  - an ongoing cycle of care that includes monitoring of health status and how the patient is coping, and management and education that is responsive to identified patient needs;
  - early identification and optimal management of complications and co-morbidities; and
  - good palliative care and support.
3. People living with a chronic illness are clear about what they require from a modern healthcare system. They need access to high quality information about their condition, care which is continuous and well-coordinated, effective management of their symptoms, and help in managing the social, economic and psychological consequences of their illness.
4. Primary healthcare must be reconfigured to provide for a team approach involving doctors, nurses, allied health professionals and patients.
5. Health funding needs to be realigned and information systems need to be developed to enhance and encourage multi-disciplinary care.
6. Access to the full range of preventative and chronic illness treatment and management services must be based on need and not ability to pay.
7. Australian health funders (both public and private) need to develop a culture of innovation and cooperation that will see investment in new models of care, measurement of their outcomes and evaluation of their cost-effectiveness.
8. Governments must commit to the necessary long-term investments in programs and the required workforce to carry out these programs.

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*This paper was developed in collaboration with the Australian Health Policy Institute at the University of Sydney.*