

Issues Brief
2 Value

HELPING MAKE HEALTHCARE EXTRAORDINARY

Australians value our health care system and consider it to be one of the nation's highest priorities.

The innovative medicines industry makes a valuable contribution to the healthcare chain, fostering the talent that helps make healthcare extraordinary.

The medicines industry in Australia contributes to a healthy, productive and diverse economy where innovation, investment and jobs are created.



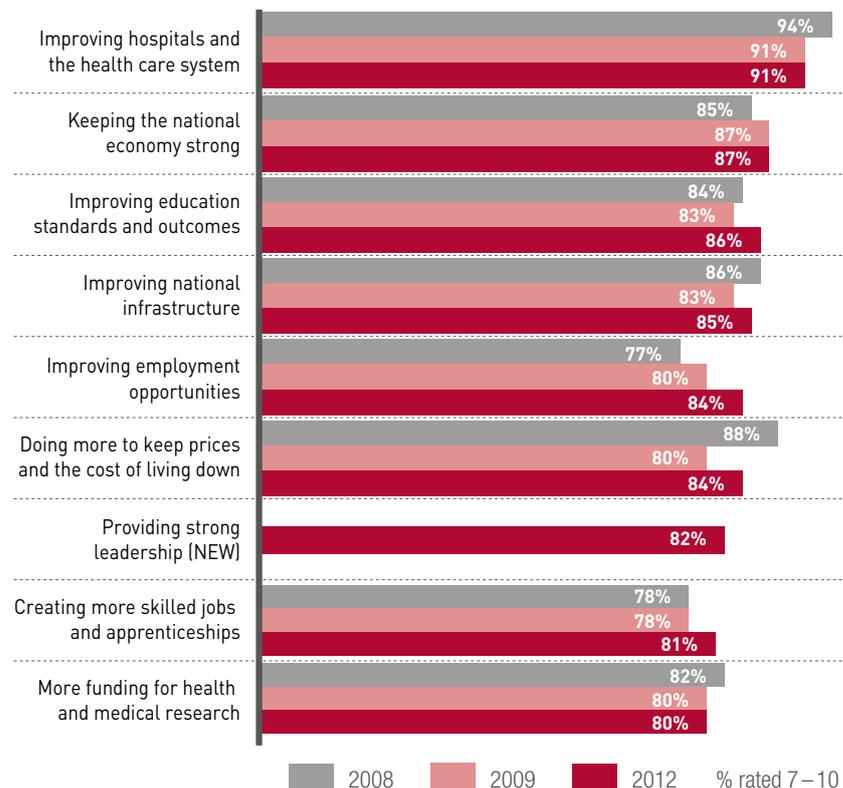
OVERVIEW: VALUE

From 2003-2011, the Australian Institute of Health and Welfare (AIHW) recorded a 15% reduction in the fatal burden of disease. These gains remind us of the role that advances in modern medicine play in reducing the overall burden of disease and premature deaths.

Patients and taxpayers see the value in the new cures, treatments and collaborations provided by the innovative medicines industry.

Australians regard the Pharmaceutical Benefits Scheme (PBS) as a vital part of the health system. In fact, Australians believe that improving the health system is the highest priority for the Australian Government.¹

FIGURE 1: RESEARCH AUSTRALIA RESULTS: WHAT SHOULD BE THE AUSTRALIAN GOVERNMENT'S TOP PRIORITIES?¹



Source: Research Australia, What do Australians think about health and medical research? 2012 Opinion Poll¹

Results from public opinion surveys show that out of a number of issues such as management of the economy, cost of living and national infrastructure that around 9 out of 10 individuals see improving health care as a key area of priority.

1. Research Australia, What do Australians think about Health and Medical Research? 2012 Opinion Poll- views of 1000 Australians. Available at: <http://crm.researchaustralia.org/documents/item/84>

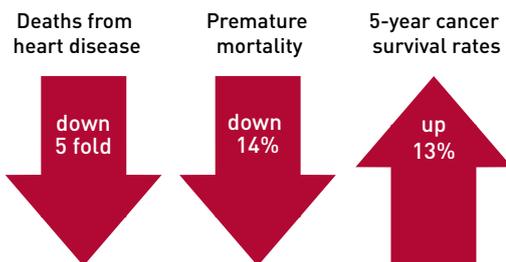
Australia enjoys one of the highest life expectancies in the world.

9 out of 10 individuals see improving health care as a key priority.

CONTRIBUTION 1: REDUCING THE OVERALL BURDEN OF DISEASE AND PREMATURE DEATHS

Key fact:

60% of the decline in premature mortality in Australia can be attributed to the listing of innovative medicines on the Pharmaceutical Benefits Scheme.



Australia's innovative medicines companies contribute to the important goal of improving the health system through the provision of new medicines, vaccines and treatments.

Recent research by Lichtenberg (2015) of Colombia University attributes 60% of the decline in premature mortality in Australia to the listing of innovative medicines on the Pharmaceutical Benefits Scheme.²

The value of innovative medicines is also illustrated by the changes in mortality in patients with diseases where there have been significant advances in treatment. For example, deaths from heart disease and other circulatory disorders have fallen more than five-fold since the late 1960s and deaths from AIDS from 764 in 1994 to 75 in 2013.^{3,4}

The availability of new treatments for patients is bringing better health outcomes in a range of disease areas including numerous cancer types, chronic disease and blood borne viruses.

For example, new medicines recently listed on the PBS for Hepatitis C are expected to increase the cure rate to 90%.⁵

REDUCING THE OVERALL BURDEN OF DISEASE AND PREMATURE DEATHS

- New medicines have transformed the impact of diseases like heart disease – where the death toll has fallen 5-fold in Australia.
- Medicines introduced over the past 2 decades have contributed to reduced premature mortality by 14% – in other words, 14% fewer people died before the age of 75.
- 5-year cancer survival has increased from 49% in 1986 to 62% in 2007.

2. Lichtenberg, F. 2015. The Impact of Pharmaceutical Innovation on premature mortality, hospital separations and cancer survival in Australia. Available at: <https://medicinesaustralia.com.au/wp-content/uploads/sites/52/2010/01/20151124-Lichtenberg-paper.pdf>

3. The Australian Government, Australian Institute of Health and Welfare. Trends in deaths. Available at: <http://www.aihw.gov.au/deaths/trends-in-deaths/#cause>

4. The Australian Government, Australian Bureau of Statistics. Mortality & Morbidity: Acquired immunodeficiency syndrome. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/2f762f95845417aeca25706c00834efa/455cdc7e9de1185fca2570ec001b1378!OpenDocument>

5. The Australian Government, Department of Health, Media Release, Hep C cures available today for as low as \$6.20 a prescription, March 2016. Available at: <http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-mediarel-yr2016-ley014.htm>

CONTRIBUTION 2: PROVIDING GLOBAL ECONOMIC OPPORTUNITIES FOR AUSTRALIA

Key facts:

The value of pharmaceutical exports is around \$2.9 billion each year.⁶

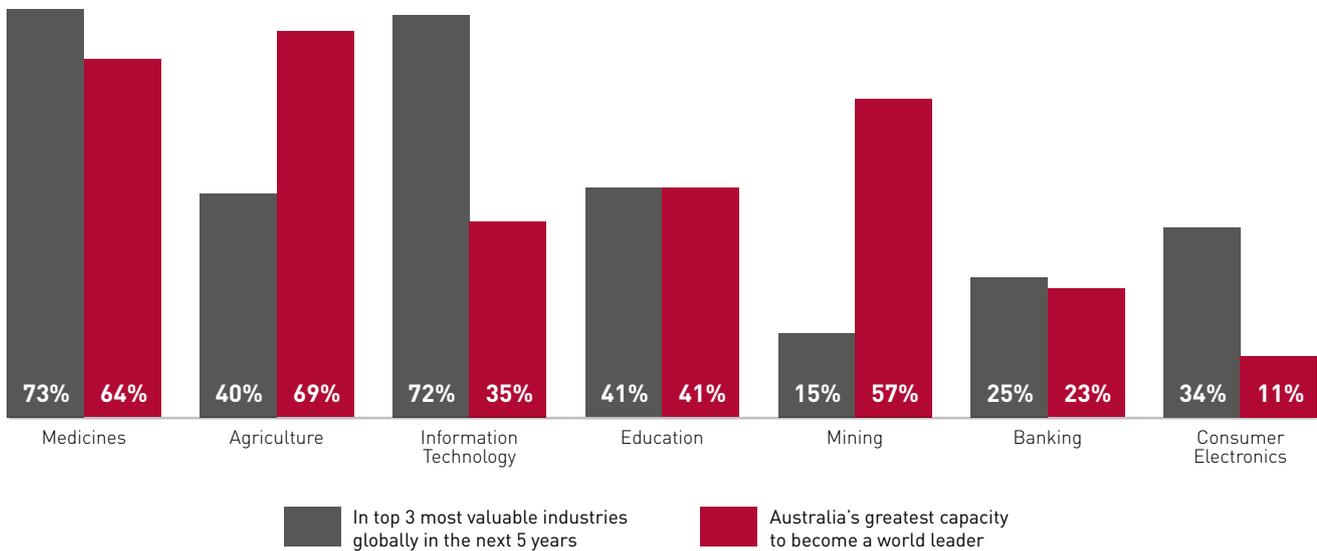
Australia currently exports medicines to over 70 countries.

Research into public opinion conducted by Medicines Australia in 2016 suggests that, in comparison to other industries, Australians see the medicines industry as being one of the most valuable industries globally in the next five years. Of participants surveyed, 64% believe Australia has the capacity to be world-leading in this area.

Australian consumers see considerable benefit in having a strong local medicines sector. 73% believe the medicines industry will become the most valuable industry globally, while the majority believe that Australia has the capacity to become a world leader in this important industry.

6. The Australian Government, ABS. International Trade in Goods and Services, Catalogue 5368.0

AUSTRALIANS VIEW MEDICINES AS ONE OF THE MOST VALUABLE INDUSTRIES



Source: Results of online nationally representative survey, n=252 unprimed consumer respondents 2016

CONTRIBUTION 3: PROVIDING INNOVATIVE SOLUTIONS FOR PREVENTIVE HEALTH

Key fact:

Immunisation is one of the most successful and cost effective health interventions ever implemented.

Preventive health interventions make a difference. The World Health Organization (WHO) defines immunisation as one of the most successful and cost effective health interventions ever implemented.⁷

According to the Department of Health, Australia's high quality immunisation programme is internationally recognised. Routine immunisation of infants in Australia began in the 1950s and the first nationally funded infant program for diphtheria, tetanus and polio started in 1975.⁸

Over the last 50 years the National Immunisation Programme has grown to be a major public programme funded by both the Australian Government and state and territory governments. Over the same period of time the incidence of vaccine preventable diseases has dramatically declined.



CASE STUDY: PREVENTATIVE HEALTH MEASURES: CHICKEN POX VACCINATION

THEN:

Prior to the 1990s, there were hundreds of thousands of cases of chicken pox (varicella zoster virus) in Australia each year, with 90% of children affected by the time they reached early adulthood.

Severe cases resulted in 1,500 hospitalisations and seven deaths from the virus each year. In mild cases chicken pox caused pain and discomfort; and because it is primarily a childhood disease, parents were often required to miss work and care for their children.

NOW:

The introduction of national funding in 2005 for vaccines to help prevent chicken pox has significantly reduced the number of children who suffer from the disease each year. The number of children hospitalised due to chicken pox each year has dropped by more than 77% in some age groups.

Vaccination against chicken pox has provided enormous benefits to children, their families and to the health system—additional societal benefits include children staying in school and parents avoiding time away from work. In a cost effectiveness study of universal varicella vaccination in the United States, it was estimated that without vaccination the 2006 birth cohort would suffer 75 deaths. Direct costs of the disease (to patients and the health system) would be \$333.4 million.

When taking a societal perspective, the costs of the disease to society were estimated at \$1.5 billion.

7. World Health Organization, Global Immunization Vision and Strategy 2006–2015. Available at: <http://www.who.int/immunization/givs/en/>

8. The Australian Government, Department of Health, National Immunisation Strategy for Australia 2013–2018. Available at: [http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/B2D3E81EEDF2346ACA257D4D0081E4BC/\\$File/nat-immune-strategy-2013-18-final.pdf](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/B2D3E81EEDF2346ACA257D4D0081E4BC/$File/nat-immune-strategy-2013-18-final.pdf)

CONTRIBUTION 4: PROVIDING INVESTMENT THAT IS BENEFICIAL TO HEALTH SYSTEMS AND TO BROADER SOCIETY

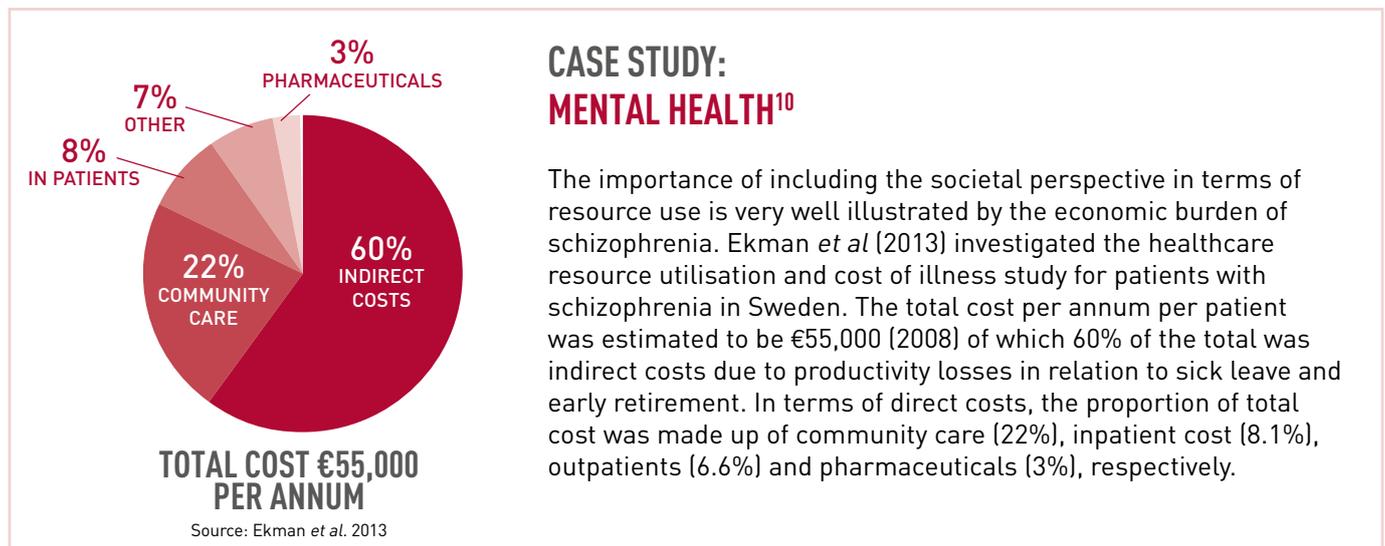
Key fact:

Investment in medicines assists in averting future hospital spending, helps minimise lost productivity and improves the quality of life of patients, their families and their communities.

It is important to consider the value of medicines both to the Australian public and to the health system more broadly. Investing in medicines helps not only saves lives, it also assists in averting future hospital spending, helps minimise lost productivity and improves the quality of life of patients, their families and their communities.

Lichtenberg (2015) found that the \$5 billion spent on the group of innovative medicines first listed on the PBS between 1989 and 2002 saved \$7 billion in additional hospital visits (hospital separations) in 2011.⁹

The increase in the incidence of chronic diseases, coupled with an ageing population leading to reduced work force participation and lost productivity will place increasing pressure on the healthcare system and the broader economy. Enabling people to stay out of hospital or better self manage their illness in consultation with a health care professional will ensure the population can better participate and remain productive.



This schizophrenia example highlights the merit of expanding the criteria of valuing a medicine to incorporate broader societal and economic impacts.

In Australia, a study undertaken for SANE Australia by Access Economics estimated that the cost of schizophrenia was \$1.85 billion in 2001, with direct costs being \$661 million and indirect costs being \$722 million (SANE, 2002).

Countries such as the Netherlands, Sweden and Germany are better than Australia at incorporating productivity gains, caregiver benefits and savings in welfare costs into funding decisions and budgetary allocations.

By excluding these additional perspectives, there is potential for lower reward for innovation than warranted than if the full economic benefit of the intervention is considered. In addition government is not fully accounting for savings or efficiencies that may be achieved in other areas of the healthcare system, or the broader societal and economic benefits, through the availability of such treatments.

9. Lichtenberg, Frank R Columbia University, Victoria University and National Bureau of Economic Research, The impact of pharmaceutical innovation on premature mortality, hospital separations, and cancer survival in Australia, November 2015. Available at: <https://medicinesaustralia.com.au/wp-content/uploads/sites/52/2010/01/20151124-Lichtenberg-paper.pdf>;

10. Medicines Australia, Value of Medicines Part 1 – Health Technology Assessment: What it does and does not measure, July 2015. Available at: <https://medicinesaustralia.com.au/policy/publications/occasional-papers/>

CONTRIBUTION 5: INVESTING IN CLINICAL TRIALS

Key fact:

Clinical trials in Australia are worth \$450 million annually and contribute around \$1 billion to the Australian economy each year.¹¹

CONTRIBUTION 6: DEVELOPING A SKILLED WORKFORCE

Key fact:

The medicines industry directly employs around 15,400 Australians, but importantly helps to support many thousands more high-skilled jobs.¹²

CONTRIBUTION 7: PHILANTHROPIC CONTRIBUTIONS, COMMUNITY ACTIVITIES AND PARTNERSHIPS

Key fact:

Medicines Australia members support around 260 Health Consumer Organisations. Based on 2014 data, members supported around 360 specific projects to the value of around \$10 million.¹³

Clinical trials contribute to the global efforts to find, discover and develop the latest breakthrough medicines and vaccines.

The pharmaceutical industry in Australia conducts around 700 clinical trials each year in partnership with hospitals, universities and other research institutions.

Clinical trials benefit Australian patients because they facilitate faster access to new treatments.

They also bring health professionals together to deliver better care for patients. Australia's scientists, doctors, nurses and specialists also benefit through their exposure to the very latest methods of treatment.

In addition to employing over 15,000 Australians directly, the medicines industry also creates many thousands more indirect jobs for other industries and suppliers.

These include services equipment suppliers, such as containers suppliers, label suppliers and advanced manufacturing equipment suppliers.

Innovative research partnerships between hospitals, research institutions and medicines companies support thousands of jobs for Australian scientists and researchers.

PHILANTHROPIC CONTRIBUTIONS:

Innovative medicines companies in Australia provide around \$20 million in charitable donations per year.¹⁴

HEALTH CONSUMER ORGANISATIONS:

Health consumer organisations (HCOs) and the industry have collaborated for many years in areas of mutual interest with regard to the needs of health consumers and improving health outcomes.

Medicines Australia works closely with the Consumers' Health Forum of Australia, representatives from health consumer organisations and member companies. **The Working Together Guide** is a collaboration between Medicines Australia and the Consumers' Health Forum, containing a basic framework to guide industry and consumer group engagement.¹⁵ The key principles for any engagement are: honesty, integrity, trust, and respect. Underpinning these principles is a respect for independence, openness, transparency and accountability.

COMMUNITY ENGAGEMENT:

The full value of the medicines industry to local communities is significant, when measuring values such as volunteer hours and local community investments.

11. The Australian Government, Australian Bureau of Statistics, Business Expenditure Report on R&D, September 2012. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/lookup/8104.0Media%20Release12010-11>;

12. The Australian Government, Australian Industry, 2014. Available at: <http://www.industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/Australian-Industry-Report.pdf>

13. Medicines Australia Health Consumer Reports, 2014. Available at: <https://medicinesaustralia.com.au/code-of-conduct/education-events-reports/health-consumer-organisation-support-reports/>

14. Medicines Australia, Member Survey 2007, Australian Pharmaceutical Industry at a crossroad? (Special Philanthropic Survey). Available at: <https://medicinesaustralia.com.au/files/2009/12/Australian-Pharmaceutical-Industry-Report-2007.pdf>

15. Medicines Australia, Working Together Guide. Available at: <https://medicinesaustralia.com.au/community/working-together-guide/>



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EXECUTIVE SUMMARY

KEY CONTRIBUTIONS OF AUSTRALIA'S INNOVATIVE MEDICINES INDUSTRY

- Benefiting patients by reducing the overall burden of disease and premature deaths – 60% of the decline in premature mortality in Australia can be attributed to the listing of innovative medicines on the Pharmaceutical Benefits Scheme.
- Providing global economic opportunities for Australia – Australia currently exports medicines to over 70 countries.
- Providing innovative solutions for preventative health – immunisation is one of the most successful and cost effective health interventions ever implemented.
- Investment that benefits health systems and the broader society – averting future hospital spending, helping minimise lost productivity and improving the quality of life of individuals and communities.
- Investment in clinical trials – clinical trials in Australia contribute around \$1 billion to the Australian economy each year.
- Helping to develop a skilled workforce – the medicines industry employs around 15,400 Australians, many in high-skilled jobs with above average incomes.
- Philanthropic contributions, community activities and partnerships for the health of Australians – Medicines Australia members support around 260 health consumer organisations and about 360 specific projects to the value of around \$10 million.