Deloitte Access Economics

Australian health insurance: extrapolated savings from health and medical research

Australian Society for Medical Research

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Deloitte.

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Dr Paul Dawson, President
Australian Society for Medical Research (ASMR)
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6 June 2012

Dear Paul,

Re: Extrapolating health insurance costs in Australia

It is my pleasure to provide this analysis of health insurance premiums in Australia over the next 50 years together with household income, as well as the aged pension, and a brief investigation into whether greater investment in health and medical research over this period would result in lower health insurance premiums.

Yours sincerely,

Lynne Pezzullo
Director, Deloitte Access Economics Pty Limited
Lead Partner, Health Economics and Social Policy, Deloitte Touche Tohmatsu

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Foreword

The Government's 2010 Intergenerational report, as well as the Australian Institute of Health and Welfare review of "Australia's Health 2010", have identified the unsustainable costs of the projected health and ageing challenges, which will greatly impact on the future health care of all Australians. Currently, Australia's Health and Ageing expenditure is more than one quarter of the total Federal Government expenditure and is projected to increase to almost half of the total Federal Government spend by 2049-50 (Intergenerational Report 2010), escalating from around $120 billion this year to reach more than $3.3 trillion by 2062 (Deloitte Access Economics 2012).

The private health insurance (PHI) rebate is the fastest growing component of the Australian Federal Government's health expenditure, projected to grow over 50% in real spending from $192 per capita in 2012-13 to $319 per capita in 2022-23 (Intergenerational Report 2010). Australia is not alone when considering the economic challenges of rising PHI costs. Projected costs of a family health insurance premium in the United States will equal the median household income by the year 2033, indicating that PHI will become increasingly unaffordable for low-to-middle-income Americans (Young and DeVoe 2012). Together, these findings warrant an analysis of future PHI costs in Australia.

This study extrapolates PHI costs in Australia from 2012 to 2062, together with household income and the age pension. In addition, this study includes an initial investigation into whether greater investment in health and medical research over this period would result in lower health insurance costs. This approach follows on from the recent ASMR-commissioned Deloitte Access Economic reports that describe the financial and health benefits from investment of health and medical research funded by the National Health and Medical Research Council (NHMRC) (Deloitte Access Economics 2011, 2012). Benefits were measured as disability adjusted life years (DALYs) averted and converted to a dollar value using the value of a statistical life year (VSLY), and were linked to a scenario of a 5% or 10% reduction in the burden of 5 diseases: cardiovascular disease, cancer, asthma, muscular dystrophy and sudden infant death syndrome.

The outcomes of this current study suggest that the proportion of income and pensions spent on PHI premiums will more than double over the next 50 years, placing increased financial burden on all Australians, particularly those relying on the age pension. This report suggests that conservative decreases (by 5 or 10%) in the burden of disease over only five disease groups through health and medical research, are likely to have significant economic savings to the PHI sector.

Dr Paul Dawson
President
Australian Society for Medical Research

Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ASMR	Australian Society for Medical Research
AWE	average weekly earnings
CVD	cardiovascular disease
DALY	disability adjusted life year
MD	muscular dystrophy
MTAWE	Male Total Average Weekly Earnings
NHMRC	National Health and Medical Research Council
PBLCI	Pensioner and Beneficiary Living Cost Index
PHI	private health insurance
PHIAC	Private Health Insurance Administration Council
SIDS	sudden infant death syndrome
VSLY	value of a statistical life year

Executive summary

- This report extrapolates private health insurance (PHI) premiums in Australia over the next 50 years and examines whether greater investment in health and medical research over this period would result in lower health insurance premiums.
- In 2011-12, for an individual to purchase a singles policy to cover both hospital and general health insurance needs, it would cost an average of $2,072 and $4,144 for family hospital and general cover. By 2061-62, in current dollars, the premium costs would increase to $27,535 and $55,070 respectively.
- As a proportion of annual average income, single PHI premiums (for hospital and general cover) would increase from 3.8% in 2011-12 to 8.0% by 2061-62, while family PHI premiums would increase from 7.7% to 16.0%.
- As a proportion of age pensions, single PHI premiums (for hospital and general cover) would increase from 11.6% of the single pension in 2011-12 to 35.1% by 2061-62, while family PHI premiums would increase from 15.3% to 46.5% of the couple pension.
- Increasing the investment in Australian health and medical research to result in a 5 or 10% reduction in cardiovascular disease, cancer, asthma, sudden infant death syndrome (SIDS) and muscular dystrophy would result in PHI savings of:

PHI savings with 5% reduction in disease burden

- Single – savings of $39 per policy in 2012-13 increasing to $321 per policy per annum by 2061-62.
- Family – savings of $77 per policy in 2012-13 increasing to $642 per policy per annum by 2061-62.

PHI savings with 10% reduction in disease burden

- Single – savings of $77 per policy in 2012-13 increasing to $642 per policy per annum by 2061-62.
- Family – savings of $155 per policy in 2012-13 increasing to $1,284 per person per annum by 2061-62.

This amounts to total extrapolated savings in PHI expenditure, in net present value terms over the next five decades, of around $21.4 billion (5% scenario) or $42.9 billion (10% scenario).

1 Background

In 2011 Deloitte Access Economics completed a report for the Australian Society for Medical Research (ASMR) describing the financial and health returns on investment of health and medical research funded by the National Health and Medical Research Council (NHMRC) (Deloitte Access Economics, 2011). Benefits were measured as disability adjusted life years (DALYs) averted and converted to a dollar value using the value of a statistical life year (VSLY).

In February 2012 we provided an additional analysis in the form of a brief report, '*Extrapolated returns on investment in NHMRC medical research'*.

This study extrapolates private health insurance (PHI) premiums in Australia over the next 50 years together with household income[1], as well as the age pension, and a brief investigation into whether greater investment in health and medical research over this period would result in lower health insurance premiums.

[1] In Australia household income is most commonly measured using average weekly earnings. This contrasts with the analysis using median income in the United States by Young and DeVoe (2012).

2 Methods

2.1 Trends in PHI premiums

In this section, historical average annual health insurance premium increases are used to project Australian health insurance premiums over the next 50 years.

Health insurance data were retrieved from the Private Health Insurance Administration Council (PHIAC) website[2] for total premium revenue and the number of policies for financial year 2010-11, disaggregated by hospital and general (formerly called ancillary) cover. For the number of policies, it was also possible to disaggregate the data by single and family policies; however, PHIAC advised that premium revenue data were not available disaggregated by single and family policies. In order to estimate the split between singles and families for the premium revenue, Deloitte Access Economics used information on premiums from a sample of PHI companies for which data were available in the public domain.[3] The average premium per policy type was then calculated by dividing the overall revenue by the number of policies nationally, for each policy type. The resulting data – for the year 2010-11 – are presented in Table 2.1.

Table 2.1: PHI revenue, policies and average premium per policy, 2010-11

Policy type	Revenue from premiums ($'000)	Number of policies ('000)	Average premium per policy ($)
Single hospital policies	3,522,928	2,394	1,472
Family hospital policies	7,572,207	2,573	2,943
Total hospital policies	**11,095,135**	**4,967**	**2,234**
Single general policies	1,366,136	2,754	496
Family general policies	2,943,032	2,966	992
Total general policies	**4,309,168**	**5,720**	**753**
Total all policies *	15,404,303	10,687	1,441

Source: Deloitte Access Economics calculations based on PHIAC and other publicly available data. * This total does not include ambulance only policies.

To extrapolate these average premium estimates into the future, recent increases in PHI premiums were used. For the past two years (premiums are increased in April each year)

[2] The most recent revenue data by financial year (for the year 2010-11) is in a spreadsheet at: http://www.phiac.gov.au/resources/file/quarterlystatistics/120206%20annual%20report%20tables.xls Previous years (we used back to 2007-08) are at: http://www.phiac.gov.au/for-industry/industry-statistics/operations-of-the-private-health-insurers-annual-report/previous-years/. The data for each of these years on numbers of policies by hospital, general, single and family is at: http://www.phiac.gov.au/for-industry/industry-statistics/datatablesmc/

[3] AHM, HCF, Health Partners, Latrobe Health Service, Manchester Unity, MBF, nib, rthealth fund, Medibank Private, Bupa–HBA, Australian Unity, Teachers Federation Health, GMHBA, Defence Health, CBHS, GMF and Westfund.

these have been 5.06% and 5.56% respectively, with an average of 5.31%.[4] Assuming this rate continues into the future essentially assumes that cost increases and competition among insurers remain similar in the future compared to the recent past, and there are no changes to Government health insurance policy in the future that may affect the average cost of policies.

> Based on these assumptions, for an individual to purchase a singles policy to cover both hospital and general health insurance needs, it would cost $2,072 in 2011-12 and $4,144 for family hospital and general cover. By 2061-62, in current dollars, the premium costs would increase to $27,535 and $55,070 respectively.

2.2 Trends in PHI policy numbers and revenues

We reviewed the number of PHI policies from PHIAC data, stratified by type of cover (hospital, general) and nature of policy (single, family). These data were used as a baseline from which to extrapolate the number of PHI policies in each category over the next 50 years, based on demographic growth rates. This approach was taken given the recent volatility in policy coverage rates, and further recent changes that may affect policy numbers. Essentially this implies that cost increases and competition among insurers is assumed to be similar in the future compared to the recent past, and there are no further major changes to Government health insurance policy in the future that may substantially affect the number of policies per capita. Decade-on-decade summary data are provided for these extrapolations in Table 2.2.

Table 2.2: Projected numbers of PHI policies ('000)

	2012	2022	2032	2042	2052	2062
Hospital polices						
Single ('000)	2,424	2,734	3,051	3,363	3,687	4,038
Family ('000)	2,606	2,939	3,279	3,614	3,963	4,340
Total number of hospital policies	*5,030*	*5,673*	*6,329*	*6,977*	*7,651*	*8,379*
General polices						
Single ('000)	2,789	3,146	3,509	3,868	4,242	4,646
Family ('000)	3,004	3,388	3,780	4,166	4,568	5,003
Total number of general policies	*5,793*	*6,533*	*7,289*	*8,034*	*8,810*	*9,649*
Total number of policies	***10,823***	***12,207***	***13,618***	***15,011***	***16,461***	***18,028***

Note: These are financial years i.e. 2012 represents 2011-12.

To extrapolate the overall revenue from (or expenditure on) PHI, the numbers of policies of each type in each year were multiplied by the premium costs per policy. The results are summarised in Table 2.3.

[4] http://www.health.gov.au/internet/ministers/publishing.nsf/Content/mr-yr12-tp-tp019.htm

Table 2.3: Projected PHI revenue ($m)

	2012	2022	2032	2042	2052	2062
Hospital polices						
Single	3,757	7,109	13,306	24,605	45,264	83,164
Family	8,076	15,281	28,599	52,886	97,291	178,754
Total revenue from hospital policies	*11,833*	*22,390*	*41,905*	*77,491*	*142,556*	*261,918*
General polices						
Single	1,457	2,757	5,160	9,541	17,553	32,250
Family	3,139	5,939	11,115	20,555	37,813	69,475
Total revenue from general policies	*4,596*	*8,696*	*16,275*	*30,096*	*55,366*	*101,725*
Total revenue from all policies	***16,428***	***31,085***	***58,180***	***107,588***	***197,922***	***363,642***

Note: These are financial years i.e. 2012 represents 2011-12.

Based on these assumptions, the number of PHI policies would increase to 8.4 million hospital policies and 9.6 million general policies by 2061-62 i.e. an increase from 10.8 million in 2012-13 to 18.0 million policies in total. The revenue from these policies would increase from $16.4 billion in 2011-12 to $364 billion by 2061-62.

2.3 Trends in average incomes

Historic rises in (total) average weekly earnings (AWE) from the Australian Bureau of Statistics (ABS) were used to extrapolate average household income over the next 50 years.[5] The last two years of historic data and an estimate for 2011-12 are provided in Table 2.4.

Table 2.4: AWE and average annual income, 2009-10 to 2011-12 ($)

Income measure	2009-10	2010-11	2011-12
AWE	961.47	1,000.37	1,039.95
% increase on previous year	5.34%	4.05%	3.96%
Average annual income	49,997	52,019	54,078

Source: Deloitte Access Economics calculations based on ABS AWE publicly available data.

Trends in future AWE were based on projections in the Deloitte Access Economics macroeconomic model, averaging 3.77% per annum over the next decade and assumed to continue at this average rate thereafter.

On this basis, average annual income would increase from $54,078 in 2011-12 to $344,330 by 2061-62, in current dollars.

[5] Australian data is not sufficiently adequate for robust projection of median income.

2.4 Trends in pensions

Age pension rates were derived from the Centrelink website for singles and couples, as shown in Table 2.5. Note that these are maximum rates as the age pension is both income and assets tested. The pension is adjusted in March and September each year in line with the Pensioner and Beneficiary Living Cost Index (PBLCI) and Male Total Average Weekly Earnings (MTAWE).

Table 2.5: Age pension per fortnight, 2011-12 ($)

Pension type	Rate effective from 20 March 2012
Single	$695.30
Couple	$524.10 each

Source: Centrelink - http://www.centrelink.gov.au/internet/internet.nsf/payments/age_rates.htm

ABS data[6] shows annual increases in the PBLCI over recent years of:

- 2.3% to June 2009;
- 3.8% to June 2010;
- 4.5% to June 2011;
- 1.4% to March 2012 (June quarter data for 2012 are not yet available).

The simple average of these increases is 3.0% per annum, which was the rate used to project pension rate increases into the future.

On this basis, average age pension maximum annual payments per person were estimated as $17,914 in 2011-12 for singles and $27,009 for couples. By 2061-62, in current dollars, the payments would increase to $78,533 and $118,404 respectively.

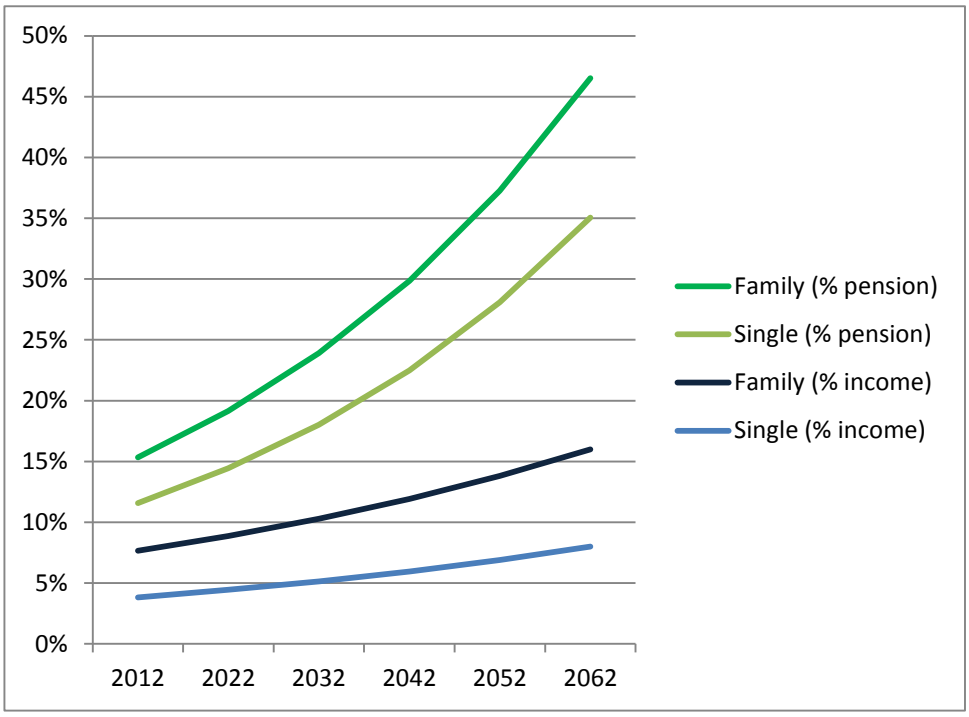
6 http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/A240CF51C330C297CA2576190018A8BE?opendocument

3 Findings

3.1 Comparison of PHI premiums, average incomes and pensions

This section shows projected health insurance premiums together with average household income and age pensions, to 2062 in Chart 3.1, based on the assumptions outlined in the previous chapter that current trends continue.

Chart 3.1: Extrapolated increase in PHI premiums, relative to income and pensions



Source: Deloitte Access Economics calculations based on PHIAC, ABS, Centrelink and other publicly available data. Note: These are financial years i.e. 2012 represents 2011-12.

The data underlying the chart is summarised in Table 3.1, which shows:

- as a proportion of annual average income, single PHI premiums (for hospital and general cover) would increase from 3.8% in 2011-12 to 8.0% by 2061-62, while family PHI premiums would increase from 7.7% to 16.0%; and
- as a proportion of age pensions, single PHI premiums (for hospital and general cover) would increase from 11.6% of the single pension in 2011-12 to 35.1% by 2061-62, while family PHI premiums would increase from 15.3% to 46.5% of the couple pension.

Table 3.1: Extrapolated increase in PHI premiums, relative to income and pensions

Premium pa	2012	2022	2032	2042	2052	2062
Single ($)	2,072	3,476	5,832	9,784	16,413	27,535
Family ($)	4,144	6,952	11,664	19,567	32,826	55,070
Single (% income)	3.8%	4.4%	5.1%	6.0%	6.9%	8.0%
Family (% income)	7.7%	8.9%	10.3%	11.9%	13.8%	16.0%
Single (% pension)	11.6%	14.4%	18.0%	22.5%	28.1%	35.1%
Family (% pension)	15.3%	19.2%	23.9%	29.8%	37.3%	46.5%

Source: Deloitte Access Economics calculations. Note: These are financial years i.e. 2012 represents 2011-12.

3.2 Scenario analysis

In this section, two scenarios are considered, increasing the investment in Australian health and medical research to result in a reduction in certain diseases by 5% and 10%. The diseases are confined to those considered in the recent Deloitte Access Economics report for ASMR, namely cardiovascular disease, cancer, asthma, sudden infant death syndrome (SIDS), and muscular dystrophy. The health system cost impact of this disease reduction is calculated and in turn, any reductions in health insurance costs estimated.

To calculate the impacts of disease reduction, epidemiological data on prevalence rates were applied to population projections to 2062, by age and gender, obtained from the Deloitte Access Economics demographic model. The prevalence rates used are shown in Table 3.2. Note that SIDS is only prevalent in the newborn population so its prevalence is not shown in the table.

Table 3.2: Prevalence rates used to project disease prevalence for select conditions

Age band	CVD		Cancer		Asthma		MD	
	Males	Females	Males	Females	Males	Females	Males	Females
0-4	1.57%	1.33%	0.07%	0.03%	9.90%	7.64%	0.024%	0.007%
5-9	1.57%	1.33%	0.05%	0.02%	15.10%	10.10%	0.024%	0.005%
10-14	1.57%	1.33%	0.05%	0.02%	11.43%	7.12%	0.020%	0.005%
15-19	2.46%	3.23%	0.08%	0.06%	11.04%	11.08%	0.015%	0.006%
20-24	2.46%	3.23%	0.08%	0.06%	11.04%	11.08%	0.014%	0.010%
25-29	3.79%	7.28%	0.22%	0.14%	7.18%	11.71%	0.015%	0.013%
30-34	3.79%	7.28%	0.22%	0.15%	7.18%	11.71%	0.015%	0.014%
35-39	9.03%	14.48%	0.48%	0.29%	8.46%	12.14%	0.016%	0.015%
40-44	9.03%	14.48%	0.48%	0.31%	8.46%	12.14%	0.019%	0.018%
45-49	21.61%	23.86%	1.39%	0.63%	6.43%	11.29%	0.021%	0.020%
50-54	21.61%	23.86%	1.39%	0.74%	6.43%	11.29%	0.022%	0.021%
55-59	33.94%	38.18%	4.08%	1.44%	7.07%	11.41%	0.023%	0.022%
60-64	33.94%	38.18%	4.08%	1.69%	7.07%	11.41%	0.023%	0.022%
65-69	47.88%	54.23%	8.28%	2.79%	8.55%	10.71%	0.023%	0.023%
70-74	47.88%	54.23%	8.28%	3.06%	8.55%	10.71%	0.023%	0.023%
75-79	51.93%	55.56%	7.06%	3.19%	7.07%	13.54%	0.021%	0.023%
80-84	51.93%	55.56%	7.06%	3.24%	7.07%	13.54%	0.018%	0.021%
85-89	51.93%	55.56%	7.06%	3.39%	7.07%	13.54%	0.013%	0.017%
90+	51.93%	55.56%	7.06%	3.39%	7.07%	13.54%	0.013%	0.015%

Source: Deloitte Access Economics calculations, based on Access Economics (2007a, 2007b, 2006, 2004).

The resulting prevalence of conditions for 2011-12 and 2061-62 are provided in Table 3.3, together with estimates of total DALYs for each. The DALY estimates were based on 2003 estimates of disease burden from the Australian Institute of Health and Welfare (AIHW) (Begg et al, 2007). DALY projections were based on expected growth in prevalence for each condition, with SIDS' burden of disease projected based on the growth rate of the population aged 0-4 years.

Table 3.3: Prevalence projections for select conditions

Condition	Prevalence		DALYs		
	2011-12	2061-62	2003	2011-12	2061-62
CVD	4,039,194	8,212,715	473,794	574,375	1,167,852
Cancer	299,110	675,251	499,416	628,849	1,419,650
Asthma	2,211,157	3,677,327	234,458	261,685	435,202
MD	3,827	6,447	265,046	301,119	507,358
SIDS	n.e.	n.e.	11,317	12,454	18,433

Source: Deloitte Access Economics calculations, based on Begg et al (2007), data from Table 3.2 and the Access Economics demographic model. n.e. not estimated.

The health system cost associated with each DALY lost to these specific conditions was estimated in Deloitte Access Economics (2011) as:

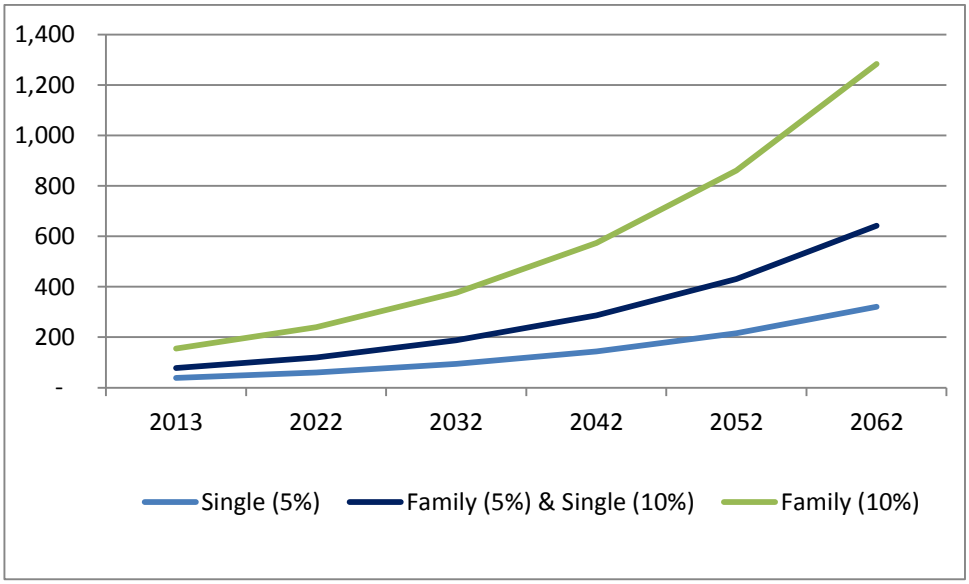
- $22,503 for CVD;
- $13,602 for cancer;
- $15,687 for asthma,
- $17,207 for MD; and
- $66 for SIDS.

These unit costs were applied to the DALY projections, inflated at 3% per annum from 2011-12 forward (since they are in 2011 prices), and the resulting total impost was discounted by 5% and 10% respectively for each scenario. Of the reduction in the economy-wide health system expenditures, some 7.6% would be paid for by PHI, based on AIHW (2011).[7] There are no savings in 2011-12 as this is the year the changes are modelled to commence – impacts commence in 2012-13.

Chart 3.2 shows the savings to PHI funds in costs, and hence assumed to have been passed on in proportionately lower premium prices, amounting to:

- For single policies, the 5% scenario results in PHI savings of $39 per policy in 2012-13 rising to $321 per policy per annum by 2061-62;
- For single policies under the 10% scenario or for family policies under the 5% scenario, there are PHI savings of $77 per policy in 2012-13 rising to $642 per policy per annum by 2061-62;
    - Note these are identical as the average singles policy premium was estimated, serendipitously, as exactly one half the average family policy premium price;
- For family policies under the 10% scenario, there are PHI savings of $155 per policy in 2012-13 rising to $1,284 per policy per annum by 2061-62.

Chart 3.2: PHI savings from the 5% and 10% scenarios by year ($ per policy per annum)



Source: Deloitte Access Economics calculations. Note: These are financial years i.e. 2013 represents 2012-13.

[7] AIHW (2011) p109 Table A3 shows that $9,203 million (7.6%) of Australia's total $121,355 million health expenditure in 2009-10 (the latest available) is paid for by PHI funds.

Greater detail is provided in Table 3.4 including the changes relative to average incomes and pensions. The table shows that:

- Under the 5% scenario, the difference in PHI premiums compared to the base case represents:
  - around 0.08% to 0.09% of average income in savings for singles and 0.15% to 0.19% of average income for families;
  - around 0.25% to 0.41% of pension payments in savings for singles and 0.33% to 0.54% of pension payments for couples;
- Under the 10% scenario, the difference in PHI premiums compared to the base case represents:
  - around 0.15% to 0.19% of average income in savings for singles and 0.31% to 0.37% of average income for families;
  - around 0.50% to 0.82% of pension payments in savings for singles and 0.66% to 1.08% of pension payments for couples.

Finally, extrapolating the savings in total PHI expenditures under the 5% and 10% scenarios provides the results presented in Table 3.5, in nominal prices.

- Under the 5% scenario, the total extrapolated PHI savings are estimated to:
  - increase from around $204 million in 2012-13 to around $2.8 billion by 2061-62 for singles ($95 million and $109 million savings for hospital and general policies rising to $1.3 billion and $1.5 billion respectively);
  - increase from around $439 million in 2012-13 to around $6.0 billion by 2061-62 for families ($204 million and $235 million savings for hospital and general policies rising to $2.8 billion and $3.2 billion respectively);
- Under the 10% scenario, the total extrapolated PHI savings are estimated to:
  - increase from around $409 million in 2012-13 to around $5.6 billion by 2061-62 for singles ($190 million and $219 million savings for hospital and general policies rising to $2.6 billion and $3.0 billion respectively);
  - increase from around $879 million in 2012-13 to around $12.0 billion by 2061-62 for families ($408 million and $471 million savings for hospital and general policies rising to $5.6 billion and $6.4 billion respectively).

To convert these savings to a single dollar metric so that the size of the savings in different years can be compared, we discount them back to 2011-12 dollars at 7% per annum, and estimate the net present value of the extrapolated savings on PHI premiums.

- For the 5% scenario, the savings over the 50 years in net present value terms are $21.4 billion - $6.8 billion from singles policies and $14.6 billion from family policies.
- For the 10% scenario, the savings over the 50 years in net present value terms are $42.9 billion - $13.6 billion from singles policies and $29.3 billion from family policies.

Table 3.4: Savings from 5% and 10% scenarios relative to average incomes and pensions

	2011-12	2021-22	2031-32	2041-42	2051-52	2061-62
5% scenario						
Single premium ($ pa)	2,072	3,433	5,781	9,726	16,349	27,464
Family premium ($ pa)	4,144	6,866	11,562	19,452	32,698	54,928
Difference compared to base case						
Single premium ($ pa)	-	(60)	(94)	(144)	(215)	(321)
Family premium ($ pa)	-	(120)	(188)	(287)	(430)	(642)
Single premium (% difference)	0.0%	-1.7%	-1.6%	-1.5%	-1.3%	-1.2%
Family premium (% difference)	0.0%	-1.7%	-1.6%	-1.5%	-1.3%	-1.2%
Premium compared to average income						
Single (% income)	3.83%	4.36%	5.06%	5.87%	6.81%	7.90%
Family (% income)	7.66%	8.73%	10.12%	11.74%	13.62%	15.81%
Difference compared to base case						
Single (% income)	0.00%	-0.08%	-0.08%	-0.09%	-0.09%	-0.09%
Family (% income)	0.00%	-0.15%	-0.17%	-0.17%	-0.18%	-0.19%
Premium compared to pension payment						
Single (% pension)	11.57%	14.19%	17.73%	22.17%	27.72%	34.65%
Family (% pension)	15.34%	18.82%	23.52%	29.41%	36.77%	45.97%
Difference compared to base case						
Single (% pension)	0.00%	-0.25%	-0.29%	-0.33%	-0.37%	-0.41%
Family (% pension)	0.00%	-0.33%	-0.39%	-0.44%	-0.49%	-0.54%
10% scenario						
Single premium ($ pa)	2,072	3,390	5,731	9,669	16,285	27,393
Family premium ($ pa)	4,144	6,780	11,461	19,337	32,570	54,786
Difference compared to base case						
Single premium ($ pa)	-	(120)	(188)	(287)	(430)	(642)
Family premium ($ pa)	-	(239)	(377)	(574)	(860)	(1,284)
Single premium (% difference)	0.0%	-1.7%	-1.6%	-1.5%	-1.3%	-1.2%
Family premium (% difference)	0.0%	-1.7%	-1.6%	-1.5%	-1.3%	-1.2%
Premium compared to average income						
Single (% income)	3.83%	4.29%	4.98%	5.78%	6.72%	7.81%
Family (% income)	7.66%	8.57%	9.95%	11.57%	13.44%	15.62%
Difference compared to base case						
Single (% income)	0.00%	-0.15%	-0.17%	-0.17%	-0.18%	-0.19%
Family (% income)	0.00%	-0.31%	-0.33%	-0.35%	-0.36%	-0.37%
Premium compared to pension payment						
Single (% pension)	11.57%	13.94%	17.44%	21.84%	27.35%	34.24%
Family (% pension)	15.34%	18.49%	23.14%	28.97%	36.28%	45.43%
Difference compared to base case						
Single (% pension)	0.00%	-0.50%	-0.58%	-0.66%	-0.74%	-0.82%
Family (% pension)	0.00%	-0.66%	-0.77%	-0.88%	-0.98%	-1.08%

Source: Deloitte Access Economics calculations.

Table 3.5: Savings from 5% and 10% scenarios for PHI expenditure

	2013	2022	2032	2042	2052	2062
PHI savings ($m, 5% scenario)						
Hospital single	95	164	287	483	793	1,296
Hospital family	204	352	618	1,037	1,705	2,786
General single	109	188	331	555	912	1,491
General family	235	405	712	1,196	1,965	3,211
Total PHI savings (5% scenario)	***644***	***1,109***	***1,948***	***3,271***	***5,376***	***8,783***
PHI savings ($m, 10% scenario)						
Hospital single	190	327	575	965	1,586	2,592
Hospital family	408	703	1,235	2,075	3,410	5,571
General single	219	376	661	1,110	1,825	2,981
General family	471	811	1,424	2,392	3,931	6,422
Total PHI savings (10% scenario)	***1,287***	***2,217***	***3,895***	***6,542***	***10,751***	***17,566***

Note: These are financial years i.e. 2013 represents 2012-13.

Summary

In this report, private health insurance (PHI) premiums in Australia were extrapolated for the period 2012 to 2062. The proportion of incomes and age pensions needed for PHI costs will more than double by 2062.

Cardiovascular disease, cancer, asthma, muscular dystrophy and SIDS, collectively account for 40% of the burden of disease in our nation. Decreasing the burden of these diseases by 5 or 10% through Australian health and medical research, has extrapolated savings for premiums ranging up to $642 or $1,284 respectively by 2062.

This amounts to total extrapolated savings in PHI expenditure, in net present value terms over the next five decades, of around $21.4 billion (5% scenario) or $42.9 billion (10% scenario).

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