

Health after Lifetime Health Cover

Recent Health Insurance Experience

Andrew P Gale, BSc, ASIA, ASA, FIAA
Alan Brown, BA, MSc, DipEd, AIA, FIAA

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ABSTRACT

After many years of membership decline, the Private Health Insurance industry in Australia experienced in mid-2000 massive growth as a result of the introduction of the entry-age rating system Lifetime Health Cover. This paper chronicles the changing environment for private health insurance over the past few years, drawing on information published by the industry regulator. The analysis provided in this paper will help the reader to determine the prognosis for the health of the private health insurance industry after Lifetime Health Cover.

CONTENTS

1. Lifetime Health Cover

- 1.1 What was the problem?
- 1.2 What was done?
- 1.3 Did it solve the problem?

2. Digging into the data

- 2.1 PHIAC Data Collections
- 2.2 Financial Performance
- 2.3 Membership Performance
- 2.4 Benefit Performance
- 2.5 Drawing Rate Analysis
- 2.6 Contribution Rates
- 2.7 Time Series Analysis

3. Is Lifetime Health Cover fair?

4. Is Lifetime Health Cover forever?

- 4.1 Was Lifetime Health Cover successful?
- 4.2 Cost Pressures
- 4.3 Tinkering with Lifetime Health Cover
- 4.4 Looking Forward

1. LIFETIME HEALTH COVER

1.1 What was the problem?

During the 1990's, private hospital insurance coverage fell from 45% to 30% of the population. The decline in coverage was most apparent amongst younger people, with the number of people covered under age 65 decreasing by 27% over the nine years to June 1999, while the number of people covered aged 65 and over increased by 9%. This compares with an increase of 10% and an increase of 23% in the corresponding groups in the entire Australian population during the same period. As a result the proportion of the privately insured population aged 65 and over increased from 10% to 15% over this period.

The decline in the proportion of the population with private health insurance across all age groups increased the cost pressure on and utilisation of Medicare. The Federal Government introduced a series of initiatives to halt and reverse these declining trends in private health insurance coverage. An income-tested incentive scheme and a 1% additional Medicare tax levy for non-insured high income earners was introduced in July 1997, followed by the replacement of the incentive scheme by a non-income tested 30% premium rebate from January 1999.

There was little change in persons covered or demographic profile as a result of the incentive scheme or the Medicare levy surcharge. However, the introduction of the 30% rebate did appear to stop the decline in coverage that had previously been running at almost 2% of the population each year.

1.2 What was done?

In April 1999, the Federal Government announced that Lifetime Health Cover would commence from July 2000. The essential features of Lifetime Health Cover are:

- Applies to Hospital cover only
- New members pay a permanent 2% premium loading for each year they delay entry after age 30
- Maximum premium loading of 70% applies for new entrants aged 65 and above
- Existing members at commencement date granted an entry age of 30, subject to a minimum one year membership post 1 July 2000
- No premium loadings apply to those born before 2 July 1934 (i.e. over age 65 when scheme was announced)
- Cumulative period of no cover of 3 years less one day allowed without penalty, thereafter the 2% penalty applies for each additional year uninsured

The month of June 2000 saw unprecedented numbers of people queuing up to purchase private hospital insurance. Consumers were subjected to saturation television and newspaper advertising from both the health funds and the government and 'free cover' offers to attract customers.

Monitoring the last minute rush to join, the government decided to extend the deadline from 30 June 2000 to 15 July 2000 so that no-one would be disadvantaged. Coverage increased by 2.1 million people in the June quarter, and by 0.6 million people in the September quarter, indicating that a significant proportion of the new joiners took advantage of the two week extension period.

1.3 Did it solve the problem?

The influx of almost three million people into private hospital insurance during those few months in mid-2000 significantly changed the demographic profile of the private health insurance population. Most growth occurred between the ages of 30 to 50, with little impact on the numbers insured over age 65 who were unaffected by Lifetime Health Cover premium loadings. The coverage for the age group 30 to 45 grew by a staggering 70%.

Since 16 July 2000, new joiners over the age of 30 who were previously uninsured have been subject to premium loadings. At 31 December 2002, 2.2% of adults covered for private hospital insurance pay a premium loading, with the average premium loading being 21%, generating perhaps \$25m per annum of additional contribution income for the industry.

These Lifetime Health Cover joiners have generally maintained their cover over the 2½ years since Lifetime Health Cover was introduced. By 31 December 2002, hospital coverage had reduced only marginally to 44.0% of the population, compared to the high of 45.6% at 30 September 2000. Despite this relative stability, there have been some changes in the age profile.

2. DIGGING INTO THE DATA

2.1 PHIAC Data Collections

The Private Health Insurance Administration Council (PHIAC) publishes a wealth of membership, benefit and financial information on the health insurance industry.

Registered health insurers in Australia provide prescribed data on both a quarterly and annual basis to PHIAC. This data is collated and published by PHIAC in a series of reports. The PHIAC A report, which covers each state and the whole of Australia, is in the public domain. It contains detailed information on:

- membership categories
- hospital services and benefits paid
- hospital and ancillary benefits paid and fees charged by age and sex
- medical gap benefits
- ancillary benefits paid by benefit type

The production of this report requires the collection of 1,354 fields of data from each fund for each state of operation, producing over 200,000 data items each quarter. The PHIAC B report contains this fund level data and is distributed only to health funds on a confidential basis. PHIAC also produces an annual report on the Operations of the Registered Health Benefits Organisations, which contains membership, benefit and financial information for each health fund.

The PHIAC data collection is regularly altered and expanded to improve the level of information available to both funds and external parties. The most recent set of changes in mid-2002 included:

- separate information on the hospital membership and benefit experience by age and sex of the Lifetime Health Cover cohort (those joining from 1 January 2000);
- ancillary membership and benefit experience by age and sex; and
- hospital membership by product attributes (level of cover and level of excess).

In this paper we analyse some of the PHIAC public domain information. Unless otherwise stated, all statistics and graphs are derived from data published on PHIAC's website.

Health after Lifetime Health Cover

2.2 Financial Performance

Health fund profitability has been quite variable, with a recent return to losses after the financial windfall caused by the improvement in the industry risk profile as a result of Lifetime Health Cover. These new entrants were also subject to waiting periods, thus intensifying this impact.

The following chart shows industry trading profit (contributions less benefits and expenses) before investment income and tax since 1991.

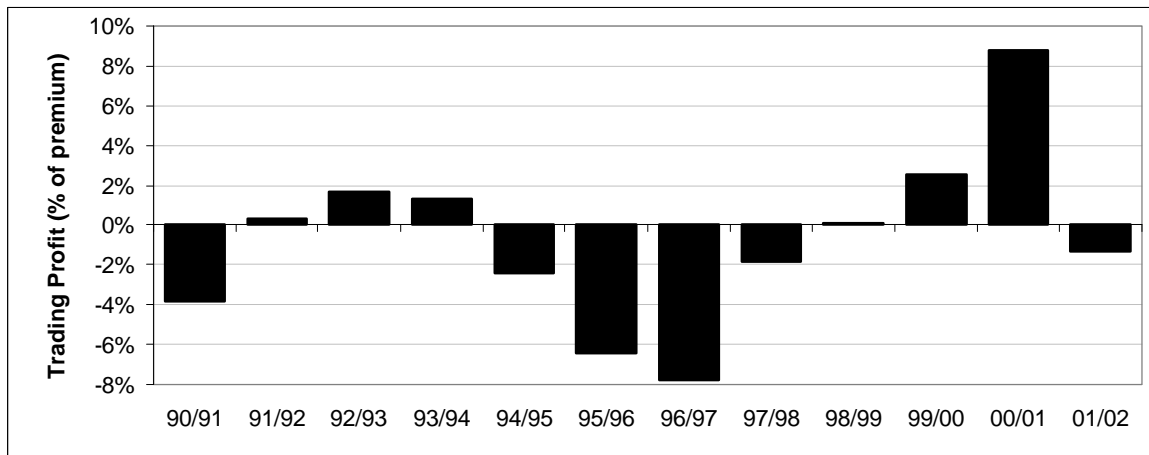


Figure 1 – Health Insurance Industry Trading Profit before tax

According to a Business Review Weekly article published on 3 April 2003, the industry posted a trading loss of 0.7% of premium for the 6 months ended 31 December 2002.

The 12-year average trading loss is 0.2% of contributions. Investment income has averaged 3.5% of contributions over the same period.

2.3 Membership Performance

Since the introduction of universal health care arrangements in Australia, the number of persons covered by private health insurance has been falling. The proportion of Australians with private hospital insurance has declined from a peak of 80% in 1970 to 44% at the end of 2002.

During this period of generally declining private hospital insurance coverage, there have been several government-induced shocks, including the introduction of Medibank in 1975, Medibank Mark II in 1976, the re-introduction of tax deductibility of private health insurance premiums in 1981 and subsequent removal of tax deductibility and introduction of Medicare in 1984. The impact of the introduction of Lifetime Health Cover in mid-2000 represents a startling contrast to the experience of the preceding 15 years.

Health after Lifetime Health Cover

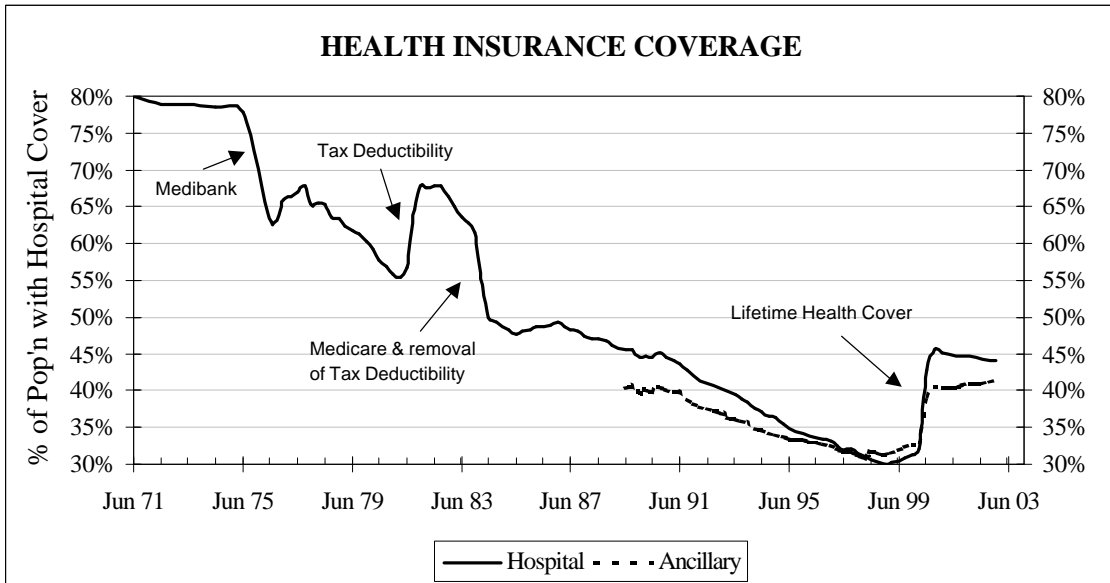


Figure 2 – Health Insurance Coverage 1971-2002

Private hospital insurance coverage is currently at the same level as it was 12 years ago. Females tend to have higher levels of hospital cover than males as illustrated in the following graph. This is partly explained by the separate cover provided by the Commonwealth for war veterans.

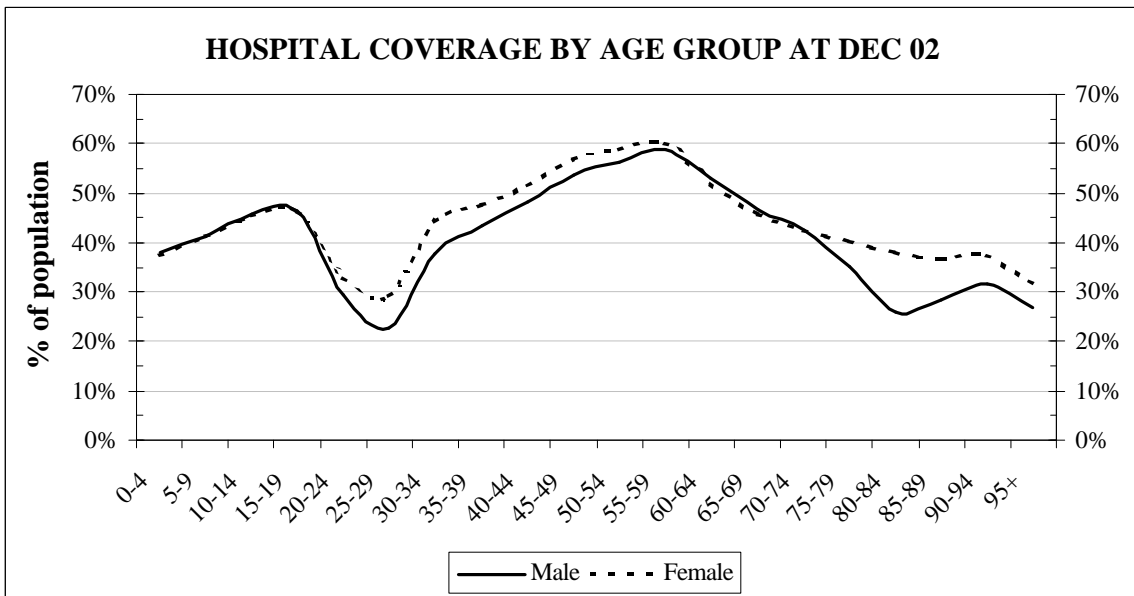


Figure 3 – Hospital Insurance Coverage by Age Group and Sex: Dec 2002

A similar graph for ancillary cover is shown below. While historical comparisons cannot be shown (as collection of this data only started during 2002) the pattern is similar to hospital insurance but with lower levels of cover at older ages than for hospital cover.

Health after Lifetime Health Cover

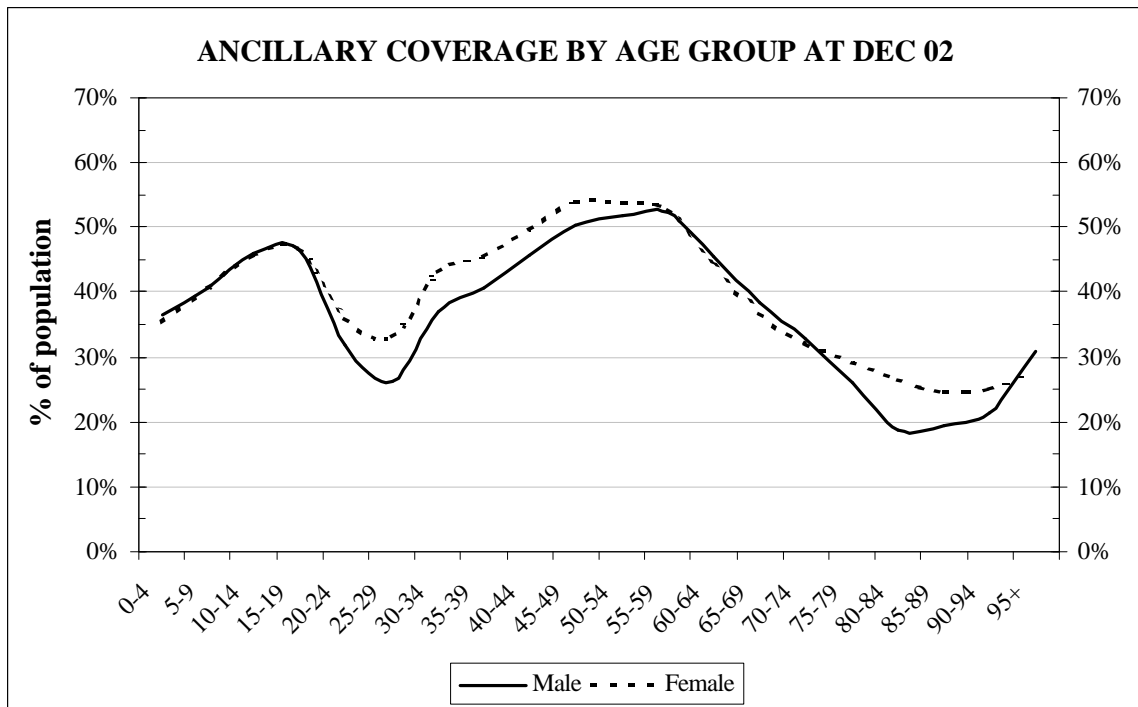


Figure 4 – Ancillary Insurance Coverage by Age Group and Sex: Dec 2002

Looking at the penetration of health insurance into different age groups, we can see that those aged 40 to 70 have the highest level of health insurance, while young adults have low levels of coverage. Children show similar coverage levels to their parents as they obtain insurance as part of their family. There are also low levels of ancillary cover amongst the elderly.

The introduction of Lifetime Health Cover resulted in massive growth in hospital coverage amongst adults between the ages of 30 and 65 who faced premium loadings in the future if they did not take out cover before mid-2000. These people also purchased cover for their children.

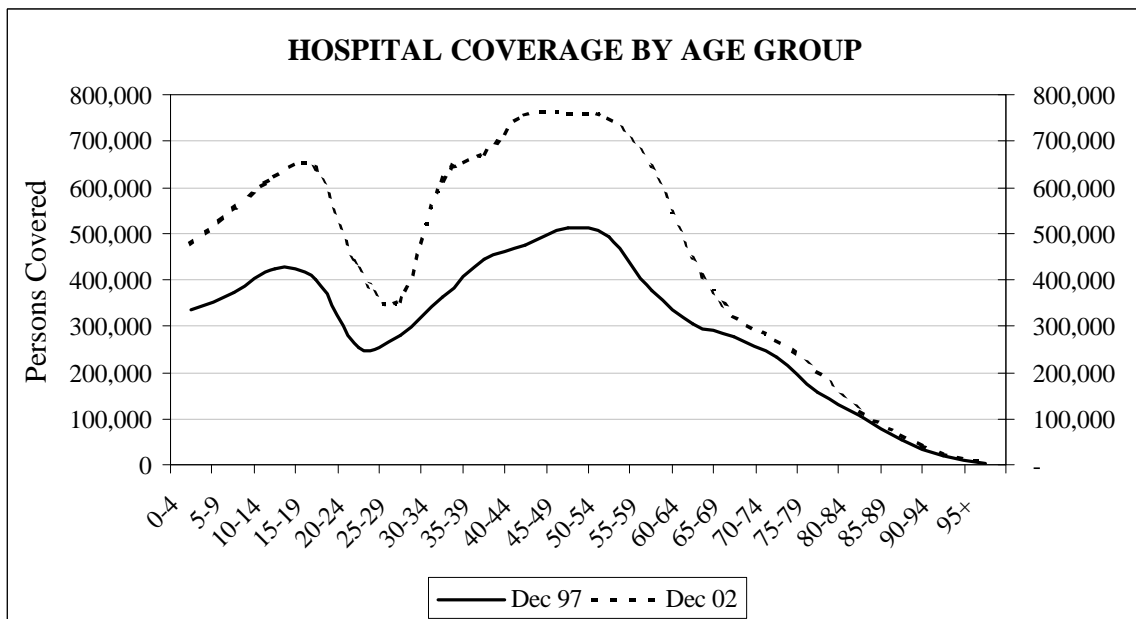


Figure 5 – Hospital Insurance Coverage by Age Group: Dec 1997 and Dec 2002

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Lifetime Health Cover increased hospital insurance cover in all age groups. At December 2002, 64% of those aged 55 to 59 have private hospital insurance.

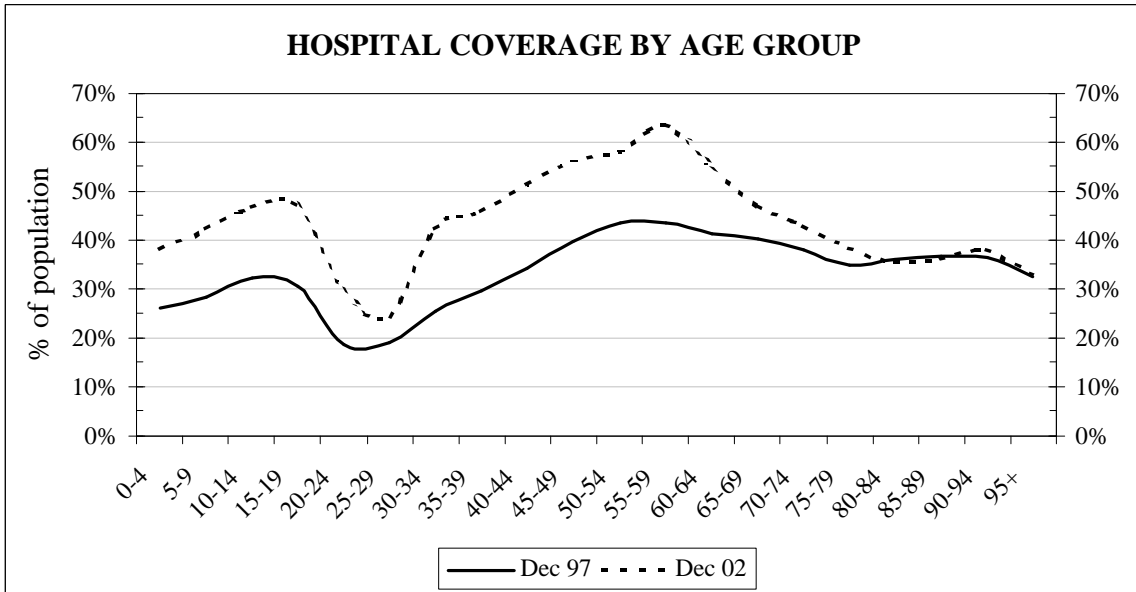


Figure 6 – Hospital Insurance Penetration by Age Group: Dec 1997 and Dec 2002

Since the introduction of Lifetime Health Cover, there has been a continual increase in the number of insured persons aged 65 and over. There has been a 17% growth in the number of persons aged 65 and over during the three years to December 2002, compared to only 3% growth in the previous three year period. Part of this increase is due to the natural ageing of the insured population while some is due to elderly new entrants. The Australian population aged 65 and over is growing by about 1.7% pa, while the under 65 population is growing at about 1.0% pa. Despite the introduction of Lifetime Health Cover, uninsured older people continue to join as those born before 2 July 1934 are permanently exempted from premium loadings.

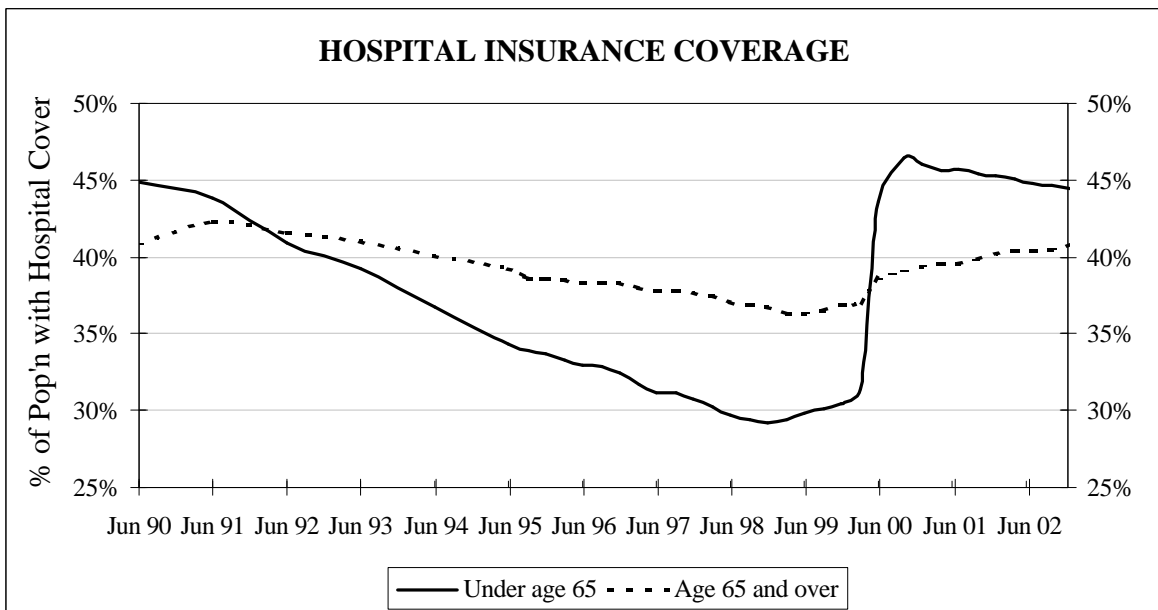


Figure 7 – Hospital Insurance penetration by under/over age 65: Jun 1990 - Dec 2002

Health after Lifetime Health Cover

Changes in the demographic mix of insured persons have a significant financial impact. Changes in the risk profile over time can be measured by applying weights equal to the average benefit paid per person by risk group to the insured population. Over the past five years, the risk profile has changed as follows:

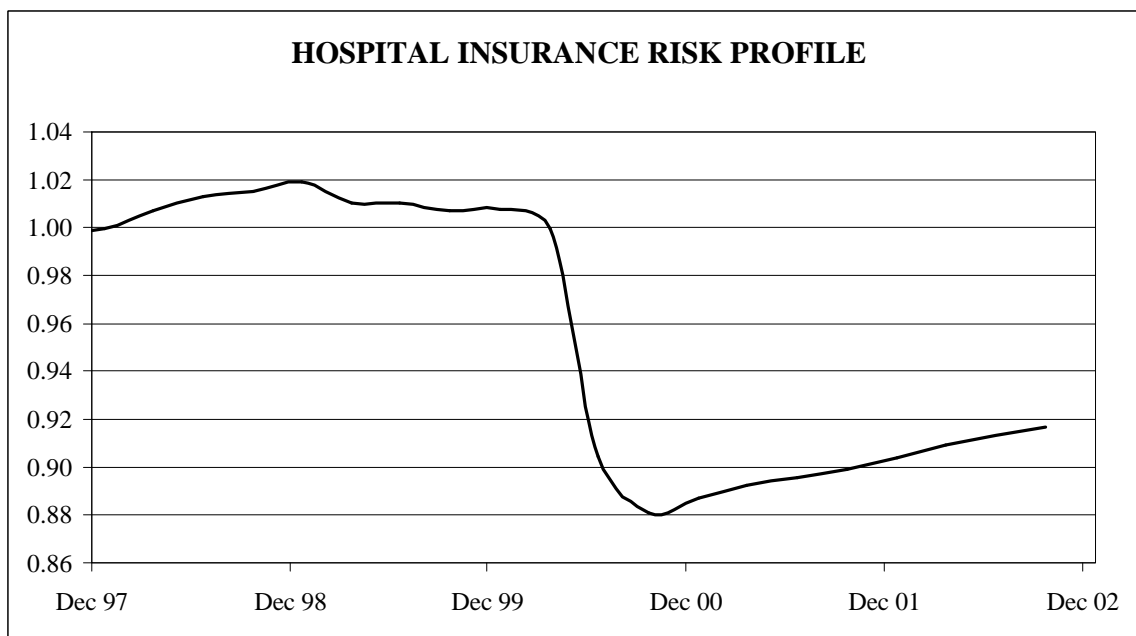


Figure 8 – Hospital insurance risk profile: Dec 1997 – Dec 2002 (Dec 97 = 1.00)

From the graph, the improvement in the risk profile as a result of the introduction of Lifetime Health Cover was about 12%. This roughly correlates with the reduced level of contribution rate increases during this period shown in section 2.6 below.

People over age 30 taking out hospital cover for the first time are now subject to permanent premium loadings. The following graph shows how the proportion of adult persons subject to these loadings has increased since Lifetime Health Cover commenced.

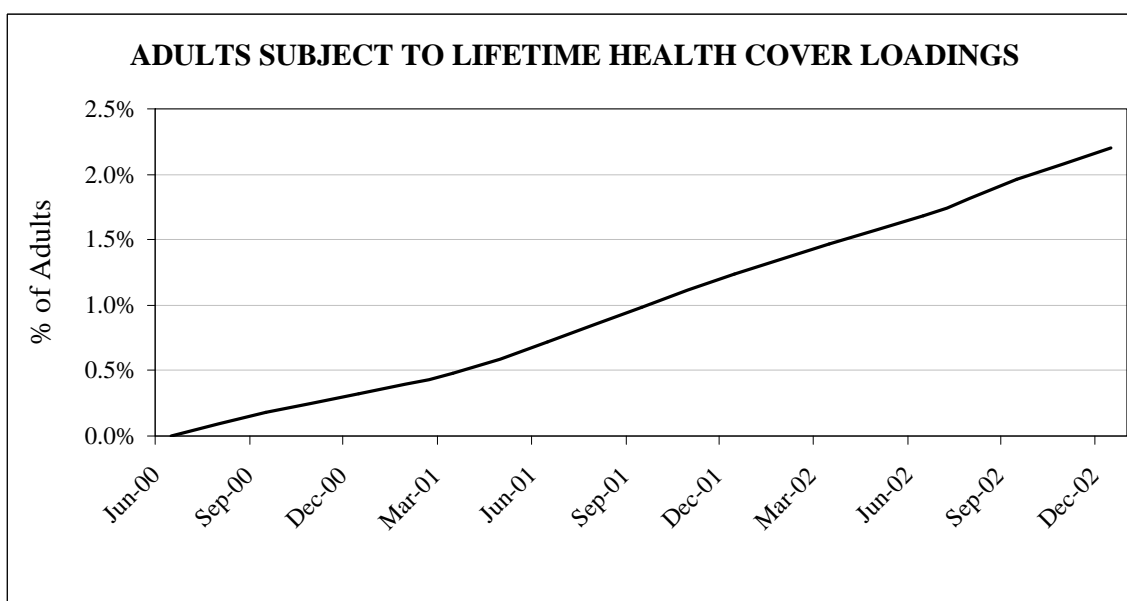


Figure 9 – Adults subject to Lifetime Health Cover loadings: Jun 2000 – Dec 2002

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At December 2002, there were 137,000 adults paying Lifetime Health Cover loadings.

The PHIAC statistics also allow some analysis of the product mix of the insured population.

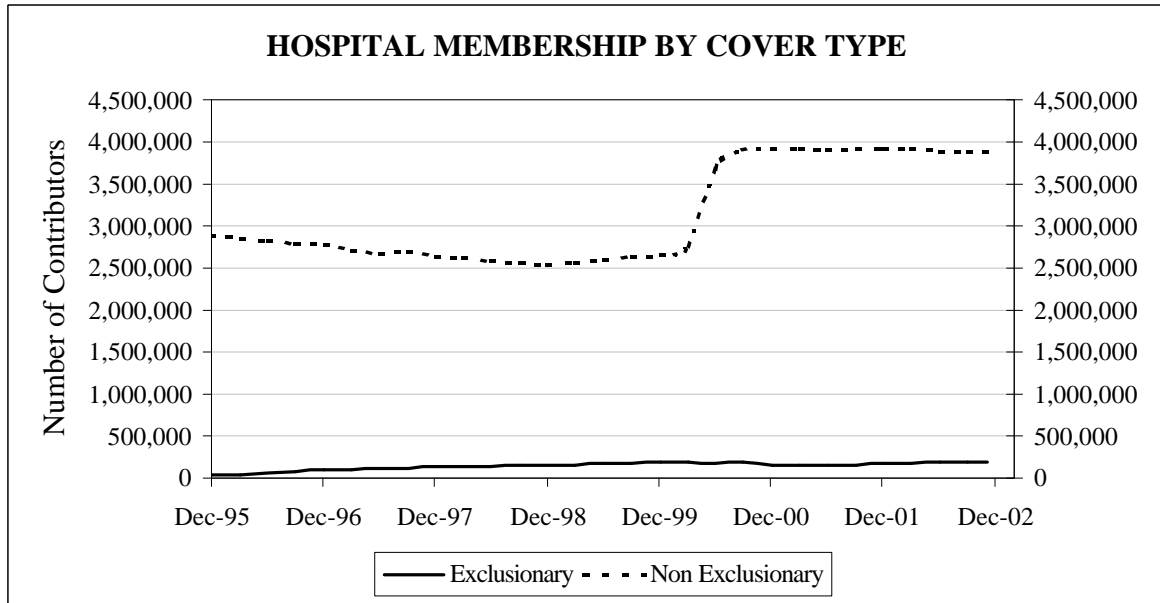


Figure 10 – Hospital membership by product type: Dec 1995 – Dec 2002

Exclusionary products have had only limited success, representing 4.7% of all memberships at December 2002. Note that many funds offer products that provide cover for all conditions in public hospitals, but have exclusions for some conditions in private hospitals. In the PHIAC statistics these products are not classified as exclusionary.

The proportion of memberships covered by products with a front end deductible or excess has increased from 24% at December 1995 to 56% at December 2002. However there is significant variation by state, ranging from 40% in South Australia to 70% in Tasmania.

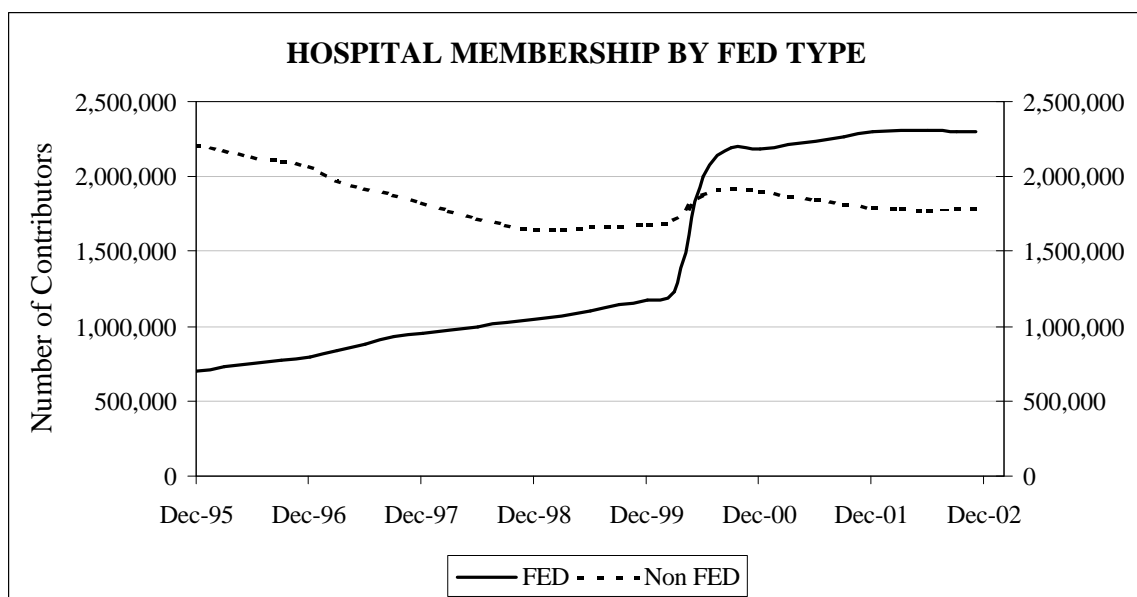


Figure 11 – Hospital membership by Front-end deductible type: Dec 1995 – Dec 2002

Health after Lifetime Health Cover

The product mix at December 2002 can be further analysed as follows:

Product Type	No Exclusions	With Exclusions	Total
Full cover	64%	1%	65%
Reduced Cover	32%	3%	35%
Total	96%	4%	100%

Excess Level	% of contributors
Nil	27%
Up to \$500 Single / \$1000 Family	49%
Over \$500 Single / \$1000 Family	24%

Most members have full cover with no exclusions, with a front end deductible or excess of less than \$500 per single member or \$1000 per family member.

2.4 Benefit Trends

In the 12 months to December 2002, private health funds paid \$6,643m in benefits as follows:

Hospital products		Ancillary products	
Category	\$m	Category	\$m
Public hospital		Dental	966
- same day	20	Optical	305
- overnight	277	Physiotherapy	143
Private hospital		Chiropractic	137
- same day	542	Other	394
- overnight	2,669		
Medical	667		
Prostheses	472		
Other	51		
<i>Total Hospital</i>	4,698	<i>Total Ancillary</i>	1,945

The rate of growth in hospital benefits paid per single equivalent unit (SEU or adult person) over the past 12 years has been analysed into components in the following table:

% increase in benefits per SEU over previous year	3 yrs to Jun 93	3 yrs to Jun 96	3 yrs to Jun 99	3 yrs to Jun 02	12 yrs to Jun 02
Public hospital	3.9%	-9.6%	-7.8%	-7.6%	-5.4%
Private hospital	14.9%	11.8%	5.3%	-4.2%	6.7%
Day hospital	38.8%	44.8%	19.8%	11.1%	27.9%
<i>Total accommodation</i>	<i>12.0%</i>	<i>7.9%</i>	<i>3.9%</i>	<i>-4.1%</i>	<i>4.8%</i>
Medical	12.9%	7.8%	7.0%	16.0%	10.9%
Prostheses	37.0%	24.2%	24.8%	5.6%	22.4%
<i>Total hospital</i>	<i>12.6%</i>	<i>8.4%</i>	<i>5.3%</i>	<i>-1.3%</i>	<i>6.2%</i>

The increase in total hospital benefits per SEU has averaged 6.2% per annum over the past 12 years. The following table shows the increases over each of the last six financial years.

Health after Lifetime Health Cover

Financial Year	% increase in Benefits paid per SEU over previous year	
	Hospital	Ancillary
1996/97	9.9%	6.4%
1997/98	1.5%	0.7%
1998/99	3.8%	0.1%
1999/00	-4.8%	2.4%
2000/01	-13.8%	2.3%
2001/02	19.8%	21.6%

A significant trend over recent years has been the shift away from overnight hospitalisations toward same day procedures as illustrated by the following graph:

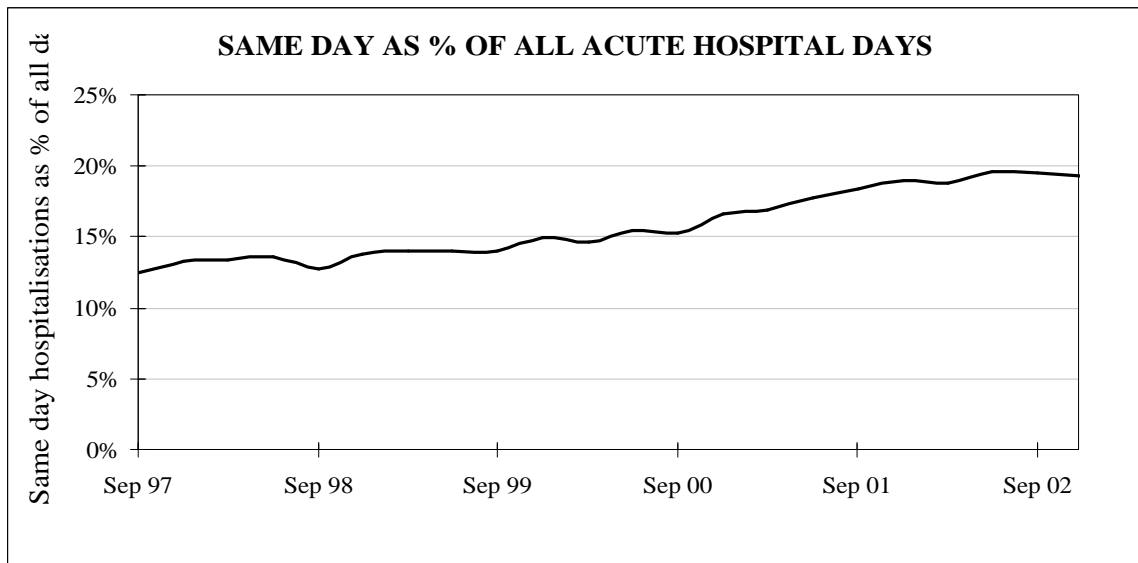


Figure 12 – Same day hospitalisations as % of total acute days: Sep 1997 – Dec 2002

Same day hospital episodes were 59% of all episodes during 2002, up from 53% in 2000. This trend has had a downward effect on aggregate hospital benefits given the cost differential between same day and overnight benefits paid per day as illustrated by the following graph:

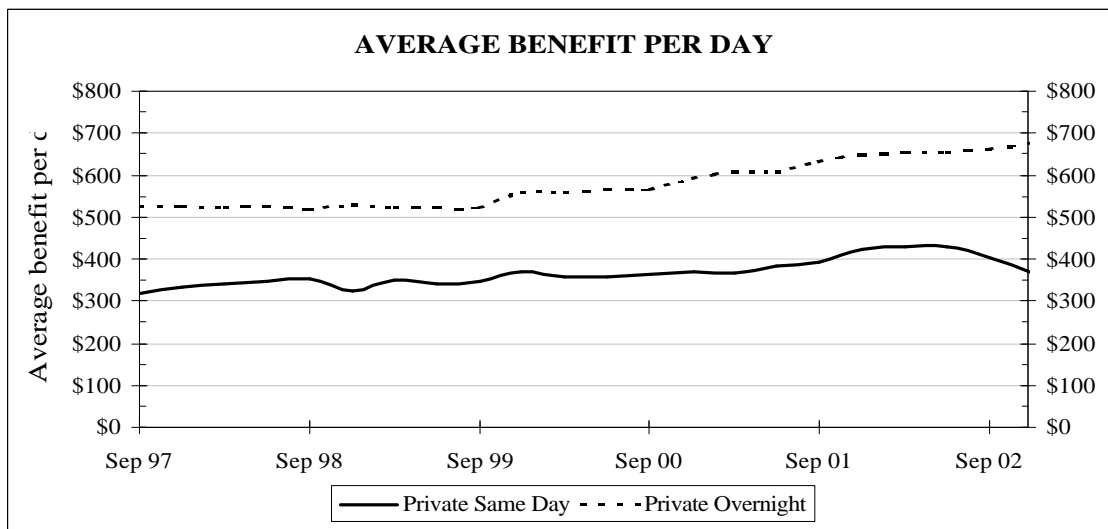


Figure 13 - Average hospital benefit per day – private same day vs. overnight: Sep 1997 – Dec 2002

Health after Lifetime Health Cover

There must surely be limits to the continuation of this trend towards same day procedures.

The major growth areas in hospital insurance benefit outlays have been medical and prostheses. Benefits paid per SEU for these categories have increased by 10.9% per annum and 22.4% per annum respectively over the past 12 years.

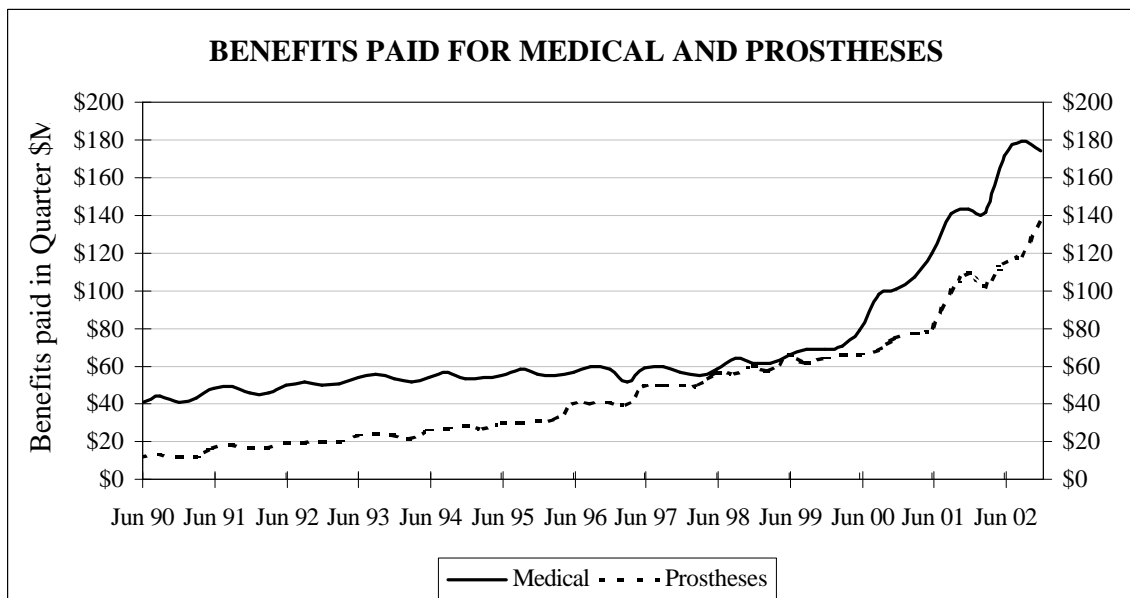


Figure 14 – Medical and Prostheses benefits paid – same day vs. overnight: Jun 1990 – Dec 2002

Since July 1995 when health funds were permitted to enter into contracts with medical specialists to pay medical benefits above the Commonwealth Medical Benefit Schedule (MBS) fee, health funds have been contracting with medical specialists to reduce medical out of pocket costs for members. The proportion of medical services paid by health funds with no member co-payment increased from 60% at September 2000 to 70% at June 2001 and 80% at December 2002.

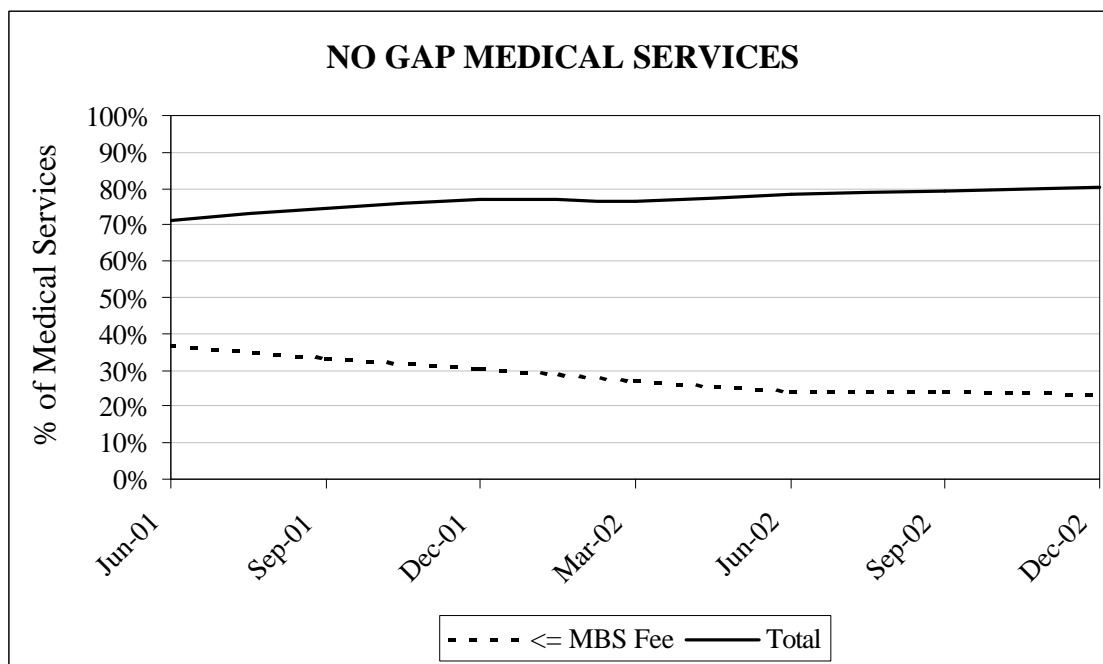


Figure 15 – No gap medical services: Jun 2001 – Dec 2002

Health after Lifetime Health Cover

During the December 2002 quarter, 23% of medical services were rendered at or below the MBS fee, a further 57% of services were rendered at an average fee of 136% of the MBS fee with no gap payable, and 20% of services were rendered at an average 176% of MBS fee with an average member gap payment of 69% of the MBS fee. The proportion of medical services where the specialist charged at or below the MBS fee has fallen significantly over the past two years.

2.5 Drawing Rate Analysis

The average benefit paid per person by age and sex for hospital products is shown below:

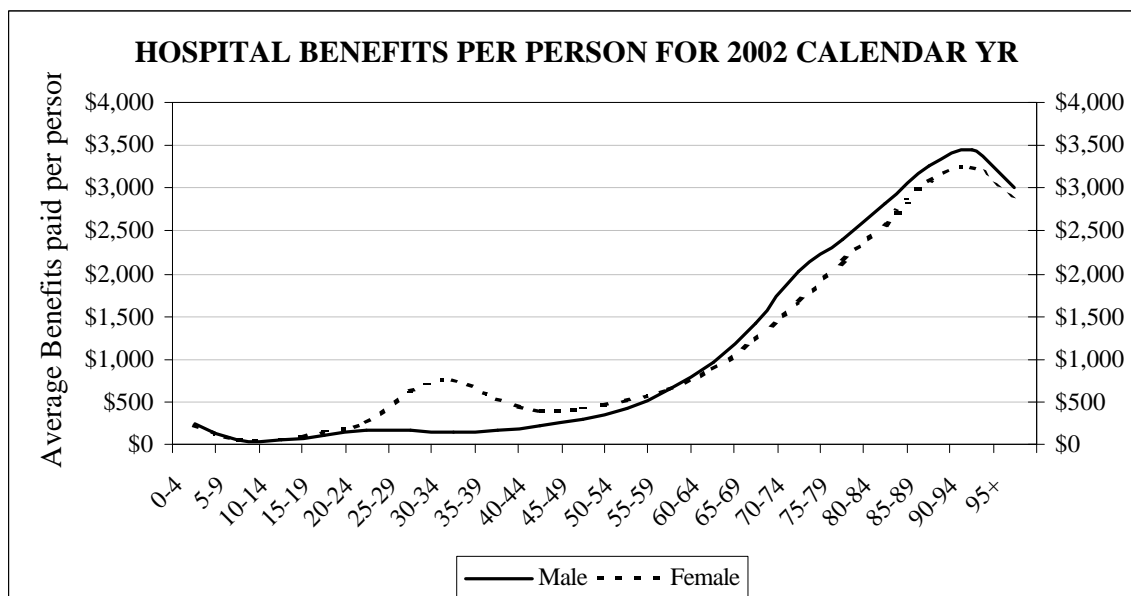


Figure 16 – Hospital benefits per person: 2002 Calendar year

A similar graph for ancillary benefits is shown below. As can be seen from the graphs, ancillary claims increase with age, but not as markedly as for hospital claims. Females also make higher claims on average than males. Of course there is a wide variation in individual hospital benefits paid, with 3% of episodes costing more than \$10,000, and claims as large as \$0.5m are possible.

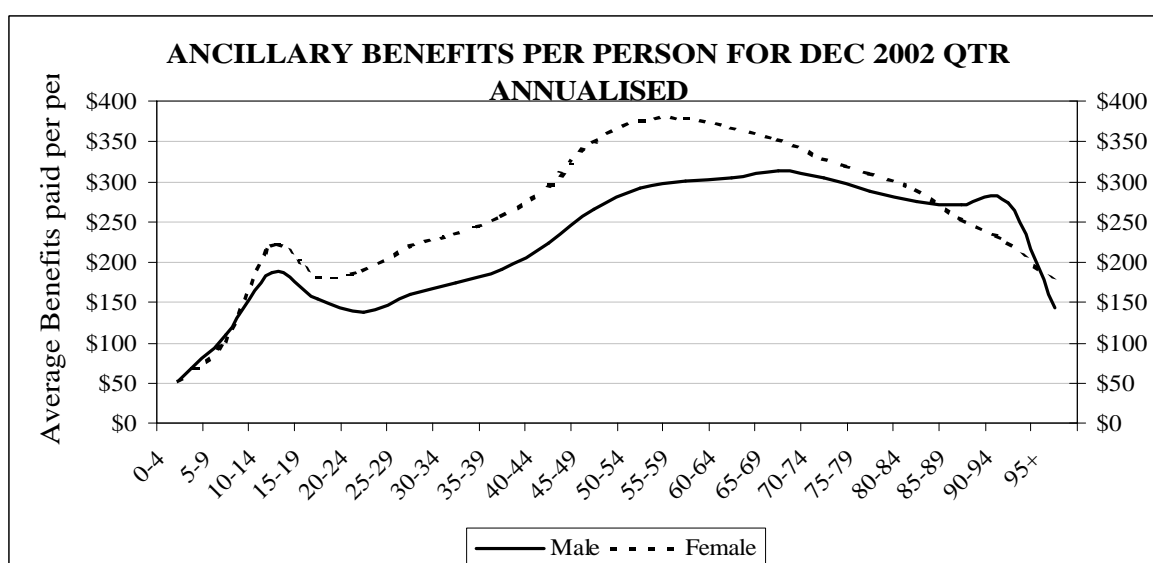


Figure 17 – Ancillary benefits per person: Dec 2002 quarter annualised

Health after Lifetime Health Cover

We can also examine the increase in hospital benefits paid per person over the past 4 years:

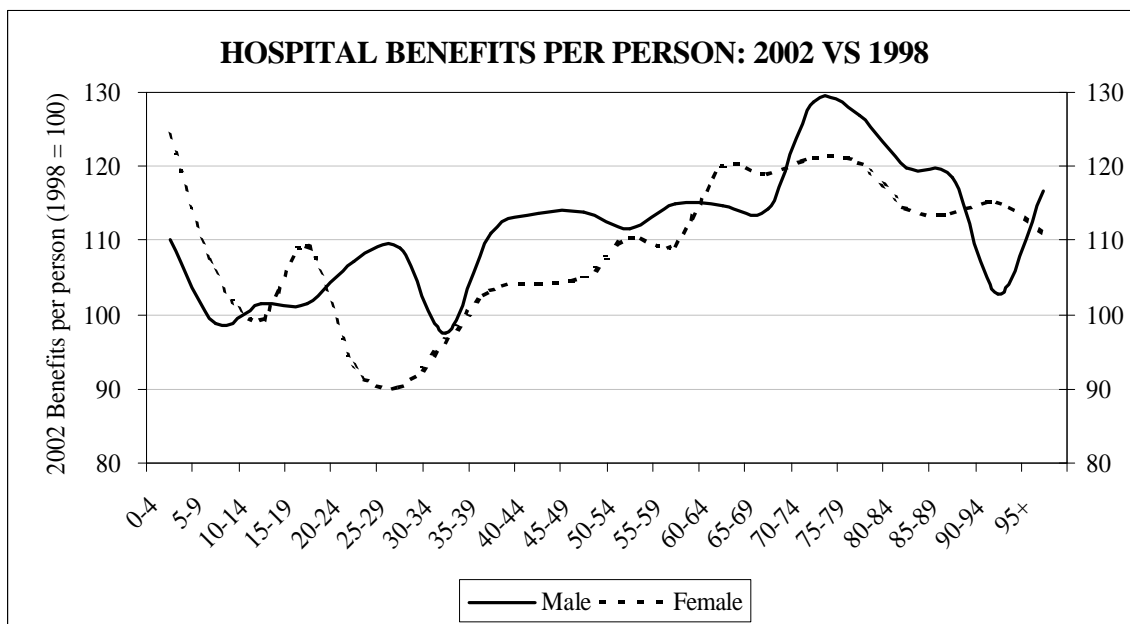


Figure 18 – Growth in Hospital benefits per person: 1998 to 2002

Hospital benefits per person appear to be growing at a faster rate in older age groups. We can also examine the experience of the Lifetime Health Cover cohort:

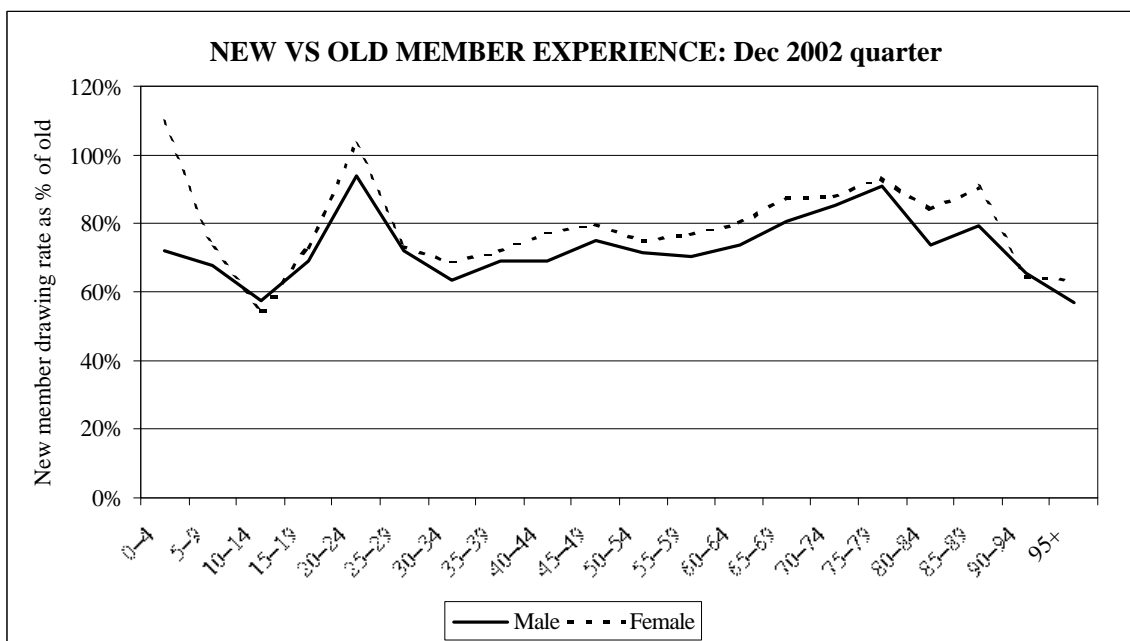


Figure 19 – New compared to old member experience: Dec 2002 quarter

The cohort of members who joined in 2000 appears to have a healthier profile than existing members. The age-adjusted relative claim rate is about 80%. However, new members have often purchased lower levels of hospital cover with exclusions and front end deductibles, leading to a benefit to fee ratio of 79% for new members compared to 84% for existing members.

Health after Lifetime Health Cover

2.6 Contribution Rates

Since 1998, as part of a process determined by Government, health funds adjust their prices generally once each year in March/April. The industry average of the prices increases approved has been as follows:

Year	Average Price Increase
1998	6.8%
1999	4.9%
2000	1.8%
2001	0.0%
2002	6.9%
2003	7.4%

Source: quarterly reports on private health insurance premium increases tabled in the Senate

The table shows the average price increase across hospital and ancillary products weighted by the number of contributors. This method, which effectively gives equal weighting to hospital and ancillary price increases, may tend to underestimate the increase in revenue generated.

It appears that an average price increase of 7% per annum is the norm. The introduction of Lifetime Health Cover led to a short period of price stability, pointing to about a 12% 'price dividend'.

2.7 Time Series Analysis

A process of analysing a time series of quarterly hospital benefit data is studied in this section.

A model for benefits paid in a quarter can be written as

$$B_t = N_t \times R_t \times L_t \times P_t \quad \text{for } t = 1, 2, \dots, T$$

where, in quarter t ,

B_t = benefits paid,

N_t = persons covered,

E_t = number of episodes,

D_t = number of bed days,

$$R_t = \frac{E_t}{N_t} = \text{average number of episodes per person covered}$$

$$L_t = \frac{D_t}{E_t} = \text{average length of stay per episode}$$

$$P_t = \frac{B_t}{D_t} = \text{average benefit payment per day in hospital}$$

To transform this model from a multiplicative model to an additive model, we first divide each factor by its own average over the period under investigation. Let

$$M_t = \frac{N_t}{N}, \quad C_t = \frac{E_t}{E}, \quad S_t = \frac{R_t}{R}, \quad K_t = \frac{L_t}{L}, \quad Q_t = \frac{P_t}{P}, \quad Z_t = \frac{B_t}{B}$$

Health after Lifetime Health Cover

The division is always possible when the number of persons covered, episodes, episodes per person, length of stay, payment per day and benefits paid are positive each quarter.

Rescaling each of these series in the model we obtain

$$Z_t = M_t \times S_t \times K_t \times Q_t \times \frac{\overline{N} \times \overline{R} \times \overline{L} \times \overline{P}}{\overline{B}} \quad \text{for } t=1,2,\dots,T$$

Next we take logarithms and modify the notation again to obtain a structural equation

$$z_t = m_t + s_t + k_t + q_t - h \quad \text{for } t=1,2,\dots,T$$

where

$$h = \log_e \left(\frac{\overline{B}}{\overline{N} \times \overline{R} \times \overline{L} \times \overline{P}} \right)$$

is a constant. This constant is a measure of the association between the variables in the model. It can be decomposed into components in an obvious way by considering pairs of variables at a time.

The structural equation is additive, with equal weight being given to each component. The data rescaling and logarithmic transformation results in the mean of each modified series being close to zero.

The plot of the modified data for the period September 1997 to December 2002 reveals much of the structure in a simple way, despite the number of series involved.

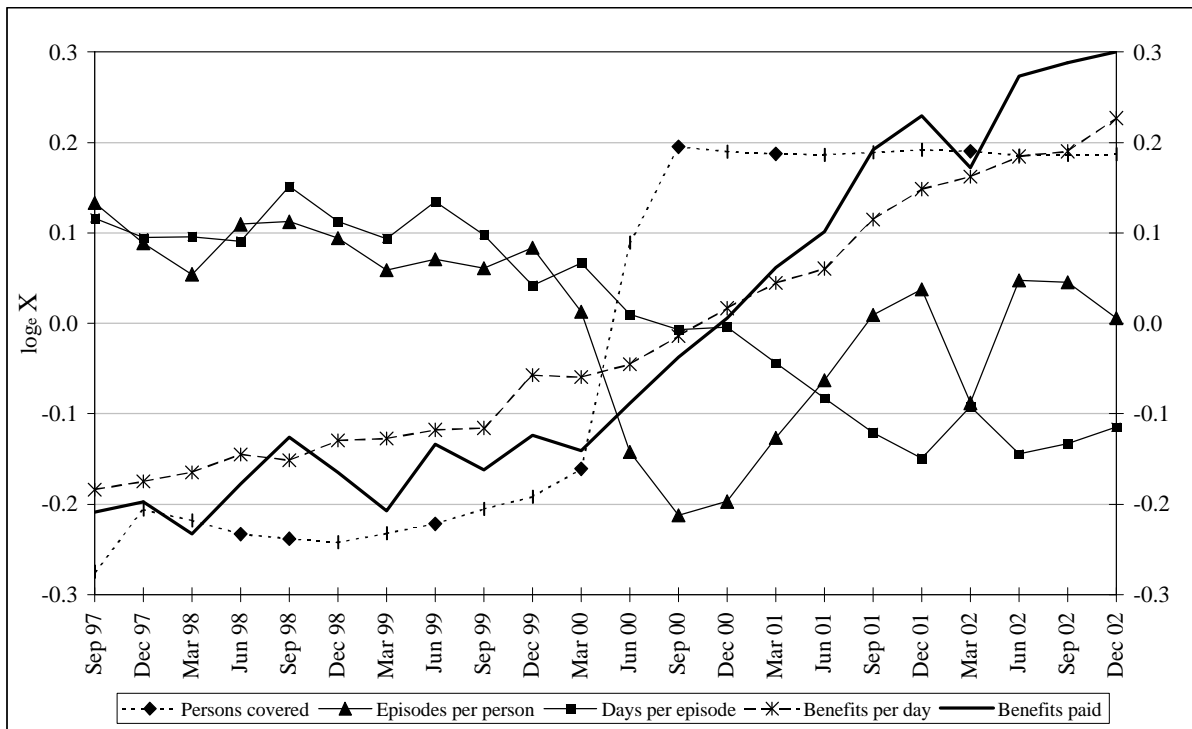


Figure 20 – Structure of benefits paid per quarter

The negative association between persons covered and episodes per person at the introduction of Lifetime Health Cover is evident. In addition, the regular decrease in length of stay and the more rapid increase in the benefit paid per day in the period under study are immediately obvious.

3. IS LIFETIME HEALTH COVER FAIR?

The Lifetime Health Cover scale imposes 2% premium loadings for each year that entry to private health insurance is delayed. A maximum loading of 70% applies at age 65 onwards. This is a simplified form of the “modified form of community rating ... under which the premium paid by an insured person – as in life insurance – would be based on age at entry and maintained at the same level (as a proportion of the premium charged to a good-risk entrant) for as long as the contributor remained insured” originally envisioned by the architects of Medibank, Deeble and Scotton, in 1973 (see *The Making of Medibank* p274).

While the scale is artificial, it is important that it approximate an actuarially fair price, since significant departure from a fair scale may lead to incentives to defer entry.

The age related claims data in the PHIAC A reports can be used to check the fairness of this scale. We have used benefit data in preference to fee charged data since the latter is presently only available for a six month period. Given Lifetime Health Cover provides the ability to move between products without the imposition of additional loadings, the use of benefit data is appropriate so as to allow for the tendency for members to upgrade to more comprehensive products as they age.

Consider a new member age x who is required to pay a multiple r_x of the certified base premium rate P . The present value of future premiums over the lifetime of the new member is:

$$\sum_{t=0}^{w-x} P \times r_x \times (1+i)^t \times v^t \times \frac{l_{x+t}}{l_x} \quad \text{where } l_x \text{ is the IA90-92 survival table and } v = \frac{1}{1+i}$$

The present value of future benefits paid over the lifetime of the member is:

$$\sum_{t=0}^{w-x} B_{x+t} \times (1+j)^{t+1/2} \times v^{t+1/2} \times \frac{l_{x+t+1/2}}{l_x}$$

where B_x is the average benefits paid per annum for a person aged x .

If the rates of increase for the premium, i , and the benefits, j , are equal (as one would expect for a pay-as-you-go system), and each are equal to the investment earning rate used to calculate the discount factor v , then the entry scale is fair if:

$$\sum_{t=0}^{w-x} P \times r_x \times \frac{l_{x+t}}{l_x} = \sum_{t=0}^{w-x} B_{x+t} \times \frac{l_{x+t+1/2}}{l_x}$$

$$\text{So } P \times r_x = \frac{\sum_{t=0}^{w-x} B_{x+t} \times l_{x+t+1/2}}{\sum_{t=0}^{w-x} l_{x+t}}$$

The following table shows the premium relativities r_x using this formula for a base entry age of 32 chosen for convenience given the 5 year age banding of the PHIAC data. It can be seen that the Lifetime Health Cover scale is a close approximation to the relative entry age premium rates that may develop in a free market.

Health after Lifetime Health Cover

age group x to x+4	l_{x+2} [1]	B_{x+2}	$B_{x+2} \cdot L_{x+2}$ [2]	Σl_{x+2} [3]	$\Sigma B_{x+2} \cdot l_{x+2}$ [4]	P. r(x+2) [5]	True LHC Premium Scale	Regulated LHC Scale
0-4	98,873	231	22,842,907	1,623,667	1,237,443,233	762	0.698	1.000
5-9	98,668	53	5,263,939	1,524,794	1,214,600,326	797	0.730	1.000
10-14	98,530	55	5,441,048	1,426,126	1,209,336,387	848	0.777	1.000
15-19	98,291	132	12,938,999	1,327,596	1,203,895,339	907	0.831	1.000
20-24	97,957	213	20,877,038	1,229,305	1,190,956,340	969	0.887	1.000
25-29	97,741	427	41,750,337	1,131,348	1,170,079,302	1034	0.947	1.000
30-34	97,512	475	46,297,490	1,033,607	1,128,328,966	1092	1.000	1.000
35-39	97,225	362	35,149,685	936,095	1,082,031,475	1156	1.059	1.100
40-44	96,842	306	29,660,293	838,870	1,046,881,790	1248	1.143	1.200
45-49	96,250	357	34,366,861	742,028	1,017,221,497	1371	1.256	1.300
50-54	95,274	467	44,461,360	645,778	982,854,637	1522	1.394	1.400
55-59	93,697	641	60,076,077	550,504	938,393,277	1705	1.562	1.500
60-64	91,166	927	84,521,769	456,807	878,317,199	1923	1.761	1.600
65-69	86,954	1,320	114,748,407	365,641	793,795,430	2171	1.989	1.700
70-74	80,319	1,833	147,235,200	278,687	679,047,023	2437	2.232	1.700
75-79	71,438	2,239	159,933,653	198,368	531,811,824	2681	2.456	1.700
80-84	57,788	2,658	153,591,679	126,930	371,878,171	2930	2.684	1.700
85-89	39,942	3,131	125,066,210	69,142	218,286,491	3157	2.892	1.700
90-94	21,645	3,297	71,355,139	29,200	93,220,281	3192	2.924	1.700
95+	7,555	2,894	21,865,143	7,555	21,865,143	2894	2.651	1.700

This true entry age premium scale as calculated can be graphically compared with the regulated Lifetime Health Cover as follows:

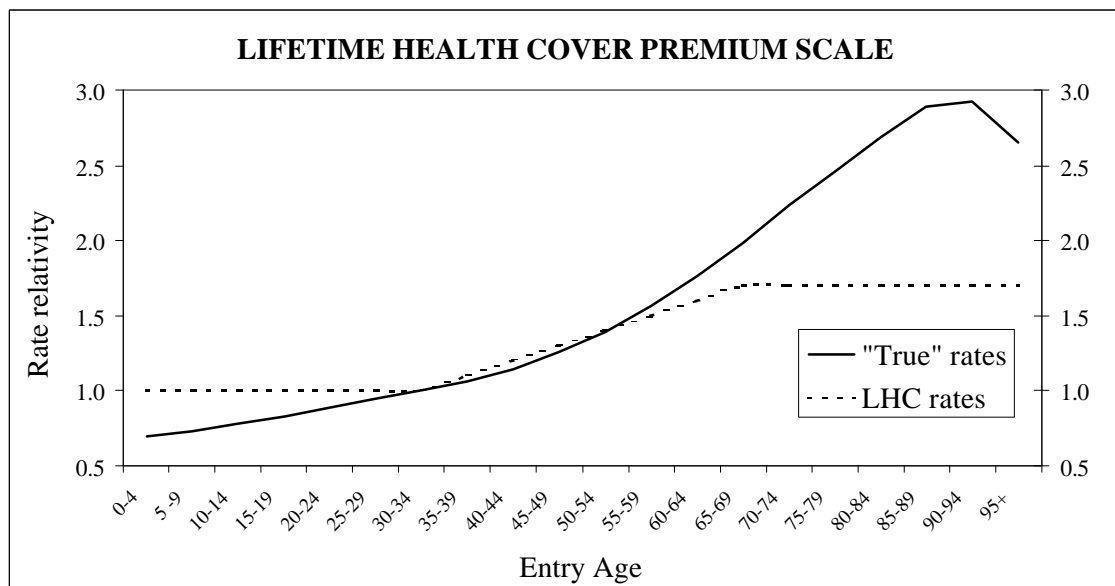


Figure 21 – Premium rate relativities by entry age

The “true” rate curve represents the shape of the entry age rates that would emerge if there were no community rating restrictions and no risk equalisation (or reinsurance) arrangements. Thus it represents a fair scale because the present value of future premiums equals the present value of future benefits (ignoring profit margins). This scale is derived from considering a “funded” system where reserves would build up in the early years and run down as age increases. It can also be applied to an “unfunded” system with the same premium relativities, but initial premium levels and future premium increases will be greater than the funded approach as the unfunded liability of existing older members continues to be financed by younger members.

Health after Lifetime Health Cover

As the Lifetime Health Cover premium loadings are broadly similar to those that would exist in a funded system, they are not a barrier to a future transition to a funded system.

From the chart we can see that the Lifetime Health Cover 2% premium loading scale is a good fit between the ages of 30 and 60. The absence of discounts below age 30 results in the premiums being excessive compared to those that would develop in the absence of a regulated scale. The capping of the maximum premium loading results in premiums being too cheap at older entry ages. At present this imposes no additional burden on the system as all persons currently aged 69 and over are entitled to enter at the base premium rate under the exemption given to older persons at the commencement of the Lifetime Health Cover scheme.

There has been some criticism that the Lifetime Health Cover scale is not steep enough. These analyses which examine the position of delaying entry until, for example, age 65 do not substantiate that criticism since the critics appear to ignore the value of claims made prior to age 65. The real issue is not the steepness of the scale, but the imposition of a maximum loading of 70%. From the previous graph, an actuarially fair premium structure would require increasing premium loadings (perhaps at 4% per year instead of 2%) past age 65.

4. IS LIFETIME HEALTH COVER FOREVER?

4.1 Was Lifetime Health Cover successful?

The introduction of Lifetime Health Cover was a significant shock to the private health insurance industry. It was a long overdue 'shot in the arm' for an industry that had been caught in a self-perpetuating cycle of falling membership and increasing contribution rates.

The initial shock of membership growth was followed one year later by an aftershock of benefit increases as waiting periods for benefit eligibility for the new members came to an end.

The industry recorded its largest ever profit before tax of \$852m for the 2000/01 financial year. Most funds did not increase contribution rates during 2000 and 2001.

It is not possible to separate fully the impact of Lifetime Health Cover from the impact of the 30% rebate introduced in 1999. The 30% rebate on its own did little to increase membership. However it may have accentuated the appeal of Lifetime Health Cover to new members during 2000.

In terms of breaking the 'vicious cycle' by increasing the membership of private health insurance and improving the insured risk profile, Lifetime Health Cover was undoubtedly a success. However, with each quarterly release of statistics from PHIAC the media herald the apparent failure of Lifetime Health Cover. Some examples of recent media comment are shown below.

Newly insured desert private health funds in droves

"...over half of the people aged under 40, who took out private health insurance in 2000 to avoid the Federal Government's penalty regime, have since dropped their coverage." (Canberra Times 15/11/02)

Health Cover exodus by young

"Higher premiums are contributing to a departure from private health insurance by people under 40, with nearly 200,000 younger Australians relinquishing their cover. The latest figures showed that the strong take-up of private health insurance after the introduction of the 30 per cent rebate and lifetime health cover rules in 2000 had not paid off. The exit of young people came as the more costly over-55s provided the largest growth in membership." (Australian Financial Review 19/2/03)

Health after Lifetime Health Cover

It is important to examine what has happened to the age profile since Lifetime Health Cover was introduced. We have previously seen that there has been an increase in the number of persons covered aged 65 and over. The change in the number of persons covered and the proportion of the population covered for hospital insurance over the past three years by age group is illustrated in the following tables:

Change in persons covered for hospital insurance

Age Group	12 mths to Dec 2000	12 mths to Dec 2001	12 mths to Dec 2002	2 years to Dec 2002
0 to 24	953,968	10,895	-27,828	-16,933
25 to 39	692,935	-63,680	-59,231	-122,911
40 to 64	1,053,438	28,940	14,112	43,052
65 and over	72,852	40,022	31,178	71,200
Total	2,773,193	16,177	-41,769	-25,592

Hospital insurance coverage - % of population

Age Group	Dec 1999	Dec 2000	Dec 2001	Dec 2002
0 to 24	26.9%	41.3%	41.0%	40.4%
25 to 39	24.3%	39.9%	38.8%	37.4%
40 to 64	39.6%	56.5%	54.7%	53.8%
65 and over	36.8%	39.2%	40.2%	40.8%
Total	31.3%	45.4%	44.7%	44.0%

It is too simplistic to conclude that those in the under 40 aged group are leaving private hospital insurance in droves. Rather, there has been a decline in coverage for this age group at a similar rate as the decline in coverage for those aged 40 to 64.

4.2 Cost Pressures

Hospital benefits paid increased by 59% over the five years to December 2002. At the same time hospital SEUs increased by 44%. Consequently the hospital drawing rate increased only by 1.9% per annum over this period. The large increase in membership as a result of Lifetime Health Cover has masked some of the underlying trends.

One trend that requires consideration is the impact of an ageing population. Past experience suggests that the risk profile of the privately insured population deteriorates at a faster rate than that of the Australian population as a whole. Historic rates of drawing rate growth due to changes in the demographic mix of the insured population have been as follows:

Year ended	Hospital Insurance Risk Profile change
Dec 98	1.9%
Dec 99	-1.1%
Dec 00	-12.0%
Dec 01	1.9%
Dec 02	1.9%

The introduction of the 30% rebate and Lifetime Health Cover temporarily interrupted the deteriorating risk profile trend of about 2% per annum.

Health after Lifetime Health Cover

Looking into the future, the drawing rate impact of this ageing population can be measured by applying age specific drawing rates to the projected population. This analysis indicates that there will be an inescapable increase in drawing rates of 0.85% per annum over a 25 year horizon due solely to population ageing. This analysis assumes a continuation of current private hospital coverage by age group. This assumption has not held in the past as illustrated by figures 7 and 8. Therefore it is expected that the drawing rate increase due to ageing of the insured population will be closer to 1.9% than 0.85% in the absence of Government induced 'shocks' to improve the age profile.

Changes in average benefit and environmental utilisation also impact the drawing rate outcome. Hospital Benefits per day have increased steadily by about 8% per annum over the five years to December 2002. Over the same period, days per episode decreased by about 4% per annum. This is the result of a significant shift to same day procedures in hospitals. Changes in episodes per person reflect both demographic and environmental factors, and there were large movements as a result of the introduction of Lifetime Health Cover.

This analysis is based on all benefits paid under hospital products, including medical and prostheses costs. These two components have recently been increasing at rapid rates. Over the five years to December 2002, medical and prostheses benefits have increased at 15% and 12% per annum respectively.

The level of detail on ancillary benefits does not permit the same type of analysis as has been performed for hospital benefits. However, ancillary benefits per SEU have increased by 5% per annum over the five years to December 2002.

The Australian Institute of Health and Welfare (AIHW) recently published its report "Health Expenditure Australia 2000-01". In this report, the AIHW calculated the real (i.e. adjusted for inflation) increase in health expenditure per person over the period 1990-91 to 2000-01 at 3.2% per annum (and at 3.6% per annum over the longer period 1960-61 to 1997-98). Together with current inflation at around 3.2%, this would translate into a nominal increase in health expenditure per person of around 6.5% per annum.

The AIHW report also quantified excess health inflation (ie. over general inflation) at 0.6% per annum over the period 1990-91 to 2000-01. It follows that the utilisation increase over the same period was about 2.6% per annum (which would include the impact of an ageing Australian population).

Of course, there will be different outcomes for private health insurance as a result of a different mix of expenditure categories and membership demographic mix. However, health funds and their members continue to face significant cost pressures, which will need to be funded by future contribution rate increases.

Clearly, Lifetime Health Cover will fail to keep contribution rate increases below CPI... despite the wish of politicians!

4.3 Tinkering with Lifetime Health Cover

The *Health Legislation Amendment (Private Health Insurance Reform) Bill 2003* that is currently being considered by the Senate Community Affairs Legislation Committee proposes several minor changes to the Lifetime Health Cover arrangements.

The Bill sets an annual date, 1 July, when uninsured persons change age for the purposes of Lifetime Health Cover. The purpose of this change is to allow the industry to concentrate its marketing efforts around the period leading up to 30 June each year to focus attention on the higher premiums that would be payable if taking out health insurance is delayed.

The Bill extends concessions from the application of Lifetime Health Cover premium loadings to persons who have continuous periods overseas of more than one year and persons who are holders of veteran's Gold cards.

The Bill also gives new arrivals to Australia one year to join a health fund before Lifetime Health Cover loadings apply. Previously only Australian citizens overseas during the six months prior to the commencement of Lifetime Health Cover in mid-2000 and refugees were given this concession.

These changes are aimed at addressing some equity issues and focussing attention on the financial impact of delaying entry. Given the shape of the true entry age premium curve in figure 21, another possibility for reform is to extend the Lifetime Health Cover scale to provide discounts for those under age 30 to address low penetration into this age group as seen in figure 3. The barrier to this change is demonstrating equity between past and future new entrants in this age group, while the argument in favour of change is the potential for improvement in the industry risk profile and the marginal increase in the level of subsidy from low risk members to high risk members.

4.4 Looking Forward

Lifetime Health Cover was a very successful innovation that achieved its primary objective of halting the downward spiral in private health insurance coverage. In fact, it exceeded almost everyone's expectations about likely membership growth. It has also significantly reduced the anti-selection opportunities for delaying entry. It delivered a 'price dividend' of about 12%, which was equivalent to a two year holiday from contribution rate increases. The holiday is now a distant memory and cost pressures have once again taken centre stage.

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