Risk Equalisation

Time to think differently?

Jamie Reid, Matthew Crane,
Kris McCullough & Ellen Bruce

Risk Equalisation

Abstract

As health costs increase due to a range of demographic and other reasons, is Australia's current private health insurance (PHI) system sustainable?

Over 40% of hospital and medical costs pass through risk equalisation, making it central to the sustainability of PHI. Ongoing growth in the risk equalisation pool reduces the incentive for insurers to control claim costs, and makes PHI less attractive for people in good health.

The paper:

- Estimates the size of the risk equalisation pool in 2030, identifying the drivers of change.
- Comments on the future impact of the risk equalisation pool on the sustainability of the Australian private health insurance model.
- Investigates whether alternative risk equalisation arrangements may be more sustainable.

Keywords: Health funding, private health insurance, financial sustainability

Part I Executive Summary

Affordability will always be the key issue in health funding

Health costs increase faster than consumer prices and wages, because health funding needs to cover both increases in the cost of services provided, and the increasing average number of services each person receives. Drivers of utilisation inflation include the development of new technologies and population ageing. The level of health inflation means affordability will always be a key issue in health funding, whether that funding comes from government, individual insurance premiums or directly from consumers' out of pocket expenses.

While affordability is always an issue in private health insurance (PHI), recent trends in participation rates bring the issue into sharper focus. Participation rates for younger policyholders have reduced slightly, while participation of people aged over 75 continues to increase. Since premium rates reflect average claim costs, this change in age mix puts further pressure on premiums, which reduces the perceived value of PHI to those in good health.

Risk equalisation adds to affordability challenges in PHI

PHI is community rated, meaning that everyone on the same policy pays the same premium irrespective of expected claims costs. Because premiums reflect average claim costs of everyone insured, affordability depends on whether people in better than average health choose to insure or not.

Risk equalisation transfers funds from insurers with lower than average claim costs to those with higher than average claim costs. This supports community rating but does not directly make PHI more affordable overall. If only people in worse than average health were insured, premiums would be unaffordable regardless of how the costs were shared between insurers.

Over 40% of hospital and medical claims are shared between insurers in this way, so risk equalisation is a material part of the PHI system. The pooled claims are allocated equally to every adult insured in a state, with a basic policy required to make the same contribution as a more comprehensive cover. This risk equalisation contribution therefore represents a "flagfall" cost of taking out PHI, and at approximately $750 per adult can represent 70% of the total premium on a basic policy. The flagfall premium has increased by 7.5% per year over the last ten years, significantly increasing the level of cross subsidy between different groups of policyholders.

After deducting expenses and a profit margin, only a small amount remains to cover the policyholder's own expected claim costs. The high flagfall premium means PHI can represent poor value for money to young people. As noted above, falling participation rates for young people increase premium rates for everyone remaining insured.

Risk equalisation 2030 – the trend continues

Building on our previous paper "Risk Equalisation 2020 – Is the Current System Sustainable?", we have prepared detailed projections of the risk equalisation pool out to 2030. Assuming no change to risk equalisation arrangements or other significant policy settings, the flagfall premium increases from current levels of around 65% of Average Weekly Earnings (AWE), to nearly 100% of AWE in 2030.

This means that, on average, policyholders under 55 would have to work for a full week to pay for the cost of other people's PHI claims, before paying anything for their own cover. This would put significant pressure on affordability for younger people or those with relatively low wages.

We project the flagfall cost to increase more quickly in the future than over the last ten years. This is driven by the ageing insured population, with the number of insured people over 75 continuing to increase while participation rates for other age groups have remained broadly constant, or recently reduced.

By 2030, we are projecting that over half of all hospital benefits will be shared through the risk equalisation pool. This would further disincentivise individual insurers from pursuing claims management initiatives with a view to reducing their own claims costs.

Time to think differently?

We think it is time to think differently in order to maintain high PHI participation. Changes to the risk equalisation system could improve the affordability of PHI to people in better than average health. There are also a range of other levers available to government to support PHI participation.

PHI reform options often generate significant debate in the industry. While the need to incentivise young people to purchase PHI is well understood, people rightly balance this with the interests of older members who have subsidised previous generations of policyholders.

Looking at reform options which have been proposed over the years, there seems to be more interest in discounts for young people than premium loadings for older people. It is worth remembering that a discount for young people is effectively a penalty for everyone else.

Along the same theme, any changes to risk equalisation that could lower the premiums for products which young people tend to buy essentially provides an invisible discount. Also, making no changes to risk equalisation is effectively a choice to continue to increase the level of cross subsidy from younger policyholders to people aged over 55.

Our conclusion is that new measures are necessary to ensure continued high participation rates, and there are a great many options. Perhaps it's more important to just adopt one of the many sensible options, rather than continue to debate the relative merits of each.

Part II Detailed Findings

1 Risk Equalisation: Why, how and what's wrong?

1.1 Why we need risk equalisation?

It is a matter of public policy that health insurance should be affordable to most Australians, irrespective of expected claim costs, and premiums are therefore community rated. A complex range of interrelated rules and regulations support community rating, in order to:

- Encourage people in better than average health to insure: This includes penalties for people on high incomes who do not insure (Medicare Levy Surcharge), penalties for people who do not take out insurance by age 30 (Lifetime Health Cover), and premium rebates.
- Pool costs: Risk equalisation shares some costs between insurers, and we provide a summary of the risk equalisation arrangements below.

In order to be affordable, community rated health insurance requires both high participation rates and some form of risk equalisation. If only people with high expected claims costs decided to insure, premiums would be unaffordable regardless of how claims were shared between insurers.

1.2 How does risk equalisation work?

1.2.1 Current regulations

The current risk equalisation arrangements commenced on 1 April 2007, and are set out in the Private Health Insurance (Risk Equalisation) Rules 2015. Some form of risk equalisation has supported PHI since the 1950s, and we provide a summary of historical risk equalisation arrangements in Attachment A.

Each insurer is required to undertake three sets of quarterly calculations:

- Calculations for the Age Based Pool (ABP), which shares claims for older policyholders. The proportion of paid claims shared varies from 15% for a 55 year old, to 82% for someone over 85 years old.
- Calculations for the High Cost Claimants Pool (HCCP), which provides risk sharing for the most expensive policyholders. If the claims for an insured person exceed $50,000 in a year after any recoveries from the ABP, 82% of the amounts above $50,000 are allocated to the HCCP. Note that the HCCP accounts for only 3% of claims equalised, so is much less material than the ABP.
- Market share: Insurers calculate their customer base in terms of Single Equivalent Units (SEUs). Single policies count as one SEU, and couple or family policies count as two SEUs. All of the less common policy types (single parent, 3+ adults etc) count as either one or two SEUs.

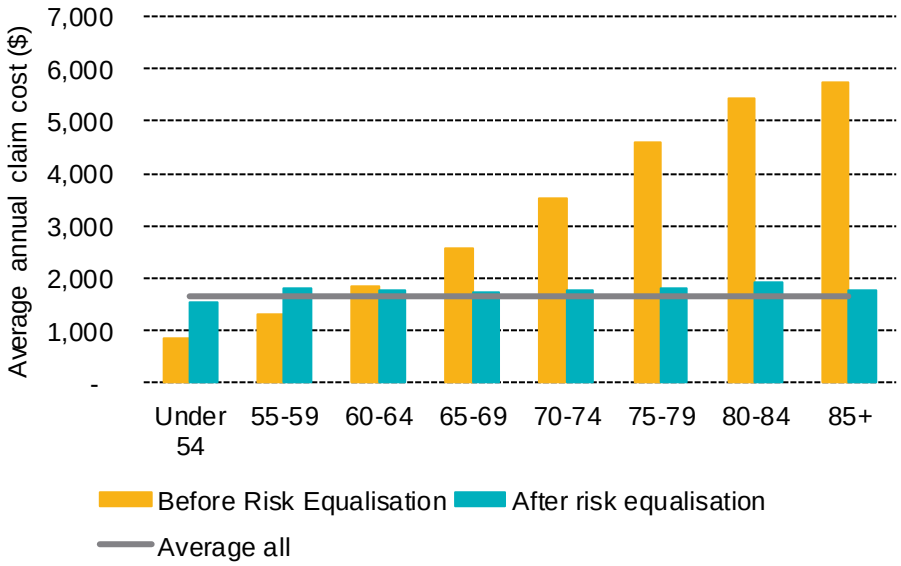
Insurers are required to contribute to the cost of the shared claims (combined ABP and HCCP) in proportion to their market share. APRA administers quarterly transfers between funds based on claims paid in the preceding quarter.

Separate calculations are performed for each State. Pooling only applies to hospital and medical costs, and not to general treatment benefits (dental, optical etc).

1.2.2 Impact on policyholders

Figure 1.1 below shows average annual claim costs by age, both before and after risk equalisation.

Figure 1.1 – Average Annual Claim Costs by Age



Source: Finity analysis of APRA statistics, year ending 31 December 2016
Amounts are for hospital claims only. Risk equalisation amounts do not include the high cost claims pool. We have reallocated children's claim costs to their parents' policies.

The figure shows that, before risk equalisation, average claim costs increase significantly by age. Average claim costs are less than $850 per year for a policyholder aged 54 and under, even including any claims made by the policyholder's children. Average claims for 20 to 30 year olds (not shown) are $645 per year. Average claim costs are approximately $2,500 per year for a 65-69 year old, and $4,600 for a 75-79 year old.

Risk equalisation redistributes costs from older to younger policyholders. After applying risk equalisation, the average cost per adult is around $1,600 for all age groups.

The risk equalisation system largely removes differences in expected claim cost due to age. It does not allow for differences in policyholder characteristics within age groups, other than in a limited way through the HCCP. For example, the arrangements do not

allow for differences in expected claim costs between smokers and non-smokers, small families and large families, or people living in cities or regional areas.

1.2.3 Impact on insurers

Gross deficit refers to the amount receivable from the scheme, that is, the eligible proportion of an insurer's large claims and claims for older policyholders. Calculated deficit refers to the amount payable to the scheme, based on market share. The example below shows total national gross deficit and calculated deficit for the four largest insurers in the year ending 30 June 2016, together with the industry total. As noted above, the calculations are actually performed quarterly and at State level.

Table 1.1 – Risk Equalisation Summary – Year ending 30 June 2016 ($ millions)

Insurer (and market share)	Gross deficit (receivable from risk equalisation)	Calculated deficit (payable to risk equalisation)	Net receipt from / (transfer to) other insurers
BUPA (28%)	1,844	1,697	147
Medibank (27%)	1,720	1,651	69
HCF (11%)	673	698	(25)
nib (8%)	318	495	(177)
Industry total (100%)	6,140	6,140	0

Each insurer calculates its gross deficit based on its own claims payments which are covered by the ABP and HCCP. The total amount pooled in the year ending 30 June 2016 was $6,140 million, which represents the total of each insurer's gross deficit. This is equivalent to $750 per SEU, meaning that each insurer must pay $750 into the pool for every SEU it covers.

Based on market share in terms of the number of SEUs covered, $1,697 million (28%) of that total was allocated to BUPA. This was less than BUPA's gross deficit, so BUPA was a net recipient of $147 million from the risk equalisation arrangements (=1,844 – 1,697).

In the same way, $495 million (8%) of total costs were allocated to nib. This was more than nib's gross deficit of $318 million, so nib was a net contributor of $177 million to the risk equalisation arrangements.

Insurers with younger than average policyholders tend to be net contributors to the risk equalisation pool, which transfers funds to insurers with older than average policyholders.

1.3 Challenges with the current system

The key challenges of the current risk equalisation system relate to:

- Affordability: Cost transfers through risk equalisation (the calculated deficit per SEU) represent a significant proportion of the cost of PHI for young policyholders. Growth in the risk equalisation pool reduces the value for money of PHI to those in

better than average health. Lower PHI participation by people in better than average health will increase PHI premiums for all remaining insured.

- Efficiency: Where a significant proportion of costs are pooled, this reduces the incentive for individual insurers to operate efficiently. Inefficiencies result in higher premium rates, which in turn impact affordability.

We consider each of these issues in further detail below.

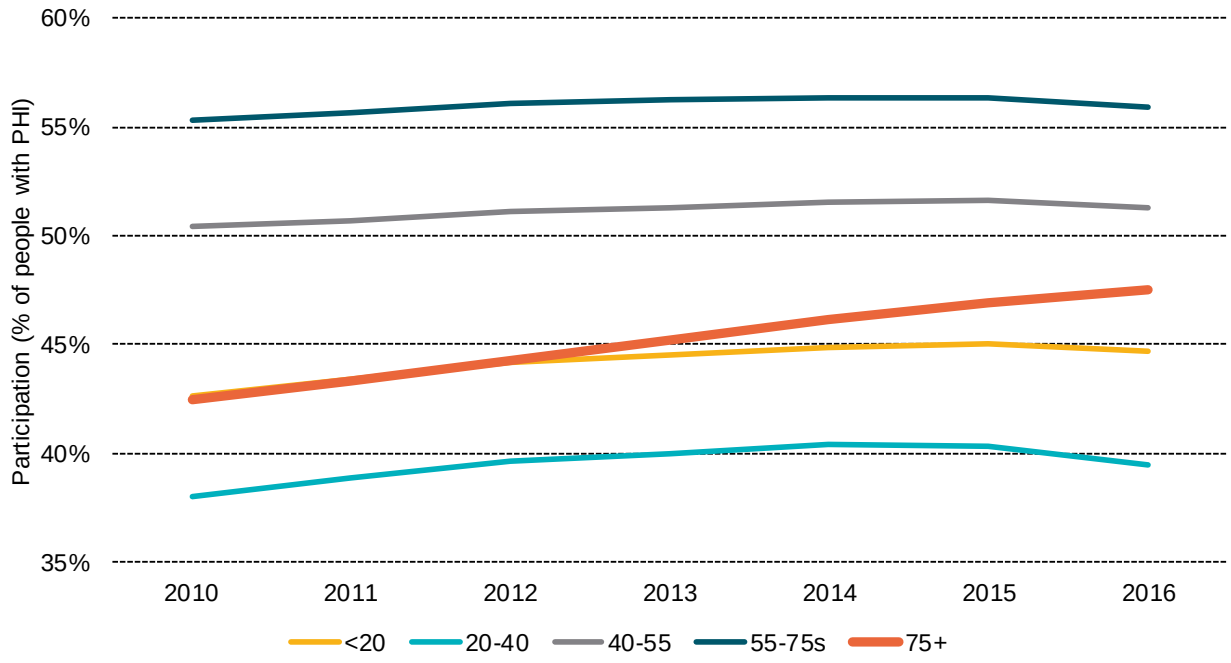
1.3.1 Affordability

Community rating means that PHI premiums reflect average claim costs of everyone purchasing a product. If someone with lower than average claim costs decides to no longer purchase PHI, the required premium rates for continuing policyholders increases. PHI will only be affordable for people with higher than average claim costs if people in better health choose to insure. As shown in Figure 1.1 above, people aged under 60 typically have lower than average claim costs, and so subsidise premiums of older policyholders.

Participation rates

Figure 1.2 below shows changes in the proportion of people with hospital cover over the last five years.

Figure 1.2 – PHI Participation by Age (as at 30 June)



The figure shows differences in PHI participation by age. Participation rates for 55-75 year olds have consistently been the highest, at more than 55%. Participation rates for 20-40 year olds are consistently the lowest, and are approximately 40%.

Participation rates had been increasing for all age groups in recent years, but there has been a reduction since 30 June 2015, which has continued through to the most recent

statistics at 31 December 2016 (not shown). The exception has been in the 75+ age cohort, where participation continues to increase significantly.

The recent reduction in participation is likely linked to PHI Rebate changes implemented in the last few years, including the introduction of income-testing the rebate, and a reduction in the rebate percentage.

In terms of the number of people insured, the number of 20-30 year olds insured reduced by almost 55,000 (or 5%) in the two years to 31 December 2016. In the same period, the number of people aged over 75 increased by almost 63,000 (or 3%). The average annual claim costs are $645 for 20-30 year olds, and more than $5,000 for over 75 year olds. Changes in age mix therefore flow through to higher premiums for everyone insured.

Flagfall premium

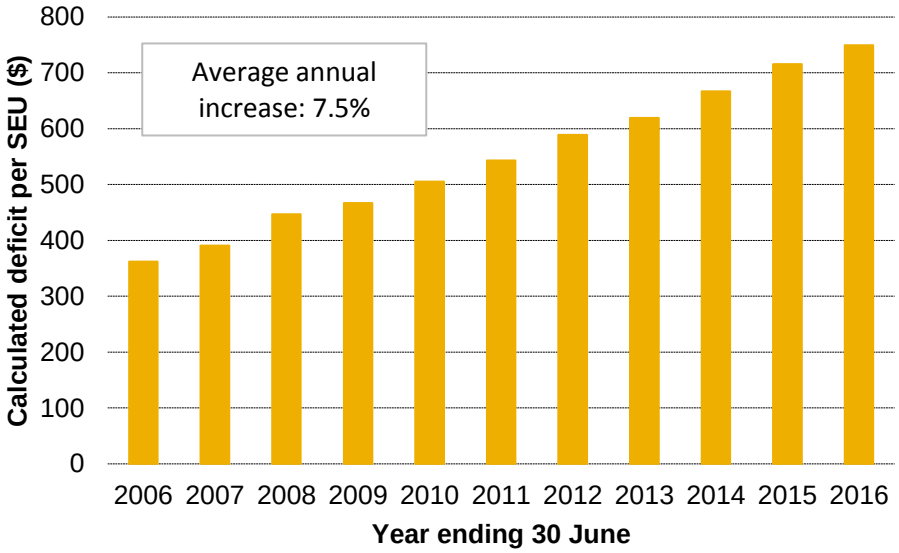
Insurers use a number of approaches to encourage young people in better than average health to insure. This includes promoting the benefits of comprehensive products, but these products will often not be selected by young people on typical incomes who do not anticipate major medical expenses.

Most insurers allow members to choose a product with exclusions in exchange for a lower premium. People can choose policies which exclude benefits they do not expect to claim on, whilst maintaining at least a basic level. The proportion of policies with exclusions was 39% 31 December 2016, compared to 31% five years earlier, and just 7% ten years earlier.

An insurer's allocated share of the risk equalisation pool reflects only the number of SEUs covered, with a basic policy resulting in the same allocation as a more comprehensive cover. Premiums must always at least cover the calculated deficit per SEU, and the risk equalisation system therefore determines a "flagfall" cost for health insurance.

Figure 1.3 shows the premium flagfall (calculated deficit per SEU) and how this has changed from year to year. The amount shown is a national average, and there is some variation between states.

Figure 1.3 – Premium Flagfall (Calculated Deficit per SEU)



This flagfall represents a significant proportion of the total cost of "entry level" products that are popular with young people. For example, the most basic hospital insurance policies in NSW currently cost around $1,100 per year (single, before premium rebate, before LHC loadings). Assuming a calculated deficit of $750 per SEU, around 70% of the total premium represents the required subsidy to older policyholders on comprehensive policies. After deducting commissions, other management expenses and a profit margin for the insurer, only a small amount of premium remains to cover the policyholder's own expected claim costs.

The flagfall cost has increased at 7.5% per year on average over the last ten years, which is greater than the overall average increase in PHI premium rates. This suggests younger people on basic products are bearing an increasing share of PHI costs, despite their low claim rates. This may be one reason why PHI participation rates for 20-30 year olds are declining faster than for other age groups.

Affordability or value for money – which matters the most?

High PHI participation requires PHI which is both affordable and considered to provide value for money. While these are related concepts, value for money is potentially more difficult to assess than affordability.

Even if premiums were to increase significantly, PHI arguably represents excellent value for money for older people when compared to expected claim costs. PHI can also be valuable for young people in good health with low expected claim costs, as it provides peace of mind should unexpected costs occur. People joining PHI before age 30 avoid paying a LHC premium loading later in life and individuals earning above the threshold can avoid paying the Medicare Levy Surcharge.

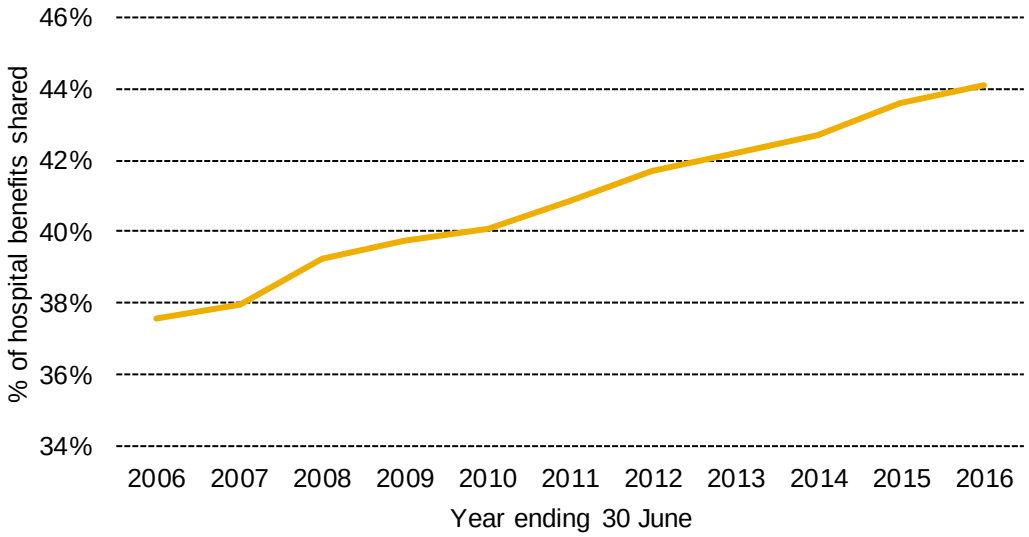
While both affordability and value are important, our analysis largely focusses on affordability. As affordability reduces people may decide not to insure, even if they understand the value of holding private health insurance.

1.3.2 Efficiency

Proportion of benefits shared

Figure 1.4 shows the proportion of hospital benefits shared through risk equalisation. It represents the size of the ABP and HCCP relative to all hospital claims paid in a year.

Figure 1.4 – Proportion of Hospital Benefits Shared



The proportion of hospital claims subject to risk equalisation has increased year on year since 2006. While the increase in any given year may be small, over ten years the proportion shared increased from less than 38% to 44%.

Attachment A shows the proportion of benefits shared back to 1990. With the exception of two years where there were significant changes to PHI participation or the risk equalisation scheme, the longer term experience also shows gradual growth in the proportion of benefits shared.

The longer term graph shows the highest proportion of benefits shared was in 1994 at 46%, following which the risk equalisation arrangements were changed. The proportion shared in 2016 of 44% is approaching the previous high point where change was considered necessary.

Why does this matter?

Amounts subject to risk equalisation are spread across all adults with PHI, and represent a large proportion of the cost of basic policies. As explained in the previous section, increases in the size of the pool lead to increased premiums for policies which are popular with people in better than average health.

In addition, as the proportion of shared costs increases, the incentive for an individual insurer to control claim costs reduces. The proportion of costs shared is therefore an important metric when comparing different risk equalisation arrangements.

For example, suppose an insurer is able to reduce its own claim costs by investing in wellness programs, or by negotiating lower hospital contract rates than its competitors. The lower claim costs would mean a lower gross deficit for the insurer and so the insurer would have to contribute more into the risk equalisation pool. In other words, risk equalisation means that lower claim costs at one insurer benefits all insurers, including those that may not be operating as efficiently.

We note that risk equalisation is not the only barrier to health insurers operating more efficiently. For example, portability rules mean that policyholders involved in a wellness program can easily change insurer, reducing the benefit to the insurer who provided the program. Also, PHI allows policyholders to choose a hospital and doctor, with no requirement to use the cheapest provider.

Risk equalisation reduces the range of efficiency initiatives for which the benefits to the insurer (after risk equalisation) cover the costs. The increasing proportion of costs shared through risk equalisation further reduces the cost savings available. If the incentive to operate efficiently increased, this may help address affordability issues.

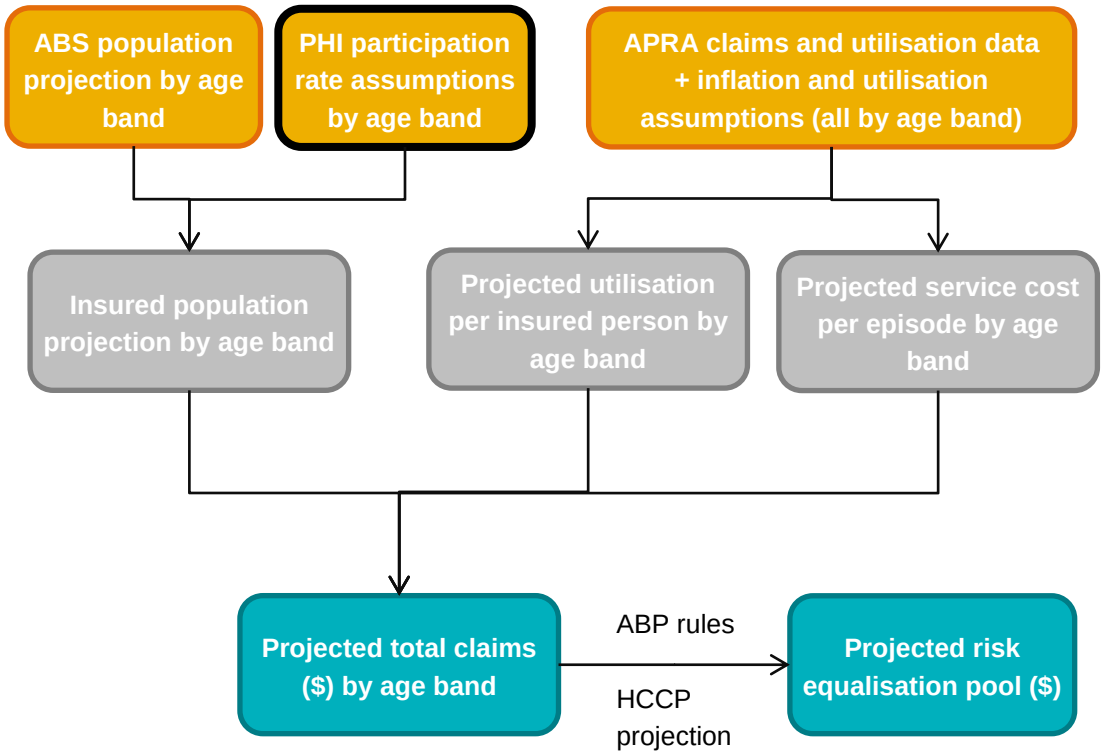
2 Financial projections

Under the current risk equalisation arrangements, the pool of benefits shared across the industry grew from $2.9 billion during FY08 to $6.2 billion during FY16. If there are no significant changes to PHI regulations, we expect growth in the pool will continue to the extent that $18.8 billion will be shared across the industry during FY30.

2.1 Approach

Our approach for projecting the risk equalisation pool is summarised in Figure 2.1.

Figure 2.1 – Projection Approach



Assuming the current risk equalisation arrangements continue through the projection period, the key area of uncertainty is the future participation rate assumptions by age band (highlighted in Figure 2.1). We provide further discussion on these assumptions in Section 2.2 and show how sensitive the risk equalisation pool is to these assumptions through our alternative scenarios in Section 2.4

Inflationary (service cost, utilisation and high cost claims) assumptions have been relatively stable within age bands in recent years, so we have tended to assume recent experience will continue. More details of our methodology and assumptions are provided in Appendix B

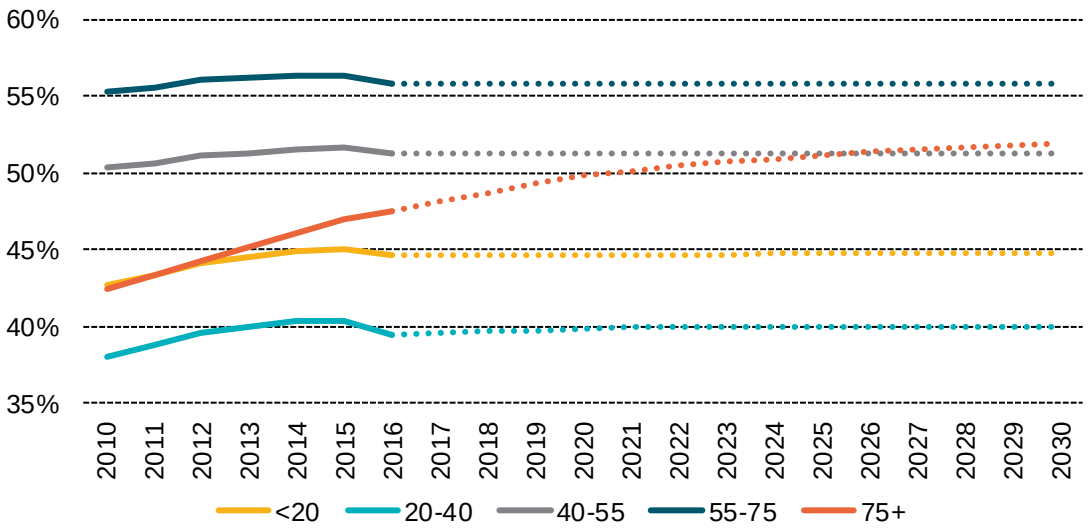
2.2 Participation

Recent participation rates by age band were shown in Figure 1.2. At most age bands, participation was gradually increasing to June 2015, but has tailed off slightly since. The exception is the oldest (75+ year old) age band where participation rates have been consistently increasing.

Even assuming there are no systemic shocks (such as risk equalisation reform), it is difficult to predict what is going to happen next. Whilst affordability is likely to continue to put downwards pressure on participation rates, PHI products continue to provide different measures of value to consumers and are actively promoted by both insurers and the government.

Our participation assumptions are shown in Figure 2.2. We have assumed current participation characteristics will continue. For most ages, this means that the age-based participation rates remain at approximately the current level. However, for the 75+ age band, we have assumed that the higher participation rates in the younger 55-75 age band will follow cohorts of members as they age. This leads to participation in the 75+ age band gradually merging towards the 55-75 age band level.

Figure 2.2 – Actual and Projected Participation by Age (as at 30 June)



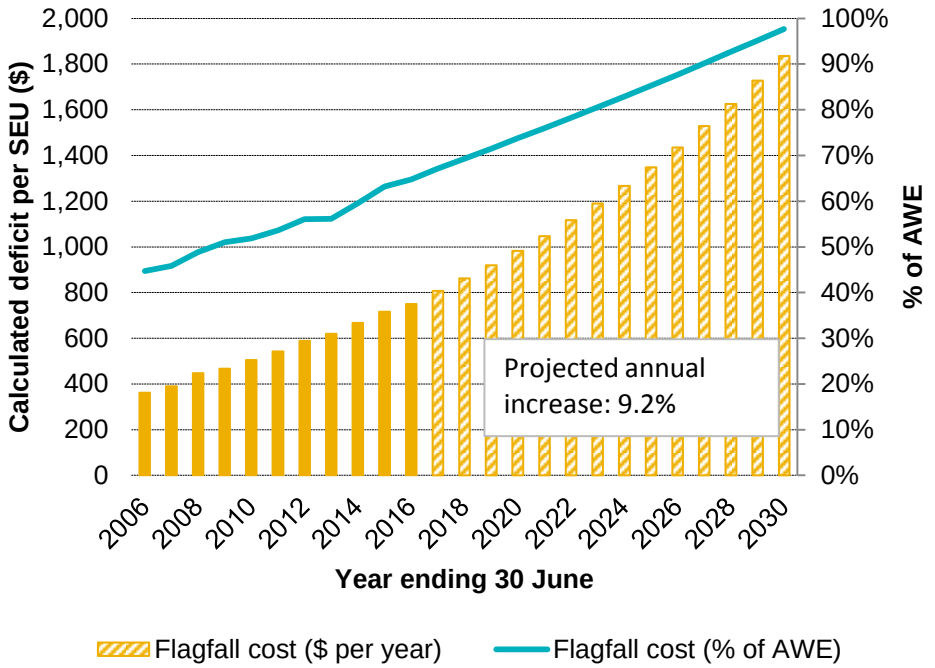
However, given the difficulty in predicting future participation rates, we illustrate the sensitivity of the risk equalisation outcomes to those assumptions through a range of alternative scenarios in Section 2.4

2.3 Results

Our projections show overall participation rates increase slightly with the ageing population, hitting 47.7% by 30 June 2030. Overall hospital benefit payments increase from $13.9 billion in the year ending 30 June 2016, to $37.0 billion in the year ending 2030, equivalent to sustained annual increases of 7.2% throughout the period.

As discussed in Section 1.3, the key risk equalisation metrics that give an indication of affordability and efficiency are the risk equalisation premium flagfall and the proportion of the hospital benefits that are shared through risk equalisation. These results are discussed below.

Figure 2.3 – Projected Premium Flagfall (Calculated Deficit per SEU)

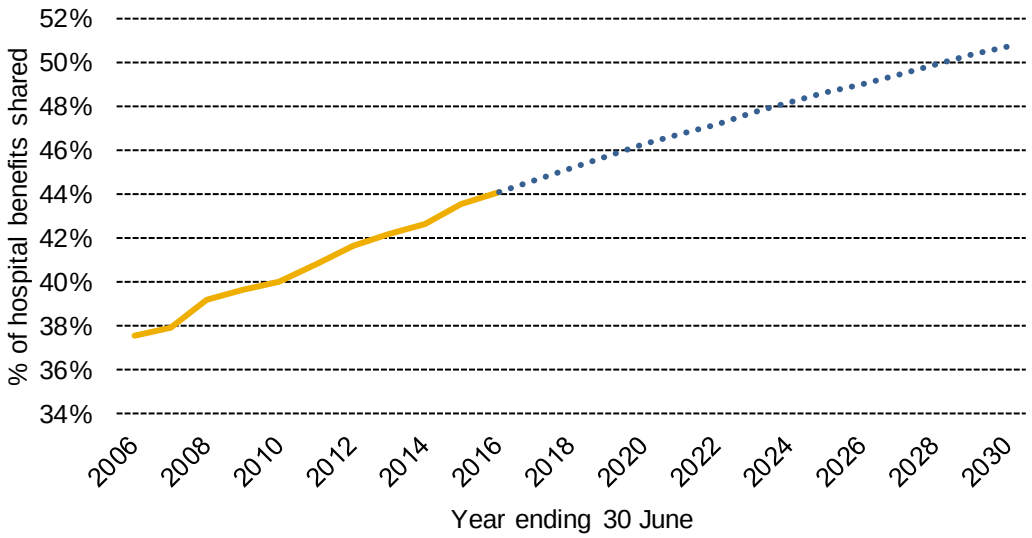


As shown in Figure 2.3, we project the flagfall cost to increase more quickly in the future at 9.2% per year. This is driven by the ageing insured population, which means that younger people have to contribute more to subsidise the claims costs from older people.

Future wage inflation levels can be expected to be around 3.5%. This would mean that the flagfall cost increases from current levels of around 65% of Average Weekly Earnings (AWE) to nearly 100% in 2030 - i.e. on average, consumers would have to work for a full week to pay for the cost of other people's claims before paying anything for their own cover. This would put significant pressure on affordability for younger people with typically lower wages, especially as their own claim rates are relatively low.

The ageing insured population also leads to the proportion of benefits shared through the risk equalisation pool increasing, as shown in Figure 2.4 below.

Figure 2.4 – Projected Proportion of Hospital Benefits Shared



By 2030, we are projecting that over half of all hospital benefits will be shared through the risk equalisation pool. This would further disincentivise individual insurers from pursuing claims management initiatives with a view to reducing their own claims costs.

2.4 Scenario analysis

The table below summarises our scenario analysis, with further details in Attachment B. Scenarios A to D vary participation rates, and E and F vary inflation rates. The description notes the differences in assumptions compared to the base scenario, with all other assumptions unchanged.

Table 2.1 – Scenario Analysis – Key Results

Scenario	Description	Proportion of benefits shared (2030)	Flagfall PHI premium ($ and % of AWE, 2030)
Base	As described above Participation continues to increase for 75+ age group, but remains around the current level for other age groups	51%	$1,850, 98%
A	Small reductions in participation rate for under 55s - Participation rate for 20-40 year olds reduces to 35% in 2030 (currently 41%) - Participation rate for 40-55 year olds reduces to 48% in 2030 (currently 51%)	53%	$2,050, 109%
B	Participation rates for all ages converge to 50%	50%	$1,650, 94%

Scenario	Description	Proportion of benefits shared (2030)	Flagfall PHI premium ($ and % of AWE, 2030)
C	Participation rates for all ages remain at June 2016 levels	50%	$1,750, 94%
D	Increase participation for under 55s to 80% (which is the level required to keep the flagfall at the around current proportion of AwE)	42%	$1,150, 62%
E	Claims inflation rate reduces from 4.55% to 4%	51%	$1,700, 91%
F	Claims inflation rate increases from 4.55% to 6%	51%	$2,200, 118%

Note: The claims inflation rate of 4.55% excludes the impact of ageing, which is allowed for explicitly by modelling participation rates by age.

The scenarios show that the proportion of benefits shared depends on the age mix of people insured. The flagfall premium depends on both the age mix insured and claims inflation.

Scenario A shows that very small reductions in participation rates for under 55s would increase both the proportion of benefits shared and the flagfall, compared to the base.

Both scenarios B and C remove the growth in participation by over 75s relative to the current levels, which result in a lower proportion of benefits shared, and a lower flagfall, than the base.

Scenario D demonstrates the high participation rates that would be required to maintain the flagfall at approximately the current proportion of AWE. Even if participation rates did increase to 80% for under 55s, this would ultimately flow through to higher participation for over 55s which would increase the flagfall. This demonstrates that the flagfall increases relative to AWE because medical claims inflation exceeds AWE.

Scenarios E and F show the impact of assuming slightly lower and higher inflation rates on the flagfall premium.

3 Time to think differently?

We think it is time to think differently in order to maintain high PHI participation. Changes to the risk equalisation system could improve the affordability of PHI to people in better than average health. There are also a range of other levers available to government to support PHI participation.

3.1 Do we need to think differently?

The historical experience summarised elsewhere in this paper shows consistent increases in both the proportion of benefits shared and the flagfall premium. Our forecasts in Section 2 show these increases are likely to continue unless there are changes to the risk equalisation arrangements or other policy settings. The scenario analysis demonstrates that the rate of growth of risk equalisation depends on changes in participation rates and claim inflation.

Participation rates have often increased despite growth in the pool, and the forecasts cannot tell us when the level of cross subsidies might trigger a significant reduction in participation rates for young people. Signs that the time has come to think differently include:

- Participation trends: The proportion of young people insured is reducing, while the proportion over 75s with cover continues to increase.
- Affordability concerns: While affordability concerns are not new, there is increasing focus on this issue and a number of reviews are underway.

3.2 Would a different risk equalisation system be helpful?

As shown in Attachment A, risk equalisation arrangements have regularly changed over time, and it is appropriate that such a significant part of health insurance system be reviewed periodically.

In particular, reducing the amount of benefits pooled, or the allocation of those benefits, would allow basic policies to be sold more cheaply. This is because the premium flagfall represents a significant proportion of the costs of these policies. Risk equalisation is a zero sum gain, so lower premium increases for basic policies will reduce the subsidy of comprehensive covers.

One option would be to maintain something similar to the current arrangements, but pool a lower proportion of claims. For example, the proportion of costs which are shared for each age band could be reduced slightly each year. The level at which claims become eligible to be included in the high cost claim pool could also be increased over time, by at least the rate of claims inflation.

Under the current arrangements each policy is required to make the same contribution to the risk equalisation pool (that is, the allocated calculated deficit per SEU is the same for all hospital policies in a state). This means that the flagfall cost of risk equalisation accounts for most of the premium on basic policies, which can therefore represent poor value for money. An alternative risk equalisation model would allocate less risk

equalisation costs to more basic policies, for example, where the customer retains part of the risk through a high excess.

A more significant change would involve moving to a prospective system of risk equalisation, as operates in the Netherlands and some other jurisdictions. Under prospective systems the transfers between funds reflect differences in *expected* claim costs, rather than the amount of benefits ultimately paid. Funds are incentivised to help customers avoid hospitalisation, and to minimise the cost of any treatment required.

Challenges in any system changes include:

- Deciding which differences in expected claim costs should be equalised, which should not, and the extent of risk sharing. For example, the current system does not attempt to share differences in expected claim costs other than age-related differences (except in a very limited way through the HCCP).
- Level of complexity: The current system is relatively simple, and any increases in complexity would need to be justified.
- Winners and losers: As shown in Table 1.1, some funds are significant net recipients or contributors to the pool. In considering reform options insurers need to balance their own financial interests as recipients or contributors, with their interest in ensuring the PHI system remains viable. There would probably need to be transitional arrangements to minimise the impact on policyholders and their insurers in any given year.

3.3 Would other policy changes be helpful?

The main driver of premium rates is the average claim costs of people insured. PHI affordability can be maintained by ensuring high participation rates by people in better than average health, and minimising claims inflation. Participation and inflation are arguably more important that the design of the risk equalisation system, which simply shares costs between policyholders.

3.3.1 Government incentives

Changes to government regulations would support PHI participation. This could include increasing the incentives for insuring, for example, increasing (or not continuing to reduce) premium rebates for particular groups. Government could also increase the penalties for not insuring, for example a higher Medicare Levy Surcharge. Given increasing PHI premiums, the tax penalty for not insuring is now similar to the cost of basic PHI for some income groups.

Increasing rebates appears challenging given government funding pressures. While penalties raise money for government, experience shows consistent government support cannot be guaranteed.

3.3.2 Other regulations

Changes in government regulations could allow insurers to manage claim costs more efficiently. A recent example has been the limited changes to prosthesis pricing, which are estimated to have reduced the April 2017 price increase by around 0.4%. In addition to completing the deregulation of prosthesis pricing, government could allow more efficient engagement with providers.

For example, insurers could be allowed to offer hospital policies which only provide benefits within the insurer's provider network. Providers would offer lower prices in exchange for increased volumes of work, allowing a discount to be offered to policyholders. This would require changes to second tier and other regulations.

3.3.3 Changes to community rating rules

Allowing premium rates to partially reflect differences in expected claim costs is a controversial topic. In particular, people are rightly concerned about any premium increases for older long standing members, who have subsidised previous generations of policyholders.

It is important to remember the objective of community rating is to ensure PHI is affordable to most people, and this does not necessarily require everyone on a policy to pay the same. There are already some differences in premium rates between people on the same products. Some people pay LHC premium loadings, and older people and those on low incomes receive higher government rebates.

The purpose of charging lower premiums to people in relatively good health would be to ensure high participation rates, and therefore that a large premium pool is available to subsidise people with high claim costs. Premiums for older people and those with significant healthcare needs would remain far below their expected claim costs.

One option which has been discussed extensively is extending the LHC scheme to provide discounts to people who first take out insurance before the age of 30. Those discounts could be maintained for as long as people remain insured, or could reduce over time. Clearly a wide range of other models are possible, offering discounts of various amounts to groups of policyholders.

There has been less debate about potentially increasing premium rates for people with higher than average expected claim costs. Our previous paper[i] (Community Rating – More Trouble Than Its Worth?) considered a number of models, including small premium loadings for older people, or for large families. Such loadings would reduce the average rate needing to be charged to people in better than average health, with the intention of increasing (or perhaps maintaining) participation rates.

Another option would be to introduce a new class of Young Adult Policies (YAPs) which only people below a certain age are eligible to buy. The objective would be similar to

the negative LHC proposal, but the incentive would be to provide higher benefits than a basic policy, rather than a premium discount.

Basic policies currently provide relatively poor value for money, as they have high premium rates (due to risk equalisation) despite sometimes providing limited benefits. YAPs would provide a high level of cover, with no or few exclusions, at a similar cost to current basic PHI policies. The premium would remain significantly higher than expected hospital claim costs, and the difference between premiums and claims would be used to subsidise older policyholders.

While the level of subsidy from each policy may be lower than under the current arrangements, high participation rates should ensure the total funds available to subsidise older policyholders are significant. It would also encourage people to maintain a full cover policy, even when they are no longer eligible for a YAP.

The options discussed above are summarised below:

Policy Change Option	Considerations (summary)
Keep current system unchanged	• Unlikely that the participation of young people will increase. × • Affordability concerns will not be alleviated. ×
Maintain a similar system but pool a lower portion of claims	• Would result in a lower flagfall and slower growth. ✓ • This would help to increase participation of younger Australians and improve the affordability of basic policies. ✓ • Increased complexity. × • Would need to demonstrate that any changes are equitable.
Move to a Prospective Risk Equalisation System	• Incentivises insurers to control claim costs which should improve affordability. ✓ • Increased complexity. ×
Government Incentives Includes increasing the Medicare Levy Surcharge or extending the LHC scheme to provide discounts	• Incentives will improve PHI participation . ✓ • May be challenging for government to consistently provide support. ×
Changes to Government Regulations to allow insurers to manage claims costs more efficiently	• Changes could enable insurers to provide more affordable basic policies. ✓
Changes to Community Rating Rules, including allowing higher	• Reducing the level of cross subsidisation would improve the affordability for individuals with low

Policy Change Option	Considerations (summary)
premiums to be charged to individuals with higher than average expected claim costs (or discounts to people with lower claim costs)	claims costs. ✓ • Encourages participation. ✓ • Increased complexity. × • Would need to be able to demonstrate fairness of changes to longstanding members.
Introducing Young Adult Policies	• YAP would provide better value for money for young Australians. ✓ • Encourages greater participation. ✓ • Increased complexity. × • Would need to be able to demonstrate fairness of changes to longstanding members.

3.4 Conclusions

The level of cross subsidies in the current system changes each year, as the risk equalisation pool grows and the flagfall premium increases. As participation rates begin to reduce for young people, it is appropriate to actively review the levels of cross subsidy in the current system, rather than allow passive changes each year.

Premiums reflect average claim costs of everyone insured, and we have considered a range of issues relating to participation of those in better than average health, and the ability of insurers to control claim costs.

While there seems to be more interest in discounts than penalties, it is worth remembering they are essentially the same thing. A discount for young people is effectively a penalty for everyone else. In the same way, changes to risk equalisation could lower the premiums for products which young people tend to buy, essentially providing an invisible discount.

Our conclusion is that new measures are necessary to ensure continued high participation rates. There are a great many options, and each idea has its advantages and disadvantages. Debate around reform options sometimes reflects philosophical views rather than an objective analysis, perhaps because the impacts can be difficult to quantify. As participation rates start to decline, it may be better to adopt one of the range of sensible policy options, rather than continue to debate the relative merits of each proposal.

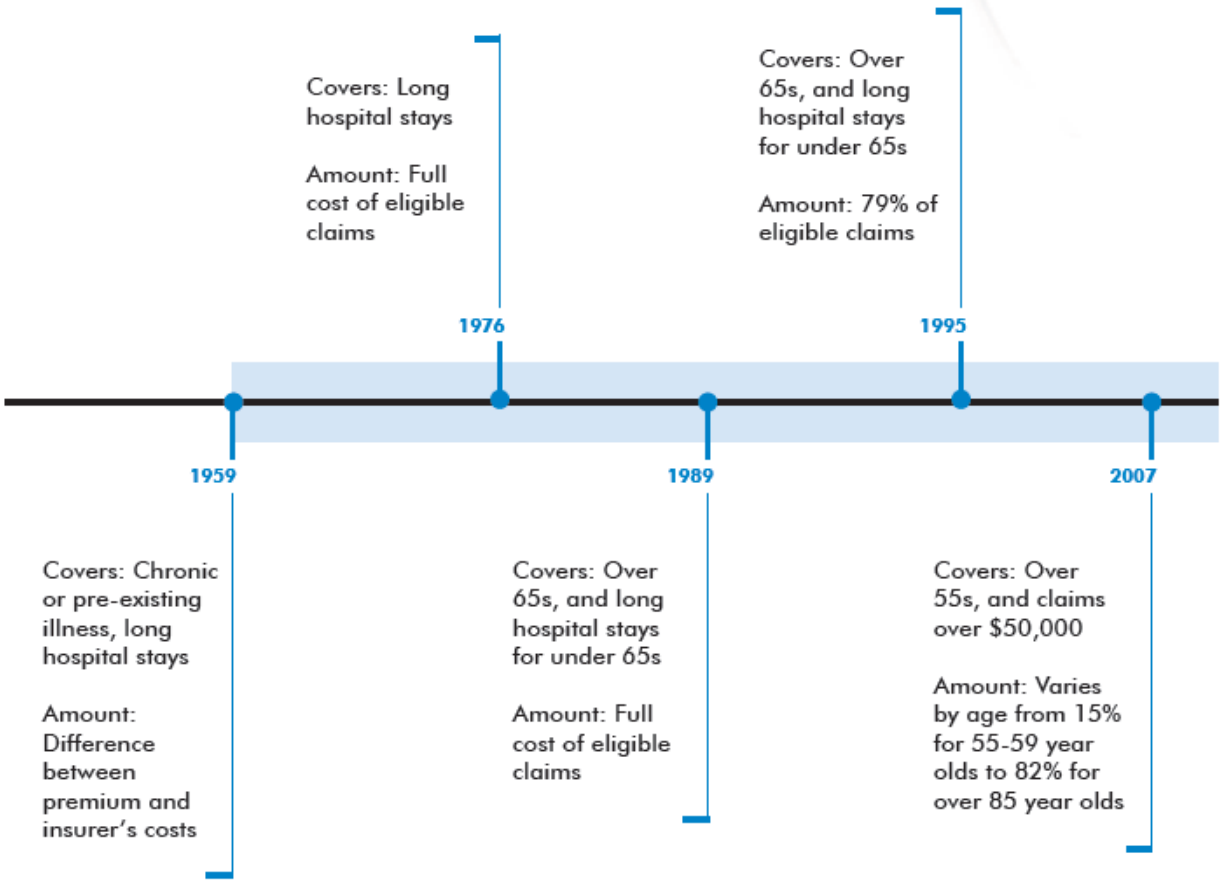
Part III Appendices

A Historical risk equalisation arrangements

Since 1959 a range of risk equalisation systems have been in place in Australia to support the principle of community rating. All the systems have been applied retrospectively to claims paid (that is, based on usage of insurance).

The figure below summarises the most significant changes to the risk equalisation arrangements over time.

Figure A.1 – Summary of Historical Risk Equalisation Arrangements

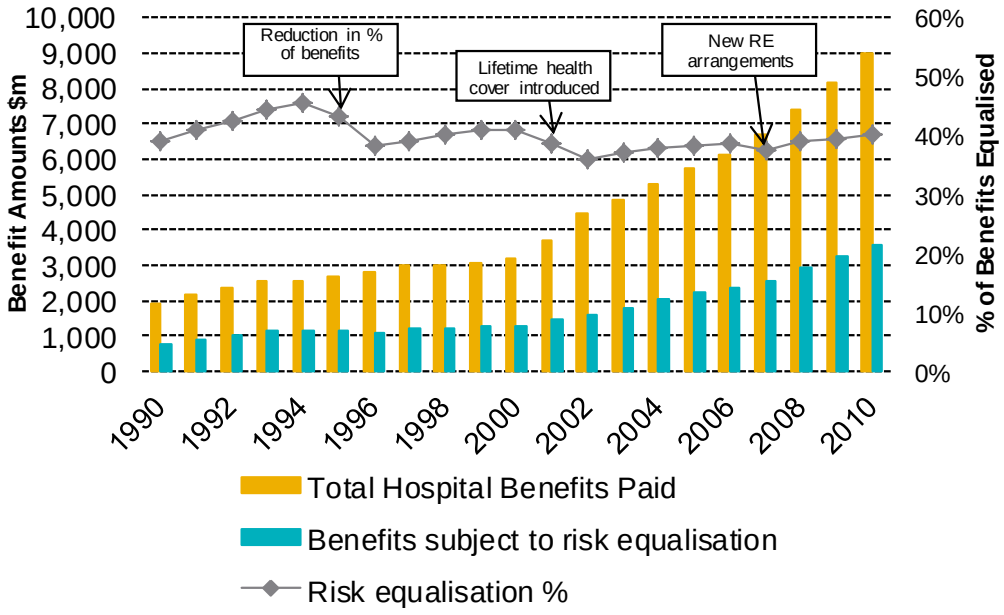


Differences in the arrangements over time have included:

- Who is subsidised - recent schemes have used policyholder age and/or length of hospital stay as a proxy to identify high-risk policyholders
- Subsidy relative to claim costs - the arrangements have changed to pay less than 100% of eligible benefits
- How funds are raised to cover the subsidy. While costs were initially paid by the government the subsidy is now financed entirely by insurers, based on membership.

The figure below summarises the financial experience of risk equalisation over the period 1990 to 2010, showing total hospital benefits paid and the proportion of those payments shared through the risk equalisation arrangements. The more recent experience is show in Section 1 of this paper.

Figure A.2 – Historical Hospital Benefits Paid and Risk Equalisation



Source: Finity analysis of PHIAC statistics

Two events resulted in reductions in the proportion of hospital benefits covered by risk equalisation:

- The reduction in proportion of eligible claims that were pooled from 100% to 79% after 1995
- The introduction of Lifetime Health Cover in 2000, which increased the proportion of claims not subject to risk equalisation by encouraging healthy people to purchase private health insurance.

These events show that the amount of claims subject to risk equalisation depends not only on the design of the risk sharing arrangements but on other aspects of the PHI environment. Other than the two changes noted above, the proportion of hospital claims subject to risk equalisation has generally increased slightly year on year.

For further details, refer to our paper Risk Equalisation 2020 – Is the Current System Sustainable? available at http://www.actuaries.asn.au/library/events/Conventions/2011/Con2011_Paper_Reid.pdf

B Technical Appendix

This attachment provides further details on our assumptions and how they compare to historical experience. We also show how experience has compared to our previous risk equalisation forecasts, and the assumptions underlying those forecasts.

Note that all historical information in this paper is sourced from APRA statistics, or statistics prepared by previous PHI regulators. All projections are prepared by the authors, with the exception of population projections which are prepared by the ABS.

B.1 Key Assumptions

We consider the ABP and HCCP separately. For the ABP, key assumptions were:

- Population data
- PHI Participation rates – see Section 2.2
- Inflation rates

B.1.1 Population

As noted above, the population projections relied on population growth rates implied by the ABS 2012 to 2101 Australian population projection (Series B)[ii]. The ABS makes assumptions about fertility, mortality and overseas migration in order to project the population by age and gender and imply an average growth rate of 1.5% p.a over the projection period. The ABS growth rates were applied to the most recent population estimate.

Table B.1 – Estimated Proportion of Population

Age Group	2016	2020	2025	2030
Under 20	25%	25%	25%	24%
20-40	28%	28%	27%	27%
40-55	20%	19%	19%	19%
55-75s	20%	21%	21%	21%
75+	7%	7%	8%	9%
Total Population (millions)	24.1	25.8	27.8	29.8

It is assumed that the ratio of SEUs to insured persons remains constant at the recent average of 72%.

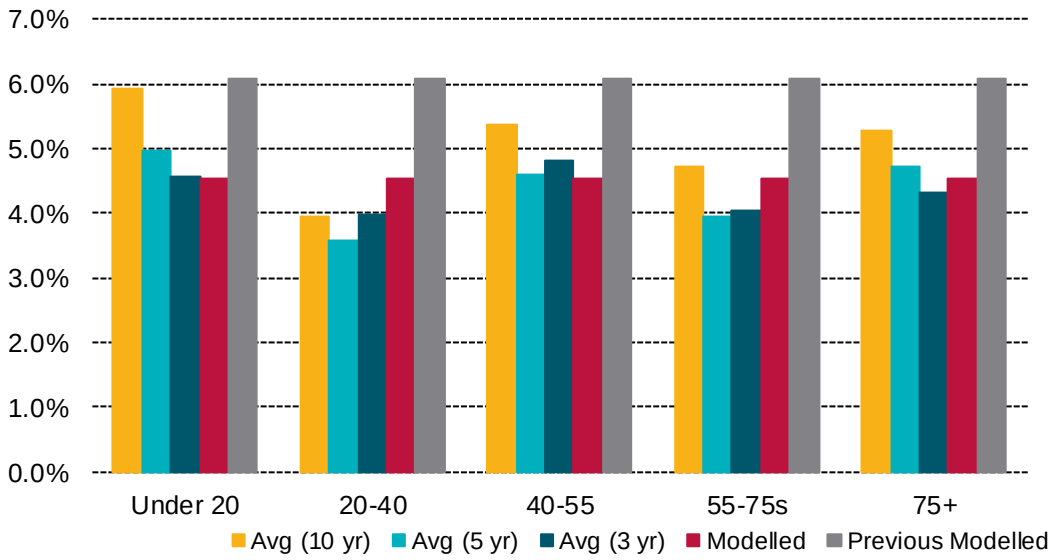
B.1.2 Inflation

The inflation assumption encompasses both the utilisation inflation and benefit cost inflation.

Whilst there is variation in the average inflation rates by band we have selected a single estimate of 4.55% which aligns to the long term average rate of inflation.

Note that this amount excludes the impact of changes in age mix. Allowing for increases in the average age of people insured, total claims inflation (and therefore price increases) have generally been higher than 4.55%.

Figure B.3 – Inflation Assumptions



The average benefit cost per episode is projected to increase from $3,300 in 2016 to $4,500 per episode in 2030. The number of episodes per insured person is expected to increase from 0.4 episodes per person to 0.6 episodes per person by 2030.

Australian Weekly Earnings were projected to increase at 3.5% p.a.

B.1.3 High Cost Claimant Pool

Given the small size of the HCCP a relatively simplistic approach was taken in its projection with key components being linked to the ABP. The total number of claimants and total gross benefits in the HCCP were assumed to grow in proportion to the number of episodes and the total benefits in the ABP. The proportions were set with reference to historical data.

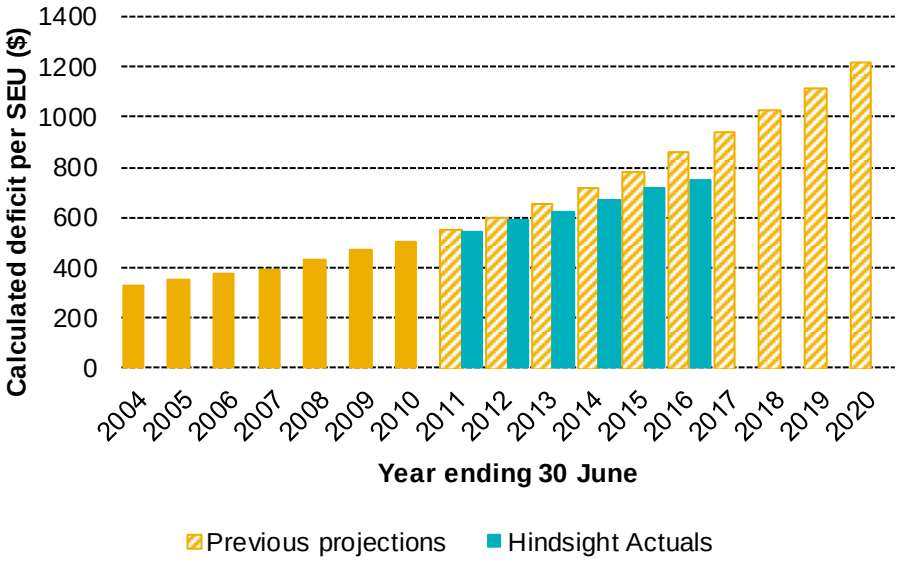
The HCCP is projected to increase from $193m in 2016 (3% of the total pool) to approximately $900m in 2030 (5% of the pool)

B.2 Comparison to previous forecasts

We performed projections using a similar methodology for our 2011 paper "*Risk Equalisation 2020 – Is the Current System Sustainable?*" Here we compare those projections to the actual experience that has emerged to 2016.

Figure B.4 shows that, in hindsight, we overestimated the growth in the premium flagfall.

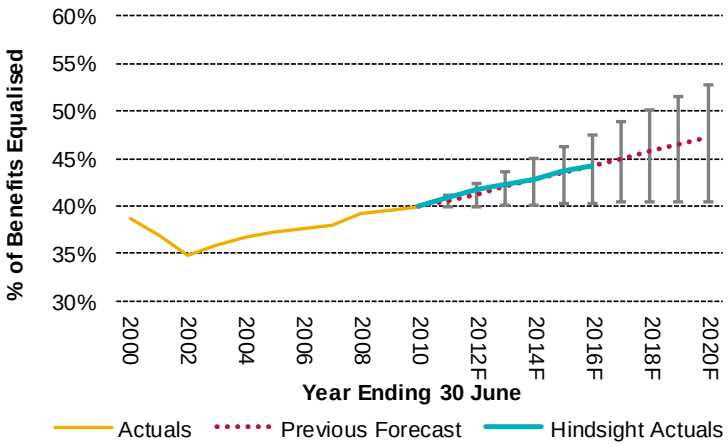
Figure B.4 - Premium Flagfall (Comparison to Previous)



The main driver for this appears to be that our utilisation and service cost inflation per person assumptions were higher than the emerging actual experience. The downward product mix that has been experienced by the industry in recent years (through downgrading and new joiners coming in on more basic products) would have contributed towards this. As a result, our overall benefits per person were lower than expected, which results in the risk equalisation premium per person being lower than expected.

However, as shown in Figure B.5 below, our projection of the proportion of benefits shared through the risk equalisation pool was very close to reality. Since our underlying participation assumptions were close to the emerging experience, this gives some confidence in the modelling approach.

Figure B.5 – Proportion of Hospital Benefits Shared (Comparison to Previous)



B.3 Detailed scenario analysis

The table below provides more detail on the scenarios summarised in Section 2.4.

Table B.2 – Scenario Analysis – Detailed Results

	2016	2020	2025	2030
Base				
Proportion of Shared Benefits	44%	46%	49%	51%
Gross Deficit per SEU ($)	752	983	1,349	1,836
Total Participation Rate	47.0%	47.2%	47.5%	47.7%
Calculated deficit (% of AWE)	0.65	0.74	0.85	0.98
Avg Age - Population	39	39	40	40
Avg Age - Insured	41	41	42	43
Scenario A - Participation for 75+ continues to grow to the 55-75 level, 55-75 remain flat, 40-55 reduces slowly, <40 reduces at similar levels to past				
Proportion of Shared Benefits	44%	47%	50%	53%
Gross Deficit per SEU ($)	752	1,027	1,470	2,039
Total Participation Rate	47%	46%	46%	45%
Calculated deficit (% of AWE)	0.65	0.77	0.93	1.09
Avg Age - Population	39	39	40	40
Avg Age - Insured	41	42	43	44
Scenario B - Participation rates for all ages converge to 50%				
Proportion of Shared Benefits	44%	45%	47%	49%
Gross Deficit per SEU ($)	752	936	1,243	1,647
Total Participation Rate	47%	48%	49%	50%
Calculated deficit (% of AWE)	0.65	0.70	0.79	0.88
Avg Age - Population	39	39	40	40
Avg Age - Insured	41	41	40	40
Scenario C - Participation rates for all ages remain at current levels				
Proportion of Shared Benefits	44%	46%	48%	50%
Gross Deficit per SEU ($)	752	961	1,305	1,758
Total Participation Rate	47%	47%	47%	47%
Calculated deficit (% of AWE)	0.65	0.72	0.82	0.94
Avg Age - Population	39	39	40	40
Avg Age - Insured	41	41	42	43
Scenario D - Increase participation rate to keep ratio of calculated deficit to wages at current				
Proportion of Shared Benefits	44%	43%	42%	42%
Gross Deficit per SEU ($)	752	816	967	1,160
Total Participation Rate	47%	56%	64%	72%
Calculated deficit (% of AWE)	0.65	0.61	0.61	**0.62**
Avg Age - Population	39	39	40	40
Avg Age - Insured	41	39	38	37
Scenario E - Lower Inflation, Participation Unchanged from Base scenario				
Proportion of Shared Benefits	44%	46%	49%	51%
Gross Deficit per SEU ($)	752	962	1,287	1,707
Total Participation Rate	47%	47%	48%	48%
Calculated deficit (% of AWE)	0.65	0.72	0.81	0.91
Avg Age - Population	39	39	40	40
Avg Age - Insured	41	41	42	43
Scenario F - Higher Inflation, Participation Unchanged from Base scenario				
Proportion of Shared Benefits	44%	46%	49%	51%
Gross Deficit per SEU ($)	752	1,038	1,524	2,217
Total Participation Rate	47%	47%	48%	48%
Calculated deficit (% of AWE)	0.65	0.78	0.96	1.18
Avg Age - Population	39	39	40	40
Avg Age - Insured	41	41	42	43

[i] "Community Rating – More Trouble Than Its Worth?" available at http://www.actuaries.asn.au/Library/Events/SUM/2013/Sum2013PaperReid.pdf

[ii] Australian Beauru of Statistics, 2013, *Population Projections, Australia, 2012 (base) to 2101*, cat no. 3222.0, http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/3222.0Main%20Features12012%20(base)%20to%202101?opendocument&tabname=Summary&prodno=3222.0&issue=2012%20(base)%20to%202101&num=&view=