ALTERNATIVE FUNDING MECHANISMS FOR PRIMARY HEALTH CARE IN AUSTRALIA

Actuarial Science Honours Dissertation- Semester 2, 2016

Nicole Parrotte 17064129

DECLARATION FORM

To the best of my knowledge and belief this dissertation contains no material previously published by any other person except where the acknowledgement has been made.

This dissertation contains no material which has been accepted for the award of any other degree or diploma in any university.

Name: Nicole Parrotte

Signature:

Date: 07/11/2016

ABSTRACT

The current funding mechanism for health care in Australia is focused on the principle of universal access and equality. To achieve this principle, the Australian Government introduced a universal health care funding scheme called Medicare in 1984 (Commonwealth of Australia 2015). In the decade from 2003-04, health expenditure in Australia grew at a rate greater than gross domestic product (GDP) and so has become a greater financial strain on the government (Australian Institute of Health and Welfare 2014). Improving primary health care (PHC) is one way to reduce this strain.

PHC encompasses most services not provided by hospitals and is usually an individual's first point of contact within the health care sector. Challenges facing the PHC system include supporting the ageing population, rising levels of risk factors to health, the increasing prevalence of chronic disease and multiple chronic conditions, disparity in access and outcomes and the increasing number of potentially preventable hospitalisations (PPH) (Australian Institute of Health and Welfare 2014). Changing the current funding mechanism for PHC may be able to address some of these issues as well as reduce the burden of health care expenditure to the Australian Government.

This thesis investigates four alternative funding mechanisms for PHC. These alternatives involve transferring the costs of PHC from the government to the private health insurers. Currently, legislation prevents private health insurers from entering the PHC market. Despite this, private health insurers have begun trials with their members in an attempt to become more involved in their PHC as they believe that a role for insurers in PHC could improve access to and the effectiveness of PHC services thereby reducing expensive hospital claims. This would increase private health insurer revenue and profit margins and so improve overall profit. By reducing hospitalisations and improving access to and the effectiveness of PHC services thereby reducing costs, through the introduction of private health insurers to the PHC market.

Two alternatives explore transferring only the costs of general practitioner (GP) services for just adults and then also including any dependants with three income thresholds; \$60,000, \$80,000 and \$100,000. This is done through modelling the impact that the introduction of compulsory private health insurance would have on the government's financials as well as the revenue of private health insurers. The other two alternatives explored in this thesis involve the same concept as with the first two alternatives but involve transferring the costs of all PHC services, which include GP services.

The results of the modelling suggest that transferring only the GP costs from the government to the private health insurers would not provide significant savings to the government. It would also not provide the private health insurers with sufficient additional revenue to introduce the programs which would help address the issues facing the PHC market as well as improve the overall health of Australians.

The two alternatives involving the transfer of all PHC costs are, however, much more effective. The government savings and additional revenue to the private health insurers was

effective under both of these alternatives. While the alternative involving transferring all PHC costs of the entire household with a member earning over each income threshold was found to be the most effective alternative, net savings cannot be the sole consideration of the government.

For an alternative to be effectively implemented, it must be considered fair to the majority of society and must not undermine the concept of universal access. The issues with introducing compulsory private health insurance that the government may face are discussed in this thesis as well as the impact that the private health insurers could have on the PHC market.

The findings of this thesis suggest that an alternative funding mechanism for PHC could address many of the issues facing the PHC market as well as improve the overall health of Australians if all PHC costs are transferred from the government to the private health insurers. While the government would face a number of issues with the introduction of such a scheme, this thesis suggests a number of options to overcome these issues. If the government were to reinvest the savings generated from an alternative funding mechanism, universal access could be maintained and efficiency in the PHC market could be improved. This, along with the impact of the private health insurers, could improve the overall health of Australians as well as reducing the costs of health care.

ACKNOWLEDGEMENTS

Firstly, I would like to express my appreciation and gratitude for my supervisor, Jo-Anne Morgan. I am so thankful for the large amount of time you have dedicated to helping me with this thesis throughout the past year. Your support has been much appreciated and I have learnt so much from working so closely with you.

I would also like to thank the entire staff, past and present, at the School of Mathematics who have supported me throughout the past four years that I have spent at Curtin University. Without this learning and support, I could not have completed this research and report to as high a standard.

I would like to acknowledge the support I received from the Brian Grey Scholarship (jointly funded by APRA and the Reserve Bank of Australia). This financial support allowed me to focus on my studies in this challenging year.

LIST OF FIGURES AND TABLES

LIST OF FIGURES

Figure	Page
2.3.1 Primary health care spending allocation (Australian Institute of Health and Welfare 2015)	10
2.4.1 Annual growth in health expenditure and GDP (Australian Institute of Health and Welfare 2015)	12
5.3.1 Comparison of net government savings with the four alternatives	23
5.4.1 Potentially preventable hospitalisation by socioeconomic status of area of residence, all hospitals, 2014-15 (Australian Institute of Health and Welfare 2016)	26
6.3.1 Additional revenue with the four alternatives	30
7.1 Comparison of alternatives 3 and 4	34

LIST OF TABLES

Table	Page
3.2.1 Government savings (Reid, et al. 2015)	14
3.3.1 Impact of transferring all PHC costs to insurer financials (Reid, et al. 2015)	15
4.1.1 Alternative funding mechanisms	16
4.2.1 Data sources	17
5.1.1 Government savings with GP only costs of adults transferred (alternative 1)	21
5.1.2 Government savings with GP only costs transferred (comparison of alternatives 1 and 2)	21
5.2.1 Government savings with all PHC costs of adults transferred (alternative 3)	22
5.2.2 Government savings with all PHC costs transferred (comparison of alternatives 3 and 4)	22
6.1.1 Additional revenue to the private health insurers with the GP only costs of adults transferred (alternative 1)	27
6.1.2 Additional revenue to the private health insurers with the GP only costs of the entire household transferred (alternative 2)	28
6.2.1 Additional revenue to the private health insurers with all PHC costs of adults transferred (alternative 3)	28
6.2.2 Additional revenue to the private health insurers with all PHC costs of the entire household transferred (alternative 4)	29

LIST OF ABBREVIATIONS

PHC- Primary health care
GP- General practitioner
PBS- Pharmaceutical benefits scheme
PPH- Potentially preventable hospitalisation
GDP- Gross domestic product
CPI- Consumer price index
MBS- Medical benefits schedule
AIHW- Australian Institute of Health and Welfare
ATO- Australian Taxation Office
ABS- Australian Bureau of Statistics
APRA- Australian Prudential Regulatory Authority
PHIAC- Private Health Insurance Administration Council
WHO- World Health Organisation
OECD- Organisation for Economic Co-operation and Development

1 CONTENTS

D	eclarat	ion Form1
A	ostract	
A	knowl	ledgements4
Li	st of Fi	gures and Tables5
	List of	Figures5
	List of	Tables5
Li	st of Al	bbreviations6
2	Intr	oduction9
	2.1	What is Primary Health Care in Australia?9
	2.2	The History of the Funding of Primary Health Care in Australia9
	2.3	The Current Mechanism for the Funding of Primary Health Care in Australia10
	2.4	Challenges Facing the Current Funding Mechanism11
	2.5	Thesis Topic and Motivation12
3	Lite	rature Review13
	3.1	The Issues Facing the Current Funding Mechanism13
	3.2	The Impact of Compulsory Private Health Insurance to the Government14
	3.3 Upon	The Impact of Compulsory Private Health Insurance to Private Health Insurers and Premiums
	3.4	The Impact of Compulsory Private Health Insurance to Consumers and Equity15
4	Pro	posed Alternative Funding Mechanism for Primary Health Care in Australia
	4.1	Proposed Changes to the Current Funding Mechanism
	4.2	Data Sources
	4.3	GP Only Costs Methodology and Assumptions
	4.4	All PHC Methodology and Assumptions
5	Imp	act of Proposed Funding Mechanism to the Government20
	5.1	Potential Government Savings with GP Only Costs Transferred20
	5.2	Potential Government Savings with All PHC Costs Transferred22
	5.3	Comparison of the Government Savings Under the Four Alternative Funding
	Mech	anisms23
	5.4	Issues Faced by the Government Under the Proposed Funding Mechanism23
6	Imp	act of Proposed Funding Mechanism to Private Health Insurers27
	6.1	Potential Change in Premium Revenue with GP Only Costs Transferred27

(6.2	Potential Change in Premium Revenue with All PHC Costs Transferred	.28
	6.3 Four <i>i</i>	Comparison of the Additional Revenue to the Private Health Insurers Under the Alternative Funding Mechanisms	.30
(6.4	Impact of Private Health Insurers Entering the Primary Health Care Market	.30
7	Con	nclusion	.33
8	Арр	pendix A	.36
9	Арр	pendix B	.37
10	R	eferences	.38

2 INTRODUCTION

2.1 WHAT IS PRIMARY HEALTH CARE IN AUSTRALIA?

Primary health care (PHC) in Australia encompasses a large number of providers and most services not provided by hospitals. PHC is usually an individual's first point of contact within the health sector when they have a health concern (Australian Institute of Health and Welfare 2014). Health professionals involved in PHC in Australia include general practitioners (GPs), nurses, dentists, pharmacists, Aboriginal health workers, midwives and other allied health professionals. PHC involves a wide range of services including health promotion, early intervention, prevention and screening, treatment and management and these services are delivered in a wide range of settings (Commonwealth of Australia 2013). A strong PHC network is important as it reduces pressure on hospitals by enabling people to manage their health issues in the community (Primary Health Care Research & Information Service 2016). The majority of the population will use at least one service included in PHC every year and so the quality and access to PHC is of importance to all Australians.

2.2 THE HISTORY OF THE FUNDING OF PRIMARY HEALTH CARE IN AUSTRALIA

At the time of the Federation of Australia in 1901, the funding of an individual's PHC was entirely the responsibility of the individual with the government's sole focus in the health sector being on quarantine. The first instance of government intervention into the funding of PHC was in 1944 with the introduction of the Pharmaceutical Benefits Scheme (PBS). Initially, this scheme only covered a very limited number of lifesaving and disease preventing medications free of charge to the community (Biggs, The Pharmacautical Benefits Scheme an Overview 2003). The scheme however was found to be unconstitutional in 1945 and so was abolished.

In 1946 a referendum was successful with 59% of the population in support of the amendment of the Constitution to give the government new powers for a range of social services. This resulted in the reintroduction of the PBS with only a few minor amendments. From this time until 1975 the government's only contribution to the funding of PHC in Australia was through this PBS scheme and a voluntary private health insurance scheme which was subsidised by the government.

In 1975, Medibank was created where the government began to become more involved in the funding of PHC. Medibank involved a levy of 1.35% on taxable income and free treatment for patients in public hospitals and subsidised treatment for patients in private hospitals. This scheme however was only operational for about a year before the government began to dismantle it due to rapidly rising government expenditure. The scheme was abolished by 1981 and PHC was again the responsibility of the individual (Biggs, Medicare- Background Brief 2004).

Public discontent about the cost of health care grew from this point but economic times were tough so the reintroduction of Medibank was not a viable option for the government. Instead, the government devised a plan to reinstate Medibank which was contingent on the successful

restructuring of the economy, boosting productivity and economic growth. This plan was successful with Medicare officially starting on the first of February 1984 (Commonwealth of Australia 2015). This marked the beginning of the funding scheme for PHC in Australia which exists today.

2.3 THE CURRENT MECHANISM FOR THE FUNDING OF PRIMARY HEALTH CARE IN AUSTRALIA

Medicare is still the government's scheme which provides funding for PHC in Australia. Medicare provides free or subsidised treatments for Australian residents for a number of primary health services including some optometrist services, consultation fees for doctors, tests and examinations by doctors, most surgical procedures performed by doctors, some dental procedures and some chronic disease management services (Commonwealth of Australia 2014). The government also covers the cost of PHC through the PBS which covers part of the payment for prescription medications purchased at pharmacies. The cost of pharmaceuticals not covered by the scheme and the subsidised cost of those medications which are covered are the responsibility of the individual. The PBS is funded entirely by the government while Medicare is partially funded by the Federal Government and partially funded by Australian residents through the Medicare levy, which is 2% of taxable income for almost all Australians, see Appendix A for more detail (Australian Taxation Office 2016).

The benefits provided by Medicare are dependent on the Medicare Schedule fee, which sets out how much individuals will be refunded for visits to approved health professionals. Doctors and other health professionals may set fees higher than these Schedule fees and the gap between is to be paid by the individual. Medicare covers 100% of the Schedule fee for GP consultations and 85% of specialist consultations. In 2013-14, \$54.7 billion was spent on PHC in Australia and this was funded by both government and non-government sources. Figure 1.3.1 shows the distribution of funding of PHC in 2013-14. The majority of non-government spending comes from payments out of the pockets of individuals, through both direct payments and payments of insurance premiums (Australian Institute of Health and Welfare 2015).



Figure 2.3.1 Primary health care spending allocation (Australian Institute of Health and Welfare 2015)

As noted, private health insurers also contribute to the funding of PHC. Australians are encouraged to have a private health insurance policy through the Medicare levy surcharge which is a charge that a person must pay if they do not have the appropriate level of private health insurance, see Appendix A for more detail. Private health insurance reimburses individuals for a number of different PHC services such a physiotherapy, optical services and dental services. In 2011-12, 73 million PHC services across Australia were reimbursed by private health insurers.

Currently, legislation exists in which private health insurers are not able to provide insurance for any health service for which a Medicare benefit is payable. This legislation is severely restricting the role of private health insurers in the funding mechanism for PHC in Australia (Biggs, Private health insurance in primary care: overview of issues 2016).

2.4 CHALLENGES FACING THE CURRENT FUNDING MECHANISM

PHC is extremely important to manage the health care needs of Australians and to keep them as healthy as possible. There are a number of challenges, including financial challenges, facing the PHC system and so the structure of the funding mechanism has become more of a focus for the government.

Some of the challenges facing the current system include;

- supporting the aging population which is creating a change in the nature of and demand for PHC services,
- rising levels of risk factors such as obesity and physical inactivity creating an increase in the demand for PHC services,
- the increasing prevalence of chronic disease and multiple chronic diseases which is increasing the demand for PHC services and
- disparity in access and outcomes for people in various population groups such as people living in remote areas or those with a low socioeconomic status (Australian Institute of Health and Welfare 2014).

Another challenge facing the current funding mechanism is the increasing number of potentially preventable hospitalisations. Potentially preventable hospitalisations (PPHs) are any hospitalisation which could have been prevented by timely access and the appropriate administration of PHC. In 2013-14, 6% of all hospitalisations were classified as PPHs and these hospitalisations are causing an unnecessary cost to the government. Of these PPHs, 48% were from chronic conditions which are constantly increasing in prevalence and need to be addressed as they are making up an increasingly high proportion of health expenditure (Australian Institute of Health and Welfare 2015).

Spending on PHC in Australia has been steadily increasing, causing a considerable financial strain for the government. Health expenditure in Australia has grown at a rate which is 2.2% per annum higher than the growth of gross domestic product (GDP) in the decade from 2003-04 to 2013-14 (Australian Institute of Health and Welfare 2014) with the proportions of spending by governments and non-governments remaining fairly constant. Figure 1.4.1 compares growth in spending on PHC, and the expenditure on healthcare in general, to the

increase to GDP over that time. As can be seen, PHC alone is typically increasing at a greater rate than GDP. As a result, both governments and individuals are paying more for PHC every year as costs and number of services provided are on the rise.



Figure 2.4.1 Annual growth in health expenditure and GDP (Australian Institute of Health and Welfare 2015)

2.5 THESIS TOPIC AND MOTIVATION

The motivation for investigating alternative funding mechanisms for PHC in Australia is to address some of the concerns mentioned above. With the rising cost of health care in Australia, the government will soon no longer have the funds required to continue with the current funding mechanism for PHC at the same high levels of service and accessibility. PHC has been found to be one of the most cost effective ways to deliver health services and a strong PHC system has been linked with better health for citizens internationally (Australian Medical Association Limited 2010). As a result, the maintenance of a strong, well-funded PHC system is of the upmost importance to all Australians.

An alternative funding mechanism may be able to better face the challenges posed by population changes such as the aging population and increased prevalence of risk factors such as obesity and lack of physical activity, which would reduce costs for both the government and individuals and improve national health. An alternative funding mechanism, such as compulsory private health insurance, may also be able to better address the concern that those in rural areas or those with a lower socioeconomic status have lower levels of access to the PHC system. If the current mechanism was altered to make individuals more responsible for the funding of PHC in Australia, there could be increased motivation to take personal responsibility for one's health, therefore improving health Australia wide which would decrease costs of health in Australia.

If private health insurers had a larger role in the funding of PHC, the insurers would be highly motivated to set up a variety of programs to improve access to the PHC network, increase

effectiveness in the PHC network and reduce expensive hospital claims. These programs would thereby increase insurer revenue and profit margins and so improve overall profit.

By improving access to and effectiveness in the PHC market as well as setting up programs aimed at reducing hospitalisations, the overall costs of healthcare in Australia could be reduced by the introduction of the private health insurers to the PHC market. This could contribute to improving the overall health of Australians.

These proposed changes come with ethical concerns which should also be addressed. All Australians should have access to effective and timely PHC, regardless of their income and socioeconomic status. A funding mechanism for PHC which relies more on individuals and insurers rather than government funding could create a two-tiered system in Australian society with different levels of health care being delivered to each tier. To address any ethical concerns, a minimum income level at which these proposed changes to the funding mechanism come into effect will be investigated to ensure lower income earners can still access PHC with funding from the government. The impact of the proposed changes to the Australian Government, to private health insurers, to individuals both above and below the minimum income level will be investigated and recommendations on whether any changes should be adopted will be made.

3 LITERATURE REVIEW

3.1 THE ISSUES FACING THE CURRENT FUNDING MECHANISM

The issues facing the current funding mechanism are very well documented. Health expenditure worldwide is on the rise for a number of reasons. In Australia, the rising cost of PHC has been mostly attributed to the following key factors:

- Changes in the price of health services and changes in the type and volume of services used have been the biggest contributors to growth in health expenditure in Australia in recent years (Actuaries Institute 2014).
- The ageing population and the growing burden of chronic health conditions have been identified as the main demographic changes contributing to the rising health expenditure which is resulting in increased pressure on the budget of the government (Commonwealth of Australia 2014).
- It has also been found that Australia has very high rates of hospital admissions for chronic conditions that could have been managed in primary care (OECD 2015).

All of these factors are causing the government and experts in the health industry to question whether the current funding mechanism will be sustainable in the future with the rising health expenditure Australia is facing. It has been estimated that health expenditure will be the main source of budgetary pressure over the next 50 years, creating an additional pressure on the budget of around 6% of GDP, (Productivity Commission 2013) and so the current funding mechanism may need to be changed to reduce this pressure.

A number of different options have been proposed including working longer, medical savings accounts, boosting national savings and pre-funding future private health insurance increases (Actuaries Institute 2014). Another is compulsory private health insurance for higher income earners. This option of removing access to Medicare for high income earners and allowing private health insurers to enter the PHC market will be the alternate funding mechanism which is further investigated in this paper.

3.2 THE IMPACT OF COMPULSORY PRIVATE HEALTH INSURANCE TO THE GOVERNMENT

Compulsory private health insurance is an alternate funding mechanism for PHC and its impact on government financials has been fairly thoroughly investigated. We know that only transferring a portion of PHC costs in the form of GP only costs would not be particularly effective in terms of government savings. Transferring all PHC from the government to private health insurers does however have potential. Table 3.2.1 illustrates the savings to the government from transferring costs of PHC as investigated by Crane, McCullough, Reid and Wang in the paper "Compulsory Health Insurance: Should government still be the insurer of first resort?".

Income threshold	\$60,000	\$80,000	\$100,000
Transferring GP only	\$780 million	\$430 million	\$250 million
Transferring all PHC	\$3.3 billion	\$1.9 billion	\$1.1 billion
costs			

Table 3.2.1 Government savings (Reid, et al. 2015)

These calculations only involved transferring the PHC costs of the individual away from the government. The impact of transferring the costs of the partner of the individual as well as any dependents has not yet been investigated.

3.3 THE IMPACT OF COMPULSORY PRIVATE HEALTH INSURANCE TO PRIVATE HEALTH INSURERS AND UPON PREMIUMS

The increasing cost of private health insurance has attracted much media attention and research. In 1998, the Chairman of the Industry Commission stated that private health insurance premiums were rising on average three times faster than the Consumer Price Index (CPI) and so affordability was steadily declining. Since this time, a number of regulations on premium setting have been introduced to ensure that private health insurance remains affordable (Deloitte Access Economics 2012). In April 2016, private health insurance premiums rose by an average of 5.6% which equates to the average family paying about \$300 more for an average policy per year (Savage 2016). However, even with the growing concerns about increasing costs of private health insurance, the impact to premiums of the potential introduction of compulsory private health insurance has not been investigated.

What has been investigated is the impact to the revenue of private health insurers. If only GP costs are transferred to private health insurers, there will only be a significant impact to the revenue of private health insurers if there is no income threshold, which would most likely be considered unethical. If all PHC services were transferred to the private health insurers, the impact would be much greater. Table 3.3.1 shows the impact of transferring all PHC costs on

the private health insurers compared to the current insurer revenue in excess of \$20 billion per year.

Income threshold	\$60,000	\$80,000	\$100,000
Impact on insurer	Moderate (around	Low/moderate	Low (around 5%
financials	20% extra revenue)	(around 10% extra	extra revenue)
		revenue)	

Table 3.3.1 Impact of transferring all PHC costs to insurer financials (Reid, et al. 2015)

If private health insurance were to be made compulsory for PHC services, it would have to be affordable for those above the chosen income threshold for it to be considered fair and ethical.

3.4 THE IMPACT OF COMPULSORY PRIVATE HEALTH INSURANCE TO CONSUMERS AND EQUITY

The debate around the introduction of compulsory private health insurance has focused on ethical concerns. The major concern is that compulsory private health insurance will create a two-tiered society where Australians with private health insurance could have improved access to PHC over those without private health insurance. This is generally considered to be an unavoidable consequence of allowing private health insurers to play a role in the PHC sector (Reid, et al. 2015). There could however be benefits to the health of Australians as a result of compulsory private health insurance which could outweigh this negative.

The insurer, Medibank is currently trialling a program called CarePoint which operates in the PHC sector and aims to reduce hospital admissions by 25% of a target group of patients who suffer from multiple chronic conditions (McDonald 2015). If private health insurers were to be allowed access to the PHC sector, they would be highly motivated to introduce programs such as this to reduce costly hospital admissions. This could decrease stress on hospitals as well as improving the health of Australians.

While these programs would only be accessible to those with private health insurance, the government saving from transferring PHC costs to private health insurers could be used, in part, to set up similar programs in the public system.

4 PROPOSED ALTERNATIVE FUNDING MECHANISM FOR PRIMARY HEALTH CARE IN AUSTRALIA

4.1 PROPOSED CHANGES TO THE CURRENT FUNDING MECHANISM

In order to overcome some of the challenges facing PHC previously discussed, four different alternative funding mechanisms will be investigated in this paper. With each alternative, I will be exploring the government savings and insurer revenue under each of the three income thresholds; \$60,000, \$80,000 and \$100,000. The following table outlines the four alternatives and explains whether GP only or all PHC costs are transferred, who is excluded from Medicare rebates in each alternative and which table in the paper corresponds to that alternative.

Alternative	GP only	All PHC*	Adults	Children	Table Reference
1	\checkmark	×	\checkmark	×	4.1.2 and 5.1.1
2	\checkmark	×	\checkmark	\checkmark	4.1.2 and 5.1.2
3	×	✓	\checkmark	×	4.2.2 and 5.2.1
4	×	✓	\checkmark	✓	4.2.2 and 5.2.2

Table 4.1.1 Alternative funding mechanisms

*All PHC includes GP services

With each alternative, I will be considering effectiveness as well as fairness concerns.

4.2 DATA SOURCES

In calculating the government savings and additional revenue to the private health insurers under each of the four alternatives, I used a number of different data sources. While the data sources were not necessarily split the same way, I was able to join certain age groups in each data set to get a consistent age and gender split across the different data sources. The following table outlines the different data sources I used.

Item	Source	Year	Comment	Data Split
GP only costs	P only costs Medicare 2015-16 Medical Benefits Schedule Australia (MBS) Item Statistics Reports for items 3, 4, 20, 23, 24, 35, 36, 37, 43, 44, 47 and 51.		Medical Benefits Schedule (MBS) Item Statistics Reports for items 3, 4, 20, 23, 24, 35, 36, 37, 43, 44, 47 and 51.	Age and gender
All PHC costs	AIHW	2008-09	Needed to be scaled up to better reflect current data	Age and gender
Scaling up	AIHW	2013-14	Newer publication "Health expenditure Australia 2013- 14"	Total costs per person
Proportion of population in each income threshold	ΑΤΟ	2013-14	Taxation statistics included proportions of population in each income threshold and the Medicare levy paid	Age, gender and income
Population statistics	ABS	2014-15	Australian Demographic Statistics	Age and gender
Australians without private health insurance	APRA	2016	Private Health Insurance Membership and Coverage	Age and gender
Additional revenue to the private health insurers	PHIAC	2013-14	Operations of the Private Health Insurers Annual Report 2013-14	
Additional rebate amount Current Medicare levy	ΑΤΟ	2015-16	Used the income thresholds to calculate rebates Used the dollar amounts of the current Medicare levy paid	Age, gender and income
Number of dependent children	ABS	2013-14	Household Income and Income Distribution	Income quartile
Average yearly disposable income	ABS	2013-14	Household Income and Wealth Australia	

Table 4.2.1 Data sources

I acknowledge that, while I used the most recent data and reports in every case, the data sets refer to different time periods. As with the paper "Compulsory Health Insurance: Should government still be the health insurer of first resort?" (Reid, et al. 2015), I have decided that this would be acceptable as, on balance, the method should provide an indication of costs by claim type and income level and so should be reasonable for the purposes of this paper (Reid, et al. 2015). Due to the fast rates of growth of health expenditure, I used the most recent health expenditure data to get the most current picture. The proportions of individuals in each income, age and gender threshold is unlikely to have changed significantly throughout the different time periods used due to the slow growth of the population during this time.

Australia's population growth peaked in 2008-09 and has slowed since, reaching a ten-year low in 2015 (Australian Bureau of Statistics 2015). I acknowledge that more refined data and additional research and analysis would help refine the estimates.

4.3 GP ONLY COSTS METHODOLOGY AND ASSUMPTIONS

Savings to the government with the GP only costs of adults transferred (alternative 1)

To estimate the cost of GP services, I summed the MBS Item Statistics Reports over all the GP related items. These item reports are the Medicare rebates paid by the government for each service and so are the GP costs that the government pay annually. I used the ATO data to determine the proportion of the population in each income bracket and used these proportions to calculate the spread of GP costs across income brackets within a given age and gender group. From this, I calculated the savings to the government if individuals earning over each of the three income thresholds were no longer eligible to receive benefits from Medicare for GP services and would instead need to cover these costs through private health insurance or from their own pockets.

I also investigated the impact on government savings if the partners and other nondependent members of a household with at least one person earning over each income threshold were also no longer eligible for Medicare rebates under the proposed funding mechanism. In doing so, I assumed that the number of non-working people in a household does not vary by age, gender and income. This is a very big assumption and so I acknowledge that the results of these calculations are just a rough estimate. In these calculations, I was only able to capture the non-working members of a household due to the available data. In 52% of Australian couple families, at least one parent is non-working (Australian Bureau of Statistics 2011). There is no data on the difference between the income levels of two employed parents. In my calculations, I have captured every person earning over each income threshold as well as every person who is non-working but has a partner who earns over the income threshold. Any adult who is working but earning under each threshold has not been captured even if they have a partner who is earning over the income threshold due to the lack of available data. More refined data would improve the estimate but, as all adults have not been captured, the numbers quoted in this paper are likely an underestimate.

This analysis has involved several assumptions. The key assumption in this calculation is that, for a given age and gender group, utilisation of GP services does not vary by income. It is unclear whether this is an under- or over-estimation as people on lower incomes may have a higher utilisation of GP services. For example, people unable to work due to poor health might require frequent GP visits and have a low income. Conversely, people on higher than average incomes may have greater utilisation of GP services. For example, this group may be highly engaged with their health and taking a proactive approach to their health and so visiting their GP more frequently (Reid, et al. 2015).

Calculating the changes in Medicare levy and rebates

The ATO data gives the dollar amount paid, split by age, gender and income, for the Medicare levy as well as the Medicare levy surcharge, which I reduced by 8.3% which is the percentage

of total government spending which is spent on GP services each year. There would be no change in the Medicare levy surcharge as I have assumed that there will be a 100% uptake in private health insurance and so I have bundled the Medicare levy and the Medicare levy surcharge for the sake of simplicity.

I have assumed that the government will continue the current rebate scheme which involves the government providing those with adequate levels of private health insurance with a refund of a part of their insurance premium. This rebate is income tested to help with affordability of private health insurance for lower income earners, see Appendix A for more detail. To calculate the additional rebates that the government would need to pay under the proposed funding mechanism, I used the thresholds and rebate percentages from the ATO and the additional number of people who would have taken out private health insurance from APRA.

Additional revenue to the private health insurers with the GP only costs of adults transferred (alternative 1)

After calculating the savings to the government, I investigated the impact that each alternative would have on the revenue of the private health insurers. To determine the additional revenue to the private health insurers, I used the data from APRA to determine the number of Australians without private health insurance and the claims to premium ratio of 86.40% (Private Health Insurance Administration Council 2014). In calculating the insurer premium revenue, I have assumed that the claims to premium ratio will remain constant following the introduction of any alternative funding mechanism. I used the savings to government as the additional claims cost to the private health insurers and then used the claims to premium ratio to determine the additional premium revenue which the health insurers would receive under each alternative funding mechanism.

I also investigated what the average premium would need to be for those taking up private health insurance to cover the additional costs. I calculated the current average premium paid by Australians with private health insurance using the number of individuals who currently have private health insurance and the current insurer premium revenue from APRA (Australian Prudential Regulatory Authority 2016). This average premium paid per person was calculated to be \$1,807 annually. Premiums differ between income thresholds due to the different distribution of health care costs and of people with private health insurance, see Appendix B for more detail.

In determining the additional revenue to the private health insurers, I also made many assumptions. The key assumption is similar to the assumption regarding GP utilisation. I assumed that within an age and gender group, the number of people with private health insurance does not vary by income. It is unclear whether this is accurate as people on lower incomes may be less likely to have private health insurance as the premiums are less affordable for these people. Conversely, people on lower than average incomes may be more likely to have private health insurance as they cannot as easily afford to pay for any health issues that arise without insurance. Also, people on higher than average incomes may be less likely to have private health insurance as they can afford to self-insure.

Another assumption made is that all Australians who are not currently insured will take up private health insurance if they are no longer eligible for Medicare benefits. It is unclear whether this is accurate as the individuals on higher than average incomes may choose to instead self-insure as they are likely to be able to afford to pay for any unseen health issues that may arise.

Savings and additional revenue with the entire household included

To determine the savings to the government if the dependant children of those earning over each income threshold were also no longer covered by Medicare, I used the ABS data. This data was split by income and number of dependant children. In these calculations, I have assumed that the number of children does not vary within an income quartile and that the dependant children are an even split of males and females.

4.4 ALL PHC METHODOLOGY AND ASSUMPTIONS

To calculate the savings to the government when all PHC benefits are transferred from the government to the private health insurers, not just the GP only costs, I used a similar methodology and assumption set as described above for GP only costs.

The demographic data is the same as used above for the GP only costs while for the cost of all PHC to the government, I used the AIHW data. The most recent data available which is split by age and gender is from 2008-09. I used the AIHW's more recent report which states the total amount spent on PHC by the government in 2010-11 to scale this data up so that it is a more accurate representation of the current government spending. I determined the number of eligible Australians who would, under the alternative funding mechanism, no longer receive Medicare rebates for PHC using the same method as with the GP only costs.

The key assumption in this analysis involved PHC utilisation. As with GP utilisation, I assumed that utilisation of PHC does not vary by income within an age and gender group. This assumption may or may not hold for the same reasons given for GP utilisation.

As with the GP only costs, I investigated the impact of reducing the Medicare levy by the percentage of services which the affected individuals would be losing under the new scheme. With all PHC costs transferred, 29.6% of all government paid health services would no longer be available to the adults earning over each of the thresholds and so I investigated the impact of reducing the Medicare levy paid by this amount.

5 IMPACT OF PROPOSED FUNDING MECHANISM TO THE GOVERNMENT

5.1 POTENTIAL GOVERNMENT SAVINGS WITH GP ONLY COSTS TRANSFERRED

Under the alternative funding mechanisms which I have proposed, I have investigated the savings to the Australian Government if the costs of GP services are transferred away from the government. I investigated the savings to the government if Medicare rebates are no longer available for GP services to individuals earning over three different thresholds; \$60,000, \$80,000 and \$100,000, and their partners.

Government savings have been measured as the value of the rebates that are currently spent by the government on GP services. The savings quoted and income thresholds refer to annual government savings and annual incomes respectively. In Table 5.1.1 below, government savings is the baseline savings to the government without considering the extra rebates which the government would need to pay under the current rebate scheme and without reducing the Medicare Levy by the proportion of services which would be lost through this scheme. The savings in this table are calculating the savings to the government if the costs of anyone earning over each income threshold and their partner are transferred away from the government.

Threshold	Government Savings (\$ millions)	Extra Rebates Paid (\$ millions)	Reduction in the Medicare Levy (\$ millions)	Net Government Savings (\$ millions)	Percentage of Population Affected
\$60,000	1,003	278	590	135	22%
\$80,000	598	109	446	43	13%
\$100,000	365	30	339	-4	8%

 Table 5.1.1 Government savings with GP only costs of adults transferred (alternative 1)

As can be seen in the table above, the net government savings are not substantial under this proposed funding mechanism when the extra rebates which would need to be paid and the reduction in the Medicare levy which would be required for the scheme to be considered fair. The low percentage of the population affected is the reason for the low net savings or, in some instances, losses to the government.

This proposed scheme is ineffective as the Medicare levy is charged at 2% of an individual's taxable income and so the highest income earners contribute the most to the Medicare levy (Australian Taxation Office 2016).

Therefore, I have proposed to also remove the Medicare rebates to the dependants of those earning over each threshold. This would increase the proportion of the population affected without altering the rebates paid or the reduction in the Medicare levy as dependant children would not be eligible for a rebate and do not pay any Medicare levy.

Threshold	Net Savings with Only Adults Included (\$ millions)	Percentage of Population Affected	Net Savings with Whole Household Included (\$ millions)	Percentage of Population Affected
\$60,000	135	22%	814	36%
\$80,000	43	13%	549	25%
\$100,000	-4	8%	324	16%

Table 5.1.2 Government savings with GP only costs transferred (comparison of alternatives 1 and 2)

As can be seen in the above table, the net government savings are significantly more substantial with the dependants included in the proposed funding mechanism. While these savings are more substantial than the earlier calculations, they are still relatively low compared to total government spending on health care of \$104.8 billion and so this proposed

funding mechanism would most likely be deemed ineffective if only GP costs were to be transferred from the government to the private health insurers.

5.2 POTENTIAL GOVERNMENT SAVINGS WITH ALL PHC COSTS TRANSFERRED

Since transferring only the costs of GP services from the government would most likely be deemed ineffective, I next investigated transferring the costs of all PHC services away from the government. GP services would be included in this scheme as GP services are a part of the PHC network. Again, in Table 5.2.1 below, all government savings quoted are annual savings.

Threshold	Government Savings (\$ millions)	Extra Rebates Paid (\$ millions)	Reduction in the Medicare Levy (\$ millions)	Net Government Savings (\$ millions)	Percentage of Population Affected
\$60,000	4,567	1,307	2,105	1,155	22%
\$80,000	2,759	513	1,593	653	13%
\$100,000	1,713	140	1,211	362	8%

 Table 5.2.1 Government savings with all PHC costs of adults transferred (alternative 3)

As can be seen in the above table, the net savings to government are significantly more substantial when all PHC costs are transferred from the government to the private health insurers rather than just the GP only costs. This scheme still faces some of the same problems as with the GP only scheme. When the additional rebates the government would have to pay are considered as well as the reduction in the Medicare levy, the savings to the government are considerably reduced.

For this scheme to be considered fair with the Australian public, the current rebate scheme would most likely need to be continued and there would likely need to be a reduction in the Medicare levy.

I next investigated including the dependants in the scheme to attempt to make the scheme more effective in terms of net government savings.

Threshold	Net Savings with Only Adults Included (\$ millions)	Percentage of Population Affected	Net Savings with Whole Household Included (\$ millions)	Percentage of Population Affected
\$60,000	1,155	22%	3,619	36%
\$80,000	653	13%	2,444	25%
\$100,000	362	8%	1,525	16%

 Table 5.2.2 Government savings with all PHC costs transferred (comparison of alternatives 3 and 4)

As can be seen in the above table, the net savings are much more substantial under this proposed model. With the whole household no longer receiving Medicare rebates for all PHC services, the net government savings are almost at the moderate level they were before the extra rebates paid are considered and the Medicare levy is not reduced. While the net government savings still reduces significantly as the income thresholds increase, I have estimated that the net savings to government will still be over \$1 billion per year even if only

the households with one member earning over \$100,000 per year are included in the scheme. This is even with the additional rebates paid and the proposed reduction in the Medicare levy. While this may not seem substantial when compared to the current government spending of \$104.8 billion, this money could be reinvested in the healthcare system to attempt to resolve the issues mentioned earlier.

5.3 COMPARISON OF THE GOVERNMENT SAVINGS UNDER THE FOUR ALTERNATIVE FUNDING MECHANISMS

For the four alternatives discussed above, the government must consider the savings as well as the fairness of the proposed funding mechanism. While transferring only the GP costs may be considered more fair by the public, as can be seen in Figure 5.3.1, the returns under the two GP only alternatives, alternatives 1 and 2, are clearly inferior to those from transferring all PHC costs. With only considering net savings to government, alternative 4 is the most effective alternative funding mechanism. Alternative 3 is also comparatively effective and may be better received by the Australian population.



Figure 5.3.1 Comparison of net government savings with the four alternatives

5.4 ISSUES FACED BY THE GOVERNMENT UNDER THE PROPOSED FUNDING MECHANISM

In considering any expansion of the role of private health insurers into the PHC market, the government needs to ensure that the outcome is in the best interests of all patients and that the principle of universal access to health care is not undermined (Australian Medical Association Limited 2014).

Under the proposed alternatives, the government is set to save significant amounts of money. This, however, isn't the only aspect of the proposed funding mechanism that the government must consider. For the government to successfully implement a new funding mechanism, it must be considered to be fair or it would be rejected by the majority of Australians and so couldn't be passed in a democratic society.

For this scheme to be fair for the adults who will no longer be eligible to receive Medicare rebates, I have proposed that the government continues the current rebate scheme and also reduces the Medicare levy by the proportion of services which are lost to these people. I am also suggesting that the government begins by initially introducing the alternative funding mechanism with only the adults in a household with a member earning over the threshold included in the scheme. By continuing to provide free PHC services to dependants, the proposed alternative funding mechanism may be more acceptable to the general population. It does, however, generate much more net savings for the government to include dependants in the scheme though this could be introduced later as a second phase to the alternative.

While I am suggesting that the government continues the current premium rebate scheme so that the alternative funding mechanism is better accepted, a study by an economist at the University of Adelaide found that a 10% increase in premiums would result in only a reduction in private health insurance coverage of less than 2% (Russell 2015). This means that it may be possible for the government to discontinue the rebate scheme without decreasing insurance coverage significantly.

In the Netherlands, the government has introduced compulsory private health insurance. To ensure affordability, the government introduced a 'health allowance' which is government assistance to pay premiums for eligible residents, where eligibility depends on income (Bupa Global 2016). The fact that a 10% increase in premiums would only result in a reduction in private health insurance coverage of less than 2% (Russell 2015) may mean that, if the Australian Government introduces compulsory private health insurance, they may not need to introduce an additional rebate scheme to ensure affordability as they did in the Netherlands.

For the proposed alternative funding mechanism to be fair, the income threshold selected must be considered to be fair. The equivalised disposable household income including imputed rent was \$57,356 in 2013-14 (Australian Bureau of Statistics 2015). This income is equivalised which means adjustments have been made to the actual income of households to enable analysis of the relative wellbeing of households of different size and composition (Australian Bureau of Statistics 2013). This figure also allows for rent paid by households. Even the lowest income threshold considered in this alternative funding mechanism, \$60,000, is greater than this measure of average household income and so could be considered fair. All income thresholds generate savings for the government and so should be considered by the government. In order to get the proposed funding mechanism to be accepted by the Australian public, the government could consider implementing the mechanism with a higher income threshold and incrementally lowering this threshold over time.

The largest issue facing the government regarding this proposed funding mechanism is the issue of equity. The concept of private health insurers having a larger role in PHC is not a new concept and the equitability associated with this larger role has been greatly debated. Many

are concerned that private health insurers could create a two-tiered system where those with insurance have better access to PHC than those without (Reid, et al. 2015).

The government is already under scrutiny for access and equity issues within the PHC network. Studies have shown that some Australians are missing out on accessing PHC networks because of where they live, some have different cultures and languages and so the networks do not meet their needs and some people with a disability or a complex mix of health problems find that there are major gaps in access to medical and other specialist services and that the system is not well connected in places (Commonwealth of Australia 2009). From 2011-2013 it was found that 39.4% of Australians went to the emergency department in a hospital rather than a GP due to access issues. These issues included; the GP was not available, financial reasons, people expected a shorter waiting time and the emergency department was more convenient to reach (van den Berg, Loenen and Westert 2016).

According to the Primary Health Care Research & Information Service (PHCRIS), the groups most associated with poor access to PHC are;

- people from low socioeconomic backgrounds,
- aboriginal and Torres Strait Islander people,
- people who experience homelessness,
- people living in rural and remote areas,
- people with lived experience of mental illness,
- people with drug and/or alcohol problems,
- prisoners,
- refugees and asylum seekers,
- victims of domestic violence,
- people living with a disability,
- the elderly and
- caregivers

(Erny-Albrecht and Bywood 2016).

These groups are likely to be those unaffected by any of the alternatives due to a general low income among members of these groups due to a number of different reasons, the main being the inability to work. The concern is that the alternatives I have proposed could increase this disparity in access to PHC as these people would not be able to afford private health insurance, and they may find themselves at the bottom of waiting lists for GPs as the GPs may prioritise more valuable private patients (Biggs, Private health insurance in primary care: overview of issues 2016). On the other hand, the alternatives I have proposed generate significant savings for the government and these funds could be reinvested into health to improve access for these people. As the government would no longer be funding the health of the entire population, the government could focus health solutions on the issues impacting the lower socioeconomic groups who would be the sole recipients of government funding for PHC.

The government would need to reinvest the funds saved in these alternatives to address the issues facing the health care system. Simply transferring costs from the government to the private health insurers will not reduce the costs of health or the pressure on the health system or slow the rate of health inflation.

By narrowing the demographic which the government is supporting, they may be able to better deliver PHC services which better meet the needs of the people who will rely on the government for the funding of the costs of PHC services. This could increase efficiency, thus lowering costs, as well as improve the access to and quality of PHC services to those in lower socioeconomic groups. By improving and tailoring the PHC networks to the needs of these people, the government could improve the health of these people and dramatically reduce the number of PPHs. As can be seen in the graph below, lower socioeconomic groups have higher numbers of PPHs than their higher earning counterparts.



Figure 5.4.1 Potentially preventable hospitalisation by socioeconomic status of area of residence, all hospitals, 2014-15 (Australian Institute of Health and Welfare 2016)

By focusing the government's efforts in health on these groups, these alternatives could decrease this gap, reducing the overall costs of health.

Another issue with the proposed alternatives which the government must address is the possible inflationary effects. There is the risk that GPs could feel free to increase the prices they charge, knowing that the private health insurers would cover the gap so as to retain customers (Biggs, Private health insurance in primary care: overview of issues 2016). This could make visiting a GP increasingly unaffordable for those without private health insurance. This issue could be prevented by the government introducing a cap on the amount GPs can charge or having designated clinics which bulk-bill for those without private health insurance. A clinic which bulk-bills is one where there is no gap between the amount the GP charges and the amount that the Medicare rebate covers.

There are also concerns that introducing private health insurers to the PHC market could create conflicts of interest. The priority for the private health insurers will be their customers and there is the concern that the insurers will use their role in training and coordinating GPs to influence referral practices so that their members receive specialist attention faster and easier than those without cover. This is not a concern shared by all members of the healthcare community however. Professor Andrew Podger of Public Policy at the Australian National University in Canberra states that "Of course, you need to manage any conflicts of interest in case they are trying to favour their members' interests, but it is manageable". Podger believes the benefits of having private health insurers enter the PHC market could be more beneficial than detrimental to the healthcare network as a whole (Scott 2015).

6 IMPACT OF PROPOSED FUNDING MECHANISM TO PRIVATE HEALTH INSURERS

6.1 POTENTIAL CHANGE IN PREMIUM REVENUE WITH GP ONLY COSTS TRANSFERRED

In transferring PHC costs away from the government, I have assumed that all individuals who become ineligible for Medicare rebates under the proposed scheme take up private health insurance and so the costs are transferred from the government to the private health insurers.

In considering the impact the proposed alternates would have on the private health insurance industry, I investigated the additional cost to the insurers as well as the additional revenue the insurers would receive. With each alternative, I compared the additional insurer revenue generated to the current insurer premium revenue which is \$22.1 billion (Australian Prudential Regulatory Authority 2016).

The first alternative I investigated is if only the GP costs are transferred. The following table outlines the impact to the private health insurers if the GP costs for the adults in a household with a member earning over each income threshold only are transferred from the government to the private health insurers.

Threshold	Extra Revenue (\$ millions)	Percentage Increase in Revenue	Number of Additional People Insured	Average Premium (\$)
\$60,000	1,161	5.3%	2.8 million	409
\$80,000	692	3.1%	1.6 million	422
\$100,000	422	1.9%	1 million	425

 Table 6.1.1 Additional revenue to the private health insurers with the GP only costs of adults transferred (alternative 1)

Under each income threshold, the additional revenue to the private health insurers is around 5% or less of the current premium revenue and so would not be a huge impact to the insurers. This means that the insurers would not have the funds to implement any of the potential health saving programs which will be discussed later. The average premiums are less than the current average premium and so premiums would still be affordable under this alternative

funding mechanism. This scheme is not worthwhile for the government as savings are not significant and the extra revenue to the private health insurers is not significant either.

The next alternative I investigated was also with GP only costs being transferred. The following table outlines the impact to the private health insurers if the GP only costs of all members of a household with one member earning over each of the thresholds were transferred.

Threshold	Extra Revenue (\$ millions)	Percentage Increase in Revenue	Number of Additional People Insured	Average Premium (\$)
\$60,000	1,696	7.7%	2.8 million	598
\$80,000	1,126	5.1%	1.6 million	687
\$100,000	708	3.2%	1 million	712

Table 6.1.2 Additional revenue to the private health insurers with the GP only costs of the whole household transferred (alternative 2)

As can be seen in the above table, including all members of a household with one member earning over each of the thresholds increases the revenue to the private health insurers. The impact to the revenue of the insurers, however, is still low compared to the current insurer premium revenue. This scheme also increases the average premium as the number of additional people insured does not change as I have assumed that the dependants and other non-employed members of a household do not pay for their own private health insurance policy.

6.2 POTENTIAL CHANGE IN PREMIUM REVENUE WITH ALL PHC COSTS TRANSFERRED

Transferring only the costs of GP services was found to be fairly insignificant for the private health insurers and so I investigated transferring the costs of all PHC services from the government to the private health insurers. I used the same method as I did with the GP only costs and again used the same comparative factors.

The first alternative I investigated with all PHC costs being transferred from the government to the private health insurers was involving only the adults.

Threshold	Extra Revenue (\$ millions)	Percentage Increase in Revenue	Number of Additional People Insured	Average Premium (\$)
\$60,000	5,286	23.9%	2.8 million	1,864
\$80,000	3,193	14.5%	1.6 million	1,947
\$100,000	1,982	9.0%	1 million	1,994

Table 6.2.1 Additional revenue to the private health insurers with all PHC costs of adults transferred (alternative 3)

As can be seen in the above table, the extra revenue is much more substantial when all PHC costs are transferred rather than just GP costs. With the GP only costs transferred, only one income threshold produced additional revenue greater than 5% of the current insurer premium revenue while with this scheme, additional revenue ranges from 9% to 24%.

The average premium that would need to be paid by the additional people taking out private health insurance would be, at most, 10% more than current average premium under all adopted income thresholds and so this would most likely be considered affordable. This is unlikely to have a large impact on insurance uptake as a study by an economist at the University of Adelaide found that a 10% increase in premiums would result in only a reduction in private health insurance coverage of less than 2% (Russell 2015).

As with the GP only costs, the next alternative I investigated with PHC costs was the impact of the costs of an entire household with one member earning over each of the income thresholds being transferred from the government to the private health insurers. The following table outlines the impact of this alternate funding mechanism on the private health insurers.

Threshold	Extra Revenue (\$ millions)	Percentage Increase in Revenue	Number of Additional People Insured	Average Premium (\$)
\$60,000	6,936	31.4%	2.8 million	2,446
\$80,000	4,532	20.5%	1.6 million	2,763
\$100,000	2,864	13.0%	1 million	2,881

Table 6.2.2 Additional revenue to the private health insurers with all PHC costs of the whole household transferred (alternative 4)

As with the GP only costs, transferring the PHC costs of the entire household, not just the adults, increases the insurer revenue under each income threshold. With this alternative, the additional revenue to the private health insurers ranges from 13% to 31% of the current premium revenue under all income thresholds. This is clearly more significant than the impact to the private health insurers if only the GP only costs are transferred as in both alternatives involving the transfer of GP only costs.

I again didn't increase the number of additional people insured as I have still assumed that the dependants and other non-employed members of the household will not be paying for their own policies. While this increases the average premium to a level which is much higher than the current average premium, it is important to note that this price is not for an individual policy but is for the policies of the entire household. On average, there are 2.6 persons in an Australian household (Australian Bureau of Statistics 2016) and so the average premium is for, on average, 2.6 insurance policies.

It has been shown that transferring only GP costs from the government to the private health insurers does not provide significant savings for the government and does not generate significant additional revenue for the private health insurers. Transferring all PHC costs, not just the costs of GP services, provides much more significant additional revenue for the private health insurers. The additional revenue is significant for both PHC alternatives, when just the costs of the adults are transferred and the costs of the entire household are transferred. With the costs of the entire household transferred, the additional revenue is more significant and the savings to government are more significant.

6.3 COMPARISON OF THE ADDITIONAL REVENUE TO THE PRIVATE HEALTH INSURERS UNDER THE FOUR ALTERNATIVE FUNDING MECHANISMS

As with the savings to the government, alternatives 1 and 2 generate fairly insubstantial additional revenue for the private health insurers. This revenue is unlikely to be sufficient to have a real impact in the private health insurers ability to improve efficiency and health in the PHC market. As can be seen in Figure 6.3.1, alternatives 3 and 4 generate significantly more revenue than the other two funding mechanisms and so could help insurers have a real impact on the PHC market.



Figure 6.3.1 Additional revenue with the four alternatives

While premiums will increase with alternatives 3 and 4, a study by an economist at the University of Adelaide found that a 10% increase in premiums would result in only a reduction in private health insurance coverage of less than 2% (Russell 2015). This means that any premium increases related to these alternative funding mechanisms would not likely have a big impact on current health insurance coverage and so would not lead to underinsurance.

6.4 IMPACT OF PRIVATE HEALTH INSURERS ENTERING THE PRIMARY HEALTH CARE MARKET

As discussed earlier, transferring costs from the government to the private health insurers alone won't address most of the issues facing the current funding mechanism. The purpose of allowing private health insurers to enter the PHC market is to improve efficiency as well as improve health of Australians and so reduce costs. Insurers are motivated to keep people in the best health possible to avoid expensive hospital and specialist costs. Currently, insurers are unaware of a policyholder's health needs until they have been referred to a surgeon or even after a surgery has occurred (Reid, et al. 2015). Clearly, this makes it difficult for insurers to have a hand in preventing their members from reaching the expensive hospitalisation stage.

Under the Private Health Insurance Act 2007, insurers cannot provide insurance for any service for which a Medicare rebate is payable (Australian Medical Association Limited 2014). Despite this legislation, insurers are already starting to enter the PHC market through a number of trials aimed at improving access to GPs and reducing hospitalisations.

Current Role of the Private Health Insurers in the PHC Market

<u>Medibank</u>

The insurer, Medibank, partnered with IPN GPs to introduce a GP access trial in October of 2013 (Harrison 2015). The aim of the trial was to give members more access options to GPs at no additional cost. Medibank's National Director, Dr Ian Boyd stated the motivation for Medibank; "We are working hard to provide our members with enhanced value and to improve the health of all Australians. Closer collaboration with GPs, particularly in the areas of preventative health, choice and access to services is better for our members' health and also makes sense to Medibank from a business perspective. If we can keep members healthier and out of hospital it is a win-win situation." (Medibank Private Limited 2014).

This GP access trial consisted of the following components:

- A 24-hour guarantee members will get an appointment to see a doctor within 24 hours of calling.
- No out-of-pocket expense participating GPs have agreed not to charge an out-of-pocket expense.
- Access to an after-hours GP after-hours home visits by a GP with no out-of-pockets.
- A range of one-off health assessments available to people at different life stages with no out of pocket costs. (Medibank Private Limited 2014)

The trial began initially in six Brisbane clinics and expanded to include 26 medical practices in April 2014. The trial was ceased to run on July 31, 2015 after receiving fierce controversy since its launch. Medibank's executive general manager of provider networks and integrated care, Dr Andrew Wilson stated that "Disappointingly, it was clear from the feedback that this pilot was perceived as a first step towards the creation of a two-tier or exclusive health system. Medibank is a strong supporter of universal health care, and we would certainly hate people to think that we were trying to do anything like this" (Harrison 2015).

There was a large negative response from the public as well as a number of influential bodies including the Royal Australian College of General Practitioners, the Australian Medical Association and a number of members of parliament. Greens Senator, Richard Di Natale even introduced legislation in an attempt to ban private health insurers from making similar arrangements in the future (Harrison 2015).

This negative backlash highlights the need for the government to make the alternative funding mechanism fair for all members of society in order for the private health insurers to successfully enter the PHC market. Despite this negative backlash, Medibank is still committed to separate trials to improve PHC for members with chronic conditions (Harrison 2015). This illustrates the eagerness of the private health insurers to enter the PHC market.

This eagerness is due to the belief of the insurers that working more closely with GPs and PHC networks will improve the health of members and makes business sense (Medibank Private Limited 2015).

Medibank also has a chronic care program, called CareComplete, which was launched in September 2014. The program consists of three parts; CareFirst, CarePoint and CareTransition. The program is designed to help members with five chronic conditions, chronic heart failure, chronic obstructive pulmonary disease, osteoarthritis, type two diabetes and coronary artery disease, in an attempt to better manage these conditions and prevent PPHs (Medibank Private Limited 2015). Chronic conditions are the targeted because these conditions were the cause of half of the PPHs in 2013-14 (Binsted 2016). Medibank has aimed this program at a particular group of their members because 2% of their members account for 45% of its hospital and medical expenditure and of this group of people, 70% have at least one chronic condition (McDonald 2015). The goal of Medibank, through this CareComplete program, is to reduce hospital admissions in this target group by 25% (Reid, et al. 2015).

<u>Bupa</u>

Bupa is another private health insurer which is attempting to play a larger role in the PHC market. Bupa has partnered with Healthscope hospitals to offer members the following:

- No out of pocket charge for Medicare rebated pathology tests through Healthscope Pathology
- 50% reduction in the cost of a skin check at a Healthscope Skin Cancer Clinics, and priority access
- 50% reduction in the cost of a health check at a Healthscope Medical Centre
- 50% discount off one hospital parking fee per admission
- Where available, free pay TV and Wi-Fi (Bupa Australia Pty Ltd 2014).

This program is aimed at getting Bupa members to take a more active role in their health with regular check-ups.

<u>HCF</u>

Another insurer which has entered the PHC market is HCF. HCF has an after-hours GP service called 'My Home Doctor' which allows members access to GP services at their home after regular hours (HCF 2013). The aim of this program is to prevent members from going to the emergency room for non-emergent health issues which could be resolved, at a lower cost, by a GP.

Potential Role of Private Health Insurers in the PHC Market

One of the strongest arguments for private health insurers entering the PHC market is improved management of chronic diseases. A chronic disease is one of a group of diseases that tend to be long lasting and have persistent effects. Chronic diseases are the leading cause of illness, disability and death in Australia, causing 90% of all deaths in 2011 (Australian

Institute of Health and Welfare 2015). A study by the World Health Organisation (WHO) found that at least 80% of all heart disease, stroke and diabetes cases, and 40% of all cancers, are potentially preventable (Wilcox 2014). Private health insurers may be able to reduce the burden of chronic disease through greater competition and innovation within chronic disease management (Doggett 2014). Currently, the focus of the PHC sector is on treating illness, not prevention. Australian investment in the prevention of chronic diseases is lower than the Organisation for Economic Co-operation and Development (OECD) average (Wilcox 2014). The introduction of private health insurers to the PHC market could provide this shift towards prevention and so prevent unnecessary hospitalisations (Australian Medical Association Limited 2014).

Private health insurers also have a potential role in educating members on better health (Doggett 2014). It has been estimated that opportunity cost savings of about \$2.3 billion could be realised by making achievable reductions in six behavioural risk factors; smoking, high risk alcohol use, physical inactivity, intimate partner violence, obesity and inadequate diet (Wilcox 2014).

If private health insurers were allowed to enter the PHC market, they would be highly motivated to introduce programs aimed at improving health as success with such programs could drastically reduce the number of expensive hospitalisations. The calculations performed in this paper have assumed that 100% of people who become ineligible for Medicare rebates under the proposed funding mechanisms take up private health insurance. In order for the take-up of private health insurance to be even close to this figure, there must be perceived value in the insurance. The aforementioned programs could give consumers the value required for a large take-up of private health insurance following the introduction of an alternative funding mechanism.

7 CONCLUSION

Health expenditure in Australia has grown at a rate which is 2.2% higher than the growth of GDP for the country in the decade from 2003-04 to 2013-14 (Australian Institute of Health and Welfare 2014). This rate of growth in expenditure is anticipated to increase as the impact of the ageing population becomes more significant (Actuaries Institute 2014). Due to this rapidly rising cost of health, it is unlikely that the current funding mechanism can continue with the current quality being maintained. For this reason, four alternative funding mechanisms for PHC were investigated in this paper. I have investigated the impact of transferring health care costs from the government to the private health insurers through the removal of Medicare rebates for certain members of the population. I investigated the impact of transferring GP only costs as well as all PHC costs, which include GP costs.

It was found that transferring only the costs of GP services would not generate significant savings for the government or significant additional revenue for the private health insurers and so would not be an effective alternative funding mechanism.

Transferring all PHC cost generated significantly more savings for the government as well as additional revenue for the private health insurers. Figure 7.1 shows the impact to the government and the private health insurers of transferring the costs of all PHC services from the government to the private health insurers. Alternative 3 is with the costs of all adults in a household being transferred while alternative 4 involves transferring the costs of the dependents as well as the adults in a household with at least one member earning over each of the income thresholds.



Figure 7.1 Comparison of alternatives 3 and 4

As can be seen in the graph above, both alternatives 3 and 4 generate significant savings for the government and significant additional revenue for the private health insurers and so should be considered as alternative funding mechanisms for PHC.

In the government's considerations, fairness should be the focus. As Australia is a democratic society, for an alternative funding mechanism to be successful, it must be seen as fair to all who are impacted.

When only looking at government savings, alternative 4 is clearly the most successful alternative funding mechanism for the government. The government may face much criticism if they were to propose this funding mechanism as a fairly large proportion of the population would be losing access to medical rebates for all PHC services. It may, therefore, be wise for the government to initially introduce alternative 3 to introduce and normalise the idea of having private health insurance for PHC services. The government could then extend the scheme to include dependents later on.

If again looking only at government savings, the \$60,000 threshold is the most effective income threshold for both alternative funding mechanisms however substantial savings are achieved at all income thresholds. The government may find that, the higher the income

threshold, the less opposition there may be to the scheme as less people are impacted. The government may, therefore, wish to introduce the alternative funding mechanism at a higher income threshold then gradually lower the threshold to \$60,000. Any lower than \$60,000 may cause issues with affordability as \$60,000 is approximately the average income of an Australian.

For the introduction of an alternative funding mechanism to be successful, the scheme must not create a two-tiered society where some members of society have better access to, or quality of, PHC. In order for this to happen, the government will need to work with the private health insurers and reinvest the money saved through the alternative funding mechanism into the health of those most likely to miss out on access to and quality of healthcare in society.

Private health insurers could have a big impact on the PHC market. Many private health insurers have already shown a keen interest in becoming more involved in the PHC of their members in an attempt to improve the company's experience. Allowing private health insurers to enter the PHC market could improve health and so bring more profit to the insurance companies.

8 APPENDIX A

The Medicare levy of 2% is not required to be paid if a person's taxable income is equal to, or less than, \$21,335. The levy is reduced for individuals earning between \$21,335 and \$26, 668.

The following table shows the different Medicare levy surcharges for the different income thresholds.

Status	Income Thresholds			
	Base Tier	Tier 1	Tier 2	Tier 3
Single	\$90,000 or less	\$90,001-	\$105,001-	\$140,001 or
		\$105,000	\$140,000	more
Family	\$180,000 or	\$180,001-	\$210,001-	\$280,001 or
	less	\$210,000	\$280,000	more
Medicare Levy Surcharge				
	0%	1%	1.25%	1.5%

Table 8.1 Medicare Levy Surcharge

The following table shows the different levels of private health insurance rebates by income.

Status	Income Thresholds				
	Base Tier	Tier 1	Tier 2	Tier 3	
Single	\$90,000 or less	\$90,001- \$105,000	\$105,001- \$140,000	\$140,001 or more	
Family	\$180,000 or less	\$180,001- \$210,000	\$210,001- \$280,000	\$280,001 or more	
Age	Rebate				
Under 65 yrs	27.820%	18.547%	9.273%	0%	
65-69 yrs	32.457%	23.184%	13.910%	0%	
70 yrs or over	37.094%	27.820%	18.547%	0%	

Table 8.2 Private Health Insurance Rebates

9 APPENDIX B

The graphs below illustrate how the number of people and the number of people without private health insurance vary between ages and income thresholds.



Figure 9.1 Split of individuals earning less than \$60,000



Figure 9.2 Split of individuals earning between \$80,000 and \$100,000



Figure 9.3 Split of individuals earning over \$100,000

10 REFERENCES

- Actuaries Institute. 2014. Who Will Fund Our Health. Green Paper, Sydney: Actuaries Institute.
- Australian Bureau of Statistics. 2015. *Australia experiences lowest population growth in almost a decade.* 24 September. Accessed October 31, 2016. http://abs.gov.au/ausstats/abs@.nsf/products/5822463A51A690D9CA257F1D00142 609?OpenDocument.
- —. 2016. Australian Demographics Statistics, Dec 2015. 23 June. Accessed August 6, 2016. http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Dec%202015?Open Document.
- 2013. Equivalised Disposable Household Income. 30 July. Accessed October 24, 2016. http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/6523.0Appendix32005 -06.
- —. 2011. Family Characteristics, Australia, 2009-10. 27 May. Accessed November 2, 2016. http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/4442.0Main%20Feat ures22009-10.
- —. 2015. Household Income and Wealth, Australia, 2013-14. 8 September. Accessed September 8, 2016. http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6523.02013-14?OpenDocument.
- Australian Institute of Health and Welfare. 2016. *Admitted patient care 2014-15: Australian hospital statistics.* Government, Canberra: Australian Institute of Health and Welfare.
- Australian Institute of Health and Welfare. 2014. *Australia's health 2014.* Government, Canberra: Australian Institute of Health and Welfare.
- 2015. Chronic diseases. August. Accessed October 26, 2016. http://www.aihw.gov.au/chronic-diseases/.
- Australian Institute of Health and Welfare. 2015. *Health expenditure Australia 2013-14: analysis by sector.* Government, Canberra: Australian Institute of Health and Welfare. Accessed July 7, 2016.
- —. 2015. Healthy Communities: Potentially preventable hospitalisations in 2013-14. 10
 December. Accessed July 20, 2016. http://www.myhealthycommunities.gov.au/our-reports/potentially-preventable-hospitalisations/december-2015.
- 2014. Preventing and treating ill health. Accessed July 4, 2016. http://www.aihw.gov.au/australias-health/2014/preventing-ill-health/#t3.
- Australian Medical Association Limited. 2010. *Primary Health Care- 2010.* 23 August. Accessed July 8, 2016. https://ama.com.au/position-statement/primary-health-care-2010.

- 2014. Private Health Insurance and Primary Care Services- 2014. 14 March. Accessed October 26, 2016. https://ama.com.au/position-statement/private-health-insuranceand-primary-care-services-2014.
- Australian Prudential Regulatory Authority. 2016. APRA releases private health insurance statistics for June 2016. 16 August. Accessed August 8, 2016. http://www.apra.gov.au/MediaReleases/Pages/16_25.aspx.
- 2016. Private Health Insurance Membership and Coverage. 16 August. Accessed August 23, 2016. http://www.apra.gov.au/PHI/Publications/Pages/Membership-and-Coverage.aspx.
- Australian Taxation Office. 2016. Income thresholds and rates for the private health insurance rebate. 31 August. Accessed August 28, 2016. https://www.ato.gov.au/Individuals/Medicare-levy/Private-health-insurancerebate/Income-thresholds-and-rates-for-the-private-health-insurance-rebate/.
- 2016. Medicare levy. Accessed October 8, 2016.
 https://www.ato.gov.au/Individuals/Medicare-levy/.
- 2016. Private health insurance rebate. 31 August. Accessed October 25, 2016. https://www.ato.gov.au/individuals/medicare-levy/private-health-insurance-rebate/#Appropriatelevelofprivatehospitalinsuran.
- 2016. Taxation Statistics 2013-14. 2 October. Accessed August 6, 2016. https://data.gov.au/dataset/taxation-statistics-2013-14.
- Biggs, Amanda. 2004. *Medicare- Background Brief.* 29 October. Accessed July 4, 2016. http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliament ary_Library/Publications_Archive/archive/medicare.
- —. 2016. Private health insurance in primary care: overview of issues. 19 Februray. Accessed
 July 12, 2016. 10.
 http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliament
 ary Library/FlagPost/2015/February/private health insurance and primary care.
- 2003. The Pharmacautical Benefits Scheme an Overview. 2 January. Accessed July 4, 2016.

http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliament ary_Library/Publications_Archive/archive/pbs.

- Binsted, Tim. 2016. *Private health wants a role in chronic disease overhaul.* 31 March. Accessed October 26, 2016. http://www.smh.com.au/business/private-healthwants-a-role-in-chronic-disease-overhaul-20160331-gnv5dw.html.
- Bupa Australia Pty Ltd. 2014. Building upon a shared committment to quality healthcare. 25 June. Accessed October 26, 2016. https://www.bupa.com.au/about-us/mediacentre/media-releases/ci.Building-upon-a-shared-commitment-to-qualityhealthcare.7030news.

- Bupa Global. 2016. *Healthcare in the Netherlands*. Accessed November 4, 2016. http://www.expatica.com/nl/healthcare/Healthcare-in-the-Netherlands_100057.html.
- Commonwealth of Australia. 2009. A Healthier Future for all Australians- Final Report June 2009. June. Accessed October 24, 2016. http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/nhhrc-report.
- 2015. Evolution of Government involvement in Health Care. Accessed June 18, 2016. https://federation.dpmc.gov.au/evolution-government-involvement-health-care.
- 2013. Primary Health Care in Australia. April. Accessed July 4, 2016. http://www.health.gov.au/internet/publications/publishing.nsf/Content/NPHC-Strategic-Framework~phc-australia.
- Commonwealth of Australia. 2014. *Reform of the Federation White Paper: Roles and Responsibilities in Health.* White Paper, Canberra: Commonwealth of Australia.
- 2014. What is covered by Medicare. Accessed July 7, 2016. http://privatehealth.gov.au/healthinsurance/whatiscovered/medicare.htm.
- Deloitte Access Economics. 2012. *The Future of Private Health Insurance Premium-Setting: Seeking Integrative Solutions.* Commercial-in-Confidence, ACT: Deloitte Access Economics Pty Ltd.
- Doggett. 2014. Private health insurance in primary health care- what do the experts think? 13 October. Accessed October 26, 2016. https://blogs.crikey.com.au/croakey/2014/10/13/22461/.
- Erny-Albrecht, Katrina, and Petra Bywood. 2016. *Expert Plus: Barriers to primary health care access- an update.* March. Accessed October 24, 2016. http://www.phcris.org.au/phplib/filedownload.php?file=/elib/lib/downloaded_files/publications/pdfs/phcris_pub_8454.pdf.
- Harrison, Dan. 2015. *Medibank dumps GP access trial.* 25 May. Accessed October 10, 2016. http://www.smh.com.au/federal-politics/political-news/medibank-dumps-gpaccess-trial-20150525-gh8uai.html.
- HCF. 2013. HCF reports significant take-up of after-hours GP service. 15 January. Accessed October 26, 2016. https://www.hcf.com.au/pdf/mediareleases/2013/HCF_MEDIA_RELEASE_15012013.pdf.
- McDonald, Kate. 2015. CarePoint trial looks to reduce hospital admissions. 10 April. Accessed August 9, 2016. http://www.pulseitmagazine.com.au/index.php?option=com_content&view=article &id=2371:carepoint-trial-looks-to-reduce-hospital-admissions&catid=16:australianehealth&Itemid=328.

- Medibank Private Limited. 2014. *Medibank and IPN trial to give more options to access to GPs at no cost.* 10 January. Accessed October 25, 2016. http://www.medibank.com.au/About-Us/Media-Centre-Details.aspx?news=535.
- 2015. Medibank targets primary care involvement to help tackle chronic disease. 22 May. Accessed October 25, 2016. https://www.medibank.com.au/content/about/mediacentre/2015/05/medibank-targetspri.html.
- Medicare Australia. 2016. *Item Statistics Reports.* 23 September. Accessed October 7, 2016. http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp.
- myDr. 2011. *Australian health system: how it works.* 15 December. Accessed July 7, 2016. http://www.mydr.com.au/first-aid-self-care/australian-health-system-how-it-works.
- OECD. 2015. *Health at a Glance 2015: OECD Indicators*. Accessed July 20, 2016. http://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2015_health_glance-2015-en.
- Primary Health Care Research & Information Service. 2016. PHCRIS Getting Started Guides: Introduction to... Primary Health Care. Accessed July 5, 2016. http://www.phcris.org.au/guides/about_phc.php.
- Private Health Insurance Administration Council. 2014. *Operations of the Private Health Insurers Annual Report 2013-14.* 7 November. Accessed August 28, 2016. http://www.apra.gov.au/PHI/PHIAC-Archive/Documents/Operations-of-PHI-Annual-Report-2013-141.pdf.
- Productivity Commission. 2013. *An Ageing Australia: Preparing for the Future.* Commission Research Paper, Canberra: Productivity Commission.
- Reid, Jamie, Matthew Crane, Kris McCullough, and Colin Wang. 2015. Compulsory Health Insurance: Should government still be the health insurer of first resort? 17 May. Accessed July 20, 2016. http://www.actuaries.asn.au/Library/Events/SUM/2015/ReidEtAlHealthInsurancePa

per.pdf.

- Russell, Lesley. 2015. *The debate we're yet to have about private health insurance*. 2 April. Accessed October 27, 2016. http://theconversation.com/the-debate-were-yet-tohave-about-private-health-insurance-39249.
- Savage, Elizabeth. 2016. *Is a 5.6% increase in private health insurance premiums justified*? 2 March. Accessed August 9, 2016. http://theconversation.com/is-a-5-6-increase-inprivate-health-insurance-premiums-justified-55435.
- Scott, Sophie. 2015. Primary health networks: Private health insurers to work directly with doctors under historic deal. 14 April. Accessed October 25, 2016. http://www.abc.net.au/news/2015-04-14/health-insurers-to-work-directly-withdoctors-under-deal/6391354.

van den Berg, Michael J, Tessa van Loenen, and Gert P Westert. 2016. "Accessible and continuous primary care may help reduce rates of emergency department use. An international survey in 34 countries." *Family Practice* (Advance Access) 33 (1): 42-50. Accessed October 24, 2016.

Wilcox, Sharon. 2014. *Chronic disease in Australia: The case for changing course.* Issues paper No. 2014-02, Melbourne: Australian Health Policy Collaboration.