CAER WORKSHOP

SYDNEY

1 and 2 February

2006

Catch us when we fall:
an analysis of the Medicare Safety Net

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DRAFT – NOT FOR CITATION

Abstract

Objectives: The Safety Net Policy was introduced in March 2004 to provide "disaster insurance" for those Australians who face high out-of-pocket costs for medical services. This study evaluates, firstly, the drivers of safety net expenditure and, secondly, the aggregate impact of the Safety Net on utilisation, benefits and fees for medical services.

Methods: Three forms of an analysis were conducted. First, multiple regression analysis was carried out to explain the relationship between regional Medicare Safety Net expenditure and health care needs, average household income, regional demographic patterns and supply side variables. Secondly, the distribution of Safety Net benefits to professional groups were estimated. Finally, time series data was used to examine whether there have been significant changes in utilisation, fees and benefits for services provided by general practitioners and specialists in the 21 month period after the introduction of the safety net.

Results: The analyses indicate widespread regional variation in Safety Net payments. The results show higher Safety Net payments in electorates with relatively high median family income and lower health care needs. It also shows that for some professions the implementation of the safety net has coincided with a greater rise in the fees charged leading to only a small decrease in average out-of-pocket costs.

Conclusions: The Safety Net was heralded by the government as a fundamental reform in Australia's Medicare program. Whilst the Safety Net was introduced to help reduce out-of-pocket medical costs, this analysis shows that it also creates some paradoxical outcomes. More research is needed using longer term and disaggregated data to assess the impact of the policy on patient and provider behaviour.

1. Introduction

Since 1984, Medicare has insured all Australians for expenses incurred for outpatient medical services. Medicare is fundamental to Australia's public health care funding arrangements. Outpatient services covered by Medicare include consultations with general practitioners, psychiatrists, obstetricians and other specialists as well as diagnostic and therapeutic services. These services are largely privately provided and providers are reimbursed on fee-for-service basis.

The Medicare program reimburses patients 85% of the schedule fee for all eligible outpatient services. Charges levied by doctors above the 85% level have historically been met by patients themselves through out-of-pocket (OOP) payments. Medicare can thus be defined as a rear-end deductible insurance program - where a fixed amount of the service fee was publicly subsidised and any fees above this level could only met paid directly by patients.

Under the Medicare program, individual providers can (and do) set fees at their discretion and are not bound by the schedule fee. Providers are also free to charge different patients different fees. In fact, the providers' right to set fees is widely regarded as constitutionally guaranteed (Scotton, 1997).

Patients have historically faced the burden of directly paying any charges above the Medicare subsidy and thus providers face market pressures to contain their fees. These pressures are seen as a major factor in keeping medical service fees – and therefore OOP costs- in check (Scotton, 1997). Between 1984 and 2004, medical fees rose by one percent per annum in real terms –although since the 2000/01 financial there has been a steady rise of over four percent per annum (DOHA, 2005).

Despite the fee-for-service and uncapped nature of the Medicare program, the Federal Government has successfully restricted public expenditure growth to 1% per annum since 1996 (in real terms) through a variety of means. These include agreements with professions to limit expenditure growth, restrictions (or incentives) to limit the number of

services per patient, restricting access to Medicare provider numbers, and moderate growth in schedule fees.

However, recent years have also witnessed increasing gaps between fees charged and benefits paid. In other words, higher OOP payments (DOHA 2005) for Medicare subsidised services. Figure 1 provides data on two key indicators of OOP costs between 1985 and 2003. Firstly, it shows the percentage of outpatient Medicare services that are "bulk billed" (services with zero OOP costs), and secondly, it shows the average OOP cost for non-bulk-billed services[1]. The figure shows that the rate of bulk-billing steadily increased between 1985 and 1996, then flattened out and in recent years started to fall. Over the same period, the out-of –pocket costs for services that are not bulk-billed has been steadily rising.

By international standards Australia's OOP costs are high. In 2001, Australia ranked third (behind Switzerland and the United States) in terms of highest per-capita OOP expenditures out of 24 OECD countries for which comparable data was available (using PPP exchange rates) (OECD, 2004). In real terms, Australia's per-capita OOP costs rose by 149% between 1985 and 2002. Of the thirteen OECD countries for which comparable data was available, this ranked second to New Zealand (OECD, 2004). It should be noted that these figures are based on all health-related OOP costs, not just those incurred for outpatient services.

OOP costs for Medicare outpatient services account for ten percent of the total costs faced by patients directly – or around $1.43 billion in 2002-03. Other big patient cost items are pharmaceuticals[2] (33%) followed by health professionals such as dentists and allied-health (29%). OOP costs for hospital services accounts for only five percent (AIHW 2004).

Following this period of rapidly rising OOP expenses, Australia's Federal Government introduced a package of measures, labelled *Medicare Plus*, designed to boost the rate of "bulk-billing" and reduce OOP. The package focused on primary care including incentives for general practitioners to bulk bill children under 16 years of age and

[1] Excluded categories were operations, assisting in operations, optometry and other services
[2] Consisting of $1 billion on PBS and $3.7 billion on over-the-counter pharmaceuticals

concession card holders. For more details on these measures see Jones et al (2004). As part of the *Medicare Plus* package, the Federal Government implemented the Medicare Safety Net[3] in March 2004.

The objective of the Medicare Safety Net policy is to provide "disaster insurance" for those people with high OOP costs (Budget 2005). The Safety Net reimburses patients 80% of all OOP costs for Medicare eligible outpatient services, once annual OOP expenses exceed a certain threshold in any given calendar year. Each family member's OOP expenditure is counted towards their household' Safety Net threshold and the count starts afresh on the 1 January of each year. When the policy commenced the threshold for low income households was AUD300, and AUD700 for all other households (indexed to inflation annually). From a total population of 20 million, 952,000 individuals received Safety Net Benefits in the 2004 calendar year. Of these, 72% had qualified via the lower threshold (Hansard November 2005).

The Safety Net represents a major change in public funding arrangements. For the first time, coverage is expanded beyond the schedule fee and thereby public subsidies for health care costs that were previously uninsurable (neither publicly nor privately) are introduced.

This study has three objectives. Firstly, it aims to identify the significant drivers of high OOP costs and Safety Net expenditure. Secondly, it estimates the allocation of Safety Net Expenditure by medical profession and service category. Thirdly, it examines changes in fees, benefits and OOP costs within the Australian health care system following the introduction of the Safety Net.

[3] The "extended" Medicare Safety Net is in addition to the original Medicare safety net for out of hospital services. The original safety net increases the Medicare benefit to 100% of the schedule fee (rather than the standard 85%) for all out of hospital services once a threshold was reached. Only the gap between the schedule fee and the Medicare subsidy counted towards the threshold.

2. Methods

2.1 What drives OOP and Safety Net expenditure?

In the absence of individual level data on Safety Net expenditure, we analysed the importance of regional characteristics in driving Medicare service related OOP and Safety Net expenditure. Safety Net expenditure data in Australia's 150 federal electorates were made publicly available after the policy's first five months of operation (March to July 2004) (Abbott, 2004).

The following models were used to estimate the significance of regional characteristics in explaining the number of people who qualify for Safety Net benefits (Model 1) and the per capita Safety Net expenditure (Model 2):

$$(1) \quad T_i = \alpha_1 + \alpha_2 H_i + \alpha_3 D_i + \alpha_4 I_i + \alpha_5 X_i + \alpha_6 G_i + u_i$$

$$(2) \quad E_i = \beta_1 + \beta_2 H_i + \beta_3 D_i + \beta_4 I_i + \beta_5 X_i + \beta_6 G_i + u_i$$

Where T_i = number of people who qualified for Safety Net benefits in federal electorate i; E_i = per capita Safety Net expenditure for federal electorate i. H = health need measured by the premature mortality rate and self-assessed health status, D = demographic variables, I = income variables, X represents supply of and access to medical services and G = geographic variables and U is the error term. Table 1 provides details of the variables used in the models as well as the data sources.

In Model 1, the dependent variable is the number of people who qualified for Safety Net benefits. It therefore estimates the regional drivers of high OOP costs. Whereas Model 2 estimates the level of support that the Safety Net provides for those who have faced high OOP costs.

It should be noted that the *self-assessed health status* variable (one of the proxies used to measure health care need) was derived by the Australian Bureau of Statistics on behalf of the Population Health Unit using the 2001 National Health Survey. This variable was

calculated from a set of synthetic predictions at the statistical local area (SLA) level and is based on the prevalence of chronic conditions and associated risk factors. The variable estimates the number of people who rate their health status as "poor" or "fair" per 1,000 individuals. However, this variable could only be mapped to 102 (out of 150) federal electorates. For those federal electorates where self-assessed health status was missing, the national mean value was inserted as well as a dummy variable to indicate the missing value.

2.2 Safety Net Benefit Allocation by Profession and Service Category

This part of the study estimates the distribution of Safety Net payments by broad category of service. Safety Net expenditure is incorporated in data routinely reported by *Medicare Australia* (formerly the Health Insurance Commission (personal communication). This publicly available data provides a means of estimating Safety Net expenditure by each Medicare item number.

In broad terms, Safety Net expenditure is equivalent to the benefit received minus the Medicare subsidy (usually 85% of the schedule fee). The schedule fee for each selected item was obtained from the November 2003 Medicare Benefits Schedule (MBS) and weighted to take into account the proportion of services provided on an inpatient and outpatient basis. A further adjustment was made to take into account two rises in schedule fees, which occurred in November 2004 and November 2005. The difference between the adjusted schedule fee and the benefits received provides a means to estimate Safety Net expenditure for that item.

For this part of the analysis, Medicare item numbers were selected on the basis that they were predominantly provided in an outpatient setting and where there were indications of changes between the 2003 and 2004 calendar years in the average benefit received. In all, 28 items were selected and grouped to GP attendances, specialists' attendances, consultant physicians' attendances, psychiatry consultations, IVF treatments, radiotherapy, pre-natal obstetric consultations and obstetric ultrasounds[4].

[4]MBS item numbers: GP attendances: 23, 36, 44, 53; Specialists attendances: 104,105; Consulting

2.3 Safety net impact on services used, fees charged, benefits paid and OOP costs

This part of the analysis examines whether the introduction of the Safety Net has coincided with any significant changes in the number of medical services used, fees charged, Medicare benefits paid and changes to OOP costs following the introduction of the Safety Net.

National Medicare data were obtained on the number services, fees charged and benefits between 1993 and 2005. These data are publicly available and are reported quarterly by the Department of Health and Ageing (see DOHA 2005). The Safety Net policy came into effect during the first quarter of 2004, resulting in seven quarters worth of available data.

Model 3 was used to indicate whether the introduction of Safety Net coincided with significant changes in (1) number of services per capita, (2) average fee per service, (3) average benefit paid per service and (4) average OOP costs per service over time. Separate regressions were run for each of the four dependent variables. All dollar values were adjusted to 2005 price levels, using the ABS' CPI time series data.

$$(3) \quad V_t = \phi_1 + \phi_2 T_{93} + \phi_3 SND_{04} + \phi_4 SND_{05} + \phi_5 SNQ_{04} + \phi_6 SNQ_{05} + \phi_7 T_{01} + u_t$$

Where V is one of the four areas of interest listed above and t is time, which takes the value of 1 to 51 for each quarter between 1993 and 2005. Two dummy variables (SN04 and SN05) indicate the start of the Safety Net policy and the start of the year where a person's OOP count goes back to zero. SNQ04 and SNQ05 take the value of 1 to 4 to indicate the quarter in 2004 and 2005 respectively. The model also includes a second time variable (T01) to account for significant rises in fees and OOP since 2001 to ensure that these increases were not wrongly attributed to the Safety Net policy.

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physicians: 110,116; Psychiatry: 302,304,306,308; Obstetrics: 16500, 16590; Radiotherapy: 15524, 15506, 15000, 15500, 15518, 15503; Obstetric ultrasound: 55700, 55703, 55704, 55706; IVF: 13200, 13203, 13209, 13221; Total: all Medicare services except optometry, operations and anaesthetics; Other; total minus listed items.

Separate models were estimated to examine the impact of the Safety Net policy in general practice and all other, non-GP, Medicare outpatient services.

3. Results

3.1 Drivers of regional safety net expenditure

Table 2 presents the mean values for safety net benefits, health care needs, income, age profile and health care access for all 150 electorates. It also reveals the mean values for those 15 electorates with the lowest Safety Net benefits per capita as well as the 15 highest. The mean values show that there are significant differences in the Safety Net benefits, income, poverty rates and pre-mature mortality rates between the overall average and the top and bottom 10% of Safety Net benefit electorates.

Table 3 shows the results for two models. Model 1 estimates the number of people who qualify for Safety Net benefits (i.e. those with high OOP costs who reach the threshold) in each federal electorate, based on the characteristics of that electorate. The base case is a couple with children, aged between 45 and 65, who are salary earners and live in an inner metropolitan electorate in Queensland.

In the model, the two health needs proxies are both significant but in opposite direction. The premature death rate has a negative relationship (p=0.026) whereas 'poor' or 'fair' self-assessed health status is associated with more people qualifying for Safety Net benefits (p=0.078).

Higher proportions of people aged 75-84 in an electorate is positively correlated with the number of people qualifying for Safety Net benefits (p=0.019). On the other hand, the proportion of 85+ year olds in the population appears to be negatively correlated (p=0.004). The family structure variables do not reach significance nor do the income variables. The proportion of GP services that are bulk-billed in the electorate is negatively related to the number of people qualifying for Safety Net benefits (p=0.000). Regional variables do not appear to be significant but the electorate's state or territory does, with

fewer people qualifying in NT, WA, SA, Tas, and Vic ($p<0.05$) electorates compared to their Qld counterparts.

Model 2 (in Table 3) estimates the per capita Safety Net expenditure in each federal electorate. The coefficient for premature death rate is negative ($p=0.031$) and self-assessed health status was found not to be significant ($p=0.151$). This result indicates that our two proxies for *health need* are either negatively or not significantly associated with Safety Net expenditure in an electorate. Results also show that the greater the proportion of 75-84 year olds in the electorate, the greater the Safety Net expenditure but there was a significant negative association for the 85+ age group. Despite the documented higher health care use of the age group, the results in this analysis indicate that the elderly either face fewer out-of-pocket costs or are perhaps greater users of non-Medicare subsidised services. Other age groups failed to reach significance, with the exception of the 25-44 year age groups.

Average weekly family income was positively correlated with high Safety Net expenditure ($p<0.001$). Poverty rates were negatively correlated but not significant ($p=0.138$). Health care access variables failed to reach significance as did the regional characteristics of the electorate. The state variable showed significantly lower payments in WA and SA ($p<0.001$).

There are some interesting differences between Models 1 and 2. Firstly, Model 1 showed poor self-assessed health status was associated with higher numbers of people qualifying for Safety Net benefits ($p=0.078$) but the same variable failed to reach significance in Model 2 ($p=0.151$). This indicates that electorates with higher poor health face higher OOP costs but the Safety Net does not appear to bring significant benefits to those electorates. Secondly, whilst average electorate income is not significant ($p=0.333$) in predicting the number of people who qualify for Safety Net benefits (Model 1), it is significant in predicting per capita Safety Net expenditure (Model 2) – with higher income relating to higher benefits ($p=0.001$). Thirdly, the 25-44 age group coefficient is negative in Model 1, indicating that this age group is associated with lower out-of-pocket costs. However, it is positively associated with Safety Net expenditure (Model 2) although it did not reach significance ($p=0.183$).

3.2 Safety Net benefit distribution by profession and service category

This part of the analysis estimates the distribution of Safety Net benefits by selected Medicare items which are then grouped together in broad professional groups. Table 4 shows the number of services and an estimate of the average Safety Net benefit per service as well as overall. In total, we estimate that the Safety Net policy cost taxpayers $432 million over the 2004 and 2005 calendar years (Hansard 2005 and personal communication). The 28 MBS items selected for this analysis explain 72.7% of all Safety Net expenditure, and the remaining 27.3% is explained by all the other items in the MBS. Table 4 shows that obstetrics alone accounts for 24.9% of total Safety Net expenditure, with an average $42.47 subsidy per service. The average Safety Net benefit for a GP service is quite small ($0.26) although it still accounts for an estimated 10.4% of total Safety Net expenditure due to the high volume of GP services. Interestingly, IVF services account for only 0.5% of all Medicare services but accounts for 13.7% of Safety Net Benefits in 2004 and 2005 respectively. In fact, the average Safety Net contribution per IVF service was $250. Radiotherapy services for the treatment and management of cancer attracted an average $18.65 per service and accounts for 0.6% of Safety Net benefits.

3.3 Safety net impact on services used, fees charged, benefits paid and OOP costs

Time series analysis was used to estimate the impact of the Safety Net on services provided, fees, Medicare benefits and OOP costs (the difference between fees and benefits). The analysis was conducted separately using data on general practice consultations and combined data on specialist, obstetricians, pathology and diagnostic imaging services (grouped as ‘other’). The reason for analysing the general practice data separately is because there were significant other policy changes in this field around the same time as the introduction of the Safety Net policy. The results are shown in Tables 5 to 8.

Table 5 indicates that the introduction of the Safety Net in 2004 did not have an immediate impact on the number services used. However, there are indications that more services are being utilised from 2005 onwards. In the case of GP consultation this results

may, in part, be attributed to other policy changes aimed at increasing the level of bulk-billing. However, the result is also significant for "other" services in 2005, supporting the notion that the Safety Net at least contributed to the rise in per capita services.

Table 6 shows the regression results for changes in the fees charged following the introduction of the Safety Net. The most significant result in the GP market is a drastic rise in fees at the start of 2005 – but this coincided with the policy to increase the Medicare rebate from 85% to 100% for all GP consultations. In "other" Medicare services the introduction of the Safety Net in 2004 coincided with a significant gradual rise in fees ($p=0.027$).

Table 7 provides evidence that the Safety Net policy has had little impact on the amount of government benefits per GP service in 2004 and that the substantial rise in 2005 can mostly be attributed to other policy initiatives. In the 'other' services category however, benefits have increased substantially following the introduction of the Safety Net.

Table 8 shows the impact on out-of-pocket payment per service following the introduction of the Safety Net. Out-of-pocket payments for GP services have fallen after the second quarter in 2004 but the usual caveat about other policy changes in this area apply. For non-GP services, the average OOP fall significantly as the calendar year progresses.

The information in Tables 5 to 8 provides evidence that, as would be expected, the Safety Net policy has led to increased Government spending through higher benefits paid per service. This increased spending appears to have reduced out-of-pocket costs but it has also raised the fees charged by medical providers. However, the results for the GP market are heavily confounded by the other policy changes in this sector.

One of the big questions for the Safety Net policy is how much of the increase in government spending has translated into reduced OOP and how much of it has gone towards higher fees? Figure 2 estimates changes on the fees charged, benefits paid and out-of-pocket costs post 2004 for non-GP services. It shows the difference between the predicted fee, benefit and OOP per service following the introduction of the Safety Net and the trend established prior to its introduction

Figure 2 reveals a seasonal pattern that is consistent with the mechanics of the Safety Net policy; as the e year progress and more people qualify for Safety Net benefits and OOP fall. What is perhaps surprising is that the fee charged exhibit a similar seasonal pattern. The figure shows that the substantial increase the average benefit per service has been matched by higher fees and only a small component has gone towards reducing the average out-of-pocket cost per service.

It should be noted that a large part of Safety Net benefits go towards obstetric services and that the figures in Table 6 may, in part, reflect changes in billing practices in this field. One suggested explanation for this phenomenon is that the booking fee associated with obstetric services (and which was previously paid directly by patients) is now been cost-shifted to Medicare (Richards, 2005). This would be financially advantageous to patients because 80% of those costs would then be covered by the Safety Net, once the threshold has been reached. The net effect of this practice is that the booking fee now appears in the Medicare data and this may artificially inflate the fee charged. However, it is irrefutable that public funding for privately provided obstetric services has increased substantially.

There may also be some scope for other medical providers practitioners to change their billing practices. Some services may have been shifted from an inpatient setting where services are subsidised by 75% of the schedule fee to an outpatient setting where the subsidy is 85%. This could be financially advantageous to the patient but it would depend on the individual's circumstances including their private health insurance coverage. If this change of billing practice is occurring, then the data in Table 7 can be attributed, in part, to the higher Medicare subsidy paid for outpatient services. To the extent that this practice is occurring, it can still be considered to be a Safety Net effect.

4. Conclusions

When the safety net policy was introduced, it was estimated that approximately 450 000 individuals and families would benefit in the first year at a cost to the Australian Government of $440 million over four years. However since its implementation, the Government has revised its Safety Net commitments. Figures released during Senate hearings revealed that spending would more than double than earlier predictions, bringing the total to over $1 billion over four years and that over 600,000 individuals and families actually qualified for benefits in the first year (Hansard, 2005).

In response to the blow-out of Safety Net costs, the Federal Government announced changes to the thresholds in the May 2005 budget. As of January 2006, thresholds rose to $500 (up from $300) for low income households and $1,000 (up from $700) for everyone else. The Government estimates that this change would reduce Safety Net expenditure by $136.1 million in the 2006-07 financial year (Budget 2005).

This analysis has shown that in the first five months of the Safety Net being operational, expenditure varied considerably by electorate. The uneven distribution in expenditure across the country gave rise to questions about which groups were benefiting most from the Safety Net policy.

The results presented here provide some answers to this question. The small area analysis shows that health care needs (proxied by the premature death rate and the number of people who claim poor or fair self-assessed health status within an electorate) are either insignificant or is negatively related to Safety Net benefits. This result indicates that the policy is not directed to those areas with highest health care needs.

Some age groups are important predictors of Safety Net benefits. The higher the proportion of the electorate's population aged 25 to 44, the greater the benefits paid - noting that individuals in this age group are most likely to use obstetric and IVF services. A positive relationship between age and benefits can also be found for the 75 to 84 year old age group. Even though the 85+ age group would also be expected to require more

health care services, the relationship between this age group and Safety Net benefits was negative.

Income was not an important indicator of OOP expenses (Model 1; Table 3). This phenomenon may be explained in two different ways. Firstly, low income electorates may utilise fewer services and thereby face lower OOP costs, or secondly, poorer electorates may use services with low OOP costs such as public hospitals, or bulk-billing GPs.

Previous research by Doorslaer et al indicates that Australia has a pro-poor distribution of GP service use but a pro-rich distribution for specialist's services (van Doorslaer et al). This evidence supports the notion that the poor use services with lower OOP.

Income is a significant and positive predictor of Safety Net benefit (Model 2). This is despite strong evidence of a negative gradient between health and income (Draper 2004). These findings are consistent with the notion that Safety Net benefits are accessed mostly in richer and healthier areas of Australia.

The small area results presented in this paper should be regarded as preliminary because of the short term nature of the data on which the findings are based. An analysis of longer term data would provide a more complete and robust picture.

The distribution of Safety Net benefits by profession (Table 4) show that despite the very low volume of services in the fields of obstetrics and IVF, these two sectors were collectively responsible for 38% of Safety Net benefits. This provides some indication that the Safety Net is advantageous for those who use high-cost services such as IVF and private obstetrics, although it can be argued that these two services constitute the type of 'disaster insurance' for which the policy was intended.

Time series analysis shows the introduction of the Safety Net policy coincided with a rise in medical fees. This trend was statistically significant even against a background of rising fees since 2000 for Medicare services overall. With the addition of the Safety Net, the Australian Government is spending more public funds on Medicare related services. This trend was significant for overall Medicare claims and provides evidence of the inflationary impact of the Safety Net.

The effect on OOP appears to have been small. The additional rise in government spending has largely been matched by higher fees or changes to billing practices. One of the important questions remaining is to measure the extent to which fees have risen for the entire population – not just for those who have qualified for Safety Net benefits. It may the case that fees have risen across the board yet only 5% of the population qualified for Safety Net benefits. The net impact of such a scenario would be higher out-of-pocket costs for the great majority of Australians.

It will be important to continue monitoring the impact of the Safety Net. Following the changes to the threshold, it is feasible that high cost items such as obstetrics and IVF will claim even larger shares of Safety Net spending. Furthermore, there remains the important question over fee changes – will the fee rises witnessed following the introduction of the Safety Net be permanent or temporary fixtures?

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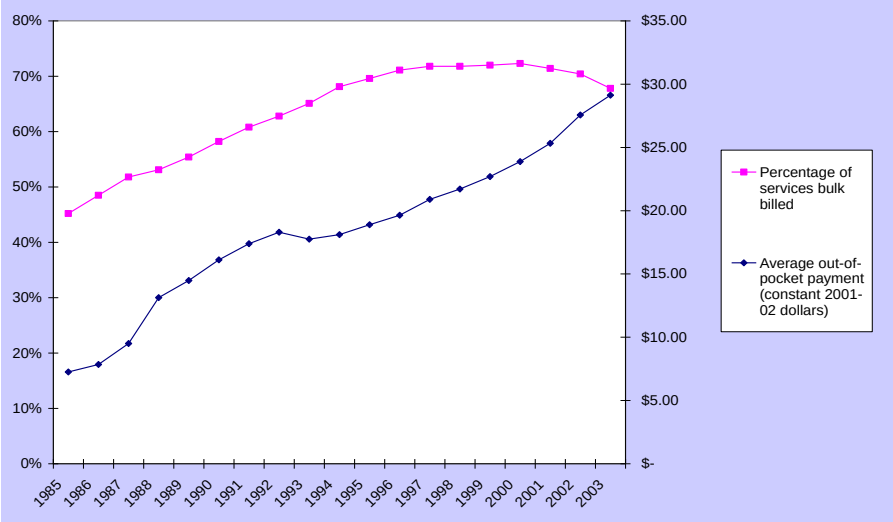
Figure 1: Percentage of Medicare services bulk billed and average out-of-pocket payments for non-bulk billed services in constant 2001-02 dollars – 1985 to 2003.



Source: Healthwiz version 6.2.9

Table 1 Variables and data sources used in the regression analysis.

	Variable	Source:
Dependent variable	Model 1: No of people reached Safety Net threshold up to July 31 2004	Abbott 2004
	Model 2: Per capita Safety Net expenditure between March and July 2004	Abbott 2004
Health needs	Death rate per 100,000 population aged < 75	Registrars of Births, Deaths and Marriage in the relevant State or Territory, 2001
	Model 1a and Model 1b: The number of people who rated their health as poor or fair per 1000 people	National Health Survey, 2001
Socio-economic	Average household income	Census 2001
	Percentage of families with weekly income of $1500 or above	Census 2001
	Percentage of income in the electorate derived from wages, own business, investment, superannuation, government benefits and other sources	Census 2001
	Percentage of people who are at or below the poverty rate	Census 2001
Demographic	Percentage of the population aged: - 0 to 4 - 5 to 24 - 25 to 44 - 65 to 74 - 74 to 84 - 85+	Census 2001
Geographic	State or Territory: NSW, NT, WA, ACT, SA, Tas, Vic and Qld	Australian electoral Commission
	Region - Inner metropolitan - Outer metropolitan - Provincial - Rural	Australian electoral Commission
Health care access	Labour force supply - Number of FTE GP - Number of FTE obstetricians and gynacologists	Medicare Australia AMWAC
	Percentage of GP services bulk-billed	DOHA, 2004

www.aph.gov.au/Library/pubs/rp/2004-05/05RP01.htm

Table 2: Mean values for all electorates, bottom and top 10% of Safety Net benefits recipient electorates

	Lowest 10%f Safety Net benefits electorates			*All electorates*			*Highest 10% Safety Net benefits electorates*		
	Average	95% Conf. Interval		Average	95% Conf. Interval		Average	95% Conf. Interval	
Average per capita Safety Net benefit	$0.50	$0.40	$0.59	$1.85	$1.64	$ 2.07	$4.56	$3.94	$5.17
No. persons qualifying for Safety Net benefits	2,326	1,874	2,778	4,316	4,023	4,609	7,065	6,269	7,860
Poor health per 1,000 population	198	188	208	182	179	185	169	159	179
Pre-mature mortality rate per 100,000 population	1006	906	1105	869	837	901	684	632	736
Median weekly family income	$815	$744	$886	$972	$927	$1,016	$1,452	$1,313	$1,591
Poverty rate	12%	11%	13%	9%	9%	10%	5%	4%	6%
% of electorate aged:									
0-4	7%	6%	8%	7%	6%	7%	6%	5%	6%
5-14	15%	13%	14%	14%	14%	15%	12%	11%	13%
15-24	13%	12%	14%	14%	13%	14%	14%	13%	15%
25-44	30%	28%	31%	30%	29%	30%	31%	28%	33%
45-64	23%	22%	24%	23%	23%	23%	24%	23%	25%
65-74	7%	6%	8%	7%	7%	7%	7%	6%	7%
75-84	4%	3%	6%	4%	4%	5%	5%	4%	6%
85+	1%	1%	2%	1%	1%	2%	2%	2%	2%
%of GP consultations 'bulk-billed'	68%	61%	75%	69%	66%	71%	67%	62%	72%

Table 3: Small area analysis - explaining high out-of-pocket costs and Safety Net Benefits

	Model 1: Number of people with high OOP costs		Model 2: Per capita Safety Net benefit ($)	
	Coef	P-value	Coef	P-value
Constant	12027	0.027	-3.33	0.330
Death rate (‘000)	-221	0.026	-0.14	0.031
SAHS	9	0.078	0.01	0.151
Missing SAHS value	301	0.042	0.05	0.597
Age 0-4	3301	0.846	-0.14	0.989
Age 5-14	-2554	0.84	3.30	0.682
Age 15-24	-4124	0.612	-2.73	0.596
Age 25-44	-4038	0.547	5.67	0.183
Age 45-64 (left out)				
Age 65-74	10687	0.491	8.02	0.415
Age 75-84	38169	0.019	29.75	0.004
Age 85+	-54795	0.004	-25.83	0.032
Couples	-4743	0.379	3.88	0.256
Couples with kids (left out)				
Singles	-2569	0.349	-1.86	0.285
Single parents	-9516	0.254	-1.56	0.767
Median weekly family income	1	0.333	0.002	0.001
Poverty rate	-11610	0.122	-7.05	0.138
Wage/salary (left out)				
Own business	-16	0.711	-0.01	0.629
Investment	77	0.085	0.08	0.007
Superannuation	-44	0.806	-0.10	0.369
Government benefits	7	0.887	0.05	0.132
Other income	311	0.301	0.27	0.161
GP bulk-billing rate	-5254	0.000	-0.64	0.256
GPs per 1000 pop	-589	0.179	-0.31	0.269
Obstetricians per 1000 pop	765	0.86	0.90	0.745
NSW	-361	0.143	0.02	0.912
NT	-2275	0.003	-0.44	0.361
WA	-1556	0.000	-1.03	0
ACT	899	0.319	0.10	0.864
SA	-2212	0.000	-1.37	0
TAS	-1751	0.000	-0.36	0.182
VIC	-1078	0.000	-0.09	0.577
QLD (left out)				
Outer metropolitan	34	0.895	-0.05	0.745
Provincial	-33	0.932	-0.06	0.811
Rural	-78	0.86	-0.18	0.512
Inner metropolitan (left out)				
Adjusted R^2	0.8155		0.8653	

Table 4: Estimating the distribution of Safety Net Benefits by broad category of service and selected Medicare item numbers[5] -2004 and 2005

	Total number of services ('000)	Percentage of services	Average Safety Net benefit per service($)	Safety Net benefits ($'000)	Percentage of total Safety Net Benefits
GP attendances	175,787	39.5	0.26	44,949	10.4
Specialists attendances	18,994	4.3	2.33	44,342	10.3
Consulting physician attendances	15,186	3.4	1.59	24,217	5.6
Psychiatry	3,148	0.7	6.89	21,679	5.0
IVF	236	0.1	250.09	59,065	13.7
Radiotherapy	139	0.03	18.65	2,597	0.6
Obstetrics	2,530	0.6	42.47	107,442	24.9
Obstetric ultrasound	1,874	0.4	5.27	9,871	2.3
Other	227,491	51.1	0.52	117,837	27.3
Total	445,385	100	0.97	432,000	100.0

[5] Item numbers: GP attendances: 23, 36, 44, 53; Specialists attendances: 104,105; Consulting physicians: 110,116; Psychiatry: 302,304,306,308; Obstetrics: 16500; Obstetric ultrasound: 55700, 55703, 55704, 55706, 55718, 55721, 55731, 55733; IVF: 13200, 13203, 13209, 13221; Total: all Medicare services except optometry, operations and anaesthetics; Other; total minus listed items.

Table 5: Medicare services following the introduction of the Medicare Safety Net

	GP	p-value	Other	p-value	Total	p-value
Constant	1.386	0.000	0.950	0.000	2.322	0.000
Time	-0.001	0.331	0.009	0.000	0.008	0.000
Safety net dummy '04	-0.048	0.649	-0.058	0.156	-0.107	0.430
Safety net dummy '05	-0.082	0.606	-0.114	0.068	-0.202	0.325
Safety net variable '04	0.038	0.292	0.020	0.156	0.055	0.242
Safety net variable '05	0.122	0.036	0.080	0.001	0.199	0.009
Time variable '01	-0.011	0.038	0.003	0.083	-0.007	0.176

Table 6: Medicare fees following the introduction of the Medicare Safety Net

	GP	p-value	Other	p-value	Total	p-value
Constant	30.682	0.000	50.564	0.000	39.012	0.000
Time	-0.022	0.003	-0.125	0.000	-0.044	0.000
Safety net dummy '04	-0.629	0.230	-0.231	0.843	-0.308	0.654
Safety net dummy '05	3.984	0.000	2.812	0.116	3.339	0.002
Safety net variable '04	-0.214	0.230	0.918	0.027	0.369	0.124
Safety net variable '05	-0.357	0.205	0.453	0.477	0.015	0.968
Time variable '01	0.444	0.000	-0.041	0.385	0.178	0.000

Table 7: Medicare benefits following the introduction of the Medicare Safety Net

	GP	p-value	Other	p-value	Total	p-value
Constant	28.624	0.000	42.881	0.000	34.585	0.000
Time	-0.034	0.000	-0.087	0.000	-0.039	0.000
Safety net dummy '04	-0.943	0.045	-0.578	0.518	-0.753	0.128
Safety net dummy '05	5.503	0.000	3.156	0.023	4.145	0.000
Safety net variable '04	0.203	0.200	1.264	0.000	0.743	0.000
Safety net variable '05	0.009	0.970	0.822	0.096	0.404	0.134
Time variable '01	0.270	0.000	-0.213	0.000	0.021	0.297

Table 8: Medicare OOP following the introduction of the Medicare Safety Net

	GP	p-value	Other	p-value	Total	p-value
Constant	1.993	0.000	7.683	0.000	3.918	0.000
Time	0.013	0.000	-0.038	0.000	0.005	0.200
Safety net dummy '04	0.329	0.096	0.347	0.343	0.485	0.072
Safety net dummy '05	-1.522	0.000	-0.344	0.532	-0.830	0.042
Safety net variable '04	-0.416	0.000	-0.346	0.008	-0.421	0.000
Safety net variable '05	-0.359	0.001	-0.368	0.068	-0.400	0.008
Time variable '01	0.171	0.000	0.172	0.000	0.134	0.000

Figure 2: Changes in the average benefit paid, fees charged and OOP per non-GP service