

AN ANALYSIS OF THE IMPORTANCE OF THE CURRENT REFERENCE PRICING SYSTEM

This report was prepared for
the Generic Medicines Industry Association
by Econtech Pty Ltd.

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CANBERRA OFFICE

Econtech
P.O. Box 4129
Kingston ACT 2604
Phone: (02) 6295-0527
Fax: (02) 6295-8513
E-mail: office@econtech.com.au

SYDNEY OFFICE

Econtech
Suite 304, 66 Berry Street
North Sydney NSW 2060
Phone: (02) 9929-4700
Fax: (02) 9929-4793
E-mail: sydney@econtech.com.au

Web-site: www.econtech.com.au



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Executive Summary

Reference pricing is an important component of the pricing policy under the Pharmaceutical Benefits Scheme (PBS). The reference pricing arrangements have reduced the average price of all PBS medicines. These price reductions multiplied by the volume of PBS prescriptions represent the value of reference pricing. Importantly, the value of reference pricing also represents the cost savings to the PBS from reference pricing.

The Generic Medicines Industry Association (GMiA) commissioned Econtech to estimate the value of reference pricing between 1 July 1995 and 30 June 2010. The aim of these estimates is to emphasise how valuable a tool the current reference pricing arrangements are for delivering cost savings to the PBS.

The GMiA is an advocate of the current reference pricing system for two reasons. The first reason is to ensure the delivery of future savings to the PBS. The second reason is because the usual reference pricing arrangements help to ensure a strong and viable generic medicine industry.

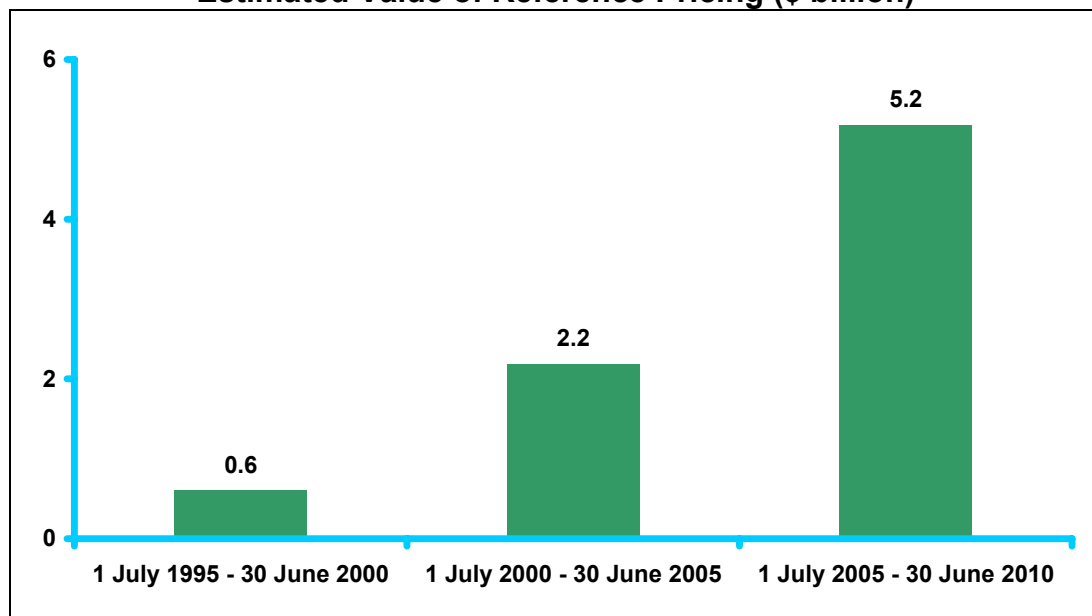
Estimates of the Value of Reference Pricing

To estimate the value of reference pricing, the following two scenarios have been modelled:

- Baseline Scenario – this scenario shows the existing situation in the Australian pharmaceutical industry under the current reference pricing arrangements between 1 July 1995 and 30 June 2010.
- No Reference Pricing Scenario – this scenario models the hypothetical situation that assumes the reference pricing system did not exist during this period of time.

Chart A shows of the value of reference pricing between 1 July 1995 and 30 June 2010.

Chart A
Estimated Value of Reference Pricing (\$ billion)



Source: Generic Medicines Model

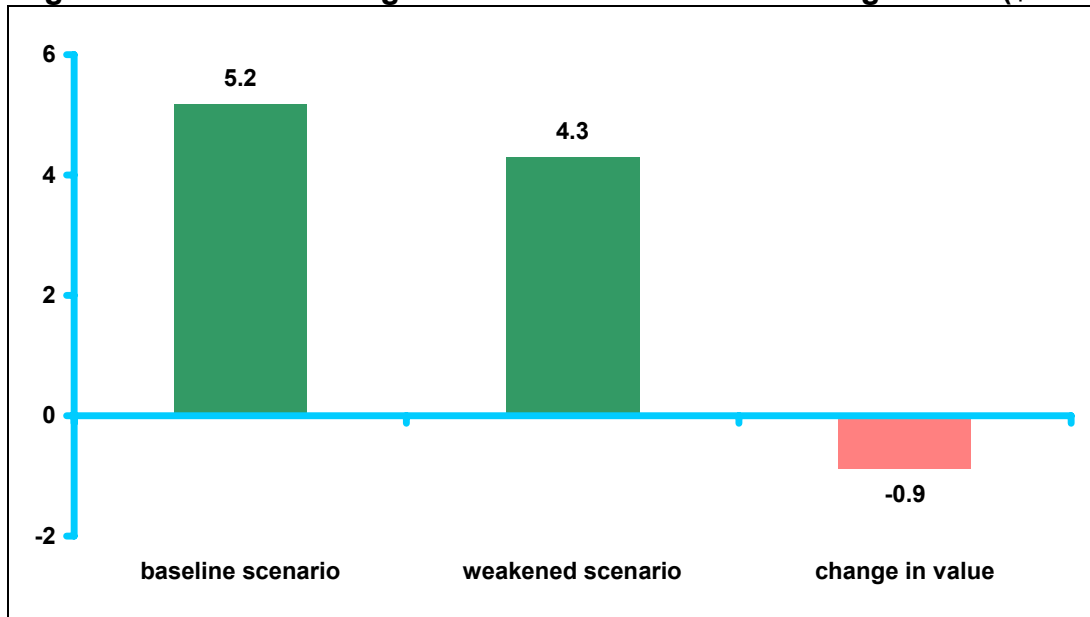
The value of reference pricing in Chart A is due to the lower drug prices that have prevailed under the reference pricing system compared to the prices that would have prevailed if the system was not in place. These price reductions multiplied by the volume of PBS prescriptions represent the value of reference pricing.

Weakening Reference Pricing

Any move to weaken the principals of the current reference pricing arrangements is likely to reduce the value of reference pricing. So in this report, an additional scenario is modelled to further highlight the value of the current reference pricing arrangements. The following scenario shows the impact on the value of reference pricing of changes to the 12.5 per cent price reduction policy, which was introduced on 1 April 2005.¹

- Weakened Reference Pricing Scenario – under this hypothetical scenario, when a generic version or a new brand of an existing PBS medicine is listed on the PBS, the 12.5 per cent price reduction only applies to other drugs in that group that are already off-patent.

Chart B
Change in Reference Pricing Value due to Weakened Arrangements (\$ billion)



Source: Generic Medicines Model

Note: the estimated reduction in value of reference pricing due to the weakened reference pricing arrangements is for the five year period between 1 July 2005 and 30 June 2010.

Chart B shows that the difference between the estimates of the value of reference pricing under each scenario is about \$879 million over five years. This means that weakening the application of the 12.5 per cent price reduction policy is expected to significantly reduce the value of reference pricing over the next five years. This will increase the cost to the Budget.

¹ This policy was introduced to reduce the cost of the PBS to offset \$1 billion in payments to pensioners and self-funded retirees that were promised during the Federal election in 2004. Under this policy, when a generic version of an existing PBS medicine is listed on the PBS, the price of that drug and all other brands of the same drug is automatically cut by 12.5 per cent.

1 Introduction

Reference pricing is an important component of the pricing policy under the Pharmaceutical Benefits Scheme (PBS). Under the current reference pricing arrangements, the price of new medicines listed on the PBS are not allowed to be any higher than the cheapest similar drug already listed. This means that the reference pricing system has reduced the average price of all PBS medicines. These price reductions multiplied by the volume of PBS prescriptions is an estimate the value of reference pricing.

The Generic Medicines Industry Association (GMiA) commissioned Econtech to estimate the value of reference pricing between 1 July 1995 and 30 June 2010. The aim of these estimates is to emphasise how valuable a tool the current reference pricing arrangements are for delivering cost savings to the PBS.

The estimates of the value of reference pricing were calculated using the Generic Medicines Model. This model was originally developed as part of a separate project commissioned by GMiA.² Specifically, Econtech estimated the cost savings to the PBS from the then proposed policy of applying a 12.5 per cent reduction in the reference price when a new brand of an already listed PBS medicine is added to the PBS.³ These cost savings were estimated for the four year period of time starting 1 April 2005.

The GMiA is an advocate of the current reference pricing system for two reasons.

The first reason is to ensure the delivery of future savings to the PBS. As discussed above, the current reference pricing arrangements have delivered significant savings to the PBS that would not have occurred if the reference pricing system was not in place. As such, any policy that is designed to weaken the principals of reference pricing is likely to reduce cost savings to the PBS.

The second reason is to ensure a strong and viable generic medicine industry. The viability of the generic medicines industry depends on the proportion of prescriptions that are filled by generic medicines. IMS Health, via the Generics Bulletin, estimated that prescriptions filled by generic medicines represented about 24 per cent of the pharmaceutical market in Australia in the 12 months to 30 September 2004. This compares to 36 per cent in the USA, 34 per cent in the UK and 30 per cent in Canada over the same period of time.

This report is structured as follows.

- Section 2 outlines the current reference pricing arrangements.
- Section 3 presents some of the background of the modelling of the value of reference pricing.
- Section 4 presents estimates of the value of reference pricing between 1 July 1995 and 30 June 2010.
- Section 5 presents estimates of the reduction in the value of reference pricing from weakening of the current referencng pricing arrangements.

² Econtech, *Estimates of the Cost Savings to the Pharmaceutical Benefits Scheme from Generic Medicines*, commissioned by the Generic Medicines Industry Association, 2005.

³ This policy was introduced to reduce the cost of the PBS to offset \$1 billion in payments to pensioners and self-funded retirees that were promised during the Federal election in 2004.

- Section 6 presents an analysis of National Competition Policy that supports the current reference pricing arrangements.

While all care, skill and consideration has been used in the preparation of this report, the findings refer to the terms of reference of the Generic Medicines Industry Association and are designed to be used only for the specific purpose set out below. If you believe that your terms of reference are different from those set out below, or you wish to use this work or information contained within it for another purpose, please contact us.

The specific purpose of this report is to estimate the value of reference pricing to emphasise how valuable a tool the current reference pricing arrangements are for delivering cost savings to the PBS.

The findings in this report are subject to unavoidable statistical variation. While all care has been taken to ensure that the statistical variation is kept to a minimum, care should be used whenever using this information. This report only takes into account information available to Econtech up to the date of this report and so its findings may be affected by new information. Should you require clarification of any material, please contact us.

2 Current Reference Pricing Arrangements

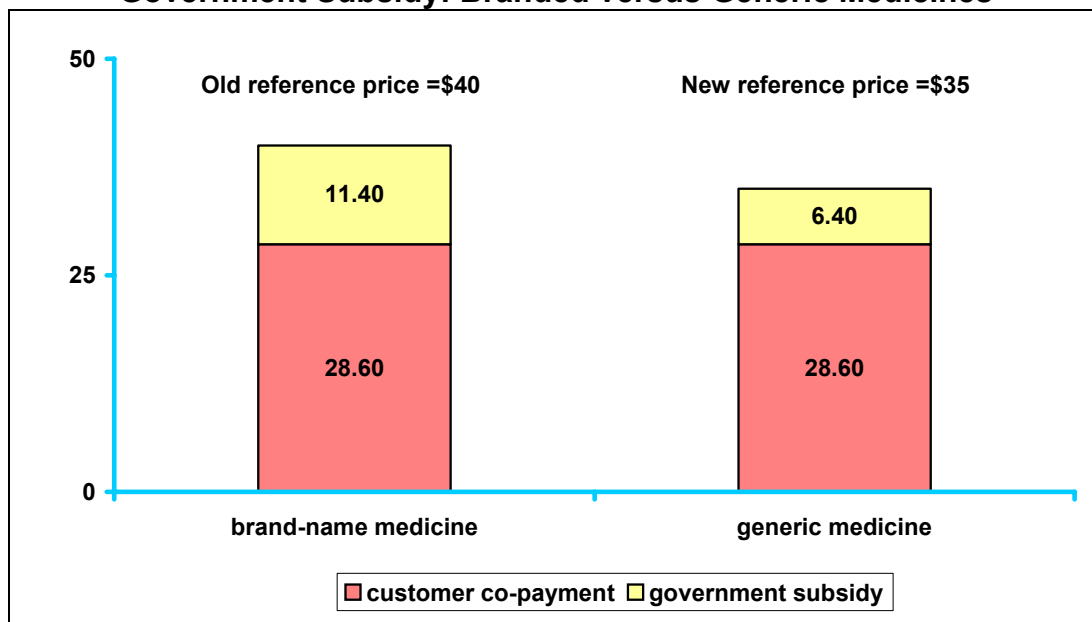
Reference pricing is an important component of the pricing policy under the PBS. Drugs listed on the PBS receive Government subsidies that significantly reduce the cost of pharmaceuticals to consumers. For example, Chart 2.1 shows that the maximum that a general customer pays for a drug under the PBS is \$28.60; the equivalent figure for a concessional customer is \$4.60.

Both generic and branded medicines are subsidised by the Government under the PBS. Specifically, the Government subsidises identical chemical entities by the same amount. The subsidy from the Government for these compounds is the same regardless of brand, manufacturer, or whether the product is supplied by an originator or generic company.

Under the current reference pricing arrangements, the price of a new generic medicine listed on the PBS must be lower than the cheapest similar drug already listed. In turn, the subsidy that the Government pays is determined by the lowest price brand (the ‘reference price’) for a particular class of drug.

For example, the actual cost of the brand-name medicine, Drug A, may be \$40. Under the PBS, a general customer pays \$28.60 towards the cost of the medicine. This means that the Government subsidy on that medicine is \$11.40, as represented in the first bar in Chart 2.1.

Chart 2.1
Government Subsidy: Branded versus Generic Medicines



If the patent expires on Drug A and a cheaper generic version of Drug A comes onto the market, the reference price is likely to drop by 12.5 per cent under the policy introduced on 1 April 2005. This means that if the reference price drops by \$5 ($\$40 \times 12.5\%$) to \$35, the Government subsidy drops to \$6.40 ($\$35 - \28.60), as shown in the second bar in Chart 2.1. This results in a saving to the PBS.

Further, the price of new medicines listed on the PBS is linked to the price of medicines that are already subsidised through the PBS. Under the current reference pricing arrangements,

this link between the prices of generic and branded medicines is continuous and remains in place for the life of all products on the PBS. Therefore, if the price offered to Government by the manufacturer of one medicine is reduced, the Government will accept this new lower price. So from that point onwards, the Government will reduce the subsidy it is willing to pay for all other identical chemical entities on the PBS.

As discussed above, the current reference pricing arrangements have reduced the average price of all PBS medicines. These price reductions would not have occurred if the reference pricing system was not in place. Most of the price reductions can be attributed to generic medicines. This is because it is extremely rare for originator pharmaceutical companies to unilaterally lower the price of their own products.

Further, it is likely that most of the future price reductions from reference pricing will be the result of generic medicines. As such, a calculation of the past and future reductions in the reference prices of PBS listed drugs is broadly equivalent to the total value to reference pricing from the generic medicines industry.

These estimates also emphasise how valuable the principals of the current reference pricing arrangements are for delivering cost savings to the PBS. In turn, emphasising how valuable reference pricing is will highlight the potential consequences of any move to weaken the principals of reference pricing.

3 Modelling Background

The original Generic Medicines Model was updated for this report. This section outlines the amendments to the original model, the main inputs and importantly, the distinction between two sets of price reduction data.

3.1 Revised Generic Medicines Model

As discussed in the Introduction, the Generic Medicines Model was originally developed for a separate project commissioned by GMiA. Specifically, Econtech estimated the cost savings to the PBS from the then proposed policy of applying a 12.5 per cent reduction in the reference price when a new brand of an already listed PBS medicine is added to the PBS.

In this report, an extended version of the Generic Medicines Model is used to estimate the value of reference pricing. This extension involved making the following changes:

- the time horizon of the model was extended from 2000-2009 to 1995-2010; and
- the model was set up to estimate the impacts of alternative policy options such as changes to the current reference pricing arrangements.

The extended Generic Medicines Model is used for this report to estimate the value of reference pricing in the following three blocks of five-year periods:

- 1 July 1995 to 30 June 2000;
- 1 July 2000 to 30 June 2005; and
- 1 July 2005 to 30 June 2010.

In addition, the model differentiates between:

- the accumulative value;
- value by year; and
- value by Weighted Average Monthly Treatment Cost (WAMTC) group.

The extended Generic Medicines Model analyses the price drop caused by the introduction of the first generics onto the market under the new reference pricing arrangements. It also analyses the price reductions prior to 1 April 2005 that were caused by WAMTC changes and therapeutic relativities under the past reference pricing arrangements.

3.2 Data Sources

The three main data sources for the extended Generic Medicines Model are:

- the HIC database of historical PBS expenditure between 1995 and 2004;
- a report prepared by IMS Health about the Australian pharmaceutical industry⁴; and
- the list of patent expiries of branded pharmaceuticals between 1995 and 2010.

The HIC is responsible for processing PBS services and as such, maintains a detailed database of historical PBS expenditure from 1992 to 2004. The HIC database provides

⁴ IMS Health, *IMS Market Prognosis Australasia 2004-2008: Australia*, 2004.

estimates of PBS expenditure by Anatomical Therapeutic Chemical (ATC) Classification as well as by individual pharmaceutical items. PBS expenditure by individual pharmaceutical items is used in the Generic Medicines Model to estimate baseline PBS expenditure for each WAMTC group from 1995 to 2004.

The last full calendar year of PBS expenditure data on the HIC website is 2004. However, to estimate the value of reference pricing required estimates of annual PBS expenditure out to 2010. In 2004, IMS Health forecast average annual growth in the Australian pharmaceutical industry from 2003 to 2008. These forecasts of annual growth were used to estimate PBS expenditure for each WAMTC group out to 2010.

The PBS expenditure estimates used in the model relate to the value (benefit) of PBS services that have been processed by the HIC. The figures refer only to paid services processed from claims presented by approved pharmacies and as such, the PBS expenditure data represents the price to pharmacies.

The final source of information is the list of patent expiries of branded pharmaceutical from 1995 to 2010. This list was used as follows:

- to determine the timing of the 12.5 per cent price reduction when generic equivalents of branded drugs are listed on the PBS; and
- to determine the application of the 12.5 per cent price reductions for on-patent PBS medicines under the Weakened Reference Pricing Scenario.

3.3 Price Reduction Data

Two sets of price reduction data are used in this report to estimate the value of reference pricing.

The first set of price reduction data showed price reductions for pharmaceuticals between 1995 and 2004. This data showed price reductions that were caused by three mechanisms, as follows:

- patent expiries;
- WAMTC price changes; and
- therapeutic relativities.

The first two price reduction mechanisms are part of the reference pricing system. However, the third mechanism – therapeutic relativities – is not part of the reference pricing system. Given the complexities and time, it was not possible to remove the impact of therapeutic relativities from the price reduction data. This means that the accumulated price reductions between 1995 and 2004 are likely to be higher than if the impact of therapeutic relativities was removed from the price reduction data.

The second set of price reduction data showed price reductions for pharmaceuticals from the start of 2005 to end of 2010. These price reductions are based only on the 12.5 per cent price reduction policy introduced on 1 April 2005 by the Federal Government. That is, no price reductions from WAMTC changes are included in the reference pricing system between 2005 and 2010.

4 Estimates of the Value of Reference Pricing

A major part of this report is to estimate the value of reference pricing between 1 July 1995 and 30 June 2010. Reference pricing is an important component of the pricing policy under the PBS. Under the current reference pricing arrangements, the price of a new medicine listed on the PBS must be lower than the cheapest similar drug already listed. This means that reference pricing system has reduced the average price of all PBS medicines.

The price reductions multiplied by the volume of PBS prescriptions represent the value of reference pricing. It also represents the cost savings to the PBS from reference pricing.

4.1 Scenarios

To estimate the value of reference pricing, the following two scenarios have been modelled using the Generic Medicines Model:

- Baseline Scenario – this scenario shows the existing situation in the Australian pharmaceutical industry under the current reference pricing arrangements between 1 July 1995 and 30 June 2010. The Baseline Scenario is the base case against which the alternative generic medicines scenarios are compared.
- No Reference Pricing Scenario – this scenario models the hypothetical situation that assumes the reference pricing system did not exist between 1 July 1995 and 30 June 2010. This scenario estimates the cost of the PBS if the reference pricing system was not in place during this period of time.

The difference between the Baseline Scenario and the No Reference Pricing Scenario is an estimate of the value of the reference pricing.

4.2 Estimates of the Value of Reference Pricing

Chart 4.1 shows the estimates of the value of reference pricing between 1 July 1995 and 30 June 2010. The chart shows that estimates of the value of reference pricing over this period of time are as follows:

- about \$0.6 billion between 1 July 1995 and 30 June 2000;
- about \$2.2 billion between 1 July 2000 and 30 June 2005; and
- about \$5.2 billion between 1 July 2005 and 30 June 2010.⁵

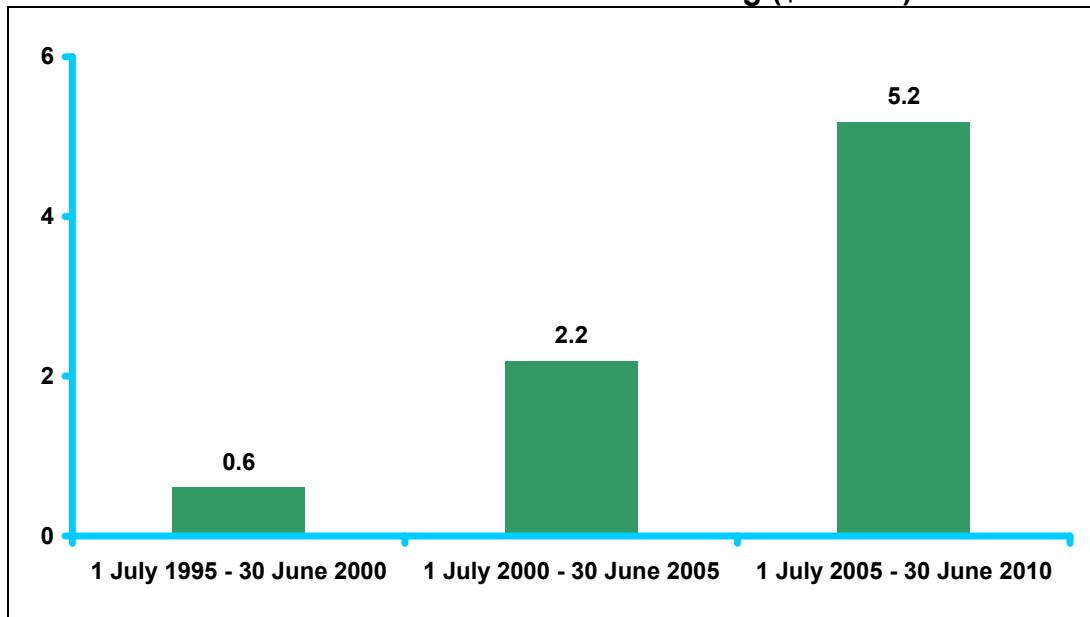
These estimates are the result of lower pharmaceutical prices that have prevailed under the reference pricing system compared to the prices that would have prevailed if the system was not in place. These price reductions multiplied by the volume of PBS prescriptions represent the value of reference pricing.

Given that it is extremely rare for originator pharmaceutical companies to unilaterally lower the price of their own products, most of the value of reference pricing to date can be

⁵ The price reduction data between 1 July 1995 and 30 June 2005 includes the price reductions from off-patents, WAMTC price changes and therapeutic relativities. The price reduction data between 1 July 2005 and 30 June 2010 include price reductions from off-patents only.

attributed to generic medicines. Further, it is likely that most of the future value of reference pricing will be the result of generic medicines.

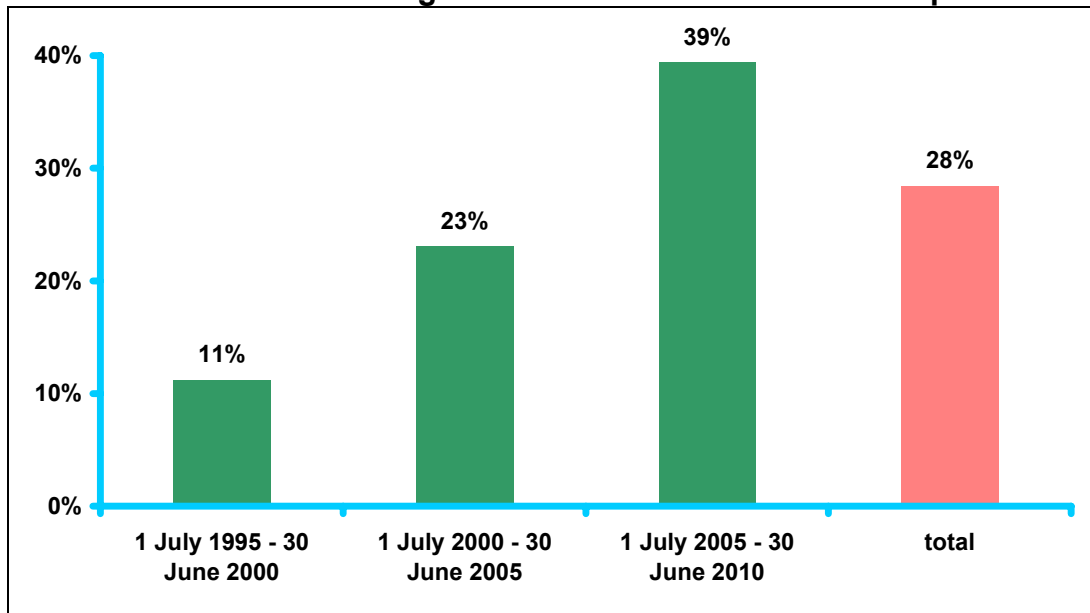
Chart 4.1
Estimated Value of Reference Pricing (\$ billion)



Source: Generic Medicines Model

Chart 4.2 shows the estimates of the value of reference pricing as a share of estimated PBS expenditure.

Chart 4.2
Value of Reference Pricing as a Share of Estimated PBS Expenditure



Source: Generic Medicines Model

The chart shows that between 1 July 1995 and 30 June 2000, the value of reference pricing of \$0.6 billion was equivalent to about 11 per cent of estimated PBS expenditure during that

period of time. This means that PBS expenditure would have been about 11 per cent higher across that five-year period if the current reference pricing arrangements were not in place.

The value of reference pricing as a share of PBS expenditure increased to 23 per cent in the next five-year period. Finally, the chart shows that the value of reference pricing as a share of PBS expenditure is projected to increase to about 39 per cent between 1 July 2005 and 30 June 2010. This increase is the result of the 12.5 per cent price reduction policy. On average, reference pricing has reduced PBS expenditure by 28 per cent over fifteen years.

The value of reference pricing between 1 July 1995 and 30 June 2010 is also illustrated in Chart 4.3. Specifically, the 'baseline' price line in the chart shows the average price of all PBS medicines under the reference pricing arrangements between 1 July 1995 and 30 June 2010. This line represents the average price of all PBS medicines under the Baseline Scenario discussed above.

Chart 4.3
Illustration of the Value of Reference Pricing

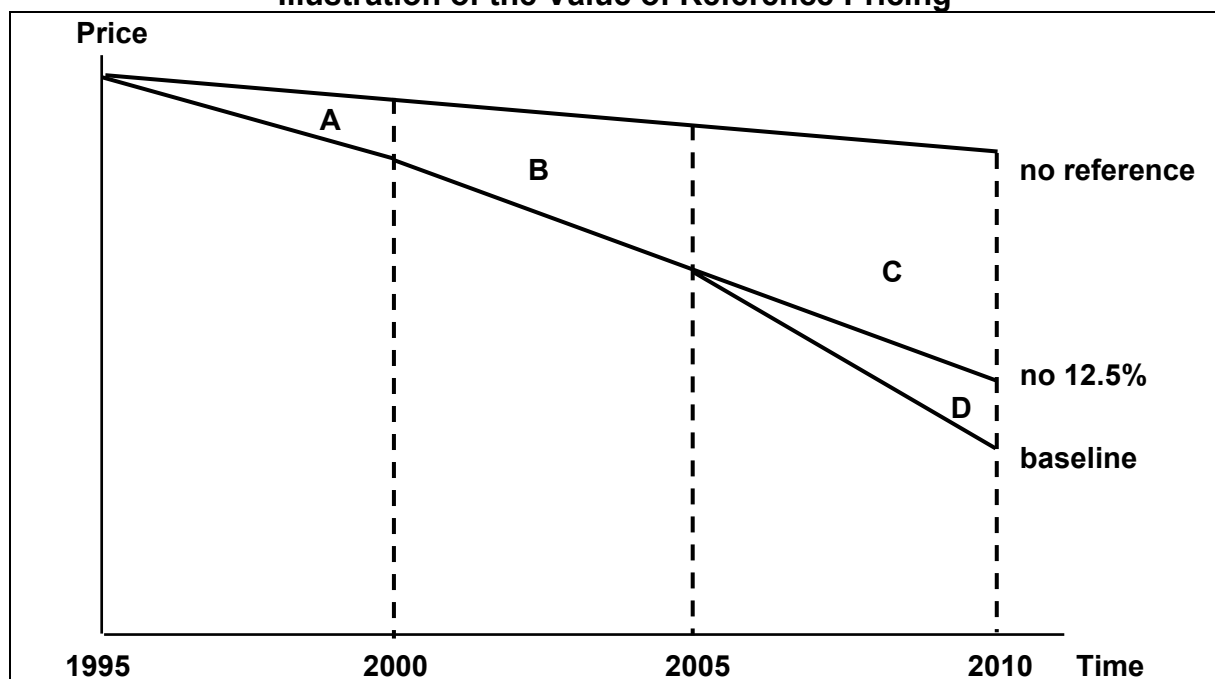


Chart 4.3 also shows the average price of all PBS medicines under the hypothetical situation of no reference pricing between 1 July 1995 and 30 June 2010. This price is shown in the chart as 'no reference' and represents the average price under the No Reference Pricing Scenario discussed above. The chart shows that the average price of all PBS medicines would have been higher if the reference pricing system was not in place during this period of time.

The difference between the 'baseline' and 'no reference' price lines in Chart 4.3 equates to the estimated value of reference pricing, as shown in Chart 4.1. Specifically, the estimated value of reference pricing between 1 July 1995 and 30 June 2000 of \$0.6 billion can be represented in Chart 4.3 by the area marked 'A'. During this period of time, the reference pricing system led to significant price reductions for PBS drugs that would not have occurred if the reference pricing system was not in place.

Similarly, the area marked 'B' in Chart 4.3 represents the accumulated value of reference pricing between 1 July 2000 and 30 June 2005. The estimate of \$2.2 billion represents the value of reference pricing during the five year period from accumulated price reductions since 1 July 1995.

Finally, the sum of areas marked 'C' plus 'D' in Chart 4.3 represent the accumulated value of reference pricing between 1 July 2005 and 30 June 2010. This estimate of about \$5.2 billion represents the value of reference pricing during this period of time from accumulated price reductions since 1 July 1995. The area marked 'D' is discussed in more detail below.

Therefore, the estimated value of reference pricing for the 15 years from 1 July 1995 is about \$8.0 billion. This estimated value is the difference between the 'baseline' price line and the 'no reference' price line in Chart 4.3.

For comparison purposes, Chart 4.3 shows the estimated cost savings to the PBS from the 12.5 per cent price reduction policy introduced on 1 April 2005. This policy was introduced to reduce the cost of the PBS to offset \$1 billion in payments to pensioners and self-funded retirees that were promised during the Federal election in 2004.

This policy aims to reduce the cost of the PBS by cutting the price of pharmaceuticals. Therefore, if the policy was not in place, the average price of all PBS medicines from 1 July 2005 onwards would be higher. Specifically, the average price would be the 'no 12.5%' price line instead of the 'baseline' price line, as shown in Chart 4.3. This means that the difference between these two average price lines – about \$1.7 billion – is the estimated value of the 12.5 per cent price reduction policy for the five years starting 1 July 2005. This estimate is represented by area 'D' in the chart.

The results in this section show that the current reference pricing arrangements have delivered savings to the PBS that would not have occurred if the reference pricing system was not in place. The current arrangements are also expected to deliver significant savings to the PBS in the future.

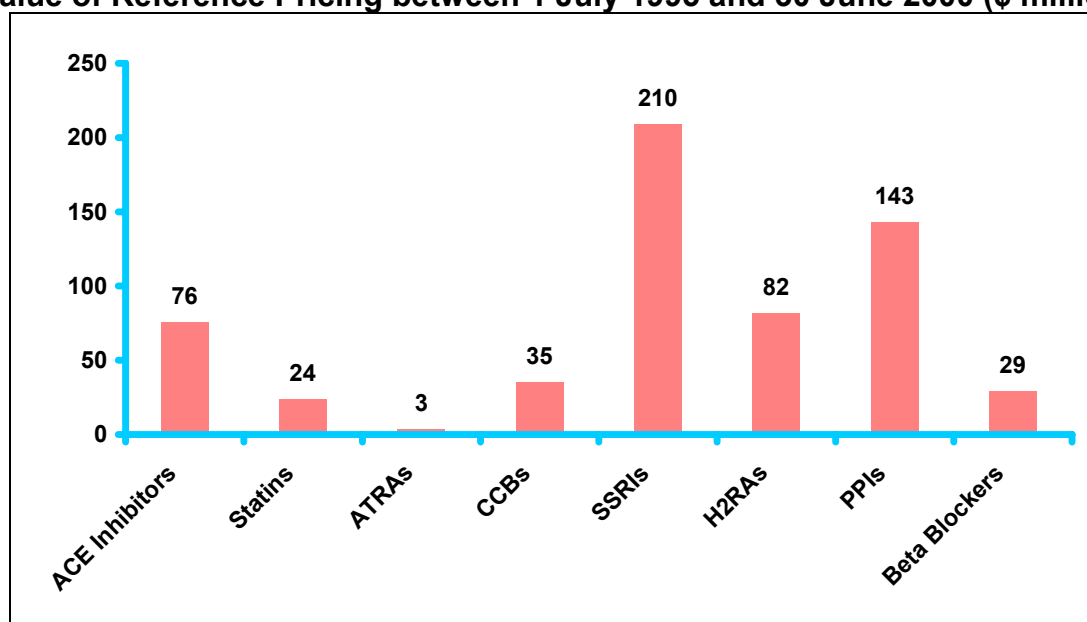
4.3 Estimates of the Value of Reference Pricing by WAMTC Group

The results in this section show the contribution of individual WAMTC groups to the value of reference pricing.

Chart 4.4 shows the value of reference pricing by WAMTC group between 1 July 1995 and 30 June 2000. During this five-year period, the largest contributor to the value of reference pricing was the SSRIs group. This is because of large reductions in the reference price for Fluoxetine, Paroxetine and Sertraline in the five years from 1 July 1995. The chart also shows that there were significant price reductions for the H2RAs group but the contribution to the value of reference pricing is offset by the low PBS expenditure for this group.

There were significant reference price reductions for medicines such as Omeprazole, Lansoprazole and Pantoprazole in the PPIs group. These price reductions occurred late in 1999 so the contribution to the value of reference pricing is more pronounced in the five-year period from 1 July 2000. For example, Chart 4.5 shows that PPIs contributed about \$789 million to the value of reference pricing between 1 July 2000 and 30 June 2005.

Chart 4.4
Value of Reference Pricing between 1 July 1995 and 30 June 2000 (\$ million)

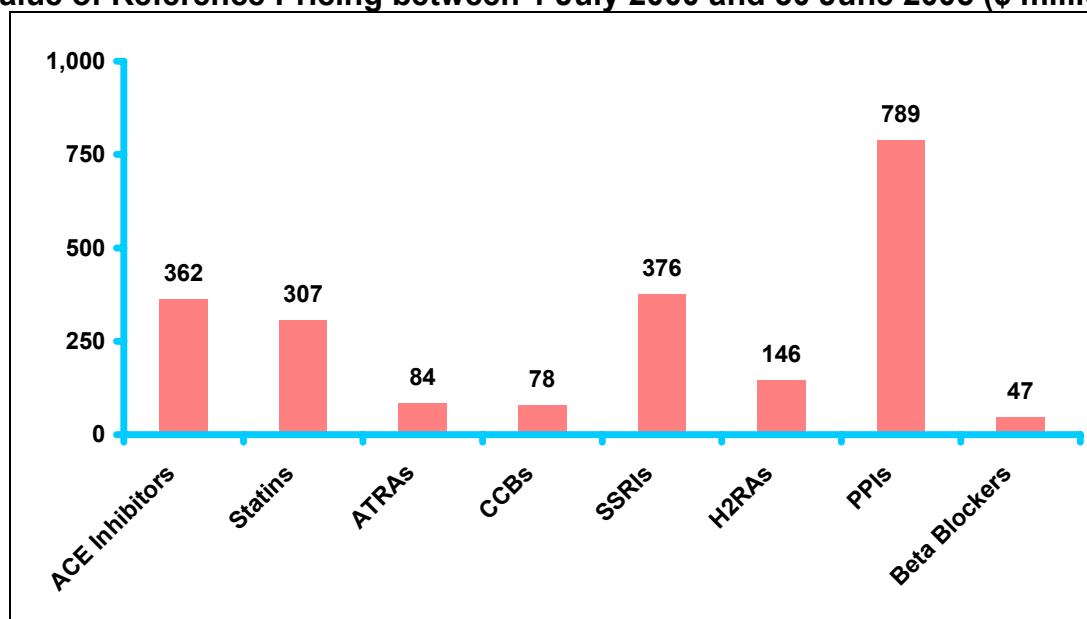


Source: Generic Medicines Model

Chart 4.5 also shows a large increase in the contribution of ACE Inhibitors to the value of reference pricing between 1 July 2000 and 30 June 2005. The contribution of \$362 million is partly because of the following three factors:

- the flow-on impact between 1 July 2000 and 30 June 2005 of the price reductions in May 2000 of most of the medicines in the ACE Inhibitors group;
- the price of all medicines in the ACE Inhibitors group fell in August 2001; and
- the price of most of the medicines in the ACE Inhibitors group fell in May 2004.

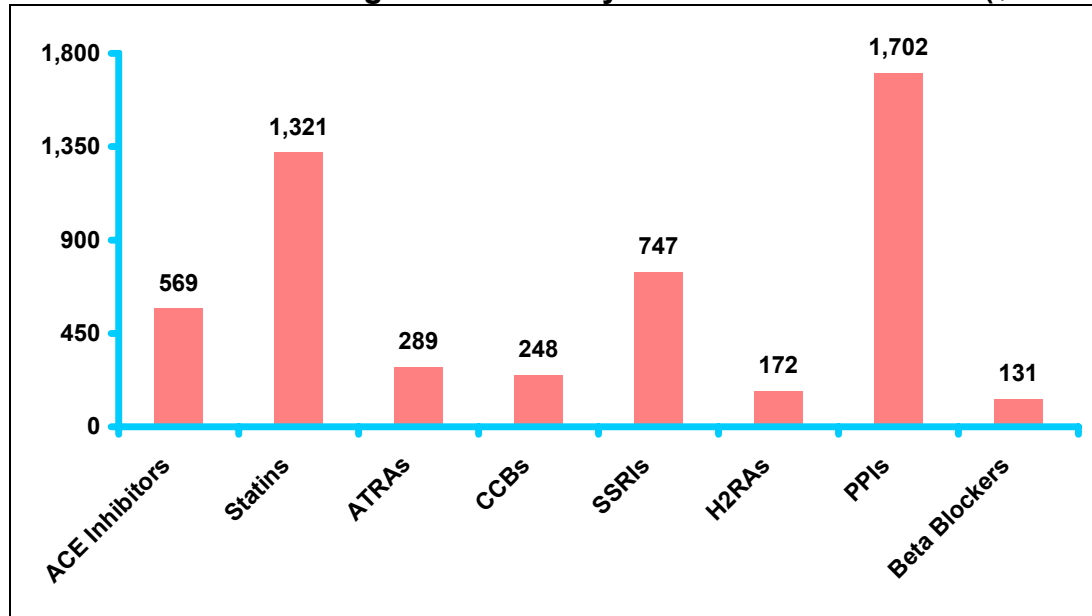
Chart 4.5
Value of Reference Pricing between 1 July 2000 and 30 June 2005 (\$ million)



Source: Generic Medicines Model

Finally, Chart 4.6 shows the value of reference pricing between 1 July 2005 and 30 June 2010. Again, the accumulated price reductions of PPIs since 1 July 1995 made a significant contribution to the value of reference pricing. In addition, there is a significant increase in the contribution of Statins to the value of reference pricing. This is because of two factors. First, the highest amount of PBS expenditure between 1 July 2005 and 30 June 2010 is projected to be on Statins such as Atorvastatin and Simvastatin. Second, the patent of Simvastatin is due to expire in 2005, which will trigger a 12.5 per cent reduction in the reference price of all Statins.

Chart 4.6
Value of Reference Pricing between 1 July 2005 and 30 June 2010 (\$ million)



Source: Generic Medicines Model

The estimates of the value of reference pricing in this report exclude non-evaluated benefits of reference pricing. These non-evaluated benefits occur when the prices of innovator products are reduced to achieve a more favourable PBS listing. For example, the price of a medicine is reduced to ensure that the medicine is listed as a restricted benefit prescription item instead of an authority restriction prescription item. The non-evaluated benefits are not specifically the result of the impact of generic medicines on reference pricing. This means that these non-evaluated benefits are over and above the savings to the PBS due to the introduction of generic medicines.

An example of these non-evaluated benefits is Telmisartan. At the start of November 1999, Telmisartan was listed as a restricted benefit item. In turn, the prices of both Irbesartan and Candesartan were reduced and both drugs were listed as a restricted benefit item at the start of February 2000. Specifically, the price of Irbesartan was reduced from \$22.22 to \$19.20 while the price of Candesartan was reduced from \$27.89 to \$24.23. These price reductions multiplied by the volume of PBS prescriptions of each drug represent the value of the non-evaluated benefits.

Importantly, under the current reference pricing arrangements, the price reductions would have flowed through to reduce the price of other drugs in the same class. This means that the estimates of the value of reference pricing between 1 July 1995 and 30 June 2010 are conservative.

5 Cost to the Government of Changes to Reference Pricing

For this report, a third scenario was modelled to further highlight the value of reference pricing. Under this hypothetical scenario, the principals of the 12.5 per cent price reduction policy arrangements are weakened to estimate the impact on the value of reference pricing. This 12.5 per cent price reduction policy was introduced on 1 April 2005 to cut the cost of the PBS to offset \$1 billion in payments to pensioners and self-funded retirees that were promised during the Federal election in 2004.

Importantly, only the impact of weakening the 12.5 per cent price reduction policy is considered. No consideration is given to the impact on the value of reference pricing from weakening the principals of either WAMTC changes or therapeutic relativities or both.

5.1 Scenarios

To emphasise how valuable the principals of the current reference pricing arrangements are for delivering cost savings to the PBS, the following two scenarios have been modelled using the Generic Medicines Model.

- **Baseline Scenario** – this scenario models the 12.5 per cent price reduction policy between 1 July 2005 and 30 June 2010. The application of this policy when pharmaceutical patents expire is shown in the top panel of Table 5.1. The Baseline Scenario is the base case against which the Weakened Reference Pricing Scenario is compared.
- **Weakened Reference Pricing Scenario** – this scenario models a weakened variation of the 12.5 per cent price reduction policy. Under this hypothetical scenario, when a generic version or additional brand of an existing PBS medicine is listed on the PBS, the 12.5 per cent price reduction only applies to other drugs in that group that are already off-patent. For example, the patent for Amlodipine expires in February 2008 so the price reduction applies to this drug from the next PBS book onwards, which is 1 April 2008. In turn, the price reduction applies to both Diltiazem and Felodipine from 1 August 2008 onwards because the patents of both these drugs have expired. However, the price reduction does not apply to either Lercanidipine or Nifedipine because both drugs are still on-patent at this point in time, as shown in the bottom panel of Table 5.1.

**Table 5.1
Pharmaceutical Price Reductions for Calcium Channel Blockers**

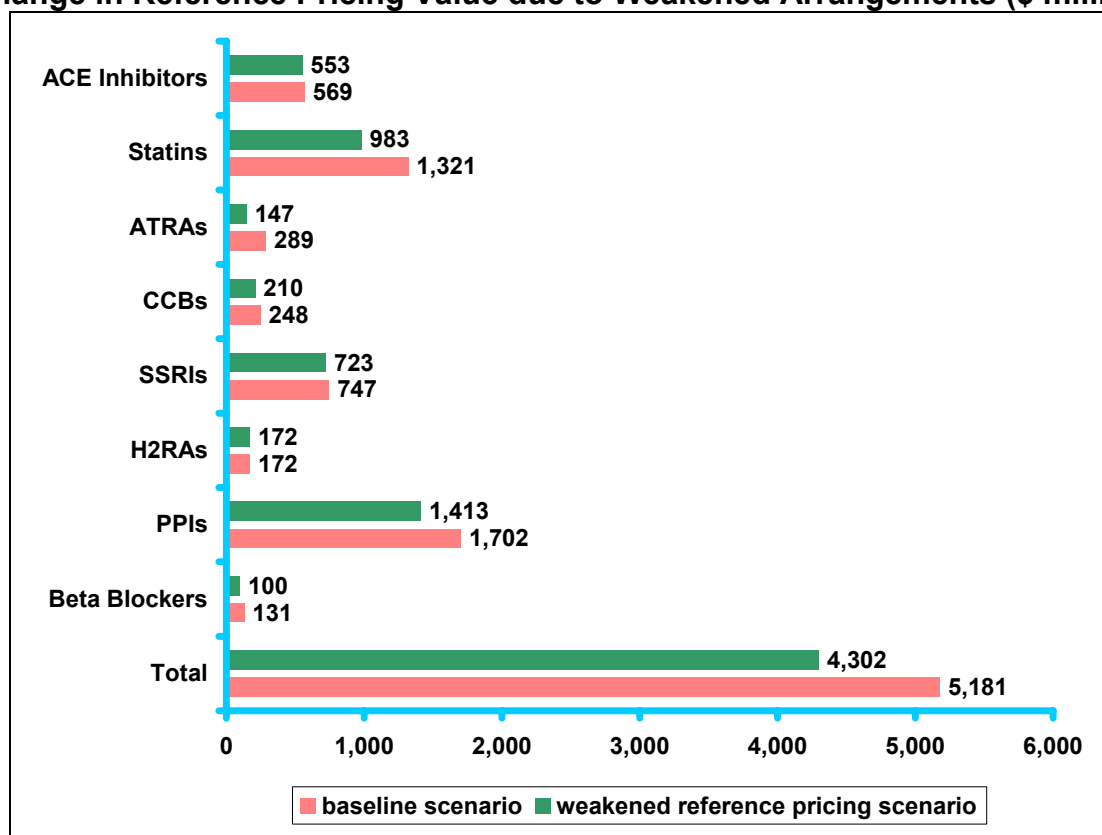
	Off-patent at 1-Apr-08	1-Apr-08	1-Aug-08
Baseline Scenario:			
Amlodipine	Yes	12.5%	12.5%
Diltiazem	Yes	0%	12.5%
Felodipine	Yes	0%	12.5%
Lercanidipine	No	0%	12.5%
Nifedipine	No	0%	12.5%
Weakened Reference Pricing Scenario:			
Amlodipine	Yes	12.5%	12.5%
Diltiazem	Yes	0%	12.5%
Felodipine	Yes	0%	12.5%
Lercanidipine	No	0%	0%
Nifedipine	No	0%	0%

The estimate of the change in the value of reference pricing from weakening the application of the 12.5 per cent price reduction policy is the difference between the two scenarios. These results are discussed in more detail below.

5.2 Estimates of the Reduction in the Value of Reference Pricing

The estimates of the value of reference pricing under both the Baseline Scenario and the Weakened Reference Pricing Scenario are shown in Chart 5.1. It shows that not applying the 12.5 per cent price reduction to the price of on-patent drugs in a WAMTC group after 1 April 2005 is estimated to reduce the value of reference pricing by about \$879 million over five years. This also means that the cost savings to the PBS would fall by the same amount.

Chart 5.1
Change in Reference Pricing Value due to Weakened Arrangements (\$ million)



Source: Generic Medicines Model

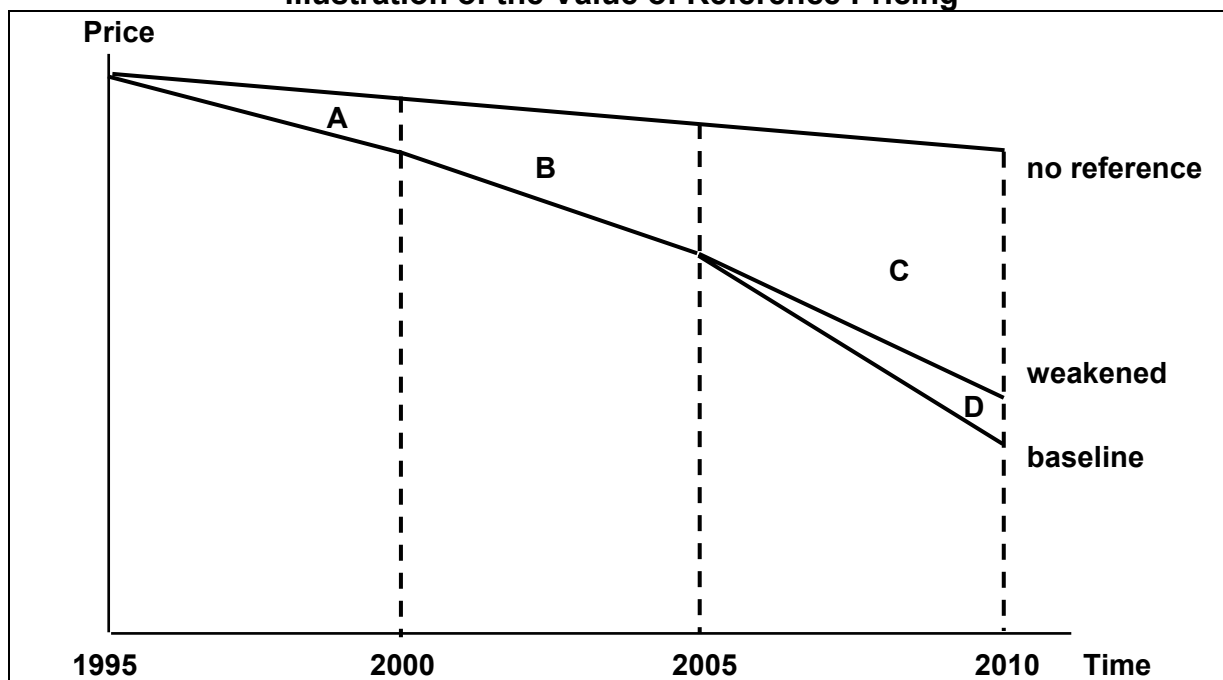
Note: the estimated reduction in value of reference pricing due to the weakened reference pricing arrangements is for the five year period between 1 July 2005 and 30 June 2010.

Chart 5.2 illustrates the fall in the value of reference pricing. For example, the average price of all PBS medicines under the Baseline Scenario is represented by the 'baseline' price line in the chart. The average price of all PBS medicines under the Weakened Reference Pricing Scenario is represented by the 'weakened' price line in the same chart.

Under the Baseline Scenario, the value of reference pricing for the five years from 1 July 2005 is estimated to be about \$5.2 billion, as shown in Chart 5.1. This estimate is also represented by the sum of areas 'A' plus 'B' plus 'C' plus 'D' in Chart 5.2.

The value of reference pricing under the Weakened Reference Pricing Scenario is about \$4.3 billion over the same period of time, as shown in Chart 5.1. This estimate of the weakened value of reference pricing is represented by the sum of areas 'A' plus 'B' plus 'C' in Chart 5.2. The difference between the estimates of the value of reference pricing under each scenario is represented by area 'D' in the chart.

Chart 5.2
Illustration of the Value of Reference Pricing

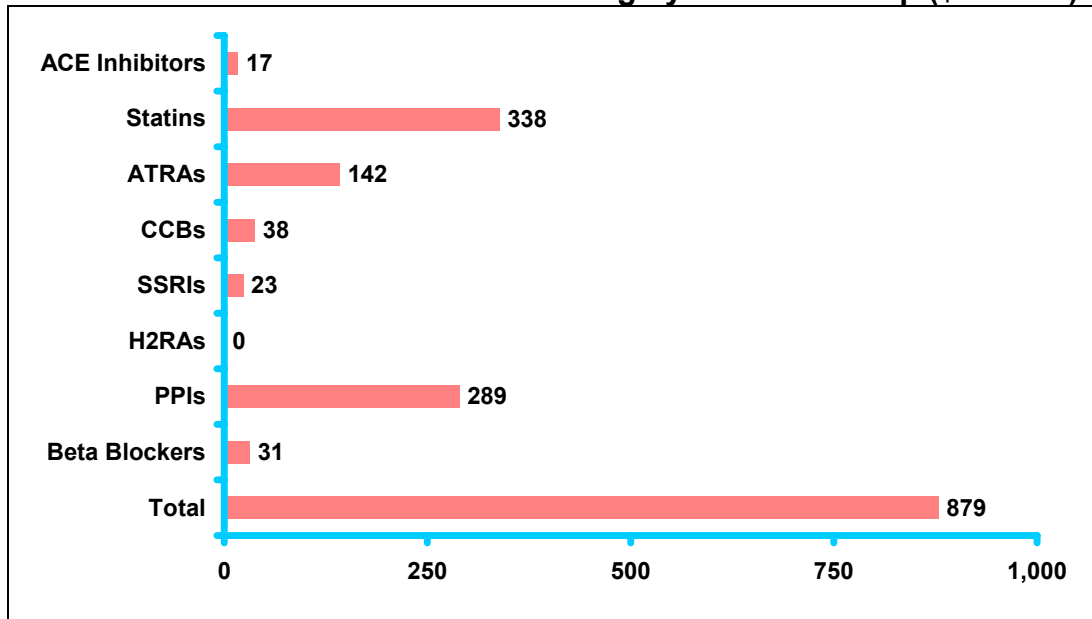


The fall in the value of reference pricing by WAMTC group is shown in Chart 5.3. For example, the chart shows that a large share of the reduction in the value of reference pricing under the Weakened Reference Pricing Scenario is accounted for by the Statins group. This is because when the patent for Simvastatin expires in July 2005, the other two drugs in the Statins group – Pravastatin and Atorvastatin – are still on-patent. So under the Weakened Reference Pricing Scenario, the 12.5 per cent price reduction will only apply when the patents of both Pravastatin and Atorvastatin expire.

Chart 5.3 shows that delaying the application of the 12.5 per cent price reduction to Pravastatin and Atorvastatin reduces the contribution of Statins to the value of reference pricing by about \$338 million over five years. About 95 per cent of this fall is due to Atorvastatin because the patent for this drug does not expire until after 30 June 2010.

Similarly, the chart shows that there is a significant fall in the contribution of the PPIs group to the value of reference pricing. This is the result of delaying the 12.5 per cent price reduction to Esomeprazole, Pantoprazole and Lansoprazole.

Chart 5.3
Reduction in Value of Reference Pricing by WAMTC Group (\$ million)



Source: Generic Medicines Model

Note: the estimated reduction in value of reference pricing due to the weakened reference pricing arrangements is for the five year period between 1 July 2005 and 30 June 2010.

The estimates in this section emphasise how valuable the principals of the current reference pricing arrangements are for delivering cost savings to the PBS. For example, the simulated weakening of the 12.5 per cent price reduction policy is estimated to significantly reduce the value of reference pricing. The fall in the value of reference pricing means that the costs of the PBS would rise by the same amount.

6 National Competition Policy

Since 1995 Australia has been undertaking a comprehensive program of competition reforms. These reforms are aimed at encouraging competitive outcomes and a more efficient use of resources. The National Competition Council was established by all Australian governments in November 1995 to act as a policy advisory body to oversee the implementation of National Competition Policy (NCP).

The key objective of NCP is to enable and encourage competition. For example, NCP aims to develop a more open and integrated Australian market that limits anti-competitive conduct. This means that every business or industry in the Australian economy that is currently sheltered from competition is opened to competition. The only exceptions are those businesses or industries for which it can be demonstrated that there is a net community benefit in restricting competition.

In general, NCP aims to serve the public interest and deliver benefits to the Australian community. The rationale is that competition generally boosts economic performance and enhances consumer welfare. The public interest is measured by an objective assessment of the pros and cons of competition including its effects on employment, social welfare and community service obligations.

The results in this report show that the current reference pricing arrangements have delivered significant benefits to the Australian community in the form of cheaper medicines. For example, Chart 4.3 in Section 4 shows that the average price of pharmaceuticals that has prevailed under the reference pricing system is significantly lower than the average price that would have prevailed if the system was not in place. This price reduction multiplied by the volume of PBS prescriptions represents the value of reference pricing.

The benefits to the community also extend to reducing the cost of the PBS. The value of reference pricing represents the cost savings to the PBS from reference pricing. The results in Section 5 show that a simulated weakening of the current reference pricing arrangements will reduce the value of reference pricing and hence increase the cost of the PBS. The PBS is funded by tax-payers so any change that increases the cost of the PBS creates opportunity costs of the extra tax revenue required to fund this increase. For example, this extra tax revenue would need to be drawn away from other uses such as education and hospital funding.

The current reference pricing arrangements also encourage competition in the pharmaceuticals market. This means that weakening of the principals of reference pricing has the potential to quarantine certain sections of the pharmaceutical industry from competitive market forces. In turn, this isolation has the potential to place additional burdens on the sections of the pharmaceuticals industry where competitive market forces remain in place and uninhibited. For example, this isolation would mean that generic medicine companies would have to compete with each other instead of competing with originator pharmaceutical companies.