

# **60-day dispensing: an analysis of likely impacts and key policy issues**

**A report for the Pharmacy Guild of Australia**  
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12 June 2023

## Disclaimer

This review has been prepared by Henry Ergas AO. The review draws on a Technical Report written by Tulipwood Advisory Pty Ltd (Tulipwood Economics) and the Relational Insights Data Lab (RIDL) at Griffith University in relation to the Australian Government's 60-day MDQ policy. The review summarises the material provided in the Technical Report, draws conclusions based on the material provided, and provides policy recommendations in response to the Technical Report's findings.

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**12 June 2023**

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## Abbreviations

ABS	Australian Bureau of Statistics
AHI	Administration, Handling and Infrastructure (fee)
CBA	Cost Benefit Analysis
CSO	Community Service Obligation (for wholesalers)
DHAC	Department of Health and Aged Care
FTE	Full-time Equivalent (employment)
IA	Impact Assessment
MDQ	Maximum Dispensing Quantity
NMP	National Medicines Policy
NPV	Net present value
OIA	The Office of Impact Analysis (Department of the Prime Minister and Cabinet)
PBAC	Pharmaceutical Benefits Advisory Committee
PBS	Pharmaceutical Benefits Scheme
PC	Productivity Commission
RIDL	Relational Insights Data Lab (Griffith University)
7CPA	7 <sup>th</sup> Community Pharmacy Agreement

# 60-day dispensing: an analysis of likely impacts and key policy issues

## Background

I have been asked by the Pharmacy Guild of Australia to review and draw policy conclusions from a Technical Report prepared by Tulipwood Advisory Pty Ltd (Tulipwood Economics) and the Relational Insights Data Lab (RIDL) at Griffith University in relation to the Australian Government's 60-day MDQ policy. In this paper, I highlight the crucial findings of that Report and advance policy recommendations in response to the Technical Report's findings.

## The Australian Government proposal

On 26 April 2023, the Australian Government announced the introduction of 60-day prescribing for medicines that managed 'stable, ongoing conditions' following advice from the clinical experts at the independent Pharmaceutical Benefits Advisory Committee (PBAC) in December 2022.<sup>1</sup>

The Australian Government plans to implement the MDQ policy change in three stages; the first from 1 September 2023 (where 100 of the 325 medicines will be extended to 60-day MDQ); the second from 1 March 2024; and the third from 1 September 2024. It is not known at this stage which particular medicines will comprise the first tranche of 100, or which and how many medicines will be part of the second and third tranches.

The Australian Government states that:

- General consumers of the 325 medicines will be able save up to \$180 a year if their medicine is able to be prescribed for 60 days and concession card holders will save up to \$43.80 a year per medicine.
- At least 6 million Australians will halve their medicine costs and need fewer visits to the GP and a community pharmacist to get the medicine they use the most. This will, save consumers more than \$1.6 billion over the next four years i.e. from 2023-24 to 2026-27.
- While the quantity of medicine eligible Australians will be able to acquire on a single script will double, overall demand for medicines will remain unchanged. This reform will not affect medicine availability and it will not add to shortages.
- The Australian Government will invest around \$300 million per year between 2023-24 and 2025-26 to maintain current levels of service for the 7<sup>th</sup> Community Pharmacy Agreement (7CPA) programs, restructure existing pharmacy funding and patient access arrangements for opioid dependence therapy and administration of vaccines

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<sup>1</sup> Australian Government Department of Health and Aged Care 2023. *Cheaper medicines to ease the cost of living*. Available at: <https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/cheaper-medicines-to-ease-cost-of-living?language=en>

under the National Immunisation Program<sup>2</sup>, and double the Regional Pharmacy Maintenance Allowance.

- Additionally, \$350 million over four years has been reallocated for community pharmacies to establish and provide a new outreach service into aged care facilities.<sup>3</sup>

## The key issues

It is estimated that almost 75,000 Australians work in the community pharmacy sector.<sup>4</sup> There is a community pharmacy in almost every single town in Australia. This is a large and important industry — it has repeatedly been recognised by Australian governments as an integral part of Australia’s world class health care delivery system and enjoys a very high level of confidence from consumers.

The Australian Government’s MDQ policy change raises a number of important questions around the viability of the sector and about the ability of the Community Pharmacy model, which has operated successfully in Australia for decades, to continue to deliver and support the public health policy objectives for which it bears responsibility. These concerns arise because the model’s viability is threatened by a substantial and sustained decline in community pharmacy income and profitability caused by the reduction in dispensing frequency. This decline will inevitably affect the geographical distribution of the community pharmacy sector (and, hence, community access) as community pharmacies come under financial pressure, pushing some pharmacies to close.<sup>5</sup> The pressures are likely to affect the viability of regional, rural and remote community pharmacies especially acutely, although urban pharmacies will also be affected.

The related job losses in the community pharmacy sector will also be significant and a proportion of these will be either long-term or permanent, with older community pharmacy workers (both community pharmacists and community pharmacist assistants) potentially leaving the labour force altogether. The greatest risk, however, is that the most vulnerable people in the Australian community will suffer from the MDQ policy change. This includes consumers managing multiple health issues, the elderly, those with mobility issues and those in regional Australia that may rely more heavily on their local community pharmacy (and community pharmacist) than their counterparts in urban areas.

In summary, the Australian Government’s MDQ policy change, as currently designed:

- *Fundamentally alters the purpose, structure, incentives and balance of the Community Pharmacy model.* The 7CPA, like its predecessors, provides remuneration guarantees to the community pharmacy sector in return for what amounts to a community service obligation whereby community pharmacists provide a broad range of health services to the Australian community free of charge or at low cost to the consumer. The policy

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<sup>2</sup> Australian Government 2023. *Budget 2023-24: Budget Measures: Budget Paper No. 2*. p.145. Available at: [https://budget.gov.au/content/bp2/download/bp2\\_2023-24.pdf](https://budget.gov.au/content/bp2/download/bp2_2023-24.pdf)

<sup>3</sup> Australian Government Department of Health and Aged Care 2023. *Cheaper medicines to ease the cost of living*. Available at: <https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/cheaper-medicines-to-ease-cost-of-living?language=en>

<sup>4</sup> Pharmacy workforce size and profile is discussed in detail in section 2.

<sup>5</sup> In capital cities, 95 per cent of consumers are no further than 2.5 km from a community pharmacy. In regional areas, 72 per cent of people are within 2.5 km of a community pharmacy.

change seriously threatens the sector's ability to deliver on the 7CPA, which is due to expire on 30 June 2025.

- *Raises issues with respect to the policy process.* In particular, the MDQ policy change appears to be inconsistent with Section 16.3.3. of the 7CPA that specifies an obligation to consult if a proposed change, in the view of the Guild, is likely to have a significant effect on the community pharmacy sector, as well as the intent of the 7CPA remuneration adjustment mechanism (which, due to the timing of the policy change, will not be triggered). The MDQ policy change announcement has come without effective prior consultation (as noted by the Office of Impact Assessment's in its response to Department of Health and Aged Care (DHAC) Impact Assessment (IA)<sup>6</sup>); nor has there been consultation about proposed compensation commensurate with the expected financial impacts for the community pharmacy sector. In this sense, the MDQ policy change is at odds with the long-standing Australian public policy approach of measured and targeted industry assistance to help industries and workers adjust in an orderly way to policy induced changes.<sup>7</sup> While the Australian Government has made claims with respect to 'reinvestment' back into Community Pharmacy, much of the claimed expenditure does not appear to be additional to expenditure which was projected to occur in any event (see discussion at Appendix C of the Technical Report).
- *Will likely adversely affect the health of some Australians, particularly those who are more vulnerable, such as those from lower socioeconomic groups, rural and remote communities, and the elderly who rely on free pharmacy services (including medical advice).*
- *Overstates the fiscal savings derived from the reduction in dispensing fee payments.* This is because there will be a corresponding reduction in co-payment revenues and community pharmacy business tax payments that need to be taken into account in quantifying the fiscal impacts of the estimated dispensing fee savings.
- Overall, the policy change, while potentially benefiting one group of Australians (being the consumers of the 325 PBS medicines subject to the MDQ policy change), could impose a net cost on the Australian community.

## This review

It is obviously important to carefully assess the claimed benefits of the MDQ policy change. Unlike the evaluation which accompanied the government's policy announcement, that is what this review, and particularly the Technical Report on which it draws, does through an analysis of the financial and economic impacts based on actual community pharmacy financial data.

In undertaking that assessment, the Technical Report adopts what is known in economics as a partial equilibrium framework; in other words, it focuses on the direct impacts of the policy

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<sup>6</sup> Taken from: Letter dated 25th April 2023 from Jason Lang, Executive Director OIA to Penny Shakespeare, Deputy Secretary, Health Resourcing Group, DHAC. Available at:

[https://oia.pmc.gov.au/sites/default/files/posts/2023/05/OIA%20Assessment\\_o.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/OIA%20Assessment_o.pdf)

<sup>7</sup> See, for example, Productivity Commission 1999. *Report on Government Services*. Available at:

<https://www.pc.gov.au/ongoing/report-on-government-services/1999>

changes rather than their ultimate effects as other sectors of the economy adjust. This is the standard approach in Cost-Benefit Appraisal, and in the Impact Assessments undertaken by Australian governments. However, it is obvious that in the long run, changes in any one sector are accompanied by expansions or contractions in others. As in the Impact Assessment carried out by the Australian Government, the extent to which, or the pace at which, induced changes occur in other activities is not captured in this analysis, except to the extent specifically noted. Modelling those consequential responses requires a general, rather than partial, equilibrium framework, which raises many technical issues of its own.

Given this strictly partial equilibrium framework, which concentrates on first-round effects, the impacts of the MDQ policy change were analysed across a number of groups in the Australian community, as follows:

- **Financial impacts** on community pharmacies, both at the national level using Pharmaceutical Benefits Scheme (PBS) data and, at the level of the individual pharmacy, using actual pharmacy financial data, by state, territory and by region using the Modified Monash Model (MMM) 7-tier regional structure.<sup>8</sup>
- **Economic impacts** by measuring the economy-wide welfare impacts of the policy in a partial equilibrium cost-benefit analysis (CBA) framework, by aggregating the effects on three groups:
  - Consumers of the 325 PBS listed medicines subject to the MDQ policy change.
  - The community pharmacy sector.
  - The rest of the Australian community not included in the first two groups, including the Australian taxpayer, noting that the impact on Australian Government revenue (i.e. fiscal impacts) is not directly counted in the CBA, as it exactly mirrors the impact on the Australian taxpayer.

## The importance of estimated GP take-up rates

An important parameter in this analysis is the rate at which GPs will adopt the MDQ policy change. The actual GP take-up rates are unknown *ex ante*. The GP take-up rate assumptions in this analysis have been informed by DHAC's submission to the OIA as well as a separate review of previous GP take-up rates of prescribing options — which showed that for 94 per cent of medicines that have an 11 repeat option, GPs still reverted to the default behaviour of writing a five repeat prescription.<sup>9</sup> Another factor will be the Australian Government's planned implementation of the MDQ policy change which (as noted above) will be rolled out in three stages between 1 September 2023 and 1 September 2024. Little information has been provided about the policy rollout other than the fact that the first tranche will include 100 medicines.

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<sup>8</sup> A definition of the MMM regions can be found here: <https://www.health.gov.au/topics/rural-health-workforce/classifications/mmm#:~:text=under%20the%20MMM-,About%20the%20Modified%20Monash%20Model,MM%207%20is%20very%20remote>

<sup>9</sup> Based on a review of PBS data which shows the 11 repeat prescriptions have different PBS item codes so their volume is separately identifiable. More background on the arrangement is at: <https://www.pbs.gov.au/pbs/news/2008/11/New-measure-to-reduce-repeat-prescription-requirements>



From the consumer’s perspective, there is an incentive to request 60-day dispensing — although how quickly consumers become aware of the MDQ policy change is another unknown.<sup>10</sup> Moreover, as noted above, how GPs will react to these requests is not entirely certain. Accordingly, a 100 per cent take-up scenario (which would have maximised the adverse impacts on community pharmacy) was not modelled as it seems unrealistic, given previous experience and that GPs retain the discretion not to implement the MDQ policy change. On balance, this analysis has taken a cautious approach to modelling this parameter.

Three GP take-up scenarios were adopted for the analysis:

1. **The Minimum scenario** which was used by DHAC in its impact assessment submitted to OIA.
2. **The Central scenario** which has been developed based on our own analysis of likely GP take-up rates, which is estimated to be, ultimately, high.
3. **The Maximum scenario** is somewhat arbitrary, but the intention is to understand the maximum impact of the MDQ policy change on individual community pharmacies and the rest of the Australian Community if GP take-up rates proved to be higher than our central scenario anticipates.

Table E-1 illustrates the GP take-up scenarios selected chosen for the review.

**Table E-1 GP take-up rates of 60-day MDQ policy under three scenarios**

GP take-up rate scenario	Year-1	Year-2	Year-3	Year-4
	2023-24	2024-25	2025-26	2026-27
1. Minimum scenario	45%	58%	63%	63%
2. Central scenario	63%	72%	81%	90%
3. Maximum scenario	80%	85%	90%	95%

Source: Tulipwood Economics and RIDL analysis.

## The financial impacts on the community pharmacy sector

The financial impacts on the community pharmacy sector have been estimated using a ‘top-down’ approach based on aggregated PBS dispensing data and a ‘bottom-up’ approach using a large sample of actual pharmacy financial data supplied by several accounting firms.

The financial losses to each community pharmacy will accrue as a result of:

- The loss in dispensing revenues of, for most scripts, around \$13.00 per script (in 2023-24).
- The loss in other retail sales caused by the reduced number of visits to pharmacies (“footfall”), which is estimated to be, *on average*, around \$20.00 in retail sales per visit

<sup>10</sup> The Australian Government has been publicly promoting the MDQ policy change but it’s not clear how quickly patients will become aware of it. See the Health Minister’s press release here: <https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/cheaper-medicines-to-ease-cost-of-living>

foregone, of which a \$6.00 gross margin is counted as a loss to the pharmacy (in 2023-24).<sup>11</sup>

The national level analysis measured the reduction in dispensing revenue only (the first of the two dot points above). Based on the analysis of the publicly available PBS data, at a national level, over the four-period 2023-24 to 2026-27:

- **Minimum scenario:**
  - The estimated reduction in dispensing volumes is **260.5 million scripts** over four years.
  - The corresponding estimated reduction in community pharmacy revenue is **\$3,391.4 million** in nominal terms over four years. This is similar to estimates in Australian Government statements, in which the Australian Government saving has been estimated to be \$1.2 billion and the consumer saving an estimated \$1.8 billion.<sup>12</sup> Both of these would be derived from reductions in community pharmacy dispensing revenue.
- **Central scenario:**
  - The estimated reduction in dispensing volumes is **348.2 million scripts** over four years.
  - The corresponding estimated reduction in community pharmacy revenue is **\$4,532.9 million** in nominal terms over four years.
- **Maximum scenario:**
  - The estimated reduction in dispensing volumes is **397.8 million scripts** over four years.
  - The corresponding estimated reduction in community pharmacy revenue is **\$5,178.5 million** in nominal terms over four years.

Under all scenarios, the financial losses accruing to the community pharmacy sector as a whole industry are significant. It is expected that these losses will translate into either community pharmacy closures (for the most financially stressed pharmacies) and/or community pharmacy sector employment losses, along with likely reductions in the services provided to consumers.

In addition, the financial impact modelling included a pharmacy-level based approach to quantify the financial impact of the MDQ policy change. This approach was based on a large sample of actual pharmacy financial data sourced from commercial online pharmacy calculators (e.g. Nostradata and Strongroom), accounting firms, valuation firms and finance brokers. The dataset, which represents a large sample of pharmacies from all states and territories, was used to account for regional variations in economic circumstances, population

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<sup>11</sup> The estimate of the impact on 'other retail' sales was derived from actual pharmacy level financial data.

<sup>12</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

health, demand for services and existing financial performance (which is relevant to understanding the impacts of the MDQ policy change).<sup>13</sup>

Based on individual community pharmacy level financial data, the estimated impact on net profit of the MDQ policy is as follows:

- Average reductions in net profit per pharmacy per year range between \$169,332 (at the 63 per cent GP take-up) and \$183,925 (at the 90 per cent GP take-up).
- Reductions in net profit per year in median terms range between \$160,138 (at 63 per cent GP take-up) and \$174,887 (at 90 per cent GP take-up).
- A 'lower bound' net profit point has been defined as the lower bound of 1 standard deviation around the average net profit. This lower bound net profit point falls from being positive (+\$9,472 in the Base Case) to negative (between -\$132,407 and -\$147,024 in the Policy Case). What this means is that many pharmacies *even within the first standard deviation of financial performance* will be vulnerable in the Policy Case.
- Moreover, it is estimated that at least one-sixth of all pharmacies (i.e. a further 944 pharmacies in the second and greater standard deviations below the average net profit level) are likely to be in a negative net profit position after the MDQ policy change and will be, therefore, forced to take action such as reducing staff to remain financially viable.

These results are shown in Table 4 4.

**Table E-2 Estimated annual net profit losses by pharmacy, by central scenario GP take-up rate**

Losses relative to 2021-22 actual net profit result	At 63% GP take-up	At 72% GP take-up	At 81% GP take-up	At 90% GP take-up
Average	\$169,332	\$174,196	\$179,061	\$183,925
Median	\$160,138	\$166,117	\$170,224	\$174,887
<b>Change in lower bound Net Profit <sup>a</sup></b>				
Lower bound Net Profit (Base Case)	\$9,472	\$9,472	\$9,472	\$9,472
Lower bound Net Profit (Policy Case)	<b>-\$132,407</b>	<b>-\$137,278</b>	<b>-\$142,151</b>	<b>-\$147,024</b>

**Note:** \*Adjusted for COVID-19 activities (e.g. Rapid Antigen Test and Vaccinations). Note: Given a normal distribution, two-thirds of the pharmacies are expected fall within the first standard deviation. **a** The lower bound estimates reported represent the lower bound of the first standard deviation around average net profit in the sample.

<sup>13</sup> These datasets were sourced from online pharmacy industry calculators, accounting firms and valuation firms. We compared the data to ATO industry benchmarks and Guild Digest data to confirm that the datasets were reflective of the whole industry. To the extent that the average financial performance in the datasets used was above industry averages, that would indicate the results of the analysis are cautious (because it would take a greater policy effect to 'shut down' a pharmacy in the sample than in the normal population of pharmacies).

## Community pharmacy closure and employment impacts

The consequence of the reductions in community pharmacy income and profitability will, ultimately, be the closure of some community pharmacies and job losses. Community pharmacies are likely to shed jobs and reduce their operating hours first to remain viable for as long as possible. However, some community pharmacies will not be able to cover their operating costs, even with reduced staff costs, and will be forced to close. Those pharmacies noted above that will fall into a negative net profit position will obviously be most vulnerable.

In the central scenario, the individual community pharmacy level modelling indicates that:

- **At least 200 community pharmacies will likely close** as a result of the MDQ policy change based on *cautious* assumptions.
- Because of the 3-tranche structure of the policy roll-out and the expected ramp-up in the GP take-up rates, it is expected that peak pharmacy net profit losses will occur in Year-2 (i.e. 2024-25).
- If a debt servicing obligation or return on investment (ROI) requirement is added to the financial analysis, it is estimated that **more than 600 community pharmacies could close**. This estimate is based on a stylised assumption (informed by consultation with the accounting firms, finance brokers and valuation firms that provided information to this review) that the average pharmacy would need \$140,000 per year (in pre-tax terms) to cover debt principal repayments or, if the pharmacy is in a net asset position, a return on investment. The effect of this assumption is to increase the estimated number of pharmacy closures by up to 400, from 200 to 600 pharmacies, with the most vulnerable pharmacies being those that are currently servicing substantial loans associated with purchasing or establishing a pharmacy.<sup>14</sup>
- As noted, the MDQ policy could put up to an estimated **944 additional community pharmacies under significant financial strain** where staff numbers would likely need to be reduced to maintain a positive net profit that could cover debt (principal) payments or ROI obligations as both the MDQ policy ramps up (in terms of the number of medicines in-scope) and the GP take-up rate ramps up.
- In addition, given the estimated reductions in average dispensing revenue per pharmacy, it is likely that all pharmacies will need to review their cost structures. Pharmacies are likely to reconsider staffing levels, opening hours, service levels and service pricing to moderate the impacts of reduced revenue.

At an aggregate level, in the central scenario, it is estimated that:

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<sup>14</sup> Interest payments are already included in the net profit figure that we use (i.e. before tax, after interest and depreciation). Hence, the \$140,000 figure is only a measure of the pre-tax principal payments (see the Technical Report's discussion at section 4.4.1.1). To maintain a cautious bias in the financial modelling, a requirement to earn a ROI has not been specifically modelled.

- **4,938 full time equivalent (FTE) jobs will be lost** over the four-year timeframe due to the MDQ policy change, before considering debt or ROI obligations.
- It is estimated that 80 per cent of those job losses will occur in the first 2 years (2023-24 and 2024-25). Specifically, it is estimated that 38 per cent of the job losses occur in Year-1, 42 per cent in Year-2 (the peak year), 10 per cent in Year-3 and 10 per cent in Year-4.
- In a sector with a high proportion of part-time jobs (35 per cent of community pharmacists work less than 34 hours per week), the employment impacts are more significant when viewed as actual jobs (i.e. headcount) rather than in FTE terms.<sup>15</sup> In the central scenario, a total of **10,863 actual jobs are lost** in the central scenario **over four-years (or 14.7% of all community pharmacy workers), including 801 community pharmacists and 10,062 pharmacy assistants.**<sup>16</sup>

When accounting for debt servicing or return on investment (ROI) obligations, the estimated impacts are greater. In the central scenario, we find that:

- A total of **20,818 individual pharmacy workers** (or 28.1% of all community pharmacy workers) would lose their jobs over the four-year period, with 80 per cent of those job losses occurring in the first 2 years.<sup>17</sup>
- In absolute terms the largest job losses occur in metropolitan centres (i.e. MMM 1 regions).
- However, a proportionately larger proportion of the job losses (relative to population) will occur in large, medium and small regional and rural locations (MMM 3,4 and 5) and remote and very remote communities (MMM 6 and 7).
- When accounting for the full financial obligations of community pharmacies, a total of 3,597 jobs (headcount) will be lost in these regional and remote areas.

Table E-3 shows the estimates of community pharmacy closures and employment losses in the central scenario by debt or ROI obligations. The more cautious estimate excludes a requirement for the community pharmacy to meet its debt obligations (which can be opaque, vary significantly and are, ultimately, unknown) and return on investment requirements (which are also unknown, can also vary significantly and is ultimately at the discretion of the pharmacist/owner). As such, the impacts reported in the first and second columns (no debt/ROI) could be considered to be the minimum expected impact on employment. The impacts reported in the third and fourth columns (with debt/ROI obligations) could be considered an upper limit of the MDQ policy change (based on central scenario assumptions).

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<sup>15</sup> An FTE is a measure of a full-time job that is used in order to compare the number of jobs across industries or between policy options or time periods using a common denominator (being a full-time job).

<sup>16</sup> These job loss estimates are based on an assumed average wage of \$120,000 per annum for a pharmacist and \$50,000 per annum for a pharmacy assistant.

<sup>17</sup> The corresponding job loss figure in FTE terms is 9,461 (see Table E-3).

In practice, the pharmacy store closures are likely to fall somewhere between these two estimates.

**Table E-3 Pharmacy closure and employment impacts, central scenario, by debt and ROI obligations**

Over four years 2023-24 to 2026-27	Central scenario No debt/ROI obligations	% of all Pharmacies or all Pharmacy workers	Central scenario Debt/ROI obligations	% of all Pharmacies or Pharmacy workers
Pharmacy closures	200	3.4%	665	11.3%
Employment losses (FTE)	4,938	n/a	9,461	n/a
Employment losses (persons)	10,863	14.7%	20,818	28.1%
	<u>Memo:</u>			
Employment losses (persons, MMM regions 3,4,5,6,7)	1,670	2.3% [15.4% of total job losses]	3,597	4.9% [17.3% of total job losses]

Source: Tulipwood Economics and RIDL analysis based on actual pharmacy financial data. Pharmacy closure percentages are based on a total of 5,901 pharmacies. Pharmacy job loss percentages are based on a total of 74,014 community pharmacy workers, being 19,420 community pharmacists and 54,594 community pharmacy workers.

## The economic impacts

Building on the financial analysis, a cost benefit analysis (CBA) partial equilibrium model was developed by Tulipwood Economics to measure the broad social welfare impacts of the MDQ policy change on all sectors of the Australian community as follows:

- **The consumers of the 325 PBS listed in-scope medicines** who benefit from fewer co-payments and fewer visits to the GP and pharmacy, offset to some extent by a sub-group of those more vulnerable consumers suffering adverse medical events from less (or worse) interaction with the health care system.<sup>18</sup>
- **The community pharmacy sector** which loses dispensing revenue paid by the Australian Government and, relatedly, other retail revenue as a result of fewer community pharmacy visits (i.e. reduced footfall). The revenue reductions per pharmacy causes a reduction in net profit, which forces many pharmacies to shed jobs and, in some cases, to close.
- **The rest of the Australian community** who are affected because the reduction in co-payment revenue and pharmacy tax payments essentially offsets the savings from avoided dispensing fee payments. There are additional, though inherently difficult to quantify, costs resulting from higher health public expenditure and the loss of human capital (long-term or permanent unemployment) making the overall impact negative.<sup>19</sup>

<sup>18</sup> An additional impact, that has not been measured in the financial or economic analysis, is that it will become harder for some patients to reach the Safety Net threshold – when medications become free for Australia’s most vulnerable patients.

<sup>19</sup> The gain to the rest of the Australian community from re-directed public expenditure is based on a ‘balanced budget’ assumption whereby the net operating balance in the general government sector remains unchanged between the Base Case and the Policy Case.

In the central policy case, the total impact of the 60-day dispensing policy on the Australian community is a **loss of \$1,209.9 million in net present value terms** over 4-years. **The estimated benefit-cost ratio (BCR) is 0.73, which is well below the threshold where the benefits of a policy exceed its costs of 1.0.** In the Central Case, **any benefit to the Australian community from a reduction in patient co-payments and government savings on dispensing fees is outweighed by the impact on the Community Pharmacy sector.**

In all three scenarios the BCR result is very low and would, under normal assumptions, provide an indication not to proceed with the policy in its current form.<sup>20</sup> The results are shown in Table E-3.

**Table E-3 CBA results, breakdown of net benefits by sector**

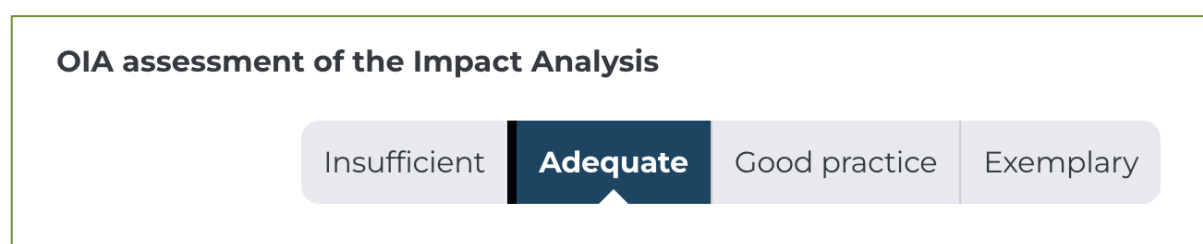
Sector	Minimum scenario	Central scenario	Maximum scenario
Rest of the Australian community	973.4	<b>1,693.5</b>	1,852.1
Pharmacy sector	-1,675.9	<b>-2,903.4</b>	-3,205.6
<b>Total (whole Australian Community)</b>	-702.5	<b>-1,209.9</b>	-1,353.5
Benefit-Cost Ratio (BCR)	0.74	<b>0.73</b>	0.73

Source: Tulipwood Economics and RIDL analysis. The Benefit-Cost Ratio divides the aggregated benefits of the policy by the aggregated costs. For example, if benefits were \$150 and costs were \$100, then the BCR would be equal to 1.5.

## Limitations of DHAC’s own impact assessment

As required by legislation, DHAC submitted an IA of the MDQ policy change to the OIA on 17 April 2023.<sup>21</sup> The IA was assessed as ‘adequate’ by OIA, as shown in Figure E-1.

**Figure E-1 Office of Impact Analysis rating of DOHA’s IA report<sup>22</sup>**



The OIA assessment noted shortcomings in DHAC’s stakeholder consultations, in particular with small businesses and rural and remote pharmacies, and the absence of metrics to evaluate the impacts of the policy on stakeholders, as follows:

<sup>20</sup> Moreover, generally, to account for the risks around predicting the future, an estimated BCR well-above 1.0 (e.g. around 1.5) would justify proceeding with the policy reform with confidence.

<sup>21</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>22</sup> The Office of Impact Analysis 2023. *Lowering the cost of medicines through changes to maximum dispensing quantities: OIA assessment of the Impact Analysis*. Available at: <https://oia.pmc.gov.au/published-impact-analyses-and-reports/lowering-costs-medicines-through-changes-maximum-dispensing>

*The Office of Impact Analysis' (OIA's) assessment is that the quality of the analysis in the IA is adequate, and therefore sufficient to inform a decision. To have been assessed as 'good practice' under the Guide, the IA would have benefited from more recent public consultations on potential stakeholder impacts, particularly for small businesses and pharmacies in rural and remote areas. Moreover, where stakeholder impacts are difficult to ascertain at this point in time (e.g., individual pharmacy-level financial impacts), the IA would have benefited from a more detailed evaluation plan that outlines metrics and data required to monitor the impacts on stakeholders following implementation.<sup>23</sup>*

DHAC's analysis could be improved in a number of important respects:

- The evidence regarding a lack of affordability of PBS medicines is based on dated, and arguably selective, survey data, undertaken prior to the Australian Government lowering the General Co-payment from \$42.50 to \$30.00 (from 1 January 2023), which would have had a positive effect on medicine affordability.
- Despite the requirement for analyses of this kind to assess a number of options, no policy alternatives are presented, other than DHAC's preferred model. In particular, no policy options that might have avoided the most damaging aspects of the MDQ policy changes are considered.
- The analysis fails to articulate the full costs of the MDQ policy change. Rather than supporting the 'sustainability of the PBS', as DHAC claims, by eliminating a significant share of co-payments, the MDQ policy change could significantly increase the net costs of the PBS which would, in turn, need to be paid for by taxpayers.
- The analysis fails to consider the medium-term effects of the MDQ policy change on the community pharmacy sector. A policy change that, as DHAC describes, will cut dispensing revenues by 18 per cent (DHAC's estimate) on average and likely also have effects on non-PBS sales, is surely likely to affect the community pharmacy sector and its ability to deliver on the 7<sup>th</sup> CPA.

## The broader policy context

It is important to consider the Australian Government's proposed changes in the context of the broader health policy objectives that guide the regulation and operation of the community pharmacy sector.

From a public policy perspective, the central role of community pharmacies is better characterised as one of agents who provide services to consumers on behalf of the Australian Government i.e. the dispensing of medicines and the provision of advisory and related services. In this context, the Australian Government has an interest in ensuring that dispensing and advisory services are provided efficiently, equitably and to a high standard. This is because it wishes to promote good health outcomes and bears the direct budget costs of the dispensing fees and the medicines dispensed and also because it bears many of the indirect costs that arise when poor outcomes prevail.

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<sup>23</sup> Taken from: Letter dated 25th April 2023 from Jason Lang, Executive Director OIA to Penny Shakespeare, Deputy Secretary, Health Resourcing Group, DHAC. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/OIA%20Assessment\\_o.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/OIA%20Assessment_o.pdf)



These considerations have underpinned policy decisions about community pharmacy by successive governments. It is reasonable to expect that any material change in those policy parameters would involve careful analysis and broad-ranging consultation, all the more so as pharmacies have incurred substantial sunk costs so as to be in a position to meet government policy objectives. However, those requirements, which are at the heart of good policy process, do not appear to have been met in this case to date.

## Conclusions

The MDQ policy change announced by the Australian Government will provide one group in the Australian Community with cheaper medicines (being the consumers of the 325 in-scope medicines under the MDQ policy); however, it will at the same time:

- **Withdraw more than \$4.5 billion (in nominal terms) out of a single industry sector** in the space of four years, substantially affecting its capacity to recover costs which were incurred in good faith.
- **Withdraw, on average, between \$169,332 and \$183,925 per community pharmacy per year** over four years depending on the GP take-up rate trajectory.
- **Lead to the likely closure of at least 200 community pharmacies and, potentially, up to 600 community pharmacies** and, moreover, **put a further 900 community pharmacies under financial stress.**
- **Disproportionally impact vulnerable communities**, such as those in regional and remote Australia. The risk of disproportionate impacts also arises with respect to community pharmacy services for Aboriginal and Torres Strait Islander peoples, who are over-represented (in demographic terms) in regional and remote Australia compared to the cities.
- **Lead to the loss of 4,938 jobs (in FTE terms) and potentially up to 9,461 jobs (in FTE terms).**
- Due to the high rate of part-time employment in the community pharmacy sector, potentially **lead to the loss of 10,863 actual jobs and up to 20,818 actual jobs** depending on the GP take-up rate and the current (pre-policy) levels of debt in the community pharmacy sector.
- **Potentially have adverse impacts on the health** of Australia's most vulnerable citizens who rely on their local community pharmacist for advice, reassurance and guidance.
- Potentially lead to **an increase in Australia's rate of prescription overdose** (from increased medicines in the home) and rate of missed diagnosis and misdiagnosis (from less interaction between patients and their GPs and pharmacists).
- Not provide **long-term fiscal savings** to the Australian Government in net terms that could be passed on to the Australian taxpayer in the form of increased public services or reduced taxes (because the reduction in dispensing fee payments is offset by a reduction in patient co-payments and reduced tax revenue paid by the community pharmacy sector as well as increased health care costs).

Given the range and scale of those impacts, there must be a real question whether the community pharmacy sector, as a geographically dispersed network of agents who help deliver the Australian Government's health policy objectives, will be able to continue to deliver on that mission under the policy set to commence in the September quarter 2023.

Therefore, to proceed on the grounds of the 'broad-brush' or 'first-round' impact assessment that has been presented by DHAC and adopted by the Australian Government (as 'Adequate') puts at risk the benefits that the Community Pharmacy model delivers to the Australian community.

## Recommendations

It hardly needs to be said that there are many difficulties involved in an analysis of this type. While every effort has been made in the analysis to address those difficulties by drawing on an exceptionally broad range of high quality data sources, the government, parliament and the Australian community may well feel more comfortable if the conclusions set out here are subject to further testing.

More generally, given the size of the estimated financial and broader economic impacts of the MDQ policy, especially on Australia's regions, and the uncertainty around the implementation of the policy rollout and the GP take-up rate, it would seem sensible for the next steps to be:

1. **Suspend the implementation of the first tranche of the MDQ policy change**, currently set for 1 September 2023, until an evidence-based, independent review of the financial and economic impacts on the community pharmacy sector and the Australian community more broadly is undertaken and the impacts properly understood.

As a key part of this independent analysis, the rate of GP take-up of the policy should be closely scrutinised and better understood. Additionally, more details about which medicines would be in-scope and at which tranche of implementation, should be provided to facilitate the independent analysis.

2. As part of the independent review and in considering its recommendations, **engage in meaningful consultation with all stakeholders** in the community pharmacy sector (peak bodies, consumer bodies and individual pharmacists across all of Australia's diverse regions) so as to properly test the impacts of the MDQ policy change at the individual community pharmacy level, at regional levels, and at a national level. This process would include consultation on how adverse impacts could be mitigated, both through changes to policy design and to the phasing in of the policy and/or via appropriately targeted compensation, so as to ensure community pharmacy could continue to play its central role in the health policy mix.

## References

Australian Government (2023), Lowering the costs of medicines through changes to maximum dispensing quantities, The Office of Impact Analysis (OIA), Department of the Prime Minister and Cabinet. 12 May 2023. ID:22-03771 Accessed: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

## **60-day dispensing**

*Financial and economic analysis of extending  
the MDQ for 325 PBS listed medicines*

**A Technical Report for the Pharmacy Guild of  
Australia**

Final Report  
12 June 2023

## Disclaimer

This Technical Report has been prepared by Tulipwood Advisory Pty Ltd (Tulipwood Economics) and the Relational Insights Data Lab (RIDL) at Griffith University. **Joe Branigan** is the Director of Tulipwood Economics and has led the economic modelling that supports this review. **Dr Tom Nik Verhelst** is the Director at RIDL and has led the financial modelling that supports this review.

The information, statements, statistics and commentary (information) contained in this document has been prepared from publicly available material, pharmacy data calculator providers (being 'Nostradata' and 'Strongroom'), a number of accounting firms, pharmacy brokers and valuation firms (listed below). The economic modelling supporting the report's findings and conclusions has relied on the financial analyses of the MDQ policy change undertaken by RIDL.

Accounting firms, valuers and pharmacy brokers that provided data and were willing to be acknowledged includes: Pitcher Partners, Yarra Lane, Peak Strategies, Perks, Holman Hodge, Findex, RSM Australia, Vincent's, Grimsey, Medici Capital, Rose Partners, CFS Sales and Valuations and Kizmet Capital.

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**12 June 2023**

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## Abbreviations

ABS	Australian Bureau of Statistics
AHI	Administration, Handling and Infrastructure (fee)
ANZSIC	Australian and New Zealand Standard Industrial Classification
CBA	Cost Benefit Analysis
CSO	Community Service Obligation (for wholesalers)
DAAs	Dose Administration Aids
DALY	Disability Adjusted Life Year
DHAC	Department of Health and Aged Care
FTE	Full-time Equivalent (employment)
GRP	Gross Regional Product
GSP	Gross State Product
IA	Impact Assessment
IDAAs	Indigenous Dose Administration Aids
MDQ	Maximum Dispensing Quantity
MEB	Marginal Excess Burden
NEC	Not elsewhere classified
NHMRC	National Health and Medical Research Council
NMP	National Medicines Policy
NPV	Net present value
OIA	The Office of Impact Analysis (Department of the Prime Minister and Cabinet)
OTC	Over the Counter
PBAC	Pharmaceutical Benefits Advisory Committee
PBS	Pharmaceutical Benefits Scheme
PC	Productivity Commission
DPMQ	Dispensed Price for Maximum Quantity
QUM	Quality Use of Medicines
R&D	Research and development
RIDL	Relational Insights Data Lab (Griffith University)
RPBS	Repatriation Pharmaceutical Benefits Scheme
7CPA	7 <sup>th</sup> Community Pharmacy Agreement
TGA	Therapeutic Goods Administration



VSL	Value of a Statistical Life
VSLY	Value of a Statistical Life Year

# 1. Introduction

## 1.1 About this report

The purpose of this Technical Report is to analyse the potential impacts of the Australian Government's 60-day Maximum Dispensing Quantity (MDQ) policy on the Australian community. This policy extends the MDQ for 325 medicines from 30-days to 60-days in three tranches beginning in September 2023.<sup>1</sup>

This report has been prepared by Tulipwood Advisory Pty Ltd (Tulipwood Economics) and the Relational Insights Data Lab (RIDL) at Griffith University. In a companion report, Professor Henry Ergas AO provides an independent assessment of this Technical Report.

## 1.2 The Australian Government proposal

On 26 April 2023, the Australian Government announced the introduction of 60-day prescribing for medicines that managed 'stable, ongoing conditions' following advice from the clinical experts at the independent Pharmaceutical Benefits Advisory Committee (PBAC) in December 2022.<sup>2</sup>

The Australian Government plans to implement the MDQ policy in three stages, with the first operating from 1 September 2023 (for an initial tranche of 100 medicines), the second from 1 March 2024 and the third from 1 September 2024.

The Australian Government states that:

- General consumers of the 325 medicines will be able save up to \$180 a year if their medicine is able to be prescribed for 60 days and concession card holders will save up to \$43.80 a year per medicine.
- At least 6 million Australians will halve their medicine costs and need fewer visits to the GP and a community pharmacist to get the medicine they use the most. This will, save consumers more than \$1.6 billion over the next four years i.e. from 2023-24 to 2026-27.
- While eligible Australians will be able to acquire double the medicine on a single script, overall demand for medicines will remain unchanged. This reform will not affect medicine availability and it will not add to shortages.
- The Australian Government will invest around \$300 million per year between 2023-24 and 2025-26 to maintain current levels of service for the 7<sup>th</sup> Community Pharmacy Agreement (7CPA) programs, restructure existing pharmacy funding arrangements for

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<sup>1</sup> A full list of the medicines can be found here: Sixty day dispensing of Pharmaceutical Benefits Scheme medicines <https://www.pbs.gov.au/industry/listing/elements/pbac-meetings/pbac-outcomes/2022-12/Increased-Dispensing-Quantities-List-of-Medicines.pdf>

<sup>2</sup> Australian Government Department of Health and Aged Care 2023. *Cheaper medicines to ease the cost of living*. Available at: <https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/cheaper-medicines-to-ease-cost-of-living?language=en>

opioid dependence therapy and administration of vaccines under the National Immunisation Program<sup>3</sup> and double the Regional Pharmacy Maintenance Allowance.

- Additionally, \$350 million over four years has been reallocated for community pharmacies to establish and provide a new outreach service into aged care facilities.<sup>4</sup>

### 1.3 The role of community pharmacies

Community pharmacies are at the core of health service delivery in Australia and, in particular, deliver a number of broad Australian Government and state and territory government health policy objectives.

The Australian Government's health policy framework is underpinned by a combination of agreements negotiated with the Pharmacy Guild of Australia (the Guild) on behalf of community pharmacies (the current one being the Seventh Community Pharmacy Agreement (7CPA)) and the statutes and regulations regarding community pharmacies. In combination, these define how, by whom and in what contexts medicines are dispensed to consumers, what type and quality of services community pharmacies provide to consumers and how they are reimbursed, how easily consumers can access medicines and other issues.

From a national health policy viewpoint, community pharmacies have at least three important community functions:

- Providing safe and effective access to pharmaceuticals for all Australians.
- Ensuring that consumers receive effective advice on the use of potentially harmful drugs.
- Containing the cost of the PBS in order to maintain its future financial viability.

The Australian Government's announced MDQ policy changes will affect the capacity of, and how, community pharmacies contribute to achieving the aims of the broader Australian health policy framework. As such, the changes should be considered carefully, which is what this Technical Report sets out to do.

### 1.4 Structure of this report

This structure of this report is shown in Table 1.1.

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<sup>3</sup> Australian Government 2023. *Budget 2023-24: Budget Measures: Budget Paper No. 2*. p.145. Available at: [https://budget.gov.au/content/bp2/download/bp2\\_2023-24.pdf](https://budget.gov.au/content/bp2/download/bp2_2023-24.pdf)

<sup>4</sup> Australian Government Department of Health and Aged Care 2023. *Cheaper medicines to ease the cost of living*. Available at: <https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/cheaper-medicines-to-ease-cost-of-living?language=en>

**Table 1-1: Report structure**

Section #	Title	Details
1	Introduction	Brief introduction to the review
2	Community pharmacy in Australia	Overview of the community pharmacy sector and its scope and scale
3	The policy and regulatory context	Overview of the context for the community pharmacy sector
4	Financial impacts on the community pharmacy sector of 60-day dispensing	The assessment of financial impacts on the community pharmacy sector
5	Economic impacts on the community pharmacy sector of 60-day dispensing	Economic impacts on the community pharmacy sector of 60-day dispensing using a cost-benefit analysis
6	Consideration of DHAC's Impact Assessment report	An independent review of the Office of Impact's Second Pass Final Assessment Impact Analysis
7	Conclusions	Main conclusions from the review
-	Appendices	Modelling assumptions used in the financial analyses (Appendix A and B) and economic analysis (Appendix C)

## 2. Community pharmacy in Australia

### 2.1 Overview

This section provides a profile of the community pharmacy sector in Australia — an industry that supports almost 75,000 workers and 26 million patients and customers. The section describes the size, workforce characteristics and role of the community pharmacy sector and, in particular, the importance of the public interest in the structure, financing and operation of the sector.

#### A note on the data in this section:

Where possible:

- The most recent publicly data available has been used.
- Data has been mainly sourced from the DHAC and the ABS.
- Data from the DHAC is mostly used in preference to ABS data because it is more recent and is based on Australian Government records of registrants and classifications of pharmacists rather than self-reported information. Where ABS data is used it is used as proportions rather than absolute numbers.

### 2.2 Pharmacists in Australia

The most recent data for all Australian pharmacists from March 2023 shows that the geographical distribution of the pharmacist workforce approximately matches the distribution of the Australian population with 60 per cent of pharmacists working in NSW/ACT and Victoria. A further 20 per cent of pharmacists work in Queensland with the remaining 20 per cent operating in the other states and territories. See Table 2-1.

**Table 2-1 Number of registered pharmacists by type and principal place of practice<sup>5</sup>**

Registration type	NSW + ACT	VIC + TAS	QLD	WA, SA + NT	No PPP*	Total
General	10,162	9,262	6,502	6,157	182	32,265
Provisional	730	695	411	474	44	2,354
Limited	4	2	6	5	1	18
Non practising	396	338	211	157	368	1,470
<b>Total</b>	<b>11,292</b>	<b>10,297</b>	<b>7,130</b>	<b>6,793</b>	<b>595</b>	<b>36,107</b>
<b>%</b>	<b>31.3%</b>	<b>28.5%</b>	<b>19.7%</b>	<b>18.8%</b>	<b>1.6%</b>	<b>100.0%</b>

\* PPP = Principal Place of Practice.

<sup>5</sup> Pharmacy Board of Australia 2023. *Registrant data: Reporting period: 01 January 2023 to 31 March 2023*. p.4. Available at: <mailto:https://www.ahpra.gov.au/documents/default.aspx?record=WD23%2f32782&dbid=AP&chksum=2eNVEtHB2oBsk8m%2fvJJ+w==>

In terms of registered pharmacists per head of population across Australia’s states and territories:<sup>6</sup>

- The geographically smaller jurisdictions Tasmania (149) and ACT (147) have the highest number of pharmacists per 100,000 head of population.
- Western Australia (128), South Australia (127), Queensland (123) and Victoria (122) have similar numbers of pharmacists per 100,000 head of population.
- NSW (116) and the Northern Territory (111) have lower numbers of pharmacists than the other states and territories per 100,000 head of population.

All states and territories have more than 100 per 100,000 persons which is the World Health Organisation goal.<sup>7</sup>

Around 53% of the total number of pharmacists work as community pharmacists<sup>8</sup> (see Section 2.3) with the remaining 47% working in public hospitals, in aged care and respite facilities, in prisons, as consultants and in the corporate health sector.

## 2.3 Community pharmacists in Australia

The most recent data for practicing community pharmacists in Australia is from the DHAC 2021 data tables. Table 2-2, which reports practising community pharmacists by Modified Monash Model region, shows that in 2021, there were 17,594 practicing community pharmacists and that, on average, the number of community pharmacists has grown by 1.8% over the past eight years.

**Table 2-2 Number of community pharmacists by MMM<sup>9</sup>**

Year	MM1	MM2	MM3	MM4	MM5	MM6	MM7	Overseas/ Unknown	Total	% Change
2013	11,012	1,267	1,056	668	853	147	68	3	15,074	
2014	11,333	1,299	1,030	681	876	141	71	3	15,434	2.4%
2015	11,637	1,328	1,053	672	891	137	71	-	15,789	2.3%
2016	11,773	1,341	1,064	672	881	156	74	-	15,961	1.1%
2017	12,173	1,400	1,074	666	875	148	77	-	16,413	2.8%
2018	12,418	1,388	1,071	675	901	148	78	-	16,679	1.6%
2019	12,453	1,425	1,090	686	923	141	76	11	16,805	0.8%
2020	12,951	1,485	1,138	672	912	154	76	12	17,400	3.5%
2021	13,087	1,501	1,158	684	900	167	85	12	17,594	1.1%

The MMM split highlights the concentration of community pharmacists in major cities and shows:

- 74.5 per cent work in major cities (MMM1).
- 8.5 per cent work in regional areas (MMM2).

<sup>6</sup> APRHA 2020. *Pharmacists - a snapshot as at 30 June 2020*. p.1. Available at:

<https://www.ahpra.gov.au/documents/default.aspx?record=WD22%2f31762&dbid=AP&chksum=YQEjlxTdnbnxO%2b3QH5Q7lQ%3d%3d>

<sup>7</sup> World Health Organisation 2023. *The Global Health Observatory: Density of pharmaceutical personnel* (per 1,000 population). Available at: <https://www.who.int/data/gho/indicator-metadata-registry/imr-details/320>

<sup>8</sup> Department of Health 2023. *Health Workforce data: National Health workforce dataset 2021*. Available at: <https://hwd.health.gov.au>

<sup>9</sup> Department of Health 2023. *Health Workforce data: National Health workforce dataset 2021*. Available at: <https://hwd.health.gov.au>

- 15.6 per cent work in rural areas (MMM3, 4 and 5).
- 1.4 per cent work in remote and very remote areas (MMM6 and 7).

Of the total number of community pharmacists, 56 per cent are female and 44 per cent are male but this split is skewed across age brackets. Although in total there are 38 per cent community pharmacists below 20-34 years old and 69 per cent 35-44 years old, both these age brackets have a higher proportion of females. This is shown in Table 2-3.

**Table 2-3 Gender split and cumulative % by age of community pharmacists<sup>10</sup>**

Age	Male	Female	Male cumulative %	Female cumulative %	% cumulative
20-34	32.9%	42.2%	32.9%	42.2%	38%
35-44	30.6%	31.2%	63.5%	73.4%	69%
45-54	17.2%	15.1%	80.7%	88.5%	85%
55-64	11.9%	8.5%	92.6%	97.0%	95%
65-74	5.7%	2.6%	98.3%	99.6%	99%
75-99	1.7%	0.4%	100.0%	100.0%	100%
Total	100.0%	100.0%			
<b>Gender split</b>	<b>44.0%</b>	<b>56.0%</b>			

There is some concern for the future viability of the community pharmacy profession with a recent study finding that the number of registered, working community pharmacists in Australia was growing at a slower rate than other health professions. Further, younger per cent pharmacists in the 25 to 34 age group are less likely to stay in the profession beyond 10 years.<sup>11</sup> Only 10 per cent of the workforce is over 55 years old, indicating that the COVID-19 pandemic may have led to an exit from the profession for older pharmacists nearing retirement age.

In terms of hours worked per week:

- 12 per cent of pharmacists work 50 hours or more per week.
- 53.7 per cent work 35-49 hours per week.
- 20.9 per cent work 20-34 hours per week.
- 13.6 per cent work less than 19 hours per week.

Approximately 35 per cent of community pharmacists work less than 34 hours per week and this illustrates the part time nature of the workforce. This is shown in Table 2-4.

<sup>10</sup> Department of Health 2023. *Health Workforce data: National Health workforce dataset 2021*. Available at: <https://hwd.health.gov.au>

<sup>11</sup> Jackson, J.K., Liang, J. & Page, A.T. 2021. Analysis of the demographics and characteristics of the Australian pharmacist workforce 2013–2018: decreasing supply points to the need for a workforce strategy. *Int J Pharm Pract* 2021; 29: 178–85. <https://doi.org/10.1093/ijpp/riao22>

**Table 2-4 Hours worked per week by community pharmacists<sup>12</sup>**

	Number of community pharmacists					
	1-19 hours	20-34 hours	35-49 hours	50-64 hours	65-79 hours	80-125 hours
20-34	671	958	4,294	485	57	26
35-44	805	1,259	2,587	544	64	22
45-54	336	666	1,291	388	45	6
55-64	257	441	718	255	29	8
65-74	183	198	225	58	7	3
75-99	66	48	42	8	3	3
<b>Total</b>	<b>2,318</b>	<b>3,570</b>	<b>9,157</b>	<b>1,738</b>	<b>205</b>	<b>68</b>
% total hours	13.6%	20.9%	53.7%	10.2%	1.2%	0.4%

## 2.4 The size and scope of the community pharmacy sector

### 2.4.1 Community pharmacies in Australia

As at 30 June 2022 there were 5,901 community pharmacies in Australia. The MMM split highlights the concentration of community pharmacies in major cities and shows:

- 69.1 per cent of community pharmacies are in major cities (MMM1).
- 8.3 per cent of community pharmacies are in regional areas (MMM2).
- 20.1 per cent of community pharmacies are in rural areas (MMM3, 4 and 5).
- 2.6 per cent of community pharmacies are in remote and very remote areas (MMM6 and 7).

This is shown in Table 2-5.

**Table 2-5 Number and distribution of community pharmacies across Australia<sup>13</sup>**

State	MMM 1	MMM 2	MMM 3	MMM 4	MMM 5	MMM 6	MMM 7	Total	% total
ACT	81	-	-	-	-	-	-	81	1.4%
NSW	1,426	41	210	116	164	13	6	1,976	33.5%
NT	-	32	-	-	-	7	2	41	0.7%
QLD	718	221	30	57	95	21	23	1,165	19.7%
SA	296	7	32	15	64	15	6	435	7.4%
TAS	-	93	22	-	32	6	1	154	2.6%
VIC	1,054	67	73	66	121	3	-	1,384	23.5%
WA	501	26	35	7	50	27	19	665	11.3%
<b>Total</b>	<b>4,076</b>	<b>487</b>	<b>402</b>	<b>261</b>	<b>526</b>	<b>92</b>	<b>57</b>	<b>5,901</b>	<b>100.0%</b>
% total	69.1%	8.3%	6.8%	4.4%	8.9%	1.6%	1.0%	100.0%	

<sup>12</sup> Department of Health 2023. *Health Workforce data: National Health workforce dataset 2021*. Available at: <https://hwd.health.gov.au>

<sup>13</sup> Australian Government Department of Health and Aged Care 2022. *PBS Expenditure and Prescriptions Report 1 July 2021 to 30 June 2022*. Table 13, p18. Available at: <https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions-report-1-july-2021-to-30-june-2022> and



Community pharmacies are the main vehicle for providing prescription and scheduled OTC medicines prescribed by GPs and specialists to their patients. The number of community pharmacies has grown at 1.01 per cent per year, on average, since 2013.<sup>14</sup>

In Australia's capital cities, 97 per cent of residents are no further than 2.5 km from a community pharmacy. In regional areas, 66 per cent of people are within 2.5 km of a community pharmacy.<sup>15</sup>

Visits to community pharmacies are high which demonstrates the role community pharmacies play in people's lives. The average Australian visited a community pharmacy 18 times in 2021 for example:<sup>16</sup>

- Visitation was highest in Queensland (20.4 times) and lowest in Western Australia (15.7 times) and Victoria (15.8 times).
- By region, it ranged from 19 visits in capital cities to 11 visits in rural areas (more than 5km from the nearest rural town).
- Men (19 times) visited a community pharmacy somewhat more often than women (17 times).
- By age, people over 65 visited most often (21 times) and almost twice as often than in the 18-24 group (11 times).
- Income did not seem to unduly influence the result, ranging from 20 times in the \$35-50,000 p.a. income group to 18 times in the \$100,000+ p.a. income group.

#### 2.4.2 The community pharmacy business model

Under state and territory laws, community pharmacies in Australia are owned by pharmacists. The total turnover per pharmacy in Australia averaged \$3.7m in 2021<sup>17</sup> and this is consistent with the ATO definition of a 'small business' as one which has a turnover of less than \$10 million.<sup>18</sup>

Whilst retaining their 'independent', small business nature, 88 per cent of community pharmacies are part of one of the five major pharmacy banners including, TerryWhite Chemmart (approximately 500 pharmacies<sup>19</sup>), Priceline Pharmacy (470 pharmacies<sup>20</sup>),

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<sup>14</sup> Calculated based on year on year change since 2013 using data from Australian Government Department of Health and Aged Care 2022. *PBS Expenditure and Prescriptions Reports*. Available at: <https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions>. For comparison, the Australian population grew by 0.8 per cent per year since 2018, but the period included the COVID-19 affected years. The current annual population growth rate (as at September 2022) is 1.63%.

<sup>15</sup> The Pharmacy Guild of Australia 2023. *Vital facts on community pharmacy*. p1. Based on 2020 data. Available at: [https://www.guild.org.au/\\_data/assets/pdf\\_file/0017/115127/Vital-Facts-April-2023.pdf](https://www.guild.org.au/_data/assets/pdf_file/0017/115127/Vital-Facts-April-2023.pdf)

<sup>16</sup> Adapted from: National Australia Bank 2022. *NAB Pharmacy Survey 2021*. Available at: <https://business.nab.com.au/wp-content/uploads/2021/08/NAB-Pharmacy-report-FINAL.pdf>

<sup>17</sup> Pharmacy Guild of Australia. 2022 *Guild Digest*. p20.

<sup>18</sup> ATO 2023. *Work out if you're a small business for the income year*. Available at: <https://www.ato.gov.au/Business/Small-business-entity-concessions/Eligibility/Work-out-if-you-re-a-small-business-for-the-income-year/>

<sup>19</sup> TerryWhite Chemmart 2023. *About us*. Available at: <https://terrywhitechemmart.com.au/about/about-us>

<sup>20</sup> Australian Pharmaceutical Industries Pty Ltd 2023. *The Story of Priceline*. Available at: <https://www.priceline.com.au/newsroom/newsroom-the-story-of-priceline#:~:text=Priceline%20currently%20employs%20over%207000,470%20stores%20across%20the%20country.>

Chemist Warehouse (440 pharmacies<sup>21</sup>), Amcal Pharmacy (200 pharmacies)<sup>22</sup>, Guardian Pharmacy (150 pharmacies<sup>23</sup>) and Blooms the Chemist (100 pharmacies<sup>24</sup>).

Most of these, and pharmacies in other banner groups in Australia, operate as independent small businesses while, at the same time, being part of large brand groupings, for example:

- Sigma Healthcare includes Amcal, Guardian, Discount Drug Stores (DDS), PharmaSave and WholeLife.
- EBOS Group includes Terry White, healthSAVE and Good Price Pharmacy Warehouse.
- Australian Pharmaceutical Industries includes Priceline Pharmacy.

The financial performance of the community pharmacy sector is considered in Section 2.5.

### 2.4.3 Direct employment in the community pharmacies

In addition to community pharmacists, community pharmacies employ pharmacy assistants. A high proportion of pharmacy assistants will have gained certificate level training outcomes, in particular, trained to Certificate III level.<sup>25</sup>

The most recent data shows that 35,174 pharmacy assistants work in community pharmacies<sup>26</sup> which (including the 17,594 community pharmacists noted in Section 2.3) brings total direct employment in the community pharmacy sector to nearly 53,000. It is estimated that 77 per cent of the total workforce is female.<sup>27</sup>

Of the 35,174 pharmacy assistants:

- 47 per cent are under 24 years old.
- 16 per cent are 25 to 34 years old.
- 11 per cent are 35 to 44 years old.
- 13 per cent are 45 to 54 years old.
- 13 per cent are 55 to 69 years old.
- 1 per cent are over 70 years old.

This highlights both a relatively young workforce and also a relatively higher proportion in the 45 years and older age groups.

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<sup>21</sup> Chemist Warehouse 2023. *Store locator*. Available at: <https://www.chemistwarehouse.com.au/aboutus/store-locator>

<sup>22</sup> Amcal 2023. *Just ask Amcal*. Available at: <https://www.amcal.com.au/corporate-info>

<sup>23</sup> Guardian Pharmacy 2023. *About us*. Available at: <https://www.guardianpharmacies.com.au/corporate-info>

<sup>24</sup> Blooms The Chemist 2023. *About us*. Available at: <https://www.bloomsthechemist.com.au/about-us/#:~:text=With%20over%202000%20team%20members,a%20part%20of%20your%20community>.

<sup>25</sup> SIR30116 – *Certificate III in Community Pharmacy* is a national level qualification offered in all states and territories. Available at: <https://training.gov.au/training/details/SIR30116>

<sup>26</sup> ABS 2021 Census. Note there is no Australian Government Department of Health and Aged Care reporting on pharmacy and pharmacy assistants. The best data available is from the ABS 2021 Census which is self-reported data on workforce role.

<sup>27</sup> Estimate provided by the Pharmacy Guild of Australia (2023).

## 2.4.4 The range of services provided in community pharmacies

Community pharmacies provide extensive before and after sales services to accompany the dispensing or sale of medicines. Some services are paid by the consumer and some are free. It has been estimated that 38 per cent of Australian community pharmacists do not charge for the provision of asthma services, 38 per cent do not charge for provision of diabetes-related services and 36 per cent do not charge for hypertension-related services.<sup>28</sup> It is notable that these are chronic conditions for which drugs have been included on the 60-day list. This means that community pharmacies that have more patients for which these services are provided may lose more revenue than other community pharmacies.

The total range of services include, but are not limited to, those in Table 2-6. This includes some examples of unpaid services. Unpaid services are viable only when the community pharmacy is sufficiently resourced, particularly in relation to staffing. To the significant extent that the 60-day dispensing policy will reduce this resourcing, community pharmacies will be unable to continue to provide the current level or range of these unpaid services.

**Table 2-6 Range of paid and unpaid services**

Service type	Details
<b>Dispensing medicines</b> <u>Paid</u>	Dispensing prescription medicines i.e. medicines listed on the PBS whose prices are set by the Australian Government, including fees regulated under the 7CPA
<b>Supplying medicines</b> <u>Paid</u>	Supplying scheduled OTC medicines available only from pharmacies
	Selling commonly used medicines, such as aspirin and paracetamol
	Delivering vaccination services, especially COVID-19 vaccinations during and following the COVID-19 pandemic, and annual flu shots
<b>Supplying non-medicines</b> <u>Paid</u>	Supplying other products in competition with general retail stores and online retailers. For example, many commonly used medicines, vitamins, skin care, cosmetics, wound management products, other health care products and nappies
<b>Medicine related advice (examples)</b> <u>Unpaid</u>	Recommending an equivalent generic (cheaper) alternative to a prescribed drug, resulting in lower PBS expenses to the Australian Government
	Providing residential aged care patients and staff with dose administration guidance, including the provision of Webster-paks <sup>®</sup> . <sup>29</sup>
	Checking whether consumers are over-using or misusing prescribed medicine
	Health advice that may reduce the likelihood of over-consumption or misuse of over-the-counter medicine
	Providing knowledge, counselling and advice and a range of health services, to consumers to accompany the sale of medicines that enhance the quality use of medicines and reduce

<sup>28</sup> Berbatis C. G., V. B. Sunderland, C. R. Mills and M. Bulsara, *National Pharmacy Database Project*, School of Pharmacy, Curtin University of Technology of Western Australia, June 2003, p.35. Available at:

[https://www.researchgate.net/profile/Max-Bulsara/publication/228551743\\_National\\_pharmacy\\_database\\_project/links/02bfe50f4a4234b8e4000000/National-pharmacy-database-project.pdf](https://www.researchgate.net/profile/Max-Bulsara/publication/228551743_National_pharmacy_database_project/links/02bfe50f4a4234b8e4000000/National-pharmacy-database-project.pdf)

<sup>29</sup> A 'Webster Pak' is the commonly used name for a medicine dose administration device. See here:

<https://www.webstercare.com.au/> and <https://www.webstercare.com.au/product/webster-pak-community/>

Service type	Details
	<p>costs in other areas of the health system, such as medication management services, the provision of Dose Administration Aids and Opioid Replacement Therapies</p> <p>Providing advice, triage or recommending treatments in relation to minor and common conditions and advice about an existing medical condition. Often this does not result in the sale of a product. For 9 per cent of Australians, the pharmacist is their first port of call for advice about non-emergency health concerns<sup>30</sup> and in 2019-20 19.7 per cent of Australians reported seeing a pharmacist for advice only<sup>31</sup>.</p> <p>Providing services, sometimes as part of public health campaigns, (often provided at no direct charge to consumers) such as:</p> <ul style="list-style-type: none"> <li>● Screening and care-management programmes, for example, blood pressure and weight checks as part of diabetes, weight and coronary management</li> <li>● Baby and maternal health services</li> <li>● Needle exchange</li> <li>● Participation in ‘quit smoking’ and other public health campaigns</li> </ul>

### 2.4.5 The pricing of medicines in community pharmacies

On average, in 2020-21, community pharmacies earned 57 per cent of their revenues from dispensed medicines, 32 per cent from retail sales, 8 per cent from OTC medicines and 3 per cent from other sources, including professional services.<sup>32</sup> (See further consideration of financial performance in Section 2.5). The proportion of revenues attributable to the dispensary in 2020-21 was lower than recent averages, due to community pharmacies being considered as an essential service provider during the COVID-19 pandemic and remaining open during lockdowns (when alternative outlets for non-dispensary products were not open). Pre-pandemic (2018-19), the proportion of revenue attributable to the dispensary was 65 per cent<sup>33</sup>. Other than dispensed medicines, many of the products sold face vigorous price competition from supermarkets and other general retail stores.

As noted in Section 3.2.1, the Australian Government subsidises the cost of medicines through the PBS. Consumers pay a ‘co-payment’ (and some receive concessions on this amount, for example, pensioners) and the Australian Government pays the rest. From 1 January 2023, consumers may pay up to \$30.00 for most PBS medicines, or \$7.30 if they have a concession card. Many PBS medicines cost significantly more than the co-payment amount.

It is important to understand how co-payments work, especially for the MDQ policy change medicines. Based on the modelling further explained in Section 5, for 60-day items:

- Only 4.3 per cent of the volume of 60-day items has the \$30 co-payment currently applied.

<sup>30</sup> Australian Patient’s Association 2023. *Australian Healthcare Index Report June 2023*. p.11. Available at: <https://australianhealthcareindex.com.au/australian-healthcare-index-june-2023-report/>

<sup>31</sup> ABS, 2021. *Patient Experiences: Data download for 2019/20*. Available at: <https://www.abs.gov.au/statistics/health/health-services/patient-experiences/2019-20>

<sup>32</sup> Pharmacy Guild of Australia. *2022 Guild Digest*. p20.

<sup>33</sup> Pharmacy Guild of Australia. *2021 Guild Digest*. p9.

- A further 30.7 per cent are prescriptions for general consumers but are priced below the co-payment, so the consumer pays the full amount and there is no Australian Government subsidy.

For these, the price paid over two months will not be the same as the price paid for one month currently. While the price will include only one set of fees to the community pharmacy (dispensing fee plus administration, handling and infrastructure fee, see Section 3.3.2 for details) it will include twice the medicine price (manufacturer and wholesale fees).

- The \$7.30 co-payment applies to 48.2 per cent of the volume of 60-day items.
- The last 16.9 per cent of volume has zero co-payment, as these are people who are eligible for concession AND have reached their safety net. Families that continue to reach the safety net under 60-day dispensing will not save anything on PBS medicines each year compared to current arrangements.

#### 2.4.6 The value of free services

It has been estimated that in addition to the advice that must be provided with the sale of certain medicines, approximately 78.2 million additional consultations occurred annually in community pharmacies.<sup>34</sup> Monitoring compliance with medicine usage instructions was also estimated to have occurred approximately 14.4 million times per year.<sup>35</sup> Around 45 per cent of pharmacies used clinical testing devices to perform this monitoring.<sup>36</sup> In some instances, monitoring resulted in the community pharmacist declining a prescription (and, as a result, receiving no remuneration).<sup>37</sup>

Nearly half of the pharmacies that responded to a Pharmacy Guild survey (n=170) in October 2022 reported providing 20 or more consultations to patients per day, the majority of which took 3-5 minutes.<sup>38</sup> Whilst a third of consultations involved providing advice only, a substantial proportion involved referring patients on to other health care professionals, including GPs (31 per cent), other specialised services (12 per cent) and hospital emergency departments (7 per cent). This pattern suggests that pharmacies are playing a role in triaging patient health issues and concerns.

Critically, consumer advice from pharmacists mitigates market failures such as:

- The pharmaceutical-centric biases in other parts of the health system that might lead to over-prescription of medicine.
- Externalities that arise from overuse of medicine. For example, the development of drug-resistant viruses as a result of overuse of antibiotics.
- Medicines non-adherence and adverse events, which result in hospital admissions. For example, in 2018, there were at least 230,000 hospitalisations a year attributable

<sup>34</sup> Berbatis, C.G., Sunderland, V.B., Mills, C.R. & Bulsara, M. 2003. *National pharmacy database project*. p. 6. Available at: <https://www.researchgate.net/publication/228551743>

<sup>35</sup> Ibid. p. 6.

<sup>36</sup> Ibid. p. 43.

<sup>37</sup> It was estimated that pharmacists declined to dispense around 1.08 million prescriptions per year due to dosage interaction, adverse effects or other problems.

<sup>38</sup> Pharmacy Guild of Australia 2022. *Advice seeking survey*.

to medication-related issues, costing \$1.2 billion a year.<sup>39</sup> This data is no longer publicly available but in 20-21 671,629 of all hospitalisations were classified as potentially preventable. Of these, 199,563 potentially preventable public hospitalisations and 64,366 private hospitalisations were due to chronic conditions (excluding diabetes).<sup>40</sup>

In summary, the community pharmacy is instrumental to ensure that the medicines that consumers purchase are not only appropriate for their medical condition but safe for them to use and used appropriately and as prescribed. In addition, they occupy a unique position in the Australian health services sector as they provide medicine-related services while performing a retail function (in a price competitive environment) and provide accessible advice and a range of other (often non-paid) health care services.

## 2.5 Financial performance of community pharmacies

### 2.5.1 Overall industry performance

As noted in Section 2.4.2. community pharmacies are small businesses with high capital and labour requirements, including the need for a relatively large storefront. As a service industry, community pharmacies are labour intensive and, for an averaged sized pharmacy, employ an owner-pharmacist, another 1 to 3 pharmacists in FTE terms, and 2 to 6 pharmacy assistants (some of whom are often pharmacy degree students and/or Certificate III qualified). Community pharmacies also employ or contract cleaners, delivery drivers and administration staff. It is also important to note that under state and territory legislation, a community pharmacy cannot be open to the public unless a community pharmacist is present and on duty.

In terms of financial performance, there is a significant distribution across community pharmacies (for detailed analysis see Section 4). This is driven, to some extent, by the location of the community pharmacy, demographic and socio-economic factors, but also by how well community pharmacies are managed. For 2020-21, average financial performance per community pharmacy included:<sup>41</sup>

- Average revenue per community pharmacy of \$3.7 million.
- 57 per cent of the revenue from the sale of prescription medicines (this percentage has fallen rapidly since 2018) and 43 per cent includes community pharmacy professional services, community pharmacy medicines, pharmacist-only medicines, and over-the-counter products.

As already noted, the proportion of revenues attributable to the sale of prescription medicines in 2020-21 was lower than recent averages, due to community pharmacies being considered as an essential service provider during the COVID-19 pandemic and

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<sup>39</sup> The Pharmacy Guild of Australia 2018. *Vital facts on community pharmacy*. Available at:

[https://www.guild.org.au/\\_data/assets/pdf\\_file/0020/12908/Vital-facts-on-community-pharmacy.pdf](https://www.guild.org.au/_data/assets/pdf_file/0020/12908/Vital-facts-on-community-pharmacy.pdf)

<sup>40</sup> Australian Government Australian Institute of Health and Welfare 2023. *Admitted patients: Admitted patient care 2020-21 8 Safety and quality of the health systems*. Available at: <https://www.aihw.gov.au/getmedia/24cdb5a0-5993-4d14-a44b-gfc8178801a0/8-admitted-patient-care-2020-21-tables-safety-and-quality.xlsx.aspx>

<sup>41</sup> The Pharmacy Guild of Australia 2023. *2023 Pharmacy Rental Report*. p.5. Available at: <https://www.guild.org.au/news-events/news/forefront/v13n03/rental-report-now-available>

remaining open during lockdowns (when alternative outlets for non-dispensary products were not open).

- Cost of goods sold was 63 per cent of total community pharmacy turnover, wages remained relatively flat at around 13 per cent and rent was around 5 per cent.
- Gross profit per community pharmacy (i.e. sales revenue less cost of goods sold) was, on average, \$1.27 million in 2020-21.
- Average annual net profit per community pharmacy (after accounting for a notional owner's salary based on actual hours worked in the community pharmacy) equated to around \$237,000, although there was a significant variation based on store size and location.

In recent years, revenue growth has been positive for community pharmacies (inclusive of some temporary gains related to the COVID-19 pandemic). Aside from the significant reduction in dispensing revenue beginning in 2023-24, revenue may be expected to continue to rise as community pharmacies seek new revenue streams based on increasing citizen health consciousness, the increased demands of population ageing and the related increasing incidence of people living with chronic illnesses.<sup>42</sup> More pharmacies are positioning themselves as health hubs offering immunisations, weight management services, advice on a wide range of health devices, and home medicines reviews.<sup>43</sup> However, even with this diversification, the core role of the community pharmacy, and major source of revenue now and well into the future, is associated with the dispensing of prescription medicines.

The COVID-19 pandemic in 2020 further highlighted the value of community pharmacies and the healthcare expertise of community pharmacists. This demonstrated without question that community pharmacies and community pharmacists are not only dispensers and retailers of prescription and OTC medications but also play a vital part in Australia's public healthcare infrastructure. As such, community pharmacies are becoming increasingly integrated into the greater public health agenda. Initially, a 2018 initiative saw community pharmacies administering influenza vaccines to the community. Two years later, community pharmacies and the community pharmacy workforce were extremely valuable assets in the COVID-19 pandemic by contributing to the administration of COVID-19 vaccinations to the community.<sup>44</sup>

A more detailed analysis of community pharmacy sector financial performance is in Section 4 at both whole-of-sector and individual community pharmacy level.

## 2.6 Summary

The community pharmacy sector has been a vital and enduring part of the Australian health care landscape for many decades. The sector has been responsive and flexible to changes in the operating context, for example its changing role within a holistic health care model,

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<sup>42</sup> Ibis World 2023. *Pharmacies in Australia - Market Research Report*. Available at: <https://www.ibisworld.com/au/industry/pharmacies/1878/#:~:text=Revenue%20for%20pharmacies%20is%20expected,are%20supporting%20alternative%20revenue%20streams>

<sup>43</sup> Ibis World 2023. *Pharmacies in Australia - Market Research Report*. Available at: <https://www.ibisworld.com/au/industry/pharmacies/1878/#:~:text=Revenue%20for%20pharmacies%20is%20expected,are%20supporting%20alternative%20revenue%20streams>

<sup>44</sup> Adapted from Statista Research Department 2023. *Pharmaceutical industry in Australia - statistics & facts*. Available at: <https://www.statista.com/topics/5750/pharmaceutical-industry-in-australia/#topicOverview>



offering an alternative treatment pathway for patients, and providing support for the elderly and those with multiple health conditions as Australia's population ages.

Generally, community pharmacists are in a lower paid bracket of the health professional workforce with static growth in the size of the workforce and a concentration of community pharmacists in the younger age group. There is some evidence of an exodus from the workforce of these younger qualified community pharmacists.

Importantly, profits for community pharmacies (and therefore their ongoing financial sustainability) are limited because of the negotiated fixed price for dispensing medicines under the negotiated Community Pharmacy Agreements. This is in contrast to GPs who have the option of charging an unregulated fee for consultations (thus reducing bulk billing rates) whereas community pharmacies are by law limited to charging the patient co-payment.

Finally, the financial performance and sustainability of community pharmacy is widely variable across different regions of Australia. Linked to the equity of access objectives of the Australian Government, community pharmacies in regional, rural and remote locations operate in challenging commercial environments with lower dispensing volumes (due to lower population density) and, potentially in some cases, similar or higher fixed costs due to remoteness (e.g. transport costs).<sup>45</sup> At the same time these pharmacies form an important part of the social fabric of regional communities. In regional, rural and remote locations there can be a higher proportion of vulnerable people (e.g. retired sea and tree changers) who will be affected if community pharmacy service provision is either removed from their locality or if service provision is reduced through reductions in opening hours, staffing levels, services being discontinued, or new or increased pricing of services.

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<sup>45</sup> On the other hand, storefront rents would be lower in regional, rural and remote communities relative to Australia's capital cities.



## 3. The policy and regulatory context

### 3.1 The policy environment

#### 3.1.1 The National Medicines Policy

The *National Medicines Policy* (NMP) is a high-level framework focused on the availability and the use of medicines and medicines-related services.

Updated in 2022, the aim of the NMP is to ensure:

- Equitable, timely, safe and affordable access to a high-quality and reliable supply of medicines and medicines-related services for all Australians
- Medicines are used safely, optimally and judiciously, with a focus on informed choice and well-coordinated person-centred care
- Support for a positive and sustainable policy environment to drive world-class innovation and research, including translational research, and the successful development of medicines and medicines-related services in Australia.<sup>46</sup>

The centrality of individuals, carers, families and communities is essential to achieve these aims within a network of a range of partners who ‘must be engaged in a collaborative, cooperative manner to achieve the best health, social and economic outcomes for all Australians’.<sup>47</sup> With partnership and shared responsibility as a key principle, ‘active, respectful dialogue, collaboration and cooperation is established and maintained between partners – listening to and recognising the wisdom and expertise of each partner. All partners act responsibly, as stewards of the NMP’.<sup>48</sup>

Community pharmacies are one of the key partners and are critical to deliver one of the ‘central pillars’ of the NMP which is the ‘equitable, timely, safe and reliable access to medicines and medicines-related services, at a cost that individuals and the community can afford’.<sup>49</sup>

Another key principle is innovation and continuous improvement. Community pharmacies commit to this principle, for example, via the national *Quality Care Pharmacy Program* (QCPP). The QCPP has been running for more than 25 years and accredits pharmacies against *Australian Standard AS 85000:2017 – quality management system for pharmacies in Australia*.<sup>50</sup> It aims to raise standards of consumer service in individual pharmacies across Australia and provides an industry-wide guarantee of retail service quality and professional

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<sup>46</sup> Australian Government Department of Health and Aged Care 2022. *National Medicines Policy* 2022. p.1. Available at: <https://www.health.gov.au/sites/default/files/2022-12/national-medicines-policy.pdf>

<sup>47</sup> Ibid. p.2.

<sup>48</sup> Ibid. p.4.

<sup>49</sup> Ibid. p.4.

<sup>50</sup> Adapted from: Quality Care Pharmacy Program n.d. *What is QCPP?* Available at: <https://www.qcpp.com/about-qcpp/what-is-qcpp>

practice.<sup>51</sup> Pharmacies are assessed every two years and currently over 94 per cent of community pharmacies are accredited.

### 3.1.2 National Strategy for Quality Use of Medicines

The National Strategy for *Quality Use of Medicines strategy* (QUM strategy) underpins the NMP. The QUM strategy focuses on:

- Selecting management options wisely
- Choosing suitable medicines if a medicine is considered necessary
- Using medicines safely and effectively.<sup>52</sup>

Again, the implementation of the QUM strategy is heavily dependent on the collaboration of partners within the system. Community pharmacies are key partners in that they are:

- Those who prescribe, provide and monitor the use of medicines
- Those who assist people in learning more about health issues and healthcare through information, education and discussion
- Those who develop, make, market, distribute and sell medicines
- Those who produce, report, publish and broadcast information about medicines and health matters.<sup>53</sup>

As partners in these roles, community pharmacies (indeed the QUM strategy notes ‘all partners’) are responsible for:

- Improving medication use by recognising when and where problems exist, identifying factors that contribute to those problems, initiating interventions to improve medication use, and evaluating outcomes
- Enhancing understanding of the risk and benefits associated with the use of all medicines
- Fostering informed debate about the role of medicines in health care
- Working in partnership to achieve quality use of medicines.<sup>54</sup>

One key example of how the QUM Strategy works in practice is the Home Medicines Reviews (HMRs) and Residential Medication Management Reviews (RMMRs) conducted by pharmacists (based on a medical professional referral with up to two follow ups within nine months). Key causes for concern and therefore improvements achieved by such reviews are shown in Figure 2-2.

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<sup>51</sup> QCPP accredits pharmacies against Australian Standard AS 85000: 2017 - quality management system for pharmacies in Australia, with the application of the standard outlined in the QCPP Requirements.

<sup>52</sup> Australian Government Department of Health and Aged Care 2002. *The National Strategy Quality Use of Medicines*. p.1. Available at: [https://www.health.gov.au/sites/default/files/documents/2022/04/national-strategy-for-quality-use-of-medicines\\_o.pdf](https://www.health.gov.au/sites/default/files/documents/2022/04/national-strategy-for-quality-use-of-medicines_o.pdf)

<sup>53</sup> Adapted from: Australian Government Department of Health and Aged Care 2002. *The National Strategy Quality Use of Medicines*. p.9. Available at: [https://www.health.gov.au/sites/default/files/documents/2022/04/national-strategy-for-quality-use-of-medicines\\_o.pdf](https://www.health.gov.au/sites/default/files/documents/2022/04/national-strategy-for-quality-use-of-medicines_o.pdf)

<sup>54</sup> Ibid. p.10.

## 3.2 The public policy framework

This section describes the regulatory structure that has underpinned the Community Pharmacy model for a number of decades and how pharmacists are paid to deliver services on behalf of the Australian community.

### 3.2.1 The Pharmaceutical Benefits Scheme

The PBS subsidises the cost to consumers of a wide range of medicines, in order to provide timely, reliable and affordable access to necessary medicines for Australians. The PBS is part of the NMP. The PBS began as a limited scheme in 1948, with free medicines for pensioners and a list of 139 ‘life-saving and disease preventing’ medicines free of charge for others in the community.<sup>55</sup> As at 30 June 2022, the PBS includes 925 different medicines in 5,178 brands.<sup>56</sup>

The proposed changes to introduce 60-day dispensing for 325 medicines will mean that just over one third of PBS-listed medicines will be affected. In terms of the number of prescriptions dispensed, these 325 medicines represent a much higher proportion (more than 60 per cent).

Overall, a summary of PBS for 2021-22 highlights:<sup>57</sup>

- Total PBS Government expense for the supply of medicines was \$14.7 billion (excluding revenue), compared with \$13.8 billion for the previous year. This is an increase of 6.7 per cent
- Total PBS subsidised prescription volume increased by 0.7 per cent to a total of 215.0 million, compared to 213.6 million for the 2020-21 financial year
- PBS Government expenditure on a cash accounting basis was \$14.4 billion (excluding rebates) which is 90.1 per cent of the total cost of PBS prescriptions. The remainder was patient contributions, which amounted to \$1.6 billion
- The average dispensed price (patient payment plus Government benefit) per prescription of PBS subsidised medicines increased to \$74.63 in 2021-22, compared to \$70.65 in 2020-21.

The majority of Australian Government expenditure was directed towards concessional cardholders (\$9.3 billion, 64.4 per cent of the total), compared to concessional cardholders expenditure for 2020-21 (\$9.0 billion, 66.3 per cent of the total). This illustrates that the cost of supply is increasing higher than the 2021-22 rate of inflation (as the average manufacturer price of PBS medicines has increased) whilst the number of prescriptions remained fairly static. In addition, it is significant that almost two-thirds of Australian Government expenditure is for concessional cardholders who are typically the most vulnerable in the Australian community.

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<sup>55</sup> Australian Government Department of Health and Aged Care 2022. *About the PBS*. Available at: <https://www.pbs.gov.au/info/about-the-pbs>

<sup>56</sup> Australian Government Department of Health and Aged Care 2022. *PBS Expenditure and Prescriptions Report 1 July 2021 to 30 June 2022*. Available at: <https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions-report-1-july-2021-to-30-june-2022>

<sup>57</sup> Ibid.

These vulnerable Australians include:

- Older Australians, often with multiple co-morbidities:<sup>58</sup>
  - On a pension living at home
  - On a pension living at home, who receive medicines under a support from home package
  - In aged care or residential aged care facilities;
- People with disability;
- People on low incomes or people who are unemployed;
- Veterans;
- Carers; and
- Aboriginal and Torres Strait Islander Australians.

### 3.3 Regulation and remuneration of community pharmacies

The regulation of community pharmacy involves a number of strands, including rules that govern the location of pharmacies, and their licensing and ownership. The remuneration of community pharmacy has in turn been determined through successive community pharmacy agreements (CPAs), with the 7CPA taking effect from 1 July 2020. Individually and in combination, these provisions have shaped the evolution of community pharmacy to date.

#### 3.3.1 Government as market steward in community pharmacy

The regulation of community pharmacy is an exemplary case of what the Harper Review called ‘market stewardship’ by the government in the human services area. As noted by the Harper Panel (Australian Government 2015, p.225):

Stewardship relates not just to governments’ direct role in human services but also to policies and regulations that bear indirectly on human services sectors.

The Harper Panel recognised that the public interest is sometimes not best served by the removal of all restrictions on competition. This is more likely to apply in the area of human health services than elsewhere, because the information that consumers need to make a well-founded decision is both uncertain and asymmetrically shared, and because of the important and possibly irreversible results that can ensue from bad advice or decisions.

The concept of market stewardship is central to how the regulation and remuneration of community pharmacy should be assessed. The organisation of the community pharmacy sector does not reflect outcomes in an unfettered market in which multiple independent agents compete and the Government is a dispassionate onlooker. Rather, the regulatory framework applied to community pharmacy and how it has shaped the sector has enabled the Government to exercise control over the costs of the distribution and supply of medicines

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<sup>58</sup> 80% of people aged 65 years and over have one or more chronic conditions. Australian Bureau of Statistics 2018. *National Health Survey: First Results, 2017-18*. Available at: [www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001](http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001)

and advisory services, while ensuring that access and quality objectives are met at the required standard.

At a high level, and setting aside the arrangements that have been put in place to provide specialised services (such as chemotherapy) or to service particular populations (such as remote Australians and the Aboriginal community), the Government's role as a market steward is reflected in three key instruments that it has applied over the years:

- The community pharmacy remuneration arrangements, as reflected in consecutive CPAs.
- The Pharmacy Location Rules ('location rules').
- The community pharmacy licensing and ownership rules.

As is set out in the following sections, individually and in combination, these instruments have played (and continue to play) a key role in enabling the Government to achieve its health policy objectives, including by shaping the organisation of the community pharmacy sector.

### 3.3.2 Community Pharmacy Agreements

Since 1990, rolling five-year *Community Pharmacy Agreements* have been formed between the Pharmacy Guild of Australia (PGA) and the Australian Government because of a key clause in the *National Health Act 1953*. This clause says any agreement relating to how the Australian Government remunerates items on the PBS needs to be made with the PGA or another pharmacists' organisation that represents the majority of approved pharmacists.<sup>59</sup>

The key purpose of these agreements is to provide for the timely and equitable supply of PBS medicines across Australia; both in terms of location, access and price. As such, the agreements set remuneration levels to approved pharmacists for dispensing PBS medicines and providing other services, such as medication management. Pharmacies must collect patient contributions from general and concessional consumers, and, under the *National Health Act 1953*, are not permitted to discount contributions for PBS drugs that are subsidised by the Australian Government, except for an allowable maximum discount of \$1.00<sup>60</sup> (this has been in place since 2016).

The *Seventh Community Pharmacy Agreement* (7CPA) is the latest (and current) of these agreements between the Australian Government and the PGA.<sup>61</sup> The Pharmaceutical Society of Australia is also a signatory to relevant parts of the 7CPA.<sup>62</sup> Effective from 1 July 2020, the 7CPA, outlines the Australian Government's agreement to reimburse pharmacists for:

- Dispensing subsidised medicines on the PBS
- Community pharmacy programs and services.<sup>63</sup>

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<sup>59</sup> The Conversation 2015. *Explainer: What is the Community Pharmacy Agreement?* Available at:

<https://theconversation.com/explainer-what-is-the-community-pharmacy-agreement-38789>

<sup>60</sup> <https://www.servicesaustralia.gov.au/discounting-patient-co-payment-for-pharmacists?context=22861>

<sup>61</sup> Australian Government Department of Health and Aged Care 2020. *Seventh Community Pharmacy Agreement*. Available at: <https://www.health.gov.au/sites/default/files/2022-12/seventh-community-pharmacy-agreement.pdf>

<sup>62</sup> <https://www.guild.org.au/programs/seventh-community-pharmacy-agreement>

<sup>63</sup> Australian Government Department of Health and Aged Care 2020. *About the 7CPA*. Available at: <https://www.health.gov.au/topics/primary-care/what-we-do/7cpa>

The 7CPA runs to 30 June 2025 and has overall funding of \$18.35 billion (compared to \$16.8 billion for 6CPA i.e. a 9 per cent increase over five years). In summary, this comprises:<sup>64</sup>

- \$16.00 billion in pharmacy remuneration for dispensing PBS subsidised medicine.
- \$1.20 billion for professional pharmacy programs.
- \$1.15 billion for the Community Service Obligation (paid directly to eligible pharmaceutical distributors) and National Diabetes Services Scheme product distribution arrangements.

The 7CPA (as with other agreements) also establishes the price at which medicines are dispensed. Although intended to promote transparency within the sector and for consumers, the complexity of the price calculation is little understood by consumers. The current fees are shown in Table 3-1.

**Table 3-1 Dispensing fees under the 7CPA, 2022-23 and 2023-24<sup>65</sup>**

Service type	Details	2022-23	Estimated 2023-24*
Dispensing Fee (ready prepared)		\$7.82	\$8.37
Wholesale mark-up	When the Ex-Manufacturer Price is up to and including \$5.50	\$0.41 per dispense	\$0.41 per dispense (not indexed)
	Where the Ex-Manufacturer Price is over \$5.50 and up to and including \$720	7.52 per cent of the Ex-Manufacturer Price per dispense	Same
	Where the Ex-Manufacturer Price is over \$720	\$54.14 per dispense	\$54.14 per dispense (not indexed)
Administration, Handling, and Infrastructure Fee	For a Listed Brand with a Price to Pharmacists for Maximum Quantity less than \$100	\$4.32 per dispense of Maximum Quantity	\$4.62 per dispense of Maximum Quantity
	For a Listed Brand with a Price to Pharmacists for Maximum Quantity from \$100 and up to and including \$2,000	Tier One AHI Fee plus 5 per cent of the amount by which the Price to Pharmacists for Maximum Quantity exceeds \$100, per dispense of Maximum Quantity	Same
	For a Listed Brand with a Price to Pharmacists for Maximum Quantity over \$2,000	Tier One AHI Fee and \$95 per dispense of Maximum Quantity.	Same
Safety Net recording fee		\$1.31 per dispense	\$1.40 per dispense

\*Estimated based on a current annual CPI inflation rate of 7% (as per the 7CPA).

<sup>64</sup> Adapted from: The Pharmacy Guild of Australia 2020. Key points. Available at: <https://www.guild.org.au/programs/seventh-community-pharmacy-agreement>

<sup>65</sup> Adapted from: Pharmaceutical Benefits Scheme 2023. Fees, Patient Contributions and Safety Net Thresholds. Available at: <https://www.pbs.gov.au/info/healthpro/explanatory-notes/front/fee>

### 3.3.3 Location rules

Under a ministerial determination made under section 99L of the National Health Act 1953, the Australian Government imposes strict controls on approving a new pharmacy, and on relocating existing pharmacies, for PBS purposes. These location-based controls help to give effect to the 7CPA which prescribes that new pharmacies can only locate within areas of community need and existing pharmacies can only relocate once every two years whilst not leaving behind a community need.

Applications for both new pharmacy and pharmacy relocation approvals for PBS purposes are considered by the Australian Community Pharmacy Authority (ACPA), which then makes recommendations to the Secretary of DHAC.

The location rules that apply to community pharmacies set out location-based criteria which must be met in order for the Australian Community Pharmacy Authority to recommend the approval of a pharmacist. These rules apply both to the establishment of a new pharmacy and the relocation of an existing pharmacy. In particular, minimum distance requirements apply for new or additional pharmacies wishing to locate in the vicinity of an existing community pharmacy, and community pharmacies must not be accessible from within a supermarket. Following a review, these rules were amended in 2011 to simplify the application process and to encourage more community pharmacies to be established in areas of community need.

In practice, the Australian Government has relied primarily on location rules as the instrument it uses to shape the geographical structure of community pharmacy. The Australian Government has two basic objectives with respect to the location of community pharmacies:

- To ensure equitable access, which requires that pharmacies are reasonably accessible to all consumers, regardless of where they live, their income or age.
- To secure cost-effectiveness in the distribution structure, achieving economies of scale and scope in distribution and avoiding unnecessary duplication.

The goal of achieving equitable access is pursued partly through the remuneration arrangements, including those established under 7CPA, as these weaken the link between the income pharmacists receive for dispensing and related services and consumer ability and willingness to pay. As a result of those arrangements, pharmacists face stronger incentives than they otherwise would to locate in areas where consumers' ability and willingness to pay would be low relative to the costs of community pharmacy. The location rules then complement and reinforce that effect by providing pharmacists with a limited assurance of securing revenues in respect of a geographical catchment area. They also help ensure that new pharmacies open where there is greatest community need.

At the same time, as the Australian Government, through the PBS, bears the bulk of the costs of dispensing, it has a legitimate interest in avoiding unnecessary distribution costs. The location rules advance this objective by avoiding both the excess entry that the economics of retail location suggest might occur when prices are largely fixed to cover average total costs and entry is unrestricted, as well as the associated clustering of retail outlets in central business areas and major shopping centres.

Finally, the location rules interact with the ownership rules, which are discussed below. In particular, by defining (albeit limited) 'catchment areas', the rules incentivise pharmacists to



invest in pharmacy facilities and to build goodwill in their pharmacy, all the more as that goodwill is at least partially saleable on exit. They also help provide pharmacy owners with the certainty to invest in infrastructure and staff required to implement new services.

Achieving the twin goals of providing for pharmacies to be located where they are needed, and yet avoiding duplication, requires a geographical pattern of pharmacy location that has some degree of dispersion to it, with less clustering of outlets (and so less close duplication) than usually characterises retail markets. In other words, to meet the Australian Government's aims, pharmacies should be located in places that differ from those that would likely be chosen simply from the perspective of maximising profits, and in a manner that limits purely overlapping outlets.

Research commissioned by the Guild confirms how well outcomes under the rules conform to the Australian Government's locational objectives. In 2014, the Guild commissioned a detailed mapping of the geographical distribution of community pharmacy from MacroPlan Dimasi which found that:

- Australians, including especially older and disadvantaged consumers, have a very high level of access to community pharmacy.

In capital cities, the average resident is located 1 kilometre from the nearest community pharmacy, while 95 percent of consumers are no further than 2.5 kilometres from a community pharmacy. Outside of capital cities, country residents are just 6.5 kilometres on average from the nearest community pharmacy, with 72 percent having a community pharmacy within 2.5 kilometres. As a result, travel times to community pharmacies are also very low. Some 50 per cent of Australians enjoy a travel time of less than 5 minutes to their preferred community pharmacy, with a further 30 per cent having a trip time of between 5 and 10 minutes. In total then, 80 percent of consumers take 10 minutes or less to get to the community pharmacy of their choice.

- Community pharmacies are also highly accessible in terms of their opening hours. Thus, 55 per cent of consumers shop at a community pharmacy that is open 7 days, with a further 32 per cent shopping at a community pharmacy that is open on Monday to Saturday but is closed on Sunday. These are remarkable levels of access to a complex, professional service. The service is also fast. 40 percent of consumers estimate it generally takes 5 minutes or less for their prescription to be filled, with an additional 40 percent waiting no more than 10 minutes.
- Moreover, Australians typically have a choice of local community pharmacies; that is, the location rules do not materially detract from effective competition. Most Australians are in reasonably close proximity to competing pharmacies, with 92 percent of metropolitan consumers within 2.5 kilometres of at least two pharmacies



and 69 percent of non-metropolitan consumers within no more than 5 kilometres of at least two community pharmacies.<sup>66,67</sup>

The findings from this analysis are consistent with independent research prepared on behalf of the DHAC (Lange and Franzon 2016). This research assessed DHAC data on the location of community pharmacies for the years 1990, 2007 and 2014 and found that:

- The total number of community pharmacies in 2014 was lower than in 1990, despite Australia's increasing population over that timeframe. At the same time, and while population to community pharmacy ratios increased overall, these ratios decreased in rural locations.
- At least on the basis of the available data, there appeared to be no relationship between community pharmacy locations and socio-economic status.

These findings thus suggest that lower socio-economic 'catchments' are as well served by community pharmacy as is the case for higher socio-economic areas. Furthermore, high accessibility has been achieved at a less than proportionate expansion of the number of community pharmacies than the Australian population.

The outcomes as regards the location of community pharmacies in Australia can be contrasted with those that have occurred when location restrictions on community pharmacies were lifted in some European countries. Location rules were removed in England (although some were reintroduced in 2012), Ireland, the Netherlands, Norway and Sweden (Vogler et al. 2012). Based on a comparison of these countries, Vogler et al. (2012) concluded that, while more new pharmacies opened after the liberalisation of establishment rules, they tended to be established at attractive locations (urban clustering) and not in places where no pharmacy had existed before, such as in rural, sparsely populated areas.

### 3.3.4 Licensing and ownership rules

In general, pharmacies can only be owned and operated by registered pharmacists. As set out in Section 5, the economic purpose of this restriction is to ensure that quality of service standards are adhered to and pharmacists who breach the standards risk losing the considerable human and physical capital invested in their pharmacy. Ownership rules also have the effect of preventing horizontal and vertical integration and therefore concentration of the pharmacy sector, which would increase costs to the Australian Government and hence ultimately to the community.

Existing ownership restrictions take the following forms:

- Restrictions on who can own pharmacies
- Restrictions on the numbers of pharmacies in which a registered pharmacist may have a proprietary interest

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<sup>66</sup> See the Guild's submission to the Harper Review for the MacroPlan Dimasi analysis. Accessed here: [https://www.guild.org.au/data/assets/pdf\\_file/0019/6157/pgoa-submission-to-competition-policy-review-draft-report-november-2014-fv.pdf](https://www.guild.org.au/data/assets/pdf_file/0019/6157/pgoa-submission-to-competition-policy-review-draft-report-november-2014-fv.pdf)

<sup>67</sup> Between June 2014 and June 2022 pharmacy numbers increased from 5,454 to 5,901. In combination with the location rules, this increase is likely to have at least maintained accessibility levels at the 2014 study findings. The 2014 numbers can be found in Table 18 of <https://www.pbs.gov.au/info/statistics/pbs-expenditure-prescriptions-30-june-2015>.

- Restrictions on the ownership structures of pharmacy businesses
- Pecuniary interest measures to prevent persons and corporations other than registered pharmacists having an indirect interest in a pharmacy business.

The *Pharmacy Acts* of the states and territories require that a pharmacy be supervised and managed by a registered pharmacist. Pharmacists are required to complete a four-year degree followed by on-the-job training to qualify. By implication rather than formal definition, *Pharmacy Acts* characterise 'ownership' as, at minimum, the holding by a pharmacist or pharmacists of the effective and undisputed control of the decision-making of a pharmacy business.

While the Australian Government sets the location rules, the ownership rules are a matter for state and territory governments. The effect of these rules is that, by and large, pharmacies can only be owned and operated by registered pharmacists, where the owner-pharmacy must have effective and undisputed control of decision-making. The ownership rules do not, however, prevent pharmacies owned by different pharmacists from operating under a common name or brand.

As described in the following, the rules regarding pharmacy ownership play an important part in achieving national health policy goals, in terms of:

- Preventing horizontal and vertical integration and therefore concentration of the pharmacy sector, thus minimising costs and financial risks to the Australian Government and to taxpayers; and
- Ensuring that quality of service standards are adhered to, since pharmacists who breach the standards risk losing the considerable human and physical capital invested in their pharmacy.

A key feature of the existing pharmacy ownership rules is that they have preserved a relatively dispersed ownership structure, with very low levels of ownership concentration. Such a structure provides crucial benefits to the Australian Government, as it prevents a situation from emerging where the Australian Government, to meet its objectives, would have to purchase dispensing services from suppliers with substantial market power, or negotiate concurrently with multiple large commercial entities.

The second benefit of the ownership rules is that the rules ensure owner-pharmacists have significant 'skin in the game'. Pharmacists invest considerably in human and physical capital to operate their businesses, which is usually their principal asset. Because the rules limit dilution of equity, pharmacists cannot spread the risk associated with that asset to other investors in the way a listed entity would. By placing the pharmacist and his or her professional reputation at the centre of the distribution relationship, a position that the pharmacist stands to lose if quality standards are not met, the Government effectively 'raises the stakes' for non-performance. Owner-pharmacists therefore have an enhanced incentive to conduct themselves and their pharmacies ethically and professionally, so as to not risk loss of registration and, therefore, loss of value in the pharmacy.

The ownership rules therefore contribute to the trust consumers have in community pharmacy, which in turn helps achieve the Australian Government's public health objectives of ensuring access to safe and effective medicines. There is furthermore an important

interaction between the public benefits that arise from the pharmacy ownership rules, and those from the location rules. As noted above, the ownership rules necessarily impose risk on owner-pharmacists who (with some historical exceptions) cannot diversify the investment risk they incur across pharmacies or by selling significant equity to non-pharmacists. Australia's health policy relies on pharmacists to fund the sunk investments that providing widespread access to dispensing services requires. The effect of free market entry for competing pharmacies would be to increase the risk on pharmacists, and to potentially increase the cost of capital to pharmacy, ultimately raising the costs consumers and taxpayers need to bear. The location rules help mitigate that risk, as they give pharmacists some (limited) assurance that, having incurred those sunk costs and built local custom, they will not be exposed to completely unrestricted entry. As such, the location and ownership rules are complementary and self-reinforcing.

The outcomes as regards the industry structure in Australia can be contrasted with those that have occurred when ownership restrictions on community pharmacies were lifted. In countries where the ownership of pharmacies has been deregulated, this process has set in motion horizontal and vertical consolidation and, in the case of Norway, has required new regulatory intervention by antitrust authorities.<sup>68</sup> Overall, and while comparisons of pharmaceutical sectors between countries can be problematic, a clear trend of industry consolidation has been observed in countries that have relaxed their pharmacy ownership rules.

### 3.3.5 Restrictions on advertising

A combination of overlapping Australian, state and territory governments regulations and industry codes govern the advertising of medicines and pharmacy services. Relevant Australian Government regulation is through the Therapeutic Goods Act 1989. Essentially, direct-to-consumer promotion of prescription drugs (and some pharmacy-only drugs) is prohibited, though manufacturers can advertise these medicines to health professionals and pharmaceutical wholesalers. Pharmacists are also legally able to advertise the prices they charge for medicines. The TGA regulates advertising for therapeutic goods including medicines.<sup>69</sup>

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<sup>68</sup> Vogler, S., Arts, D., & Sandberger, K. 2021. *Impact of pharmacy deregulation and regulation in European countries* Summary Report. Gesundheit Österreich Forschungs-und Planungs GmbH, Vienna and Vogler, S., 2014. *Competition Issues in the Distribution of Pharmaceuticals, Directorate for Financial and Enterprise Affairs: Competition Committee Global Forum on Competition*. 14 March 2014.

<sup>69</sup> Australian Government Department of Health and Aged Care 2023 Therapeutic Goods Administration n.d. *Advertising*. Available at: <https://www.tga.gov.au/how-we-regulate/advertising>

## 4. Financial impacts on community pharmacy sector of 60-day dispensing

### 4.1 Overview

This section provides estimates of the financial and related employment impacts on community pharmacy from the MDQ policy change. The analysis is based on publicly available dispensing data as well as financial data supplied by community pharmacies via their accounting firms.

The section includes:

- An outline of the key assumptions and methodology used for the financial analysis with a full description provided at Appendix A and B (Section 4.2)
- A summary report of the estimated impacts of the MDQ policy change on dispensing volumes and pharmacy revenue at the national level (Section 4.3)
- A summary report of the estimated impacts of the MDQ policy change on dispensing volumes and pharmacy revenue at the individual pharmacy level and then aggregated to state/territory and regional levels (Section 4.4).

### 4.2 Key assumptions and methodology

A financial model was developed to understand the impact of the MDQ policy on dispensing volumes and pharmacy revenue at the national level. A database was built by consolidating various publicly available datasets related to PBS dispensing activity (through to 2021-22) and, based on this latest available dataset, establishing a base case for dispensing volumes from 2023-24 to 2026-27.

The PBS and Services Australia websites provide information on the quantity of medication dispensed under the PBS on a monthly and annual basis, categorised by jurisdiction. These figures served as a reference point for the volume of medication dispensed in 2021-22 which is the latest year reported. From 2022-23 onwards, dispensing volumes were grown at an assumed population growth rate of 1.6 per cent per year.<sup>70</sup>

A second stream of financial modelling was undertaken at the pharmacy level. Financial data was obtained from community pharmacies directly (via accounting firms) and these datasets provide insights into the impact of the policy on dispensing volumes, revenue and net profit at the individual community pharmacy level.<sup>71</sup>

The MDQ policy change aims to reduce the number of separately dispensed scripts by half for those 325 PBS listed medicines in scope (i.e. from every 30 days to every 60 days). For example, if 12 scripts per year were dispensed under the previous 30-day policy for the 325 PBS listed medicines in scope, the starting point for this analysis is that dispensing volume

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<sup>70</sup> This population growth rate assumption aligns with DHAC's analysis submitted to OIA. See: Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.27. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>71</sup> A full description of the assumptions and methodology used is at Appendix B.

would fall to six scripts per year under the 60-day policy. This reduction in dispensing volume reduces pharmacy revenue directly due to reduced payments by the Australian Government for supplying the medicines and indirectly due to reduced visits to the community pharmacy which impacts retail sales.

By extrapolating dispensing volumes at the individual pharmacy level and considering the three different GP take-up rates (see Section 4.2.1), it was possible to estimate the financial impacts on the community pharmacy sector.

To further evaluate the impacts of the MDQ policy change, the potential decrease in visits per pharmacy was analysed and aggregated to a jurisdiction level (i.e. state and territory) and Modified Monash Model level, taking into account the geographic distribution of pharmacies (see also Appendix B).

### 4.2.1 GP take-up rate

A key parameter in the financial and economic models is the assumed GP take-up rate of the policy.<sup>72</sup>

The actual GP take-up rates are, of course, unknown *ex ante*. Take-up rate assumptions have been informed by DHAC's submission to OIA (see also Section 6) as well as a separate review of previous GP take-up rates of prescribing options which showed that for 94 per cent of the dispensing for items that have an 11 repeat option GPs still reverted to the default behaviour of a five repeat.<sup>73</sup>

Another related factor will be the Australian Government's planned implementation the MDQ policy, in three stages, as follows:

1. From 1 September 2023 (100 medicines announced, but yet to be identified).
2. From 1 March 2024 (unknown number).
3. From 1 September 2024 (unknown number).<sup>74</sup>

From the consumers perspective, there is a financial incentive to request 60-day dispensing (see Section 5.2.4) although how quickly patients become aware of the policy is unknown. Moreover, how GPs will react to these changes is not entirely certain. That said, as patients become aware of the policy change, there may be pressure on GPs from their patients to adopt 60-day dispensing for these medicines.

On balance, the information about the policy rollout and previously available evidence on GP dispensing behaviour is tenuous at best. The reason for this uncertainty is that there is a lack of publicly available data on GP dispensing behaviour, especially in the estimates provided by

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<sup>72</sup> In the DHAC IA, the term 'consumer take up rate' is used. We have used this interchangeably with the term 'GP take-up' rate because the decision to adopt the MDQ policy change rests with the GP. See: *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.26. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>73</sup> Based on a review of PBS data which shows the 11 repeat prescriptions have different PBS item codes so their volume is separately identifiable. More background on the arrangement is at: <https://www.pbs.gov.au/pbs/news/2008/11/New-measure-to-reduce-repeat-prescription-requirements>

<sup>74</sup> To the best of current knowledge, the Australian Government has not specified which of the 325 in-scope medicines will be rolled out across the three stages.

DHAC in its submission to OIA. We have, therefore, taken a cautious approach by adopting three GP take-up rate scenarios.

Table 4-1 shows the GP take-up rates by the three scenarios adopted for the financial and economic analysis. The Minimum Scenario rate, used in DHAC’s IA, begins at 45 per cent take-up in Year-1 (2023-24), increases to 58 per cent in Year-2 (2024-25), and then levels out at 63 per cent in Year-3 (2025-26) and Year-4 (2026-27).<sup>75</sup> The Central Case scenario begins with a GP take-up rate of 63 per cent in Year-1 and increases by 9 percentage points in each subsequent year to reach 90 per cent in Year-4. A maximum impact scenario, which begins at 80 per cent in Year-1 and rises to 95 per cent in Year-4, was established to understand the maximum potential impact of the policy. In our view, the Central Case scenario represents the most reasonable GP take-up rate trajectory.

**Table 4-1 The three scenarios for GP take-up rates of the MDQ policy change**

Scenario	Year-1 2023-24	Year-2 2024-25	Year-3 2025-26	Year-4 2026-27
Minimum	45%	58%	63%	63%
Central	63%	72%	81%	90%
Maximum	80%	85%	90%	95%

Source: Tulipwood Economics-RIDL scenarios.

#### 4.2.2 Community pharmacy revenue per script

The price received by a pharmacy for each PBS listed medicine, known as the Dispensed Price for Maximum Quantity (DPMQ), was used to calculate the potential cost to the community pharmacy for dispensing medication over a 60-day period instead of a 30-day period. These calculations helped assess the impact on the rate of co-payments for patients and the Australian Government i.e. the Concessional co-payment of \$7.30 and the General co-payment of \$30.00, as increased adoption would lead to fewer 30-day dispensing periods and more 60-day dispensing periods. In addition, larger quantities of medicine supplied will, in some cases, lead to ‘bracket creep’ i.e. pushing medicines previously supplied below the general co-payment level being eligible for the co-payment subsidy under the new policy.

For example, if the PBS manufacturer price of a medicine is \$15, a patient not eligible for a concession may pay the dispensed price of \$28.40 for a 30-day quantity. However, under the 60-day dispensing policy, that patient will now only pay the General Co-payment price of \$30 since the new listed price of \$43.40 (being 2 \* \$15, plus one set of fees) exceeds the General Co-payment price.

As noted in Section 3.3.2 in Table 3-1, community pharmacists receive a number of payments from the Australian Government related to dispensing PBS listed medicines. At a national level, pharmacists receive, a minimum, \$12.14 per script dispensed (\$13.00 from 2023-24), which is the sum of the Ready Prepared dispensing fee (\$7.82 in 2022-23, \$8.37 in 2023-24) and the Tier 1 Administration, Handling and Infrastructure fee (\$4.32 in 2022-23 for medicines less than \$100, \$4.62 in 2023-24). See Section 3.3.2 for these 2023-24 estimated fees.

<sup>75</sup> Ibid. p.26.

### 4.2.3 Revenue received for other retail sales

The decline in community pharmacy visits was used to calculate reduced gross profit from reduced sales of non-PBS items due to decreased footfall.<sup>76</sup>

Financial data from community pharmacies was used to determine the overall financial impact of the reduction in gross profit both from reduced dispensing activity and reduced footfall. The combination of dispensing data at the community pharmacy level, reported net profit margins and the 'other retail' gross profit reduction caused by decreased foot traffic (supplied by accounting firms) enabled a detailed analysis of the financial impacts at the national, state/territory and regional levels.

In the Central Case scenario, the *average* reduction in retail spend per visit foregone is estimated to be \$20 in 2023-24 with the reduction in gross margin estimated to be \$6 *on average*.

Since different regions have varying socioeconomic characteristics, the effect of the MDQ policy change on community pharmacies will be different. As such, it is important to assess the impact at urban, regional, rural and remote levels and the analysis considers both jurisdiction and regional location simultaneously when considering the financial impact of the MDQ policy change.

Appendix A and B provides the assumptions and methodology used in the financial analysis.

## 4.3 Financial impacts at a national level

The MDQ policy change will have a financial impact on community pharmacies by reducing the dispensing payments made by the Australian Government.

### 4.3.1 Estimate of lower dispensing volumes based on GP take-up rates

Under the MDQ policy change, community pharmacies will experience a significant reduction in dispensing volumes and, consequently, revenue.

In 2021-22, the Australian community pharmacy sector dispensed 214.77 million prescriptions that are in-scope of the Australian Government's proposed changes.<sup>77</sup> Given the changes would effectively halve the number of prescriptions for the same quantity of medications supplied by community pharmacies, the reduction in script volume in 2021-22 at a 100 per cent GP take-up rate is estimated to be 107.4 million scripts. As discussed previously, this maximum level of GP uptake is, in our view, unrealistic and is not used in modelled scenarios but is expressed here to show the starting point of the analysis.

This 100 per cent impact is shown (in bold) in the top-left of the array in Table 4-2 in the 2021-22 column.

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<sup>76</sup> Footfall refers to the number of retail consumers visiting a physical store (or shopfront).

<sup>77</sup> A total of 310.7 million medicines were dispensed in 2021-22 across more than 900 approved medicines. PBS Expenditure and Prescriptions Report (2021-22). Accessed here: <https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions-report-1-july-2021-to-30-june-2022#:~:text=Total%202021%2D22%20PBS%20subsidised,the%202020%2D21%20of%20financial%20year.>



The estimated reduction in script volumes in 2021-22 is then grown at the population growth rate across the four-year period of analysis (from 2023-24 to 2026-27). These are the figures along the 'Scenario\_100' row. The GP take-up rates are then applied and the take-up rates for the three scenarios are identified (in the coloured cells). For example, in Yr-1 in the central scenario (63% GP take-up), script volumes are estimated to fall by 69.8 million.

**Table 4-2 Reduction in script volume by GP take-up rate**

Reduction in script volumes at GP take-up rates (m)	2021-22	2022-23	Year 1 2023-24	Year 2 2024-25	Year 3 2025-26	Year 4 2026-27
Scenario_100	<b>107.4</b>	109.1	110.8	112.6	114.4	116.3
Scenario_95	102.0	103.6	105.3	107.0	108.7	110.4
Scenario_90	96.6	98.2	99.8	101.4	103.0	104.6
Scenario_85	91.3	92.7	94.2	95.7	97.3	98.8
Scenario_81	87.0	88.4	89.8	91.2	92.7	94.2
Scenario_80	85.9	87.3	88.7	90.1	91.5	93.0
Scenario_72	77.3	78.6	79.8	81.1	82.4	83.7
Scenario_70	75.2	76.4	77.6	78.8	80.1	81.4
Scenario_63	67.7	68.7	69.8	71.0	72.1	73.2
Scenario_60	64.4	65.5	66.5	67.6	68.7	69.8
Scenario_58	62.3	63.3	64.3	65.3	66.4	67.4
Scenario_50	53.7	54.6	55.4	56.3	57.2	58.1
Scenario_45	48.3	49.1	49.9	50.7	51.5	52.3

Note:

Red = minimum take-up scenario, Orange = central take-up scenario, Green = maximum take up scenario

Source: Tulipwood Economics and RIDL analysis.

### 4.3.2 Corresponding estimates of lost dispensing revenue

The corresponding community pharmacy revenue losses at a national level are reported in Table 4-3. The revenue reduction figure which corresponds to the 107.4 million volume reduction figure in Table 4-2 (above) is \$1,306.5 billion in 2021-22.<sup>78</sup> For example, in Yr-1 in the central scenario (63% GP take-up), script revenue is estimated to fall by \$909 million.

**Table 4-3 Reduction in script revenue by GP take-up rate**

Reduction in script revenues at GP take-up rates (\$m)	2021-22	2022-23	Year 1 2023-24	Year 2 2024-25	Year 3 2025-26	Year 4 2026-27
Scenario_100	<b>1,306.5</b>	1,327.4	1,442.9	1,466.0	1,489.4	1,513.3
Scenario_95	1,241.2	1,261.1	1,370.8	1,392.7	1,415.0	1,437.6

<sup>78</sup> To maintain the conservative estimation methodology, future indexation of dispensing fees is not included in these estimates.



Scenario_90	1,175.9	1,194.7	1,298.6	1,319.4	1,340.5	1,361.9
Scenario_85	1,110.6	1,128.3	1,226.5	1,246.1	1,266.0	1,286.3
Scenario_81	1,058.3	1,075.2	1,168.8	1,187.5	1,206.5	1,225.8
Scenario_80	1,045.2	1,062.0	1,154.3	1,172.8	1,191.6	1,210.6
Scenario_72	940.7	955.8	1,038.9	1,055.5	1,072.4	1,089.6
Scenario_70	914.6	929.2	1,010.0	1,026.2	1,042.6	1,059.3
Scenario_63	823.1	836.3	909.0	923.6	938.4	953.4
Scenario_60	783.9	796.5	865.7	879.6	893.7	908.0
Scenario_58	757.8	769.9	836.9	850.3	863.9	877.7
Scenario_50	653.3	663.7	721.5	733.0	744.7	756.6
Scenario_45	587.9	597.3	649.3	659.7	670.3	681.0

Note:

Red = minimum take-up scenario, Orange = central take-up scenario, Green = maximum take up scenario

Source: Tulipwood Economics and RIDL analysis.

In summary, at a national level, over the period 2023-24 to 2026-27 the reduction in dispensing volumes and dispensing-related revenues are as follows:

- **Minimum scenario:**
  - The estimated reduction in dispensing volumes is **260.5 million scripts** over four years.
  - The corresponding estimated reduction in community pharmacy revenue is **\$3,391.4 million**. This is similar to estimates in Australian Government statements, in which the Australian Government saving has been estimated to be \$1.2 billion and the consumer saving an estimated \$1.8 billion.<sup>79</sup> Both of these would be derived from reductions in community pharmacy dispensing revenue.
- **Central scenario:**
  - The estimated reduction in dispensing volumes is **348.2 million scripts** over four years.
  - The corresponding estimated reduction in community pharmacy revenue is **\$4,532.9 million**.
- **Maximum scenario:**
  - The estimated reduction in dispensing volumes is **397.8 million scripts** over four years.
  - The corresponding estimated reduction in community pharmacy revenue is **\$5,178.5 million**.

<sup>79</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

## 4.4 Impacts at an individual community pharmacy level

Aside from the estimated sector level impacts on revenue noted in Section 4.3 it has been possible to estimate impacts at an individual community pharmacy level, by jurisdiction and location across Australia using financial data supplied by individual pharmacies.

This analysis utilised two key sources of confidential financial data:

- Data supplied by community pharmacies (sample: n=1,732) from all states and territories via confidential and secure portals such as Strongroom and Nostradata<sup>80</sup>. These datasets provided insights into the impact on revenue from lower Australian Government dispensing fee payments and reduced visits to community pharmacy (lowering retail sales) by region. The secure portals Strongroom and Nostradata considered the dispensing volumes in the prior financial year, and the dispensing time and date to determine the number of discrete visits and the gross profit that would have been lost the prior financial year had the 60-day dispensing policy been active. For the purposes of the analysis in this report, calculator assumptions used in these portals, including the prescriber uptake rate, were adjusted to be consistent with the report assumptions.
- Data was supplied by several accountants and valuers from all states and territories as at 31 May 2023 (sample: n=521 of which n=478 was used).<sup>81</sup> These datasets provided insights into the financial viability of the community pharmacy sector in 2021-22 and insights into the extent to which the sector currently has enough financial resilience (or buffer) to withstand (and, ultimately, adjust) to the reduced income from the 60-day MDQ policy change.<sup>82</sup>
- The sample is drawn largely from those pharmacies that use specialist pharmacy accounting firms. We assessed the representativeness of the sample of 478 pharmacies and found:
  - The average total revenue per pharmacy of \$4.2m (2021-22) is approximately 13% higher than the average published in the 2022 Guild Digest (relating to financial year 2020-21)<sup>83</sup>.
  - The average ratio of expenses to total revenue was 89.2%. This is at the lower end of the range expected based on averages for pharmacies as published by

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<sup>80</sup> StrongRoom and NostraData are two software companies who currently offer various products to community pharmacy owners related to dispensing and transactional data. They created their own products ('calculators') to leverage this existing dispensary data flow to offer community pharmacies an ability to calculate the impact of 6oDD on their own dispensary data. The Guild was given the data by the companies under an access arrangement. For the purposes of the analysis in this report, calculator assumptions used in these portals, including the prescriber uptake rate, were adjusted to be consistent with this report's assumptions. The websites can be accessed here: <https://www.nostradata.com.au/public/doubleDispense/> and <https://pharmacyguild.strongroom.ai/calculator>. Further details are provided at Appendix B. The term 'n' refers to the sample size.

<sup>81</sup> Accounting firms, valuers and pharmacy brokers that provided data and were willing to be acknowledged included: Pitcher Partners, Yarra Lane, Peak Strategies, Perks, Holman Hodge, Findex, RSM Australia, Vincent's, Grimsey, Medici Capital, Rose Partners, CFS Sales and Valuations and Kizmet Capital. Further details are provided at Appendix B.

<sup>82</sup> Further details about pharmacy level data sources are provided at Appendix B.

<sup>83</sup> Guild Digest data was not used in this report's impact analysis, as the Guild's privacy arrangements with data providers restrict the access to data at the pharmacy location level. Also, the latest Guild Digest results include significant COVID-19 related revenue from rapid antigen tests, vaccinations and additional retail sales.

the Australian Taxation Office, which range from 89% for smaller pharmacies to 92% for larger pharmacies.<sup>84</sup>

- Based on the above, compared with other published sources of pharmacy financial performance, the sample used is (on average) larger and has a relatively low cost base (so is relatively more profitable). As the impact analysis is based on this sample, the estimated impact when extrapolated across the whole sector is likely to be, therefore, understated.
- It is important to note that the modelling does not take into account further cost pressures that may be experienced by community pharmacies beyond the 2021-22 base data used.
  - The Fair Work Commission decided to increase the minimum wage rates in modern awards by 5.75 per cent effective from 1 July 2023, which will flow through to pharmacy assistant wages and also impact pharmacist wages;<sup>85</sup>
  - recent RBA cash rate rises which flow through to commercial lending rates;<sup>86</sup> and
  - the impact of CPI, which is currently at 7 per cent in annual terms, on pharmacy rents and other expenses.<sup>87</sup>

The combination of these data sources allowed for an analysis of pharmacies located in all states and territories and all 7 tiers of the MMM regional classification. The size and geographic spread of the sample examined means that the analysis and findings are representative of the impacts across the whole community pharmacy sector. In addition, the analysis also accounted for the increased funding for some community pharmacies announced by Australian Government under the Regional Pharmacy Maintenance Allowance (RPMA).<sup>88</sup>

The rest of this section analyses:

- Increased risks of medicine shortages. Again, these are identified as potentially significant impacts that are not quantified in the financial analysis but underpin a part of the economic model (Section 4.4.1).
- Reductions in community pharmacy profitability (Section 4.4.2).
- Increased community pharmacy closures (Section 4.4.3).
- Reductions in community pharmacy employment (Section 4.4.4)

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<sup>84</sup> See here for details: <https://www.ato.gov.au/business/small-business-benchmarks/in-detail/benchmarks-a-z/l-g/pharmacy/>

<sup>85</sup> See paragraph 17 of the FWC Decision here: <https://www.fwc.gov.au/documents/resources/annual-wage-review-2022-23-decision-announcement.pdf>

<sup>86</sup> The Reserve Bank of Australia has raised the cash rate target 12 times since May 2022, from 0.35 per cent to 4.10 per cent.

<sup>87</sup> The current (March quarter 2023) rate of annual CPI inflation is 7.0%. See here: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release>

<sup>88</sup> Australian Government 2023. *Budget 2023-24: Delivering cost-of-living relief*. Available at: <https://budget.gov.au/content/01-col-relief.htm#m3>

- Debt repayment obligation impacts at a state/territory and regional level (Section 4.4.5).

#### 4.4.1 Reduction in community pharmacy profitability

Pharmacy profitability will be impacted because, in the short-run, revenues will decline faster than fixed and variable costs, including labour costs.<sup>89</sup>

Community pharmacies are expected to struggle to reduce operating costs *in the short-run* because most costs are fixed in the short-run, such as rent (as it would be difficult to reduce the floor space under contract), labour costs (whereby there is, *generally*, an inclination to keep staff for as long as possible to recoup any initial investment in training and development), and utilities costs (e.g. refrigeration, storage and interest costs). More broadly, community pharmacies may have little flexibility to reduce costs to maintain previous levels of profitability and still meet the levels of service expected by the community. While every pharmacy will take a different approach that suits their unique circumstances, the two main options would likely be to either reduce staff numbers (i.e. actual job positions) or reduce operating hours (i.e. staff hours), or a combination of the two approaches.

##### 4.4.1.1 A pharmacy 'job losses' and 'shutdown' rule was developed

In order to estimate the potential number of community pharmacy job losses and store closures as a result of the MDQ policy, a pharmacy 'job losses' and 'shutdown' rule was developed. The rule is based on an accounting measure of net profit and specifies that a pharmacy will begin to shed staff if:

*Net profit before tax, but after interest payments and depreciation expense < 0*

If, after the implementation of the MDQ policy, the new negative net profit figure is (in absolute terms) greater than the total wages bill of the pharmacy, then the pharmacy must shutdown. The reason is that no matter how many staff are let go, the pharmacy will remain in a negative net profit position. In this stylised rule, the only business cost considered to be variable in the short-run are staff costs with all other costs fixed.

A simple example is presented to illustrate the rule. In the Base Case pharmacy net profit is equal to \$100. The effect of the MDQ policy is to reduce pharmacy revenue by \$200, which reduces net profit to -\$100. The wages bill is \$50. In this case, even if all staff are let go (thereby reducing costs by \$50 and correspondingly raising net profit by \$50), the pharmacy will remain in a negative net profit position (and in any event not have any staff to service customers). On the other hand, if the wages bill is \$200, then some staff could be let go until the pharmacy returned to a positive net profit position.

We acknowledge that this rule is very stylised and there are many other factors a pharmacy owner must consider in response to a significant reduction in revenue. For example, the rule

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<sup>89</sup> "Short-run" is an economic concept and does not necessarily relate to a specific length of time, but a conceptual period in which one or more production inputs are considered fixed in quantity, which determines the ability for a business or industry to react and adjust to changes that will affect their operation.

should properly consider the asset position of the pharmacy and how much debt the business is carrying. A pharmacy with debt must make provision to pay down the loan principal. A pharmacy that is in a net asset position must rationally earn a return on those assets. And there are also more complex trade-offs to consider in terms of the utilisation of technology, trade-offs between capital and labour, the products and services the store will offer, how those products and services are priced, and numerous other factors in response to the reduction in dispensing revenues. However, overall, in our view the net profit rule adopted represents a cautious approach to understanding and estimating the impacts.

#### 4.4.2 Results of the analysis

The pharmacy level analysis compared the impact of the 60-day MDQ policy change, by GP take-up rate, using the 2021-22 financial data supplied by 478 community pharmacies as the benchmark. In terms of net profit before tax, the analysis found:

- **Average net profit is estimated to decline by 43 per cent** at the GP take-up rates used in the central scenario, from a baseline of \$429,116 to between \$245,190 (at 90 per cent GP take-up) and \$259,784 (at 63 per cent GP take-up).<sup>90</sup>
- **Median net profit is estimated to decline by 49 per cent** at the GP take-up rates used in the central scenario, from a baseline of \$357,336 to between \$182,449 (at 90 per cent GP take-up) and \$197,198 (at 63 per cent GP take-up).

The full results by GP take-up rate are shown in Table 4-3 (below).

**Table 4-3 Estimated community pharmacy net profit (average and median), by central scenario GP take-up rates**

Impact of net profit	2021-22 (actual)	At 63% GP take-up	At 72% GP take-up	At 81% GP take-up	At 90% GP take-up
Average	\$429,116	\$259,784	\$254,920	\$250,055	\$245,190
Median	\$357,336	\$197,198	\$191,219	\$187,112	\$182,449

Source: Tulipwood economics and RIDL analysis based on actual financial data provided by community pharmacies.

The losses per community pharmacy relative to the 2021-22 net profit outcomes are very significant, and these losses will directly translate into either pharmacy closures and/or pharmacy sector employment losses (discussed at sections 4.4.3 and 4.4.4 below).

- Average losses per pharmacy range between \$169,332 (at the 63 per cent GP take-up) and \$183,925 (at the 90 per cent GP take-up).
- Pharmacy losses in median terms range between \$160,138 (at 63 per cent GP take-up) and \$174,887 (at 90 per cent GP take-up). (Table 4-5 below).
- A 'lower bound' net profit point has been defined as the lower bound of 1 standard deviation around the average net profit. This lower bound point falls and switches from being positive (+\$9,472 in the Base Case) to negative

<sup>90</sup> An overview of community pharmacy financial performance is in Section 2.5.

(between -\$132,407 and -\$147,024 in the Policy Case). What this means is that many pharmacies *even within the first standard deviation of financial performance* will be financially vulnerable in the Policy Case.

- Moreover, the analysis indicates that at least one-sixth of all pharmacies (i.e. 944 of 5,901 pharmacies) are likely to be in a negative net profit position after the MDQ policy change and will be, therefore, forced to take action by either reducing staff levels or, in the worst cases, shutting the pharmacy (as outlined in section 4.4.1.1 above).

These results are shown in Table 4-4.

**Table 4-4 Estimated losses by individual community pharmacy relative to 2021-22 actual outcome, by central scenario GP take-up rate**

Losses relative to 2021-22 actual net profit result	At 63% GP take-up	At 72% GP take-up	At 81% GP take-up	At 90% GP take-up
Average	\$169,332	\$174,196	\$179,061	\$183,925
Median	\$160,138	\$166,117	\$170,224	\$174,887
<b>Change in lower bound Net Profit <sup>a</sup></b>				
Lower bound Net Profit (Base Case)	\$9,472	\$9,472	\$9,472	\$9,472
Lower bound Net Profit (Policy Case)	<b>-\$132,407</b>	<b>-\$137,278</b>	<b>-\$142,151</b>	<b>-\$147,024</b>

Note: \*Adjusted for COVID-19 activities (e.g. Rapid Antigen Test and Vaccinations). Note: In a normal distribution, two-thirds of the pharmacies will fall between the upper and lower bound estimates. The lower bound estimate represents the average less 1 standard deviation.

Source: Tulipwood economics and RIDL analysis based on actual financial data provided by community pharmacies.

### 4.4.3 Many community pharmacies will likely close

The impacts of the 60-day MDQ policy on pharmacy profitability will be, as we have shown, significant.

There are currently 5,901 community pharmacies in Australia (See section 2.4). The pharmacy-level analysis identified the most at-risk of those community pharmacies based on the current 2021-22 geographical distribution of net profit (i.e. the starting point), and the impact of the MDQ policy change on each individual community pharmacy by applying the ‘job losses’ and ‘pharmacy shutdown’ rule discussed above. In particular, those community pharmacies that would move to a negative net profit position (or their negative net profit worsens) after the implementation of the policy, by each of the GP take-up rates were identified.

Clearly, the higher the GP take-up rate, the higher the number of expected pharmacy closures given the positive correlation to dispensing revenue reductions.

Table 4-6 (below) presents the impact of the MDQ policy on pharmacy closures when ignoring any need to service debt (i.e. make principal repayments) or provide a return on investment for risk. These estimates can be, therefore, considered cautious.

- At the assumed 63 per cent GP take-up rate (Year-1 in the central scenario), it is estimated that more than 135 pharmacies will close as a result of the 60-day MDQ policy.
- At the 90 per cent GP take-up rate (Year-4 in the central scenario), it is estimated that around 200 community pharmacies are at risk of closing.
- There are expected to be a higher or equal number of pharmacy closures in Victoria, Queensland and South Australia compared to NSW, despite NSW having the largest population of any Australian jurisdiction.

**Table 4-6 Community pharmacy closures, by GP take-up rate and state/territory, before debt repayments or ROI**

State/GP take-up rate	63%	72%	81%	90%
NSW	17	17	17	35
VIC	29	39	48	48
QLD	26	35	35	35
SA	19	19	19	37
WA	N.P.	N.P.	N.P.	N.P.
TAS	N.P.	N.P.	N.P.	N.P.
NT	18	18	18	18
ACT	N.P.	N.P.	N.P.	N.P.
<b>Total</b>	>135	>155	>170	<b>~200</b>

Notes: N.P – not provided due to ensuring data deidentification.

Source: Tulipwood economics and RIDL analysis based on actual financial data provided by community pharmacies.

Table 4-7 (below) presents the impact when considering servicing of debt i.e. principal payments, or earning a return on investment for risk (i.e. the additional \$140,000 subtracted from the baseline net profit figure, discussed at section 4.4.4). Note the impact and closures were calculated after applying the increase to the RPMA as announced by the Australian Government. In other words, returning to the pharmacy job losses and shutdown rule, in this scenario we subtract an additional \$140,000 from net profit before we apply the rule to cover for the situation where a pharmacy business might be paying down a loan or has assets that require a return on investment.

- At the assumed 63 per cent GP take-up rate (Year-1 in the central scenario), it is estimated that more than 440 pharmacies will close as a result of the 60-day MDQ policy.
- At the 90 per cent GP take-up rate (Year-4), it is estimated that more than 665 community pharmacies are at risk of closing.
- In Australia’s three largest states, more than 100 pharmacies per state are estimated to close by Year-3 at the 81 per cent GP take-up rate.

**Table 4-7 Community pharmacy closures, by GP take-up rate and state/territory, including debt repayments or ROI**

State/GP take-up rate	63%	72%	81%	90%
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NSW	122	122	157	157
VIC	125	145	145	173
QLD	70	96	105	123
SA	37	56	56	74
WA	39	39	39	59
TAS	N.P.	N.P.	8	8
NT	24	24	24	30
ACT	N.P.	N.P.	N.P.	N.P.
<b>Total</b>	<b>&gt;440</b>	<b>&gt;510</b>	<b>&gt;565</b>	<b>&gt;665</b>

Notes: N.P – not provided.

Source: Tulipwood economics and RIDL analysis based on actual financial data provided by community pharmacies.

The impacts of the MDQ policy change by region illustrate the vulnerability of regional pharmacies to the policy. While most pharmacy store closures occur in Australia’s major cities because that’s where a majority of the pharmacies are located, the outer regional areas (MMM regions 5 and 6) are particularly vulnerable because of the low population densities and, hence, low dispensing volumes and retail sales combined with relatively higher fixed costs as a percentage of revenue. These results include the announced doubling of the Regional Pharmacy Maintenance Allowance (RPMA).<sup>91</sup> (Table 4-7).

**Table 4-7 Community pharmacy closures, by GP take-up rate and Modified Monash Model**

MMM region	63%	72%	81%	90%
1	274	302	302	357
2	68	101	110	110
3	22	22	55	66
4	9	9	9	19
5	44	44	44	44
6	18	18	18	36
7	N.P.	N.P.	N.P.	14
<b>Total</b>	<b>435</b>	<b>478</b>	<b>538</b>	<b>646</b>

Notes: N.P = not provided.

In this analysis, community pharmacy closures have been calculated as the amount of funds required to break-even when servicing a modest loan. That is \$140,000 (estimated amount to service a modest commercial loan or provide return on investment based on risk) less the net profit after the MDQ policy change. This analysis is after (or net of) applying the increase to the RPMA.

Source: Tulipwood economics and RIDL analysis based on actual financial data provided by community pharmacies.

#### 4.4.4 Reduction in community pharmacy employment

At an aggregate level, in the central scenario, it is estimated that **4,938 full time equivalent (FTE) jobs will be lost** as a result of the MDQ policy change (from a combination of job

<sup>91</sup> Details on the RPMA can be found here: <https://www.ppaonline.com.au/programs/rural-support-programs/regional-pharmacy-maintenance-allowance>



shedding and full pharmacy closures), *before considering servicing debt or any return on investment for risk for investors*. An estimated 80 per cent of those jobs will be lost in the first 2 years (2023-24 and 2024-25) and 90 per cent lost after three years.

As noted in Section 2.3, 56 per cent of community pharmacists are female and 35 per cent of community pharmacists work less than 34 hours per week. In a sector with a high proportion of part time jobs, the employment impacts are more significant when viewed as actual jobs rather than FTEs.<sup>92</sup> A total of **10,863 actual jobs are lost in the central scenario, including 801 pharmacists and 10,062 non-pharmacist staff.**<sup>93</sup>

Based on pharmacy employment demographic data presented in Section 2.3, it is estimated that **out of every ten persons set to lose their job: four will be under the age of 25 years; two will be mothers (30-40 years of age); and one will be a carer that works part-time (i.e. 40-50 years of age).**<sup>94</sup>

Job losses by region were estimated based on the job losses and pharmacy shutdown rule specified in section 4.4.1.1. As discussed above, we have been able to assess the impact of the MDQ policy on pharmacies by region because of the access to individual pharmacy data supplied by accounting firms. The large proportion of job losses in the MMM 1 and 2 regions reflects the fact that the majority of community pharmacies are located there, in addition to the higher cost base (e.g. higher rents in the large shopping centres of major cities). However, as explained in the economic modelling (Section 5.2), the welfare costs of unemployment in the regions are potentially much higher because of the socio-economic characteristics of regional workers and the smaller and shallower labour markets that gives rise to higher frictional unemployment.

Table 4-8 reports estimated pharmacy job losses by MMM region over the four years. The results are reported cumulatively. The largest job losses impact occurs in Year-2. This is because:

- The MDQ policy doesn't run a full year in Year-1 (beginning in the September quarter 2023);
- The GP take-up rate increases over the four years; and
- The medicine rollout occurs in three tranches (with only 100 of the 325 medicines becoming in-scope in the first year of the policy).

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<sup>92</sup> An FTE is a measure of a full-time job that is used in order to compare the number of jobs across industries or between policy options or time periods using a common denominator (being a full-time job).

<sup>93</sup> These job loss figures assume a pharmacist wage of \$120,000 per year and a pharmacy assistant wage of \$50,000 per year. See Appendix B for further discussion.

<sup>94</sup> The economic costs of these job losses, many of which could be permanent, are measured in the cost benefit analysis.

**Table 4-8 Pharmacy job losses (persons) by region, by GP take-up rate by year (cumulative)  
– before considering debt or return on investment**

Number of pharmacists and pharmacy workers actual jobs lost by year (cumulative)				
MMM region and scenario	2023-24	2024-25	2025-26	2026-27
<b>Minimum scenario</b>				
MMM 1,2	2,294	4,868	5,477	6,085
MMM 3,4,5	281	597	671	746
MMM 6,7	12	26	29	32
<b>Total</b>	<b>2,587</b>	<b>5,490</b>	<b>6,177</b>	<b>6,863</b>
<b>Central scenario</b>				
MMM 1,2	3,466	7,355	8,275	9,194
MMM 3,4,5	600	1,273	1,432	1,591
MMM 6,7	29	62	70	78
<b>Total</b>	<b>4,095</b>	<b>8,690</b>	<b>9,777</b>	<b>10,863</b>
<b>Maximum scenario</b>				
MMM 1,2	2,294	4,868	5,477	9,815
MMM 3,4,5	281	597	671	1,784
MMM 6,7	12	26	29	88
<b>Total</b>	<b>2,587</b>	<b>5,491</b>	<b>6,177</b>	<b>11,687</b>

Source: Tulipwood Economics and RIDL analysis. Job losses by year are scaled to the assumed impact of the policy, being: 37.7% in Yr-1, 42.3% in Yr-2 (80% cumulative), 10% in Yr-3 (90% cumulative), and 10% in Yr-4 (100% cumulative).

#### 4.4.5 Employment impacts at a state/territory and regional level, accounting for debt and ROI obligations

This section considers the employment impacts of the MDQ policy change, by state/territory and region after accounting for the effect of debt repayment obligations or earning an appropriate return on investment.

Financial arrangements of small businesses can be complex and opaque.

- Some business owners may have debt within the business accounts, others may have debt within their residential property, others may have debt within both.
- Some operators may attain finance through official means, such as banks or brokers and others may attain finance through family or equity via Trusts.

A proportion of community pharmacies will have commercial debt as part of purchasing the business. Such arrangements are commercial-in-confidence between the community pharmacy and their financial institution — we are not able to determine the average levels of debt or the geographical distribution of the debt. While analysis of the impact of the MDQ policy change could consider the interest paid by each community pharmacy and then quantify the likely amount of debt held, such analysis would continue to have a high degree of uncertainty given the various financial arrangements that an owner may use to finance their operations.

On that basis, it was decided that a broader market assessment be done to ascertain the likely debt levels held by the community pharmacy sector, where an indication of the debt levels be attained through consultation with a range of industry operators (i.e. consultations with valuation firms and finances companies listed in this report). That consultation suggested that the average community pharmacy may hold debt levels of about \$1.5 million on 15-year terms but actual pharmacy debt levels and terms are likely to vary widely.<sup>95</sup>

To put this market intelligence into context, a stylised example of the cost of servicing a loan has been developed, as follows.

If an average community pharmacy was to cost a pharmacist/owner \$2.0 million to purchase, with a Loan-to-Value Ratio (LVR) of 75 per cent, then it is conceivable that a recently acquired community pharmacy could have a debt of at least \$1.5 million outstanding.<sup>96</sup> If that loan was on commercial terms over 15 years then the community pharmacist would need to maintain a net profit of at least \$140,000 per year (in pre-tax terms at a company tax rate of 30 per cent) to be able to meet their tax obligation on this profit and the principal repayments on the loan.<sup>97</sup>

Using the estimate that a community pharmacy must maintain a net profit of \$140,000 per year to meet its principal payments (including accounting for tax) or earn a return on investment, when the 60-day MDQ policy is adopted at a 63 per cent GP take-up rate it is estimated that over 16,400 people (or 7,483 full-time equivalents) will be set to lose their pharmacy job — even after accounting for the increase in the Regional Pharmacy Maintenance Allowance.<sup>98</sup>

Table 4-7 presents the jobs impacts (in terms of actual persons) by rurality (i.e. using the Modified Monash Model regional classification). The rationale for presenting the impact by region is to accommodate for variations in dispensing volumes, revenue, cost structures and net profit, which can (in part) be driven by regional variations in the demographic profile of

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<sup>95</sup> This information has been provided in confidence. In our view, this is a conservative assessment. Consultation with community pharmacy brokers indicated that community pharmacy loans are likely to be in the order of \$1.5 million to \$2.0 million, and the current variable interest rate with some of the major banks is between 7.5% and 8.0% (secured by a residential property). Accordingly, some operators may need to maintain a net profit closer to \$380,000 per month to meet their tax obligations and principal repayments on a \$2.0 million loan.

<sup>96</sup> Of course, not all pharmacies have been recently acquired. Some pharmacies may be debt free and have significant assets.

<sup>97</sup> That is, a \$1.5 million loan over 15 years requires, on average, \$100,000 per year in principal repayments. At a 30% company tax rate, the business would need to earn \$142,000 in order to pay the \$100,000 and pay tax on the earnings. In relation to the tax rate, while it's true that the small business company tax rate is 25%, many pharmacists operate as Sole Traders or Partnerships and pay their marginal tax rate on earnings, which may be higher than 25%.

<sup>98</sup> The RMPA was added to the net profit of sample pharmacies, based on geographical location. Job losses were then calculated to remove a pharmacist first at \$120,000 per annum, followed by pharmacy assistants at \$55,000 per annum.

the population and incidence of chronic disease. Pharmacies operating in some regions are more likely to serve populations with a greater proportion of persons with chronic conditions (i.e. medicines in-scope of the policy change).<sup>99</sup>

In the central scenario, and accounting for debt repayments or a return on investment to the owner/s of the pharmacy, a total of 20,819 pharmacy workers are estimated to lose their jobs over the four year period, with 80 per cent of job losses occurring in the first 2 years.

A proportionately larger number of the job losses (relative to population) occur in large, medium and small rural towns (MMM 3,4,5) and remote and very remote communities (MMM 6,7). It is estimated that a total of 3,597 jobs will be lost in these regional and remote areas as a result of the MDQ policy. (Table 4-8).

**Table 4-8 Pharmacy job losses by region, by GP take-up rate by year (cumulative) – debt repayment and ROI scenario**

Number of pharmacists and pharmacy workers actual jobs lost by year, cumulative				
MMM region and scenario	2023-24	2024-25	2025-26	2026-27
<b>Minimum scenario</b>				
MMM 1,2	5,038	10,691	12,028	13,364
MMM 3,4,5	891	1,891	2,128	2,364
MMM 6,7	64	135	152	169
<b>Total</b>	<b>5,993</b>	<b>12,718</b>	<b>14,307</b>	<b>15,897</b>
<b>Central scenario</b>				
MMM 1,2	6,493	13,778	15,500	17,222
MMM 3,4,5	1,277	2,709	3,047	3,386
MMM 6,7	80	169	190	211
<b>Total</b>	<b>7,849</b>	<b>16,655</b>	<b>18,737</b>	<b>20,819</b>
<b>Maximum scenario</b>				
MMM 1,2	6,779	14,386	16,184	17,982
MMM 3,4,5	1,380	2,928	3,294	3,660
MMM 6,7	83	175	197	219
<b>Total</b>	<b>8,242</b>	<b>17,489</b>	<b>19,675</b>	<b>21,861</b>

Source: Tulipwood Economics and RIDL analysis. Job losses by year are scaled to the assumed impact of the policy, being: 37.7% in Yr-1, 42.3% in Yr-2 (80% cumulative), 10% in Yr-3 (90% cumulative), and 10% in Yr-4 (100% cumulative).

<sup>99</sup> See Appendix B for more details.

## 4.5 Conclusions

The financial impact of the MDQ policy on community pharmacies is likely to be significant. Community pharmacies are set to lose dispensing fee income, while potentially incurring increased capital and operating costs from the policy. There is also likely to be a reduction in retail revenue due to the reduced footfall.

At a national level, in the central scenario, over the period 2023-24 to 2026-27:

- The estimated reduction in dispensing volumes is **348.2 million scripts over the four years**.
- The corresponding estimated reduction in community pharmacy revenue is **\$4,532.9 million over four years in nominal terms**.

The pharmacy level financial analysis has demonstrated that there is significant variation in the financial performance of community pharmacies across Australia, by state/territory and rurality (as measured by the Modified Monash Model). Many pharmacies in regional and rural Australia will be more financially vulnerable to this policy relative to larger pharmacies in the cities.

Community pharmacies primarily operate on a fixed cost basis, where there are few variable costs within their control. This means that the levers available to offset the impacts of the policy will likely lead to job losses in the first instance, or reduced hours of operation (with corresponding reductions in staff hours). Even before considering any return on investment, or net profit to service principal repayments on loans, **at a minimum it is forecast that 200 community pharmacies are likely to close**. This will see reduced access to some of Australia's most vulnerable communities. **After considering that community pharmacies are likely to have debt repayments or a requirement to earn a return on investment, it is estimated that potentially over 600 community pharmacies could close as a result of the MDQ policy.**

In the minimum scenario, accounting for debt/ROI obligations, which is the scenario considered by DHAC in its submission to the OIA in terms of the GP take-up rate trajectory, at least almost 6,000 (at 45% GP take-up) and up to almost 16,000 people (at 63% GP take-up) will be set to lose their job as a result of the policy, where over 2,500 of these people would be from regional, rural and remote Australia.

**In the central scenario, accounting for debt/ROI obligations, it is estimated that at least 7,800 and up to 20,000 community pharmacy workers (at 90% GP take-up) are likely to lose their jobs under the current policy design.**

In the maximum scenario, accounting for debt/ROI obligations, it is estimated that at least 8,200 (at 80% GP take-up) and up to almost 22,000 people (at 95% GP take-up) could lose their pharmacy job as a result of the policy, where almost 4,000 of these people would be from regional, rural and remote Australia.

As a result of these estimated job losses and pharmacy closures, it is likely that access to Community Pharmacies will be reduced in regional, rural and remote Australia, which may adversely impact population health in these regions (see section 5.2.4)

## 5. Economic impacts on pharmacy of 60-day dispensing

### 5.1 Overview

In this section, the results of the economic analysis are reported. First, a brief overview of the assumptions and methodology used in the analysis is outlined in section 5.2 with a detailed description at Appendix C. Section 5.3 presents the headline results of the analysis (i.e. the total impact on the Australian community) and the subsequent sections present the results by region.

### 5.2 Assumptions and methodology

#### 5.2.1 Groups impacted

The economic analysis seeks to measure the incremental impact on the Australian community as a whole of moving from 30-day to 60-day MDQ's for the 325 PBS listed medicines that are within the scope of the policy. The economic analysis utilises the financial analysis undertaken by RIDL, both at the national and pharmacy level, as key inputs.

The economic analysis seeks to measure the impacts on three groups, which are mutually exclusive (to avoid double-counting costs and benefits), namely:

- **The consumers of the 325 PBS listed in-scope medicines** who benefit from fewer co-payments and fewer visits to the GP and pharmacy, offset to some extent by a subgroup of more vulnerable consumers suffering adverse medical events from less interaction with the health care system.<sup>100</sup>
- **The community pharmacy sector**, which loses dispensing revenue paid by the Australian Government and, relatedly, other retail revenue as a result of fewer pharmacy visits. Moreover, it is expected that a significant number of pharmacies will close and pharmacy jobs will be lost.
- **The rest of the Australian community**, who lose in net terms from less public funds being available to meet public expenditure priorities because the reduction in co-payment revenue and pharmacy tax payments essentially offsets the savings from avoided dispensing fee payments, but there are additional costs resulting from higher health public expenditure and the loss of human capital (unemployment) making the overall impact negative.<sup>101</sup>

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<sup>100</sup> An additional impact, that has not been measured in the financial or economic analysis, is that it will become harder for some patients to reach the Safety Net threshold – when medications become free for Australia's most vulnerable patients.

<sup>101</sup> The gain to the rest of the Australian community from re-directed public expenditure is based on a 'balanced budget' assumption whereby the net operating balance in the general government sector remains unchanged between the Base Case and the Policy Case.

## 5.2.2 The policy take-up rate will scale the impacts

As discussed in section 4.2.1, an important determinant of the scale of the financial and economic impacts will be the rate at which GPs take-up the 60-day dispensing policy, which will begin from the September quarter 2023.<sup>102</sup> While this rate is unknowable *ex ante*, our analysis indicates that the GP take-up rate chosen by the Department of Health and Aged Care (DHAC) is likely to be low.

We have selected three GP take-up scenarios that guide both the financial and economic analysis, as follows:

1. **The Minimum scenario** which begins at 45 per cent GP take-up in Year-1 (2023-24) and levels out at 63 per cent by Year-3 (2025-26). This is the scenario adopted by the DHAC in its analysis of the policy's impacts that was submitted to the Office of Impact Analysis (OIA). This scenario may be designed to match the implementation rate of the MDQ policy, but this is not clear from reading DHAC's impact assessment submission.
2. **The Central scenario** which begins at 63 per cent in Year-1 (2023-24) and reaches 90 per cent in Year-4 (2026-27), has been developed based on our own independent analysis of the likely GP take-up rate trajectory.
3. **The Maximum scenario** is somewhat arbitrary, increasing from 80 per cent in Year-1 to 95 per cent in Year-4, but the intention is to understand the maximum potential impact of the policy without assuming a default take-up rate of 100 per cent from Year-1. We chose not to model a 100 per cent take-up scenario, which seems unrealistic given that GPs have the discretion and, possibly for some, the financial incentive not to enforce the 60-day policy 100 per cent of the time. Moreover, it will take patients time to become aware of the policy and many patients will simply follow their GP's advice in terms of dispensing quantity. Finally, it would not be possible to reach a 100 per cent take-up rate in 2023-24 because the policy starts in the second quarter (on 1 September 2023) rather than on 1 July 2023 (Table 5-1).

**Table 5-1 GP take-up rates of 60-day MDQ under 3 scenarios**

Scenario	Year-1	Year-2	Year-3	Year-4
	2023-24	2024-25	2025-26	2026-27
Minimum	45%	58%	63%	63%
Central	63%	72%	81%	90%
Maximum	80%	85%	90%	95%

Source: Tulipwood Economics-RIDL GP take-up scenarios. The Minimum scenario is the DHAC scenario.

<sup>102</sup> The derivation of the financial impacts is described in Section 4 and Appendices A and B.



### 5.2.3 A cost benefit analysis (CBA) framework was used to measure impacts

To account for the broad range of impacts on the Australian community, we used a CBA framework to undertake the economic analysis. A CBA is an analytical tool used to account for the complex trade-offs involved in assessing the benefits and costs of particular policy proposals on a common basis in terms of monetary value and time, such that the comparison can be easily understood. The CBA framework is widely used as a tool to assist government or industry make or understand decisions on alternative options, especially in situations where the impacts of a proposed policy change are not captured solely by the proponent (i.e. in this case the Australian Government), but are broader in terms of impacts, and complex financial, economic and social welfare trade-offs are at play.

The CBA has been undertaken over a four-year timeframe (2023-24 to 2026-27 inclusive) in order to align with the Australian Government's timing in terms of the policy rollout, which begins in September 2023. The four-year timeframe also aligns with DHAC's impact analysis that the department submitted to the OIA under the Australian Government's IA Guidelines.

#### Base Case

The Base Case establishes the most likely future dispensing volumes trajectory of the 325 in-scope PBS-listed medicines over the next four years, being 2023-24 to 2026-27 inclusive, under the current 7CPA (2020-21 to 2024-25) and subsequent (if developed and enacted) 8CPA (2025-26 to 2029-30). Under this scenario it is assumed that there are no changes to the level and structure of pharmacy remuneration in real terms (see discussion at section 3.3).<sup>103</sup> Dispensing volumes for the 325 PBS listed in scope medicines are assumed to grow at the population growth rate of 1.6 per cent per year.<sup>104</sup>

The Base Case sets the foundation on which the policy change is compared. In this 'factual scenario', the dispensing rules remain unchanged and the 7CPA agreement between the Australian Government and the Community Pharmacy sector remain unchanged. In other words, the Base Case represents the business-as-usual scenario.

#### Policy Case

In the Policy Case, the Australian Government introduces 60-day dispensing for the 325 PBS listed medicines identified in the policy announcement, in a phased approach beginning on 1 September 2023 with 100 medicines (as yet unidentified) transferring to 60-day MDQ. There are three GP take-up rate scenarios in the Policy Case, which drives the estimated decline in dispensing volumes relative to the Base Case and, consequently, pharmacy dispensing revenues (see 4.3 for detailed discussion).

The reductions in dispensing volumes and revenue by GP take-up rate scenario is shown in Table 5-2.

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<sup>103</sup> While it is likely that pharmacy remuneration will increase in real terms this is not guaranteed, hence this conservative assumption is made.

<sup>104</sup> We have aligned most of our core assumptions, including the population growth rate, to those used by DHAC in their impact assessment submitted to the OIA.

**Table 5-2 Reduction in dispensing volumes and revenue, by GP take-up rate**

GP take-up rate scenarios	Year-1	Year-2	Year-3	Year-4
	2023-24	2024-25	2025-26	2026-27
Minimum scenario (based on OIA assessment)				
Reduction in dispensing volume relative to Base Case (m)	49.9	65.3	72.1	73.2
Reduction in dispensing revenue relative to Base Case (\$m)	649.3	850.3	938.4	953.4
Central scenario				
Reduction in dispensing volume relative to Base Case (m)	69.8	81.1	92.7	104.6
Reduction in dispensing revenue relative to Base Case (\$m)	909.0	1,055.5	1,206.5	1,361.9
Maximum scenario				
Reduction in dispensing volume relative to Base Case (m)	88.7	95.7	103.0	110.4
Reduction in dispensing revenue relative to Base Case (\$m)	1,154.3	1,246.1	1,340.5	1,437.6

Source: Tulipwood Economics and RIDL analysis of publicly available PBS dispensing volume and price data. The rollout of the 325 medicines is unclear and wasn't modelled at the national level. It has been reported that 100 of the 325 medicines will be subject to the 60-day MDQ policy in Year-1, but it is not clear which medicines have been identified for the first tranche, nor the specifics for the later years.

#### 5.2.4 PBS medicines consumer welfare impacts were also measured

In addition to the effect of the changed financial arrangements between consumers and the Australian Government as a result of the 60-day MDQ policy, a number of flow-on welfare impacts were measured.

First the non-financial benefits and costs to the consumers of the in-scope medicines were identified and estimated. Table 5-3 and Table 5-4 identify the benefits and costs of the policy from the perspective of the consumer.

**Table 5-3 Identification of consumer benefits of policy change**

Consumers of the 325 PBS listed medicines	Explanation
Consumer surplus from reduced PBS co-payments	Consumers benefit from paying a reduced number of co-payments per year because they are receiving two months of medicines (for a single co-payment) instead of one month of medicines. This benefit is limited by the per person co-payment ceilings in place. Note that, in the CBA model, this benefit is fully offset by the reduction in government revenue, which means a reduction in public expenditure, which is a loss to the Australian community sector. In other words, this parameter does not affect the BCR as the obligation to pay the co-payment is being transferred from the PBS consumer to, ultimately, the Australian taxpayer.

Consumer surplus from reduced pharmacy visits	Consumers of the 325 PBS 60-day MDQ dispensing benefit from visiting their pharmacy (on average) 6 times less per year. This number is scaled back (to 20 per cent, or 1.2 visits) for the times consumers would have visited their pharmacy (for a 30-day script or other retail product) or nearby anyway to undertake another task in the immediate vicinity of the pharmacy (e.g. local shops or post office visit). The costs of the visits are estimated as time and fuel costs (at a percentage of the average wage rate to reflect not all Australians are employed). The time cost of 15 minutes is exactly that used by DHAC in their OIA submission. Our estimate of the opportunity cost of leisure (at \$21.18/hr) is lower than DHAC's estimate (at \$36/hr).
Consumer surplus from reduced GP visits	Consumers benefit from visiting their GP one less time per year per relevant in-scope PBS medicine prescribed. Similar to the above, this benefit is scaled back (to 20 per cent) to account for "seeing the GP anyway" and/or another task in the immediate vicinity of the GP clinic or obtaining the script over the phone or online. Our time cost of 30 minutes is slightly below that used by DHAC in their OIA submission (at 35 minutes). And, as above, our estimate of the opportunity cost of leisure (at \$21.18/hr) is lower DHAC's estimate (at \$36/hr).

Source: Tulipwood Economics and RIDL.

The potential costs of the policy change to 60-day dispensing are listed in Table 5-4.

**Table 5-4 Identification of consumer costs of policy change**

Consumers of the 325 PBS listed medicines	Explanation
Monetised value of increased deaths and illness from increased overdose (-ve)	<p>It is assumed that more medicines in the home could lead to an increase in the incidence of illness and death as a result of an increased prevalence of overdose. We use research undertaken by the <a href="#">National Drug &amp; Alcohol Centre at the University of NSW</a> and measures of the Value of a Statistical Life (VSL) to estimate the welfare cost.</p> <p>It is assumed that the additional deaths from prescription drug overdoses in the Policy Case is 0.1 per 100,000 GP/pharmacist interactions foregone. The VSL is set at the OIA guidelines of \$5.3 million.</p> <p>The rate of illness in the Policy Case is assumed to be 100 times greater than the death rate (i.e. 10 in 100,000 per GP/Pharmacist interactions foregone). The Willingness to Pay for 1 Disability Adjusted Life Year (DALY) is assumed to be \$50,000 (which is within the DHAC range for considering new PBS medicines) and the disability factor is assumed to be 0.5.</p>
Monetised value of increased deaths and illness from missed and mid-diagnoses (-ve)	<p>It is assumed that fewer visits to the GP and pharmacist could lead to an increase in the incidence of illness and death as a result of fewer serious illnesses being diagnosed or patient's being misdiagnosed due to the reduced interaction with the patient. This impact, although in our view a real risk of the policy, was difficult to scale and quantify as there is scant literature on the topic.</p> <p>We have, therefore, not provided a quantitative estimate of this impact.</p>
Monetised cost of drug shortages and drug mismanagement (-ve)  Note: this cost is transferred to the Australian taxpayer	<p>It is worth noting that there are at least 230,000 hospitalisations a year attributable to medication-related issues in Australia, costing \$1.2 billion a year.<sup>105</sup> Medicines adherence is an important and valued role for community pharmacists.</p> <p>Assuming that, in the short-run, a fixed quantity of each drug currently classified as being in moderate to severe shortage is available to Australia,</p>

<sup>105</sup> Source: <https://www.safetyandquality.gov.au/about-us/latest-news/media-releases/australia-joins-international-push-halve-medication-errors>

Consumers of the 325 PBS listed medicines	Explanation
	<p>the issuing of 60-day supply will mean that that fixed quantity will be sufficient for only as few as half as many Australians as it currently is. If alternatives are unavailable or inappropriate for the other half, patients will be adversely affected, worsening the impact even at times of moderate national shortage, and when shortages are localised.</p> <p>It is assumed that medicine shortages could lead to an increase in the incidence hospitalisations as a result of the addictive or harmful withdrawal effects of some drugs. The Australian Government has noted likely shortages for at least 7 drugs on the 60-day dispensing list.</p> <p>There is also a related effect of an increased probability of drug mismanagement for patients juggling multiple medicines and their interactions. This impact is assumed to be short-term, over 1-4 years, as supply chains adjust to the new arrangements.</p> <p>The rate of hospitalisation is assumed to be 10 per 100,000 GP/Pharmacist interactions foregone. Hospital costs per admitted patient is assumed to be \$5,335 in 2023-24 and is sourced from the <a href="#">National Hospital Cost Data Collection report</a> (Public Sector Round 24 (Financial Year 2019-20), October 2021).</p>
<p>Aged Care pharmacy service quality reduction (e.g. Webster packs; nurses) (-ve)</p> <p>Note: this cost is transferred to the Australian taxpayer</p>	<p>Community pharmacy currently provides a number of services to the Aged Care sector, either free, below cost or at cost. The increased financial pressure placed on Community Pharmacy could result in the sector withdrawing these services, which would be replaced by higher-cost nursing services or in-patient hospital services.</p> <p>Of the 188,000 Australians currently in permanent or respite residential Aged Care facilities, we assume that 75 per cent are provided pharmacy services from the community pharmacy sector.<sup>106</sup> According to the Australian Commission of Safety and Quality in Health, up to 91 per cent of individuals in Australian residential Aged Care facilities are prescribed more than five concomitant medicines, and up to 74 per cent of residents take more than nine medicines.<sup>107</sup></p> <p>We estimated an increased cost to the Australian taxpayer of transferring this dispensing role from Community Pharmacy to higher cost nurses or GPs working in the residential Aged Care sector. It is assumed that the cost of packing a Webster pack is \$11.60 per resident per week.<sup>108</sup></p>

Source: Tulipwood Economics and RIDL.

### 5.2.5 Community pharmacy sector impacts

The economic impacts on the Community Pharmacy sector are very similar to the financial impacts reported (and discussed in detail) in section 4.3. While the financial analysis identified a reduction in net profit (before tax), the economic analysis identifies a similar concept being the reduction in producer surplus (see Box C-1 in Appendix C). One difference is that the

<sup>106</sup> <https://www.gen-agedcaredata.gov.au/Topics/People-using-aged-care#:~:text=Aged%20care%20use%20in%20Australia,-The%20Australian%20Government&text=On%2030%20June%202022%2C%20approximately,and%203%2C500%20using%20transition%20care>

<sup>107</sup> <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/national-baseline-report-quality-use-medicines-and-medicines-safety-phase-1-residential-aged-care>

<sup>108</sup> The \$11.60 figure is sourced from the Indigenous Dose Administration Aids pricing schedule. See here: <https://www.ppaonline.com.au/programs/medication-adherence-programs-2/indigenous-dose-administration-aids>

economic impacts are reported in net present value terms (in 2023-24 dollars) whereas the financial impacts is reported in nominal terms.

From the perspective of the community pharmacy, the economic modelling identified one benefit of the MDQ policy and three costs (although only two of the three costs have been quantified). (Table 5-1)

**Table 5-1 Community pharmacy impacts**

Community Pharmacy sector	Explanation
<b>Benefits</b>	
Doubling of the RPMA for 1,093 regional and remote community pharmacies	Of the claimed re-investment back into community pharmacy we identified the RPMA as being a positive additional contribution to Community Pharmacy, at \$19.9 million per year over the four-year period (i.e. \$79.6 million in nominal terms over four years).
<b>Costs</b>	
Reduction in profits from reduction in dispensing revenue	Like any business, a community pharmacy must earn a return on its capital invested to stay in business. It is assumed that the loss in dispensing revenue flows straight through to the pharmacy bottom line (i.e. net profit). This is because, in the short-run, the cost structure of the business is fixed and, consequently any change in revenue is the equivalent of a change in producer surplus (i.e. profit).
Reduction profits from retail sales as a result of the reduction in foot traffic	As above, a community pharmacy must earn a return on its capital invested to stay in business. The move to 60-day dispensing reduces 'foot traffic' in pharmacies such the community pharmacy retail sales decline by \$20 per visit avoided (of which, a gross margin of \$6 per visit is counted as a loss in producer surplus). The average retail spending figure is based on pharmacy level financial data supplied by several accounting firms.
Reduction in profits from an increase in the cost base	The transition to the new dispensing arrangements will increase storage costs (incl. refrigeration) to manage supply-chain risk, and administration and handling costs. These increased costs, without compensation, will reduce profits (i.e. producer surplus).  To maintain the conservative bias in the modelling, we do not measure this impact quantitatively, but rather discuss it qualitatively.

Source: Tulipwood Economics and RIDL.

### 5.2.6 The cost of long-term or permanent job losses was measured

In the financial analysis gross job losses were estimated. These gross job losses represent the immediate impact of the MDQ policy on pharmacy workers and their communities.

From an economic perspective it is assumed that most of these unemployed pharmacy workers will return to work in another job, whether in a closely related sector to pharmacy or a completely different industry.<sup>109</sup> Pharmacists are highly educated and can work in other pharmacy-related fields such as medical research, management, consulting or in hospitals. Pharmacy assistants have retail and customer service experience and could transfer to other

<sup>109</sup> The Australian unemployment rate, as at April 2023, is 3.7%.

health service or retail customer-facing roles. In a cost-benefit analysis framework, the only economic (or 'social welfare') loss that is counted is what is known as human capital — which relates to a situation where long-term unemployment, or dropping out of the labour force permanently, results in an overall reduction in the size and productivity of the labour force. The extent to which there will be long-term unemployment depends on several factors, including:

- The age and skills of the unemployed worker;
- The size and depth of the labour market where the worker lives (or whether that worker is prepared to relocate); and
- The current rate of unemployment in the labour market where the worker lives and the overall rate of unemployment in the national labour market.

In estimating the economic cost of unemployment as a result of the 60-day MDQ policy, we assumed a rate of long-term unemployment by MMM.

- In MMM 1 & 2 regions, it was assumed that 5 per cent of the gross job losses would be unemployed for an average of 6 months. Some would be unemployed for less than 6 months, some for more, and a small proportion of older workers would choose not to re-enter than labour force. In other words, we assume that 95 per cent of former pharmacy workers in Australia's capital cities and large urban centres would be re-employed within 1 month. In our view, this is a conservative assumption.
- In MMM 3 & 4 regions, it was assumed that 15 per cent of the gross job losses would be unemployed for an average of 12 months. Similar to the above, the 12 months represents an average. In these large and small regional towns, it is assumed that the rate of frictional unemployment would be higher than in the big, deep labour markets of Australia's capital cities.
- In MMM 5, 6 & 7 regions, it was assumed that 25 per cent of the gross job losses would be unemployed for an average of 2 years. Again, some workers would be re-employed in much less than 2 years, but other workers would choose to permanently drop out of the labour force. In these small rural and remote towns, the rate of frictional unemployment would be higher again than in the large and small regional towns, indicating a longer duration of unemployment especially to the extent that these workers might be older than the average in the capital cities.

In this analysis, the value-added foregone is the gross wage foregone. The average gross wage foregone of around \$100,000 has been estimated based on an average pharmacist salary of \$120,000 and pharmacy/retail assistant's salary of \$55,000 based on a 1:2.3 ratio between a pharmacist and pharmacy worker.<sup>110</sup>

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<sup>110</sup> This ratio has been supplied by the Guild.

Finally, as the CBA is a partial equilibrium analysis, the value-added generated by those re-employed workers is not measured but, rather, assumed to be not different to that in the Base Case. First, because any resulting *additional* consumer surplus would be impossible to measure accurately and likely to be very small. Second, because it is assumed that, in a global market for capital, any freed-up capital from the structural adjustment in the pharmacy sector could be expected to earn its weighted average cost of capital (WACC). In other words, it is difficult to be confident that the freed-up resources would result in any *additional* consumer or producer surplus in the Policy Case relative to the Base Case.

### 5.3 Headline results

In the central policy case, the total impact of the 60-day dispensing policy on the Australian community is a **loss of \$1,209.9 million in net present value terms** over 4-years. **The estimated benefit-cost ratio (BCR) is 0.73.** In the Central Case, any benefit to the Australian community from a reduction in patient co-payments and government savings on dispensing fees (which translates into an increase in public spending on other policy priorities) is far outweighed by the significant financial impact on the Community Pharmacy sector.

All three GP take-up rate scenarios impose a substantial loss on the whole Australian community ranging between -\$702.5 million in the Minimum Case to -\$1,353.5 million in the Maximum Case in NPV terms. The losses to the pharmacy sector are linear in the sense that they grow with the policy rollout and GP take-up rate.

In all three scenarios the BCR result is very low and provides an indication not to proceed with the policy in its current form.<sup>111</sup>

This is shown in Table 5-5.

**Table 5-5 CBA headline results, by GP take-up rates**

Sector	Minimum Case	Central Case	Maximum Case
Rest of the Australian community	973.4	<b>1,693.5</b>	1,852.1
Pharmacy sector	-1,675.9	<b>-2,903.4</b>	-3,205.6
Whole Australian Community	-702.5	<b>-1,209.9</b>	-1,353.5
Benefit-Cost Ratio	0.74	<b>0.73</b>	0.73

Source: Tulipwood Economics and RIDL analysis. A social discount rate of 7 per cent was used over a term of four years. The Benefit-Cost Ratio (BCR) sums the estimates of identified benefits of the policy (numerator) and divides by the sum of the estimates of the identified costs of the policy (denominator).

<sup>111</sup> Moreover, generally, to account for the risks around predicting the future, an estimated BCR well-above 1.0 (i.e. around 1.5) would justify proceeding with the policy reform with confidence.

## 5.4 Community pharmacy sector impacts

Across all three GP take-up scenarios, the Community Pharmacy sector will be significantly impacted by the 60-day dispensing changes. In fact, the impacts are arguably far greater than the impacts on other important sectors in the Australian economy as a result of policy changes.<sup>112</sup>

In the Central Case, it is estimated that the sector as a whole will **lose \$2,903.4 million over four years in NPV terms.**

The largest loss is caused by the reduction in pharmacy dispensing revenue, of \$3,660.8 million in net present value terms over the 4-year period. This reduction in dispensing revenue is counted as a 100 per cent loss in producer surplus in the economic model. The reason is that, in the short-run, pharmacies will find it difficult to immediately adjust to the policy change and, hence, the reduction in dispensing revenue will flow straight through to the pharmacy's bottom line (i.e. net profit). It is a well-known result in economic theory that, in the short-run all costs are fixed and, accordingly, a change in revenue is exactly equal to a change in the producer surplus (i.e. gross profit).<sup>113</sup>

Pharmacies also lose producer surplus from foregone retail sales, estimated to be -\$583 million in NPV terms over the four years (see section 4.4).<sup>114</sup> Further, pharmacies also have increased capital and operating expenses to deal with the higher stocking requirements and different supply chain arrangements that result from 60-day dispensing. In order to remain conservative in our modelling, we have not estimated the increased capital and operating costs of the policy change (see Section 4.4.1).

We also examined the claims made by the Australian Government in terms of the 'reinvestment' back into Community Pharmacy. We found much of the claimed expenditure is not additional (see discussion at Appendix C). In our modelling, an additional \$19.9 million per year is adding back into the community pharmacy sector or \$67.3 million in NPV terms over four years.

A proportion of these gross losses, being the foregone 30 per cent tax paid, is transferred (and recorded as a loss) to the Australian taxpayer.

Finally, a reduction in industry revenue of this magnitude will have flow-on effects in terms of employment and store viability. These impacts are discussed at section 4.4. In the economic modelling, we only measure what is known as the loss in human capital as a result of the policy change — which is, effectively, the net effect on the unemployment rate over the timeframe of analysis (see discussion in Section 5.5.2).

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<sup>112</sup> For example, the impacts of successive Australian and state government climate change policy on industry have, arguably been more gradual, with longer ramp-up timeframes (e.g. the net zero policy by 2050) and with significant compensation paid either to industries or households to assist with the adverse impacts of the transition.

<sup>113</sup> Importantly, since it is only pharmacists who can dispense medicines, for a reduction in revenue not to offset a reduction in producer surplus, a pharmacist would need to be let go, but this may not be possible in many of Australia's pharmacies. Moreover, it is assumed that pharmacies will try to retain staff for as long as practical. Hence, it is assumed (and likely in our view) that the reduction in dispensing revenue will flow straight through to the bottom line of the pharmacy business.

<sup>114</sup> Producer surplus is an economic term that describes the returns to a firm's invested capital before tax and is equivalent to gross profit or EBITDA. The estimated gross margin on foregone retail sales has been derived from the pharmacy level financial analysis and is assumed to be \$6 per visit foregone in the economic model (central sensitivity).



This is shown in Table 5-6.

**Table 5.6 Community pharmacy sector impacts by scenario, NPV over 4-years**

Impact	Minimum Case	Central Case	Maximum Case
Loss in Producer Surplus from loss in dispensing revenue	-2,237.7	<b>-3,660.8</b>	-3,977.2
Loss in Producer Surplus from loss in other retail sales	-252.7	<b>-583.1</b>	-669.6
Public funds reinvested back into community pharmacy	67.3	<b>67.3</b>	67.3
Of which, change in tax paid	-747.1	<b>-1,273.2</b>	-1,373.8
Net loss to Community Pharmacy sector (\$m, NPV)	-1,675.9	<b>-2,903.4</b>	-3,205.6

Source: Tulipwood Economics and RIDL analysis. A social discount rate of 7 per cent was used. The foregone tax paid by pharmacies is subtracted from the Community Pharmacy sector and transferred as a loss to the Australian community (i.e. the Australian taxpayer), since it results in a decrease in public expenditure (all things being equal).

## 5.5 Rest of the Australian community impacts

The Australian community group comprises three sub-groups, being:

- Consumers of the 325 PBS listed (60-day MDQ) medicines that are within scope of the policy change.
- Other groups impacted, being pharmacy workers (i.e. pharmacists and pharmacy assistants) who lose their jobs for a significant period of time or permanently drop out of the labour force, consumers of pharmacy services in regions where pharmacies close and alternative (higher cost and/or lower quality) services must be sought, and Aged Care residents who are likely to receive either a lower quality of pharmacy service and/or pay a higher cost under the new policy; and
- Australian taxpayers, who reflect the net effect of the policy on the operating balance in the General Government sector; that is, if the operating balance decreases in net terms as a result of the 60-day MDQ policy it is assumed that some public services are foregone, costing the Australian taxpayer and vice versa.<sup>115</sup>

### 5.5.1 Consumers of the 325 PBS listed medicines

Consumers of the 325 PBS listed medicines subject to 60-day MDQ gain from the lower co-payments paid over the course of a year. Consumers also gain from fewer visits to the GP (being 1 visit per script per year) and the pharmacy (being 6 visits per script per year). However, a small cohort of this group is expected to lose as a result of the increased risks

<sup>115</sup> In other words, if the net effect of the policy is a reduction in government revenue of \$100 then, applying the rule to keep the operating balance the same in the Base Case and Policy case means that the provision of public services would decline by \$100.

around the policy, particularly in relation to Australia's most vulnerable patients and the elderly.

In terms of the costs, we model an effect from prescription drug overdose that is caused by an increase in medicines kept in the household. This effect is very small and conservative relative to the Australian literature on the rate of prescription overdose (see detailed discussion at Appendix A).<sup>116</sup>

We also model a very small adverse impact related to missed diagnoses, as a result of less frequent interaction with a medical professional. That is, if a patient interacts with their GP and pharmacist less often, there is a slight increase in the chance that an illness or diseases is not picked up. This would result in worse outcomes for patients than in the Base Case.

The net effect on the Consumers of PBS listed medicines remains positive, but somewhat lower than the initial saving from the reduction in the patient co-payment. In other words, these welfare costs arising from adverse health impacts somewhat offset the overall gain in consumer surplus.

### 5.5.2 Australian taxpayers

Finally, we model the increased costs of hospitalisation from drug shortages and patient (or GP) drug mismanagement. The drug shortages effect is well documented in Australia, especially since the global supply chain issues have been exacerbated as a result of the COVID-19 pandemic (see discussion at section 4.4.1.1). The drug mismanagement effect relates to older populations managing more than one drug, and often several drugs, and the impact of seeing their GP or pharmacist less often to check how those drugs are interacting.

### 5.5.3 Other groups

The sub-group 'Other groups' captures the impacts on two groups, namely:

- Those pharmacy workers (i.e. pharmacists and pharmacy assistants and pharmacy retail workers) who become long-term or permanently unemployed as a result of the policy.
- The cost to those groups who lose their local pharmacy and need to make alternative arrangements to receive the same service, which increases the cost of receiving the same service or reduces the quality of that service, or both.

These impacts are described in detail at Appendix C.

Table 5-1 reports the impacts on the Australian community by the three sub-groups described above. In the Central Case,

- Consumers of the 325 PBS listed medicines gain \$2,472.7 million over four years (between 2023-24 and 2026-27 inclusive) in net present value terms.
- Taxpayers lose \$699.9 million over the four-year period in net present value terms.

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<sup>116</sup> Also, see here: <https://ndarc.med.unsw.edu.au/resource-analytics/trends-drug-induced-deaths-australia-1997-2019>

- Other groups lose \$79.3 million over the four-year period in net present value terms; such that
- Overall, the Rest of the Australian Community gains \$1,693.5 million, but this gain is not enough to offset the loss to the Community Pharmacy sector (Table 5-7).

**Table 5-7 Impacts on the Australian community**

Impact	Minimum Case	Central Case	Maximum Case
<b>Consumers of 325 PBS listed medicines:</b>			
Consumer surplus from reduction in co-payments	1,905.3	2,537.2	2,922.8
Consumer surplus from reduced pharmacy visits	266.2	355.4	408.1
Consumer surplus from reduced GP visits	82.9	110.7	127.1
Monetised value of increased deaths and illness from overdose	-397.4	-530.6	-609.3
<i>sub-total</i>	1,857.0	2,472.7	2,848.7
<b>Taxpayers:</b>			
Loss in public expenditure from loss in Pharmacy tax payments	-747.1	-1,273.2	-1,373.8
Loss of public expenditure from loss in co-payment revenue	-1,905.3	-2,537.2	-2,922.8
Gain in public expenditure from gain in dispensing fees not paid	2,237.7	3,660.8	3,977.2
Increased taxpayer cost to deliver Aged Care pharmacy services	-389.8	-389.8	-389.8
Increased hospitalisation from drug shortages and drug mismanagement	-120.2	-160.5	-168.7
<i>sub-total</i>	-804.5	-699.9	-877.9
<b>Other groups affected:</b>			
Net reduction in Gross Wages paid (long-term unemployment impact)	-27.7	-28.0	-67.3
Cost to communities of pharmacies closing	-51.4	-51.4	-51.4
<i>sub-total</i>	-79.1	-79.3	-118.7
<b>Net loss or gain to the Australian community (\$m, NPV)</b>	973.4	1,693.5	1,852.1

Source: Tulipwood Economics and RIDL analysis. A social discount rate of 7 per cent was used. Note a In the Central Case, it is estimated that there are 67 deaths from increased rates of prescription overdose. Further, it is estimated that there are 6,686 cases of illness as a result of increased prescription overdose.

## 5.6 Government impacts

### 5.6.1 Australian Government impacts

The Australian and state governments do not gain or lose welfare in a cost benefit analysis. In other words, welfare gains and losses only accrue to sectors (comprising people) in the Australian community. This is because any gain or loss in revenue to the government is exactly mirrored by a gain or loss to the Australian taxpayer. For example, a decrease in government revenue from the decrease in patient co-payments means less public expenditure that would otherwise benefit the Australian community — therefore, it's a cost to the Australian community. Similarly, an increase in government revenue from an increase in avoided dispensing fee payments (i.e. a government saving) means more public expenditure (or debt repayments) that benefits the Australian community.

In all three GP take-up scenarios, the Australian Government loses revenue and, applying a balanced budget rule between the Base Case and Policy Case, this implies a reduction in services delivered to the Australian Community.

Table 5-8 reports the net effect on the Australian Government budget balance in all three scenarios is negative. Applying the balanced budget rule (i.e. an assumption that there's no increase in taxation between the Base Case and the Policy Case), the Australian Government would need to lower the provision of public services by the amounts set out below. This reduction would directly translate into a loss in welfare for the Australian community, which is identified in Table 5-7 above.

**Table 5-8 Government impacts, NPV over 4-years**

Impact	Minimum Case	Central Case	Maximum Case
Reduction in revenues from reduction in pharmacy profits	-747.1	<b>-1,273.2</b>	-1,373.8
Reduction in revenues from reduction in co-payments received	-1,905.3	<b>-2,537.2</b>	-2,922.8
Change in expenditures (decrease in dispensing fees paid)	2,237.7	<b>3,660.8</b>	3,977.2
Change in expenditures (increase in health care costs; eg. Aged Care, hospital)	-389.8	<b>-389.8</b>	-389.8
Increased hospitalisation from drug shortages and drug mismanagement	-120.2	<b>-160.5</b>	-168.7
<b>Net effect on general government sector operating balance</b>	<b>-924.7</b>	<b>-699.9</b>	<b>-877.9</b>

Source: Tulipwood Economics and RIDL analysis. A social discount rate of 7 per cent was used.

## 5.6.2 State and territory government impacts

There are also potential impacts on state and territory government revenues, which are not explicitly measured in the financial or economic analysis, but worth noting.

State and territory governments generate about half of their income through own-source tax revenue, royalties, registration fees and other payments.

To the extent that pharmacy businesses will close or reduce in size, state and territory government payroll tax revenue may be affected. The first effect relates to the reduction in pharmacy employees at those pharmacies above their state payroll tax threshold. The second effect relates to the situation where the reduction in employees brings the pharmacy business back below the threshold and the tax obligation ceases.<sup>117</sup> Additionally, state public hospital systems will likely bear most of the cost of the increased hospitalisations that are forecast in the economic analysis. However, the Australian Government funds at least one-half of public

<sup>117</sup> A summary of payroll tax rates and thresholds can be found here: [https://www.payrolltax.gov.au/resources#resources\\_rates\\_and\\_thresholds](https://www.payrolltax.gov.au/resources#resources_rates_and_thresholds)

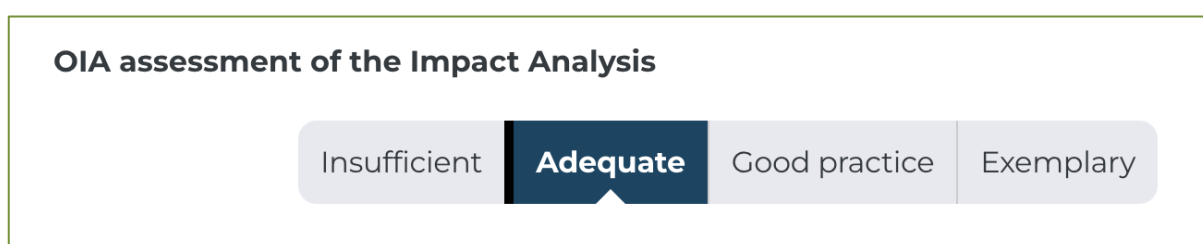
hospital costs via transfer to state and territory governments. Hence, for simplicity, the increased hospital costs are counted as an Australian Government cost.

## 6. Consideration of DHAC’s Impact Assessment report

### 6.1 Overview

As required by legislation, the Department of Health and Aged Care (DHAC) submitted a Second Pass Final Assessment Impact Analysis (IA) of the MDQ policy change to the Office of Impact Analysis (OIA) on 17th April 2023.<sup>118</sup> DHAC’s analysis was assessed as ‘adequate’ by OIA. This is shown in Figure 6-1.

Figure 6-1 Office of Impact Analysis rating of DOHA’s IA report<sup>119</sup>



The analysis noted shortcomings in DHAC’s stakeholder consultations, in particular with small businesses and rural and remote pharmacies, and the absence of metrics to evaluate the impacts of the policy on stakeholders, as follows:

*The Office of Impact Analysis’ (OIA’s) assessment is that the quality of the analysis in the IA is adequate, and therefore sufficient to inform a decision. To have been assessed as ‘good practice’ under the Guide, the IA would have benefited from more recent public consultations on potential stakeholder impacts, particularly for small businesses and pharmacies in rural and remote areas. Moreover, where stakeholder impacts are difficult to ascertain at this point in time (e.g., individual pharmacy-level financial impacts), the IA would have benefited from a more detailed evaluation plan that outlines metrics and data required to monitor the impacts on stakeholders following implementation.<sup>120</sup>*

There are, however, a number of broader concerns with DHAC’s IA that are relevant and important and which go beyond those noted by the OIA.

DHAC was required to apply the *Australian Government Guide to Policy Impact Analysis*<sup>121</sup> which are intended to inform policy makers about the costs and benefits of a new policy ‘from

<sup>118</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. Available at:

[https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>119</sup> The Office of Impact Analysis 2023. *Lowering the cost of medicines through changes to maximum dispensing quantities: OIA assessment of the Impact Analysis*. Available at: <https://oia.pmc.gov.au/published-impact-analyses-and-reports/lowering-costs-medicines-through-changes-maximum-dispensing>

<sup>120</sup> Taken from: Letter dated 25th April 2023 from Jason Lang, Executive Director OIA to Penny Shakespeare, Deputy Secretary, Health Resourcing Group, DHAC. Available at:

[https://oia.pmc.gov.au/sites/default/files/posts/2023/05/OIA%20Assessment\\_o.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/OIA%20Assessment_o.pdf)

<sup>121</sup> Australian Government Department of the Prime Minister and Cabinet 2023. *Australian Government Guide to Policy Impact Analysis*. Available at: <https://oia.pmc.gov.au/sites/default/files/2023-02/oia-impact-analysis-guide-nov-22.pdf>

all angles'. The Guide sets out seven questions that an IA should answer and these are shown in Box 6-1.

### Box 6-1 OIA policy development guidance questions<sup>122</sup>

#### **1. What is the problem you are trying to solve and what data is available?**

- The Impact Analysis framework requires you to explain the problem – and the data and evidence needed to describe and solve it – simply and clearly. A crisply defined problem offers better scope to target approaches that will actually solve it. An upfront discussion about available data and any gaps will ensure the evidentiary base is sufficient to support a decision.

#### **2. What are the objectives, why is government intervention needed to achieve them, and how will success be measured?**

- Each Impact Analysis must be clear about the objectives that will be achieved in solving the problem and the metrics for success. This will form the basis for selecting the best option and for future evaluation. The analysis must demonstrate the issue is a genuine priority, the government's job, serious enough to justify government intervention, and that intervention would likely be successful in addressing the problem.

#### **3. What policy options are you considering?**

- Impact Analysis is an opportunity to demonstrate you've thought through all of the viable options, including the option of not intervening. Until you've analysed the problem from every angle, you may be overlooking a viable, low-impact alternative.

#### **4. What is the likely net benefit of each option?**

- Policy interventions have both costs and benefits. Impact Analysis obliges you to assess the benefit of the proposed intervention against the costs imposed. If the costs outweigh the benefit, you should look for alternatives or reconsider the need to intervene at all.

#### **5. Who did you consult and how did you incorporate their feedback?**

- Transparency and accountability are not optional. Impact Analysis encourages you to walk in the shoes of the people, businesses and community groups affected by your policy proposal. Consultation must be focused on the costs and benefits of each option, not on whether certain stakeholders prefer a particular pathway.

#### **6. What is the best option from those you have considered and how will it be implemented?**

- Recommending a preferred option requires trade-offs. The Impact Analysis must discuss the degree to which each option would achieve the stated objectives, and the anticipated net benefit for each. The recommended option should always be the option with the greatest net benefit to Australia. The Impact Analysis will help make clear whether your decision making processes are robust enough to cope with scrutiny. The Impact Analysis must set out which option has been recommended, the key information and arguments that were relied upon and how the option will be successfully implemented.

#### **7. How will you evaluate your chosen option against the success metrics?**

- Too often this question is left until the last minute. The Impact Analysis process ensures you give adequate and timely consideration to the real-world problems of making your policy work—and makes sure you will test its effectiveness and ongoing relevance.

<sup>122</sup> Australian Government Department of the Prime Minister and Cabinet 2023. *Australian Government Guide to Policy Impact Analysis*. p.9. Available at: <https://oia.pmc.gov.au/sites/default/files/2023-02/oia-impact-analysis-guide-nov-22.pdf>

In its IA, DHAC follows this question structure. However, aside from lacking transparency, DHAC's analysis is misleading and deficient in important respects:

- The evidence regarding a lack of affordability of PBS medicines presented by DHAC is problematic.
- No policy alternatives are presented, other than DHAC's preferred model. In particular, no policy options that would have avoided the most damaging aspects of the MDQ policy changes are considered.
- The analysis fails to articulate the costs of the MDQ policy change. Rather than supporting the 'sustainability of the PBS', as DHAC claims, by eliminating a significant share of co-payments, the MDQ policy change will (all other things equal) significantly increase the net costs of the PBS which would, in turn, need to be paid for by taxpayers.
- The analysis fails to consider the adverse flow-on effects of the MDQ policy change on the community pharmacy sector. A policy that, as DHAC describes, will cut dispensing revenues by 18 per cent on average<sup>123</sup> and likely also have flow-on effects on non-PBS sales that would almost certainly force a significant proportion of community pharmacies to close (as our analysis set out in section 4 shows). As noted in Section 2, the community pharmacy sector is a crucial part of the Australian health system, providing a range of services to consumers that have a major impact on health outcomes. Yet, the broader impacts of the policy on one of the central pillars or the Australian health care system are not discussed in the IA.

## 6.2 Claimed rationale for government action

The characterisation of the problem that MDQ policy change is designed to address appears to have evolved over time. DHAC notes at the outset that the origins of its MDQ policy change lie in advice provided by the PBAC (at the request of the Department of Health and Aged Care) in 2018.<sup>124</sup> In that advice, PBAC suggested that increasing the maximum dispensed quantities for certain medicines and in certain circumstances would:

- Allow GPs to exercise greater choice.
- Provide consumers with financial and convenience benefits.

However, PBAC offered no supporting information to suggest that consumers were either generally financially disadvantaged or inconvenienced as a result of the current dispensing arrangements. PBAC was subsequently asked to provide advice on the clinical safety and suitability of certain medicines for the MDQ policy change.<sup>125</sup>

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<sup>123</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.4. Available at:

[https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>124</sup> PBAC 2018. *Meeting August 2018: PBAC outcomes – other matters*. p.1. Available at:

<http://www.pbs.gov.au/industry/listing/elements/pbac-meetings/pbac-outcomes/2018-08/Outcome-Statement-August-2018-Increased-MDQ.pdf>

<sup>125</sup> PBAC 2022. *Meeting December 2022: PBAC outcomes – other matters*. p.1. Available at:

<https://www.pbs.gov.au/industry/listing/elements/pbac-meetings/pbac-outcomes/2022-12/december-2022-pbac-web-outcomes-other-matters.pdf>



In the IA, DHAC in turn, claims that the MDQ policy change will meet three objectives:

- Ease cost of living pressures.
- Enable greater access and convenience for consumers.
- Ensure the ongoing sustainability of the PBS.

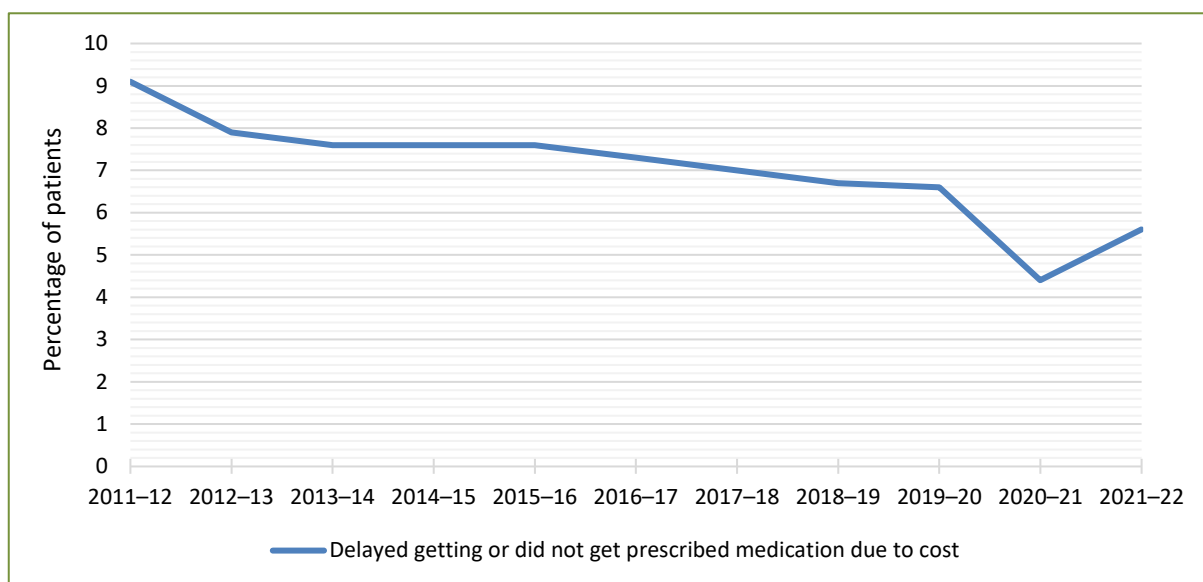
However, as set out below, DHAC offers no evidence that issues around affordability or access to PBS medicines have become a greater concern in recent years, in particular given that the Australian Government has recently made significant changes to the ‘Safety Net’ arrangements. Furthermore, to the extent that the MDQ scheme reduces consumers’ co-payments, concerns about the future sustainability of the PBS would be even more acute.

### 6.2.1 Cost of living pressures

The IA mainly cites statements on the part of consumer advocate groups and ABS statistics to support the assertion that monthly prescriptions of PBS are not affordable.

DHAC notes that according to the ABS, *the proportion of people who delayed or did not get prescription medication when needed due to cost increased to 5.6% in 2021-22, from 4.4% in 2020-21.*<sup>126</sup> Yet, the ABS data referenced shows that, over a longer time horizon, the share of patients who delayed or did not get a prescribed medicine due to cost has been steadily declining (Figure 6-1). In particular, the outcomes in 2021-22 that DHAC cites were better than in all previous years, save in 2020-21, which appears to have been an outlier.

**Figure 6-1: Percentage of persons who delayed getting or did not get prescribed medication due to cost, 2011-12 to 2021-22<sup>127</sup>**



<sup>126</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.12. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>127</sup> ABS, 2023. *Patient Experiences: Data download*. Available at: <https://www.abs.gov.au/statistics/health/health-services/patient-experiences/latest-release>

The same trends are apparent for the groups that DHAC refers to as being most vulnerable. This is shown in Figure 6-2.

**Figure 6-2: Percentage of persons who delayed getting or did not get prescribed medication due to cost, 2017-18 to 2021-22<sup>128</sup>**

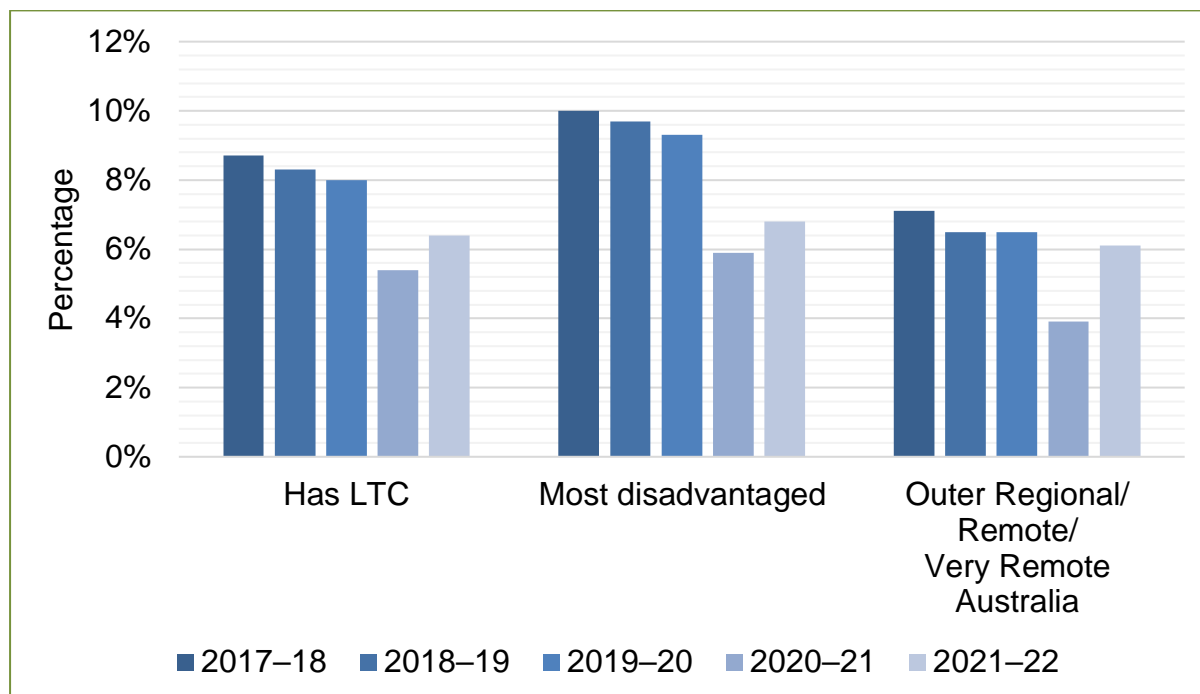


Figure 6-2 highlights that, for these three socio-economically disadvantaged groups:

- Over a five-year time horizon, the share of consumers who delayed or did not get a prescribed medicine due to cost has declined for all of these groups
- For all of these groups the outcomes in 2021-22 were better than in all previous years, apart from in 2020-21.

The IA also cites the Australian Patient's Association (APA)<sup>129</sup> to claim that, in the June 2022 survey 24 per cent disagreed when asked whether medicine was affordable to them, increased from 19 per cent in the last report (in October 2021). However, a closer look at these surveys reveals that DHAC misrepresents these results by selectively quoting only those responses that suit its purposes. In particular:

- In the June 2022 survey, 3 per cent of respondents said that they could not afford to get the prescriptions they needed.<sup>130</sup>
- This response represents a decrease from the 5 per cent of respondents who gave the same answer in October 2021.<sup>131</sup>

<sup>128</sup> Ibid.

<sup>129</sup> Australian Patient's Association 2022. *Australian Healthcare Index Report June 2022*. p.22. Available at: <https://australianhealthcareindex.com.au/australian-healthcare-index-june-2022-report/>

<sup>130</sup> Ibid p.22

<sup>131</sup> Australian Patient's Association 2021. *Australian Healthcare Index Report October 2021*. p.16. Available at: <https://australianhealthcareindex.com.au/wp-content/uploads/2021/10/Australian-Healthcare-Index-Report-2-October-2021.pdf>

In another reference to the APA, the IA notes that '1 in 5 Australians aged 18-64 find prescription medicines to be unaffordable...'.<sup>132</sup> Such an estimate would correspond to a share of 20 per cent of Australians who could not afford their medicines. This is inconsistent with estimates published by other sources.

Most importantly, all of the above data and information sources were published prior to the Australian Government's decision to reduce the PBS co-payment to \$30 (from previously \$42.50) on 1 January 2023. Given that the Australian Government has recently enacted a policy measure designed to precisely target the affordability of PBS drugs, it is difficult to understand that DHAC did not acknowledge that a claimed affordability problem may have been substantially addressed via a policy initiative within the last six months.

Further, the IA does not make reference to lower impact alternatives available to government such as additional reductions in co-payments or safety net thresholds.

### 6.2.2 Access and convenience

The second rationale cited by DHAC for its MDQ policy change is convenience for consumers. The IA provides no evidence that the need for consumers with chronic conditions to visit a community pharmacy on a monthly basis, or their GP on a six-monthly basis, represents a particular burden or cost, including where:

- The consumer has a chronic illness and lives in a remote area where access to PBS supplies is limited.
- The consumer would suffer great hardship trying to get the pharmaceutical benefit on separate occasions.

The IA also provides no evidence as to the convenience or otherwise of accessing monthly prescriptions nor whether a lack of convenience is a material barrier to accessing PBS medicines. Yet, as noted in Section 3, past research prepared on behalf of the Guild and for DHAC indicates that the location of pharmacies is such that accessing a community pharmacy is easy for the overwhelming majority of consumers because:

- In capital cities, the average resident is located 1 kilometre from the nearest pharmacy and outside capital cities, the average resident is 6.5 kilometres on average from the nearest community pharmacy.
- As a result, travel times to community pharmacies are very low. Some 50 percent of Australians enjoy a travel time of less than 5 minutes to their preferred community pharmacy, with a further 30 percent having a trip time of between 5 and 10 minutes.
- 40 percent of consumers estimate it generally takes 5 minutes or less for their prescription to be filled, with an additional 40 percent waiting no more than 10 minutes.

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<sup>132</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.12. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

- Consumers are more likely to be close to a community pharmacy than to a supermarket, bank or medical centre. (Pharmacy Guild submission to the Harper Review, 2020).

In addition, the IA is based on estimated averages and there is no meaningful analysis of the potential larger impacts of individual community pharmacy closures on the health and wellbeing of Australians, including those living in regional communities (outlined in Section 4.4 and 4.5).

### 6.2.3 Sustainability of the PBS

Finally, the IA asserts that the MDQ policy change will help solve the problem of the 'sustainability of the PBS'. The IA does not discuss how the MDQ policy change would assist in this regard.

As noted in Section 6.4, the Australian Government's MDQ policy change would almost certainly achieve the opposite effect. In particular, given that one effect of the MDQ policy change is to significantly cut consumer co-payments, the costs to the Australian Government and the corresponding burden on taxpayers would also increase significantly. Far from ensuring the sustainability of the PBS, the MDQ policy change will undermine it.

## 6.3 Policy options

The IA does not articulate the range of policy options that might have been considered; in fact, fundamentally only two options are discussed in the IA:

1. No change.
2. Two variations of the MDQ scheme:
  - Option 1: implementing the MDQ policy changes for two months' supply
  - Option 2: implementing the MDQ policy changes for three months' supply.

There are other more targeted and more cost-effective options that could have considered, for example:

- (Further) lowering the PBS Safety Net threshold for patients using multiple medicines who may meet other (for instance, income or age) criteria
- (Further) reducing the level of PBS co-payments for some or all patients
- Enabling GPs to write prescriptions for up to a 12 months' supply of certain drugs without adjusting the number of dispense events. In this way, the same convenience effect cut may be achieved without cutting fees to community pharmacists and without affecting the financial sustainability of the PBS.

## 6.4 Claimed net benefits of the MDQ policy change

The net benefits of the MDQ policy change noted in the IA have significant shortcomings, including:

- A lack of clarity about the actual costs of the MDQ policy change to the Australian Government and taxpayers
- A lack of transparency in relation to both the sources of data used and the calculations made.

#### 6.4.1 Impacts on the government and taxpayers

The impacts of the MDQ policy change on the Australian Government are briefly discussed in the IA.<sup>133</sup>

The discussion is framed around the aim of reducing PBS expenditures. Here, it is argued that the MDQ policy change would reduce PBS expenditure by reducing dispensing and handling fees, Safety Net card issue fees and Electronic Prescription Fees. All of these are fees that are currently paid to pharmacists for a well-defined service and on the understanding of a certain volume of these services being procured, which DHAC has elected to cut. The IA provides no indications of the magnitude of these savings.

For each of the MDQ policy options considered, the IA further presents a ‘regulatory burden estimate’ table that purports to show a benefit accruing to the Australian Government in the form of ‘average annual regulatory cost’ savings to consumers. These savings to ‘individuals’ (note the columns for ‘business’ and ‘community organisations’ are blank) are estimated at \$138.4 million in the case of Option 2 and \$171.6 million in the case of Option 3.<sup>134</sup>

These tables are not referenced anywhere in the text, nor does the IA describe how the claimed savings to consumers were calculated or derived or why these claimed savings would represent a benefit to the Australian Government. In particular, there is no description of the manner in which the schemes would result in a reduced regulatory burden being placed on consumers (whether ‘individuals’, ‘business’ or ‘community organisations’) or what the relevant metric might be to convert that claimed reduced regulatory burden into dollar amounts.

Perhaps the most striking omission from the discussion of the impacts of the MDQ policy change on the Australian Government is an explanation of the cost scheme and how this cost would be funded, namely by taxpayers. The IA claims that for the Australian Government’s preferred Option 2, *...patients who are prescribed prescriptions that allow two months’ supply per dispense will save around \$540 million in PBS patient contributions in 2026-27, and approximately \$1.8 billion between 2023-24 and 2026-27.*<sup>135</sup>

The implications of that statement are not discussed further in the IA, yet they are straightforward. Given that the patients will consume more or less the same volume of

<sup>133</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.34 for Option 1 and p.38 for Option 2. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>134</sup> Ibid. p.34 for Option 2 and p.38 for Option 3.

<sup>135</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.25. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf). Note that for the three month option, the total estimated save to patients is \$740 million in PBS patient contributions in 2026-27 and approximately \$2.5 billion between 2023-24 and 2026-27.

medicines under the MDQ policy change but will pay significantly less in the form of co-payments than under the status quo, it is clear that these claimed savings will be borne by:

- Community pharmacies, whose fee income from dispensing will be cut substantially under the MDQ policy change.
- By taxpayers, who will need to fill the gap from the reduction in co-payments.

The assertion that the MDQ policy change will reduce PBS expenditure is therefore misleading because:

- The IA does not consider PBS expenditure savings which will be reduced by cutting dispensing and other fees paid to community pharmacies.
- Whatever those savings to the PBS might be, they will be more than offset by the estimated (\$1.8 billion) shortfall in PBS co-payments, a shortfall that will need to be picked up, ultimately, by community pharmacies.

In addition, the Australian Government will also lose company tax and income tax revenue paid by the community pharmacy sector. This will translate into a reduction in public services for the Australian community. Moreover, to the extent that the expected job losses require an increase in welfare support, this again (holding all other factors constant) will lead to a reduction in services for all other members of the Australian community (other than the recipients of unemployment benefits and other welfare payments).

#### 6.4.2 Impacts on consumers

The discussion of net benefits accruing to consumers similarly raises serious concerns. As noted above, the IA states that the MDQ policy change will provide financial benefits of \$1.8 billion between 2023-24 and 2026-27 to consumers. As discussed above, those benefits represent a direct subsidy or transfer from community pharmacies and taxpayers to a very wide group of consumers, irrespective of whether individual consumers are experiencing hardship or not.

The only net benefit to consumers explicitly discussed in the IA relates to claimed 'direct regulatory impact savings' for consumers. These deemed savings are based on a calculation that takes the number of minutes saved per person assumed to visit the GP and community pharmacy less often and multiplies those minutes saved with 'the default value for an individual's leisure time', which is said to be \$36 per hour. The total notional benefit that would correspondingly accrue to consumers is then said to be \$553 million between 2023-24 and 2026-27 for Option 2 and \$686 million for Option 3.<sup>136</sup>

There are many questions around the assumptions underpinning this calculation and how they were derived. For instance, the valuation of consumer time saved in the IA assumes that the time required by a consumer to fill a prescription at a community pharmacy would be 15 minutes,<sup>137</sup> while elsewhere the IA assumes that the time it takes a pharmacist to dispense a

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<sup>136</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.28 for Option 2 and p.36 for Option 3. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>137</sup> Ibid. p.27.

prescription is 4.5 mins.<sup>138</sup> In either case, the IA cites no sources for the assumptions underpinning these ‘saved’ time estimates.

Given that consumer time savings is one of the few elements that would genuinely represent a net benefit to consumers, it also seems remarkable that no effort has been made to establish an appropriate value for consumers’ opportunity cost of time.

The figure of \$36 per hour is derived from an Australian Government Guidance Note and described as ‘the opportunity cost of the time spent filling in forms’ which has been equated with the average wage in Australia and the default value for an individual’s leisure time.<sup>139</sup> The Guidance Note states that it may not always be the case that the trade-off between work and leisure is applicable to all individuals who are affected by a regulation. This is very likely to be the case here. Indeed, there is a very substantive theoretical and empirical literature on the opportunity cost of individual’s time in different circumstances and contexts, including in the context of paid work, unpaid work (such as doing household chores) and leisure time (such as hobbies and sports activities). One of the central findings of that research is that the opportunity cost of time tends to be lower for retirees who can be expected to make up a substantial proportion of those taking multiple medicines who would supposedly benefit from the MDQ policy change.<sup>140</sup>

Patients benefit from seeing their GP and pharmacist regularly. This is particularly true for patients with chronic illnesses and with risk factors for additional conditions (including risk factors related to social determinants of health), such as the consumers of the 325 medicines on the MDQ list. As such, it is not unreasonable to conclude that seeing a health professional less often would raise the risks of illness, missed diagnoses, or drug mismanagement. Critically, the IA does not account for the health impacts on PBS consumers of interacting with their GP and pharmacist less often nor on the health system as a whole due to the impact of missed/delayed diagnosis of health conditions.

Finally, some consumers may be credit constrained and buying two boxes within a weekly or fortnightly pay (or welfare) cycle (where their medicines are priced below the general co-payment and will therefore increase in price per dispense) will make their medicines less affordable not more affordable. While it’s true that, over the course of the whole year, the cost is unchanged, many people budget over much shorter cycles. Sensitivity analysis should have been undertaken to assess this impact.

### 6.4.3 Impacts on pharmacies

The IA acknowledges that the impact of the MDQ policy change on community pharmacies will be substantial, although the aggregate impact (in terms of the loss of income to the community pharmacy sector) is never articulated. The calculations and the assumptions underpinning them are not provided and cannot be verified. Yet even the illustrative

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<sup>138</sup> Ibid. p.30.

<sup>139</sup> Australian Government Department of the Prime Minister and Cabinet 2022. *Regulatory Burden Measurement Framework: Guidance Note*. p.11. Available at: <https://oia.pmc.gov.au/resources/guidance-assessing-impacts/regulatory-burden-measurement-framework>

<sup>140</sup> Aguiar, M. & Hurst, E. (2007b). Measuring trends in leisure: The allocation of time over five decades. *Quarterly Journal of Economics* 122(3), pp.969–1006.



examples cited in the IA highlight that (for the preferred Option 2), the estimated average impact per community pharmacy in Year 4 of implementation may be up to \$158,000 reduction in remuneration, or an 18 per cent reduction in the baseline remuneration of community pharmacy fees.<sup>141</sup> Overall, and assuming that there are at least 5,900 pharmacies (see Section 2.4.1) this corresponds to a cut in income in that year of around \$930 million.

The IA further notes that:

*Smaller pharmacies and those in isolated/remote areas may be impacted more than larger pharmacies and those in metropolitan areas, as in addition to reduced dispensing related remuneration, there may be less foot traffic and therefore less opportunity for over the counter sales due to the smaller populations of serviced regions.*<sup>142</sup>

Given the expressed concerns about convenience and accessibility of community pharmacies for consumers, it might be thought that an outcome whereby community pharmacies in remote and less desirable locations are more likely to close directly contradicts the aims of the MDQ policy change.

A concern noted in the IA, but not addressed in any depth, is the implication for retail sales that a reduction in pharmacy visits would create. This raises further concerns about the future viability and costs of the community pharmacy sector. Concerns about the broader cost implications of proposals to restrict retail sales in one form or another arise because the margins earned by community pharmacies on such sales currently contribute to meeting operating costs (such as staff costs, rent and business taxes). A reduction in community pharmacy visits, which would in turn be accompanied by a reduction in retail sales would then further deprive community pharmacies of an additional revenue stream that currently contributes to meeting these costs.

These very significant negative impacts on the community pharmacy sector in general, and smaller and remote pharmacies in particular, should have been considered as part of the IA.

It is also relevant, though not mentioned in the IA, that larger pharmacies and those located in high rent areas, such as urban streets and shopping centres, will also be at particular risk due to their high prescription volumes and higher cost base. Additionally, any pharmacy in an area that services a population with higher than average rates of chronic disease (and therefore a higher proportion of prescription volume relating to the 60-day medicines) will be more vulnerable. The same applies to pharmacies that have a relatively small retail footprint – they are likely to be heavily reliant on current levels of prescription remuneration for their viability. Further, pharmacies that open for extended hours – often with those hours being marginal in terms of return on expenses – will need to re-examine their business model. The IA did not examine any of this variable impact by pharmacy type, or the effect that resultant business decisions will have on patient access.

A policy initiative that reduces the remuneration of community pharmacies from prescribed medicines by 18 per cent and associated losses in turnover in other retail sales will almost certainly impact the viability of many individual community pharmacies and the community

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<sup>141</sup> Australian Government Department of Health and Aged Care 2023. *Impact analysis: Lowering the cost of medicines through changes to maximum dispensing quantities*. p.29. Available at: [https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis\\_3.pdf](https://oia.pmc.gov.au/sites/default/files/posts/2023/05/Impact%20Analysis_3.pdf)

<sup>142</sup> Ibid. p.29.



pharmacy sector as a whole. These consequences of the MDQ policy change would seem to directly contradict the statement in 7CPA that refers to community pharmacy as an integral part of the Australian health care system and the commitment of the signatories of 7CPA to:

- Ensuring Australians have access to patient focused, outcome oriented professional pharmacy services and programs that support the safe and quality use of medicines
- Predictable remuneration for community pharmacies to support their viability and allow for an efficient and effective network of Approved Pharmacists across Australia, while ensuring the Proper use of Public Resources.<sup>143</sup>

## 6.5 Summary

This review of the IA highlights that the analysis does not consider all the relevant, available evidence and has not been approached in a way which is systemic. Significantly, it has not been undertaken in consultation with stakeholders which might have identified critical impacts on the Australian Government, the community pharmacy sector and consumer.

In addition, there is an important distinction between the broader policy development process, which the OIA Guidelines cover, and the process of conducting a good CBA to identify the costs and benefits associated with any policy change. While the seven guidance questions are a recognised part of good-practice policy development, in the case of the MDQ policy change, the analysis should have included a proper evaluation of the net benefits or costs from the perspective of the Australian Government, the community pharmacy sector and the Australian community, particularly taking into account spatial differences. This requires a CBA to be part of the assessment process with direct and indirect costs and benefits monetised to form a critical part of the evidence base for the proposed MDQ policy change.

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<sup>143</sup> Australian Government Department of Health and Aged Care 2020. *Seventh Community Pharmacy Agreement*. p.4. Available at: <https://www.health.gov.au/sites/default/files/2022-12/seventh-community-pharmacy-agreement.pdf>

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# Appendix A: Financial analyses methodology and assumptions – national level

## A.1 Data sources and adjustments made

To build a model of PBS dispensing, PBS data was collected from various sources and adjusted as appropriate. This is shown in Table A-1. A computer program (Spyder Python) was used to collate and format the data.

**Table A-1 Data and assumptions used**

Data	Source	Adjustments to data
Country dispensing volumes by month	PBS <i>Expenditure and Prescriptions Report</i> for 2020-2021 and 2021-2022 and PBS Date of Supply data <a href="https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions">https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions</a> <a href="https://www.pbs.gov.au/info/statistics/dos-and-dop/dos-and-dop">https://www.pbs.gov.au/info/statistics/dos-and-dop/dos-and-dop</a>	The Country dispensing volumes were isolated for pharmacy type s90 (community pharmacies only), which removed hospitals from the dispensing volume
State dispensing volumes	Extracted using a computer program (UIPath) for fiscal years 2020-2021 and 2021-2022 <a href="http://medicarestatistics.humanservices.gov.au/statistics/pbs_item.jsp">http://medicarestatistics.humanservices.gov.au/statistics/pbs_item.jsp</a>	The data state dispensing data from Human Services was significantly lower in total volume than the country wide data from PBS. The state dispensing ratios were used in combination with country wide dispensing volumes to correct for the discrepancy and calculate a dispensing volume and associated revenue by state.
DPMQ	PBS website <a href="https://www.pbs.gov.au/info/industry/pricing/ex-manufacturer-price">https://www.pbs.gov.au/info/industry/pricing/ex-manufacturer-price</a>	The values of some AEMP equalled the DPMQ. This is due to non-

Data	Source	Adjustments to data
		<p>disclosed AEMP prices. To circumvent this problem AEMP was calculated based on the DPMQ was used to calculate AHI and combined with the dispensing fee to calculate the money paid for pharmacies per item dispensed currently and with increased AHI and dispensing fee from 1 July 2023.</p> <p>The calculated AEMP was used to calculate a hypothetical 2021-22 and 2022-23 60-day AEMP, associated 60-day wholesale mark-up and 60-day AHI to create a 30 and 60-day cost of medicine at the counter and a hypothetical 2023-24, 2024-25, 2025-26, 2026-27 AEMP, wholesale markup, inflation increased AHI to create a 30 and 60-day cost of medicine.</p>
Number of community pharmacies	<p>PBS <i>Expenditure and Prescriptions Report</i> for 2021-2022  <a href="https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions-report-1-july-2021-to-30-june-2022">https://www.pbs.gov.au/info/statistics/expenditure-prescriptions/pbs-expenditure-and-prescriptions-report-1-july-2021-to-30-june-2022</a></p>	None required.
PBS items in the MDQ policy change	<p>Sixty day dispensing of Pharmaceutical Benefits Scheme medicines  <a href="https://www.pbs.gov.au/industry/listing/elements/pbac-meetings/pbac-outcomes/2022-12/Increased-Dispensing-Quantities-List-of-Medicines.pdf">https://www.pbs.gov.au/industry/listing/elements/pbac-meetings/pbac-outcomes/2022-12/Increased-Dispensing-Quantities-List-of-Medicines.pdf</a></p>	None required.

## A.2 Financial impacts methodology

The methodology to calculate potential financial impacts included:

- **Income from PBS items in scope:** The community pharmacy dispensing volume per month per consumer type and PBS type were multiplied with the sum of PBS item specific AHI and dispensing fee.
- **Income from PBS items not in scope:** These items were removed and the results were aggregated up per year.
- **A sensitivity analysis:** This was undertaken using adoption ratios ranging from 45 per cent to 100 per cent. It calculated the decrease in cost for government and consumer and corresponding loss of pharmacy revenue for fiscal years 2020-23 to 2023-27. The analysis considered the increased price of a 60-day dispensed item and the impact on concession payment (e.g. “bracket creep”).

The simulations on fiscal years 2020-23 showed the financial impact on 2021-22 based on financial data from 478 community pharmacies).

Data from 1,732 community pharmacies demonstrated the impact to dispensary revenue and lost visits. It was assumed that \$6 gross profit was lost for every lost visit, to determine the non-dispensary lost gross profit. Using the 2021-2022 dispensing data simulated hypothetical losses were calculated with a 45%, 50%, 55%, 58%, 60%, 63%, 65%, 70%, 72%, 75%, 80%, 85% 90%, 95% and 100% adoption of the policy.

This was aggregated up to state-level, Modified Monash Model combined and state per Modified Monash Model combined.

- **The Modified Monash Model:**<sup>144</sup> This was used at Australian-wide and state/territory-wide levels. However, MMM levels 3, 4 and 5 were merged as were MMM levels 6 and 7 due to privacy reasons.
- **Consumer visits:** The loss of visits per state was calculated by comparing the dispensing data and identifying visits to the community pharmacy that solely fell within the PSB items in scope of the proposed MDQ policy change. That visitor count loss per state was used to calculate a potential cross sale loss due to decreased visits of PBS items in scope.

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<sup>144</sup> A definition of the MMM regions can be found at: <https://www.health.gov.au/topics/rural-health-workforce/classifications/mmm#:~:text=under%20the%20MMM-,About%20the%20Modified%20Monash%20Model,MM%207%20is%20very%20remote>

# Appendix B: Financial analyses methodology and assumptions

## B.1 Overview

We acknowledge that the Australian Government does not have access to the accountant's financial data or the Strongroom and Nostradata dispensing volume data, both of which were crucial for assessing the regional impact of the policy and estimating the projected pharmacy closures and job losses.<sup>145</sup>

However, the Australian Government possesses the necessary data to replicate this analysis in greater detail. The ABS *Business Longitudinal Analysis Data Environment* (BLADE) contains tax returns from every Australian business, including information on revenue, profit, operating expenses including debt repayments and Pay as You Go (PAYG) summaries. This data can be used to determine the profitability and total salaries paid by each community pharmacy. Additionally, the BLADE data includes geographic location details for each community pharmacy, enabling allocation by state and by Modified Monash Model. Since the number of community pharmacies (5,901), is significantly higher than our cohort (478 financial data and 1,732 dispensing data), it should be possible to assess the impact on a per-state by Modified Monash Model basis.

The PBS collects information on dispensed items per community pharmacy and this data is partially accessible through the *ABS Microdata: Multi-Agency Data Integration Project* (MADIP). Alternatively, the Department of Health of Aged Care should have detailed dispensing data for each community pharmacy at the row level for each affected medicine.

By combining the BLADE data with either the MADIP or PBS data, an Australian Government analyst should be able to determine the financial impact on each community pharmacy and aggregate these results by state and by Modified Monash Model. This would provide a more precise estimate of the number of community pharmacy closures and job losses.

Calculating the loss of footfall would be more challenging, but the PBS data per community pharmacy can help identify the revenue derived from dispensing PBS drugs and other sales. A reasonable estimate would be around 30 per cent of the PBS items creating footfall and using \$6 per footfall would be a conservative indicator for profit loss by footfall. This can be evaluated in function of the total non-dispensing revenue per community pharmacy.

## B.2 Summary of steps

- **Job losses:** Were calculated by several steps:
  1. Adjusted Net Profit = Net profit reported in 2021-22, adjusted for gross profit from COVID-19 activities e.g. Rapid Antigen Tests, vaccinations (where known) and

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<sup>145</sup> Accounting firms that provided data and were willing to be identified in this report include: Pitcher Partners, Yarra Lane, Peak Strategies, Perks, Holman Hodge, Findex, RSM Australia, Vincent's, Grimsey, Medici Capital and Rose Partners. Valuers and finance brokers who provided data and were willing to be identified include CFS Sales and Valuations and Kizmet Capital.

owner's salary i.e. \$120,000 per annum (only where the net profit reported had not been reduced for an owner's salary).

2. Adjusted Net Profit *less* reduced Gross Profit lost due to the 60-day dispensing policy = Forecast Net Profit. The Gross Profit lost was calculated using data from 1,732 community pharmacies, which demonstrated the reduced Gross Profit by jurisdiction and Modified Monash Model (MMM). The data from the 1,732 community pharmacies also reported reduced visits, which were multiplied by \$6 to determine the Gross Profit lost from footfall. Note: The financial impacts of the 60-day dispensing policy were calculated by jurisdiction by MMM to ensure that the impacts were place-based.
3. If the Forecast Net Profit was less than zero (i.e. before accounting for debt or a return on investment for risk) a calculation of job losses was undertaken, as follows:
  - Where the Forecast Net Profit (loss) was greater than salaries and wages in 2021-22 the community pharmacy was forecast to close. *If the salaries and wages in 2021-22 was:*
    - Less than \$120,000, then one job loss was tallied and it was assumed this was a community pharmacist (i.e. no pharmacy assistants lost their job as there were none employed).
    - Greater than \$120,000 and the dispensary revenue was greater than \$2.06 million (i.e. 40<sup>th</sup> percentile – an assumption where two or more pharmacists would be employed), then the salaries and wages in 2021-22 *minus* \$120,000 *divided by* \$50,000 (i.e. average FTE salary for a pharmacy assistant) = pharmacist assistant job losses *plus* 1 for the Pharmacist (i.e. \$120,000).
    - Greater less than \$120,000 and the dispensary revenue was less than or equal to \$2.06 million (i.e. assuming one pharmacist operation), then the salaries and wages in 2021-22 *divided by* \$50,000 (i.e. average FTE salary for a pharmacy assistant) = pharmacist assistant job losses.
  - Where the Forecast Net Profit (loss) was less than salaries and wages in 2021-22 the community pharmacy was forecast to continue operations.
    - If the Forecast Net Profit (loss) was greater than \$120,000 (loss), and the dispensary revenue was greater than \$2.06 million (i.e. assuming two or more pharmacist operation) then Forecast Net Profit (loss) *minus* \$120,000 *divided by* \$50,000 (i.e. average FTE salary for a pharmacy assistant) = pharmacist assistant job losses *plus* 1 for the Pharmacist (i.e. \$120,000).
    - If the Forecast Net Profit (loss) was greater than \$120,000 (loss), and the dispensary revenue was less than or equal to \$2.06 million (i.e. assuming one pharmacist operation) then Forecast Net Profit (loss) *divided by* \$50,000 (i.e. average FTE salary for a pharmacy assistant) = pharmacist assistant job losses.



- If the Forecast Net Profit (loss) was less than \$120,000 (loss), then Forecast Net Profit (loss) divided by \$50,000 i.e. average FTE salary for a pharmacy assistant, equals community pharmacist assistant job losses.

Note: Fractional job losses were calculated, and these were calculated based on an FTE. FTEs were then converted to number of persons set to lose their job based on data from the Guild regarding distribution of workers by age and average before tax salaries. Using that data, it was assumed that full time persons represent 41 per cent of the pharmacist assistant workforce, and 59 per cent were part-timers. Persons under the age of 26 represent 26 per cent of workforce and earn on average \$14,500 per year (29 per cent of an FTE, meaning 3.44 persons in this age range could lose their job instead of 1 FTE). Persons aged 25 to 30 years represent 17 per cent of workforce and earn on average \$33,500 (67 per cent of an FTE), Persons aged 30 to 40 years working part time (10 per cent of workforce) earn on average \$12,500 (25 per cent of an FTE), and Persons aged 40 to 50 years and working part time (6 per cent of workforce) earn on average \$12,500 (25 per cent of an FTE). When this is all considered, 1 FTE equates to approximately 2.2 Persons across the entire workforce for non-pharmacist staff and 1 FTE pharmacist has been assumed to represent to 1 person.

Importantly, the forecast job losses are extremely conservative as the forecast ignores debt maintenance, the need to maintain Net Profit greater than zero to service principal repayments, and any return on investment for investor risk. To provide some insight to the practical forecast given debt exists, a conservative \$140,000 annual Net Profit requirement was modelled (See Chapter 4 for more details).

## B.3 Individual community pharmacy data

**Table B-0-1 Data quality assurance: processing of provided pharmacy data**

Data processing sequence	Number of community pharmacies
<b>Original number of community pharmacies</b>	<b>521</b>
<u>Data cleansing criteria:</u>	
1. Removed data: Data represented more than one pharmacy	25
2. Removed data: Gross Profit less Labour was less than Net Profit	15
3. Removed data: (Labour / Gross Profit) > 100%	3
4. Removed data: Labour expense less than \$79,900	2
5. Removed data: Suspected shell company (Net profit <\$100 and Revenue >\$1m)	0
<b>Sub-total pharmacies removed from data supplied*</b>	<b>43</b>
<b>Total community pharmacies remaining in analysed sample</b>	<b>478</b>

Note: Pharmacies removed may have meet multiple removal criteria.

The additional considerations were made on the accuracy of the financial data provided by data suppliers:

1. Data was supplied by 12 suppliers.
2. The following table represents the proportion that each supplier contributed to the sample.

Given one supplier represented 36 per cent of the sample, sensitivity analysis was undertaken to determine whether that supplier's data materially influenced the outcome of the analysis. Of the providers most were accounting firms, however, some were valuers.

Group G (36 per cent of the sample used) represented valuers which used forecast future maintainable net profit which would not have accounted for debt i.e. earnings before interest and debt. As such, when Group G was removed the number of closures and job losses grew, indicating that the sample of 478 community pharmacy financial data leads to a conservative output of the financial impacts of the 60-day dispensing policy.

The FTE job losses were 2,244 (including Group G) and 2,420 (excluding Group G). This is considered an immaterial change in the overall forecast at 45 per cent median adoption and no consideration of debt or return on investment for risk.

Group A	Group B	Group C	Group D	Group E	Group F	Group G	Group H	Group I	Group J	Group K	Group L
5%	10%	4%	4%	2%	5%	36%	5%	10%	2%	0%	18%

3. While it is conceivable that operators would seek to minimise their tax obligations and this would impact the reported net profit, there is no direct benefit of a single store operator to report significant losses i.e. losses in the order of \$100k+. Consideration was given to whether any pharmacies in the sample were operated as shell companies i.e. reported a net profit less than zero and greater than minus \$100, where the net profits were reported in another entity. Where this was suspected the pharmacies were removed from the sample.

After the above data cleansing criteria and considerations, it has been assumed that those remaining in the sample who reported losses were indeed a fair and reasonable representation of financial position of that entity.

Data for the remaining 478 community pharmacies are shown below.

**Table B-0-2 Number of community pharmacies in sample data, by jurisdiction**

Jurisdiction	Number in sample	Percentage of total
New South Wales	110	5.7%
Victoria	146	10.4%
Queensland	136	11.4%
South Australia	25	5.4%
Western Australia	33	5.1%
Tasmania	19	12.3%
Northern Territory	7	16.7%
Australian Capital Territory	2	2.5%
<b>All Australia</b>	<b>478</b>	<b>8.1%</b>

**Table B-0-3 Number of community pharmacies in sample data, by Modified Monash Model**

MMM region	Number in sample	Percentage of total
1	296	7.3%
2	61	11.8%
3	37	9.1%
4	28	10.8%
5	47	9.2%
6	5	5.5%
7	4	7.0%
<b>Total</b>	<b>478</b>	<b>8.1%</b>

**Table B-0-4 Number of community pharmacies in sample data, by Jurisdiction and Modified Monash Model**

MMM region	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
1	66	106	87	15	20	Not applicable	Not applicable	2	<b>296</b>
2	2	10	32	1	1	10	5	0	<b>61</b>
3	20	4	2	4	3	4	Not applicable	Not applicable	<b>37</b>
4	7	12	8	0	1	Not applicable	Not applicable	Not applicable	<b>28</b>
5	15	13	6	4	4	5	0	0	<b>47</b>
6	0	1	0	0	2	0	2	Not applicable	<b>5</b>
7	0	Not applicable	1	1	2	0	0	Not applicable	<b>4</b>
<b>Total</b>	<b>110</b>	<b>146</b>	<b>136</b>	<b>25</b>	<b>33</b>	<b>19</b>	<b>7</b>	<b>2</b>	<b>478</b>

**Table B-0-5 Percentage of community pharmacies in sample data, by Jurisdiction and Modified Monash Model**

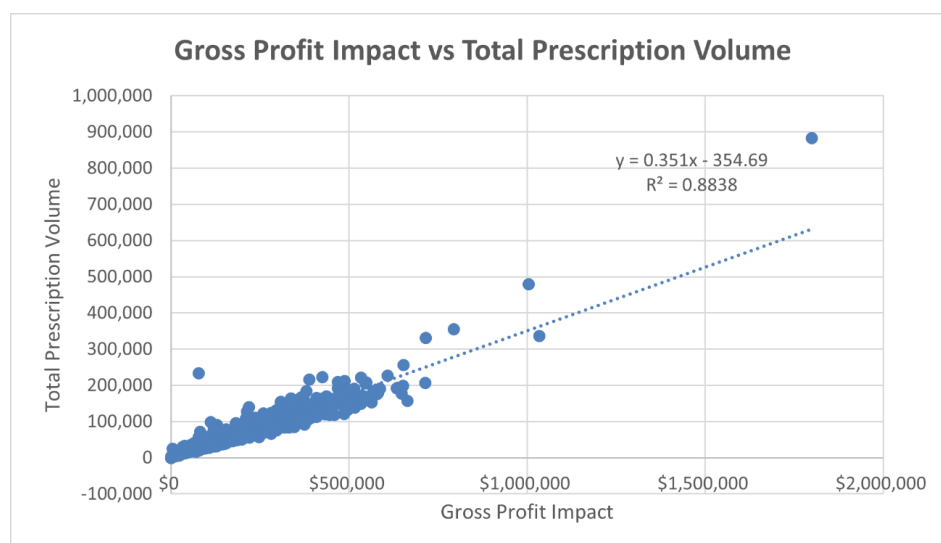
MMM	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
1	5%	10%	12%	5%	4%	Not applicable	Not applicable	3%	7%
2	5%	12%	14%	11%	4%	11%	17%	0%	12%
3	10%	5%	6%	11%	9%	18%	Not applicable	Not applicable	9%
4	6%	19%	14%	0%	14%	Not applicable	Not applicable	Not applicable	11%
5	10%	11%	6%	7%	8%	16%	0%	0%	9%
6	0%	33%	0%	0%	7%	0%	20%	Not applicable	5%
7	0%	Not applicable	4%	17%	11%	0%	0%	Not applicable	7%
<b>Total</b>	<b>6%</b>	<b>10%</b>	<b>11%</b>	<b>5%</b>	<b>5%</b>	<b>12%</b>	<b>17%</b>	<b>3%</b>	<b>8%</b>

## B.4 Gross profits and prescription volumes

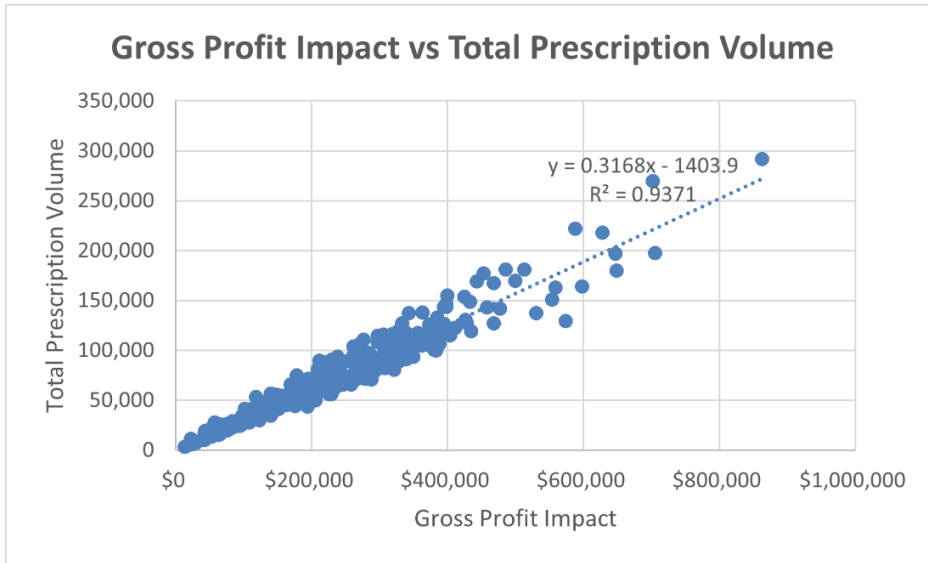
The financial impact of the MDQ policy change is not synonymous with the volume of prescriptions that a community pharmacy currently dispenses. This is because the mix of medications supplied by a community pharmacy will be dependent on the needs of the population that it serves i.e. younger populations, more chronic disease and older populations, and the type of pharmacy i.e. medical centre community pharmacy compared to a shopping centre community pharmacy.

The relationship between the total prescriptions dispensed across a sample of pharmacies (n=1,732) only explained 88 per cent of the gross profit impact (i.e. loss). This was consistent when considering location i.e. various MMMs.

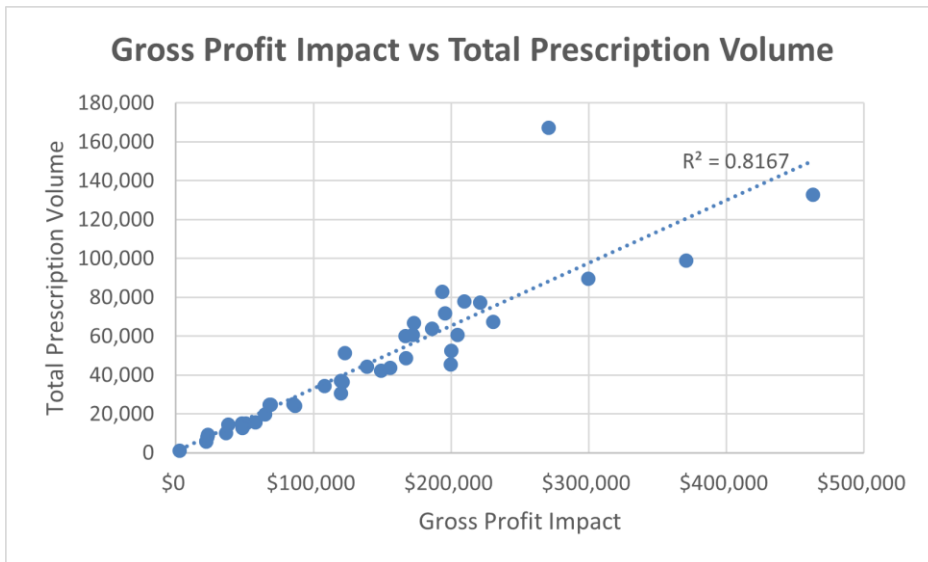
**Table B-6 Community pharmacies in Modified Monash Model regions 1 and 2**



**Table B-7 Community pharmacies in Modified Monash Model regions 3, 4 and 5**



**Table B-8 Community pharmacies in Modified Monash Model regions 6 and 7**



# Appendix C CBA methodology and assumptions

## C.1 Introduction

This appendix describes the analytical approach used to assess the impacts of the move to 60-day MDQ for the 325 PBS-listed medicines identified by the Australian Government. The economic analysis uses the results of the financial modelling (set out in section 4) as inputs and considers the broader ‘social welfare’ impacts of the move to 60-day dispensing on the Australian community over a four-year timeframe (from 2023-24 to 2026-27 inclusive). These broader impacts extend beyond the immediate financial impact on pharmacy viability or the Australian Government’s operating balance and include monetary estimates of how patient’s health could be adversely affected by the policy. The economic model also accounts for the benefits of the policy to the consumers of the 325 PBS medicines identified, such as the savings from fewer patient co-payments and fewer visits to the pharmacy and GP. The results of the economic analysis are reported in section 5.

## C.2 A cost benefit analysis framework was used

To account for the broad range of impacts on the Australian community, we used a CBA framework to undertake the economic analysis. A CBA is an analytical tool used to account for the complex trade-offs involved in assessing the benefits and costs of particular policy proposals on a common basis in terms of monetary value and time, such that the comparison can be easily understood. The CBA framework is widely used as a tool to assist government or industry make or understand decisions on alternative options, especially in situations where the costs and/or benefits of a proposed policy change are not captured solely by the proponent (i.e. in this case the Australian Government), but are broader in scope, and complex financial, economic and social welfare trade-offs are at play.

A CBA is considered the ‘gold standard’ in public policy analysis because the conceptual framework is able to account for any identified benefit or cost, the process of estimation is transparent, double-counting of costs and benefits is avoided, and the assumptions underpinning the analysis are made clear. In this framework, the government does not gain or lose welfare, but is simply a mechanism to transfer welfare between different groups in society. A standard CBA sets out a base case and policy change scenario in order to measure the incremental difference between two future trajectories, and takes into account all possible welfare effects, including effects on consumers (of medicines) and producers (i.e. the pharmacists who deliver the medicines) as well as the Australian community. In the CBA analysis of 60-day dispensing, these ‘two futures’ are compared over a four-year time period and the impacts are reported in net present value terms.<sup>146</sup>

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<sup>146</sup> Conceptually, calculating the net present value of an investment or policy decision is a way to understand the present value e.g. in 2023 dollars, of future flows of costs and benefits that will result from that decision. A 4-year time period has been adopted to align this analysis with that undertaken by the OIA. See: <https://oia.pmc.gov.au/published-impact-analyses-and-reports/lowering-costs-medicines-through-changes-maximum-dispensing>

### C.3 General CBA assumptions

A number of generalised assumptions have been made to structure and bound the economic analysis. It is assumed that:

- More visits to a GP lowers an individual's health risk because there's an increased likelihood that an illness or disease is discovered and treated sooner as a result of increased observation, patient-GP discussion and diagnostic testing.
- In the same way, more visits to a pharmacy lowers an individual's health risk. Pharmacies employ a number of methods to check-up on a patient's health, including responding to patient queries and asking patients questions when they submit or pick-up their scripts. Pharmacists are available to speak with patients if requested by the patient or if a discussion is recommended by the pharmacy assistant (who can be a pharmacy degree student).
- In relation to those pharmacies that may be at financial risk from the changes (e.g. pharmacies in regional Australia with lower population density and dispensing volumes), a proportion of pharmacists and other pharmacy employees are likely to lose their jobs. The financial analysis applies a Net Profit After Tax (NPAT) rule where pharmacies that do not make a net profit after accounting for the policy change go out of business.
- It is assumed that most pharmacists and pharmacy workers will find alternative employment within 1-3 months of losing their jobs, while a small proportion will not. Those who do not find alternative employment remain unemployed for an average of 6 months in the larger, deeper labour markets of Australia's capital cities, 12 months in Australia's major towns, and 2 years (or drop out of the labour force completely) in Australia's small towns and remote areas.
- A social discount rate of 7 percent is applied to the analysis, which follows the Australian Government Guidelines and, also, reflects a return to neutral monetary policy around the globe over the past 12 months (as at June 2023).<sup>147</sup>
- Benefits and costs are measured as the sum of the change in the consumer and producer surplus (Box C-1). This assumption recognises the fact that capital and labour resources have alternative uses in the economy. For example, a pharmacy worker who loses their job and immediately finds alternative employment at the same wage is not measured in a CBA as a cost or benefit. Alternatively, a pharmacy worker who loses their job and then drops out of the labour force because they cannot find alternative employment at any wage, is counted as a cost in a CBA because of the reduction in human capital.

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<sup>147</sup> See the Australian Government's OIA Guidelines here: <https://oia.pmc.gov.au/resources/guidance-impact-analysis>

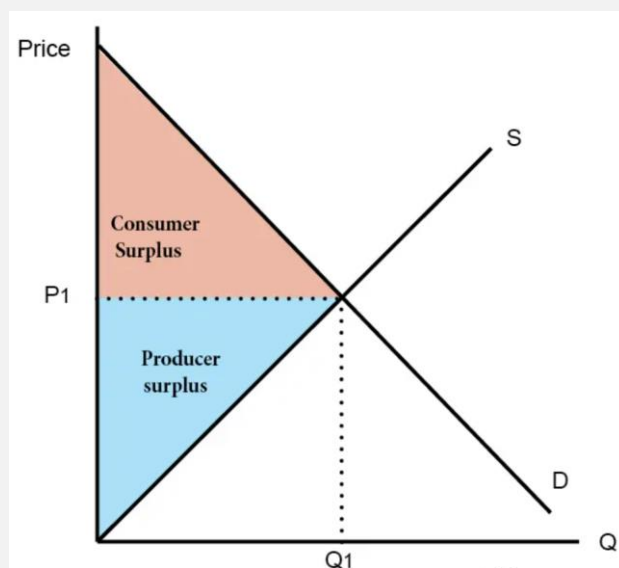
## Box C-1 Consumer and Producer surplus

### Consumer and Producer surplus

Consumer surplus is defined as the benefit enjoyed by consumers over and above the price paid for a product or service. In a market for a good, it represents the sum of the willingness to pay for the good less the sum of the revenue collected by the firm.

Producer surplus is defined as the benefit enjoyed by the firm over and above the price it would be willing to sell at (i.e. the total cost of production). In a market for a good, it represents the sum of the returns to the capital invested (i.e. profit) accruing to the industry.

**Diagram A** – Graphical representation of consumer and producer surplus



Notes: In the diagram above, P1 and Q1 represent the equilibrium price and quantity in the market for a product or service. Total market revenue is represented by the square bounded by the Origin, Q1, equilibrium and P1. The consumer surplus is the salmon-coloured triangle underneath the demand curve and above the equilibrium price. The producer surplus is the blue coloured triangle above the supply curve and below the equilibrium price.

Source: Tulipwood Economics.

## C.4 Base Case — no policy change

The Base Case establishes the most likely future trajectory of PBS-listed dispensing and the Community Pharmacy sector over the next four years, being 2023-24 to 2026-27 inclusive, under the current 7CPA (2020-21 to 2024-25) and subsequent 8CPA (2025-26 to 2029-30). Under this scenario it is assumed that there are no changes to the level and structure of pharmacy remuneration in real terms.<sup>148</sup> Dispensing volumes are assumed to grow at the population growth rate of 1.6 per cent per year.<sup>149</sup>

The Base Case sets the foundation on which the policy change is assessed. In this 'factual scenario', the dispensing rules remain unchanged and the 7CPA agreement between the Australian Government and the Community Pharmacy sector is unchanged. Table C-1 reports the main assumptions underpinning the Base Case.

<sup>148</sup> While it is likely that pharmacy remuneration will increase in real terms this is not guaranteed, hence this conservative assumption is made.

<sup>149</sup> We have aligned most of our core assumptions, including the population growth rate, to those used by the Office of Impact Analysis in their impact assessment.



**Table C-1 Assumptions underpinning the Base Case**

Base Case assumption in 2023-24	Value
Number of Community Pharmacies	5,901
Number of Community pharmacists	18,938
Number of Community pharmacists working in regional Australia (MMM 3-7)	4,734
Dispensing volume of the 325 PBS medicines identified	222.3 million scripts
Growth in dispensing volume of the 325 PBS medicines	1.6% per year (Assumed population growth rate)
Weighted average dispensing fee per script:	<b>2022-23</b>
Ready Prepared + AHF (Administration, Handling and Infrastructure fee)	\$7.82 + \$4.32 = \$12.14
	<b>2023-24</b>
	\$8.37 + \$4.62 = \$12.99
Governing Policy	7CPA, 8CPA (if developed and enacted)

Source: Tulipwood Economics analysis and RIDL analysis.

## C.5. Policy Case — 60-day dispensing

In the Policy Case, the Australian Government introduces 60-day MDQ dispensing for 325 medicines listed on the PBS in a phased approach from 1 September 2023.

### C.5.1. Australian Government claims

With 60-day dispensing for the 325 PBS listed medicines, the Australian Government claims:

- General patients will be able save up to \$180 a year and concession card holders will save up to \$43.80 a year per medicine.
- At least 6 million Australians will halve their medicine costs and need fewer visits to the GP and pharmacist to get the medicine they use the most, saving patients more than \$1.6 billion over the next four years i.e. from 2023-24 to 2026-27.
- While eligible Australians will be able to buy double the medicine on a single script, overall demand for medicines will remain unchanged.
- The reform won't affect medicine availability and it won't add to shortages.
- The Australian Government will reinvest \$350 million per year over four years in Community Pharmacy to partially offset their significant financial losses.
- While the details of the Australian Government's 'reinvestment' offer are scant, it seems that the package is, largely, a reallocation or topping-up of existing funding and/or would not directly benefit the Community Pharmacy sector. Specific initiatives are targeted towards opioid replacement therapy, administration of vaccines, Aged Care services, and rural pharmacy payments. If this is the case:

- These proposals would deliver very little (and in some cases zero) additional net income to pharmacies compared with current arrangements.
- The proposals are also not relevant to every pharmacy in Australia, but the negative financial impact of 60-day dispensing affects every pharmacy.
- There is also no certainty in the design of the package as scant detail has been provided. (Table C-2).

**Table C-2 Government re-investment claims back into the community pharmacy sector**

Budget announcement	Explanation
\$654 million over 4 years from 2023-24 (and \$168.4 million ongoing) for community pharmacy programs under 7 <sup>th</sup> Community Pharmacy Agreement (7CPA)	As a result of excess patient demand, existing 7CPA programs have been overspending compared to the original funding allocation. This newly announced funding is to maintain the current level of service in response to demand (i.e. it is not an increase to the current “run rate” of service funding being received by pharmacies).
\$377.3 million over 4 years from 2023-24 (and \$98.4 million ongoing) for a national PBS Opioid Dependence Therapy (ODT) program	Currently ODT programs are run in pharmacies with policies and funding arrangements determined through states and territories. Pharmacies receive funding from those governments and/or from patients. This funding restructures existing arrangements to create a nationally consistent arrangement. It simply moves the funding from one source to another, with little or no net financial change at a pharmacy level and the possibility of a net negative impact for pharmacies in some states or territories.
\$111.8 million over 4 years from 2023-24 (and \$24.2 million ongoing) for e-script infrastructure, including mandating use of e-prescribing for high risk and high-cost PBS medicines	<p>Currently, there is funding in the 7CPA for an Electronic Prescription Fee (<a href="https://www.servicesaustralia.gov.au/electronic-prescription-fee?context=22861">https://www.servicesaustralia.gov.au/electronic-prescription-fee?context=22861</a>).</p> <p>This is paid to pharmacies but is paid straight through to the IT system providers (called Prescription Exchange Services (PES)). This money will change the funding arrangement to pay the PES directly (pharmacies will no longer receive the fee).</p> <p>There is no net benefit for pharmacy compared with current arrangements.</p>
\$114.1 million over 5 years from 2022-23 (and \$31.0 million ongoing) to subsidise National Immunisation Program (NIP) vaccinations in community pharmacy	<p>Currently, pharmacies have access to NIP vaccines, however the patient must pay for the vaccination service (compared with at a general practice where they can get it for free). Currently, pharmacies typically charge patients \$15 to \$25. It has been announced that the new arrangement will pay pharmacies approximately \$19 per vaccine administered, and the patient will no longer pay.</p> <p>This will only be a net benefit to pharmacies (compared with existing payments received for the same service from pharmacies) if a pharmacy can increase their current volume of vaccinations. Some pharmacies are already at their capacity in terms of delivering vaccines. It is also unknown at this stage whether the funding will be capped or otherwise limited (if it is capped, it further constrains any financial upside).</p> <p>It is notable that the allocated funding equates to less than one vaccination per day per pharmacy (which is likely to already exist currently, being paid for by the patient), compared with the central scenario loss of approximately 40 prescriptions per day.</p>
\$79.5 million over 4 years from 2023-24 (and \$19.9 million ongoing) for doubling of the Regional Pharmacy Maintenance Allowance (RPMA)	<p>This is the only component that could be considered new money with a net benefit. It has been included in the modelling of individual pharmacy impact.</p> <p>However, the RPMA is paid only to pharmacies in Modified Monash Model (MMM) categories 3 to 7. Currently approximately 1,200 pharmacies are</p>

Budget announcement	Explanation
	eligible for these payments. The \$19.9 million annual increase is an average of about \$16,500 per pharmacy per year. This is only a fraction of the average losses that will be incurred through 60-day dispensing.
\$350 million over four years for pharmacists in the aged care sector.	Little information is available in relation to this announcement. It is understood to be for pharmacies to put pharmacists into the aged care facility(ies) they service to ensure quality use of medicine and safety. Establishing and implementing this service will come with extra costs to the pharmacy, mostly in the form of wages. Also, a minority of pharmacies provide services to aged care – so this is not globally applied, while the impact of 60-day dispensing will be.

Source: Hon Mark Butler Media Release, Cheaper medicines to ease cost of living (26 April 2023). Accessed here: <https://www.health.gov.au/ministers/the-hon-mark-butler-mp/media/cheaper-medicines-to-ease-cost-of-living?language=en>

### C.5.1 Policy Case assumptions

The assumptions underpinning in the Policy Case are in Table C-3 and are largely based on the dispensing volume and financial modelling undertaken by the RIDL (see Sections 3 and 4).

**Table C-3 Assumptions underpinning the Policy Case**

Policy Case assumption	Value
GP take-up rate of policy change	3 scenarios Minimum (45%, 58%, 63%, 63%) Central (63%, 72%, 81%, 90%) Maximum (80%, 85%, 90%, 95%)
Dispensing volume reduction of the 325 PBS medicines identified	<b>110.8 million</b> scripts in 2023-24 (i.e. 50% of the 2023-24 Base Case)
Growth in dispensing volume of the 325 PBS medicines	<b>1.6% per year</b> (Assumed population growth rate) <sup>150</sup>
Weighted average dispensing fee per script (derived value is close to the expected value): Ready-prepared dispensing fee + Tier One AHI fee	<b>2022-23</b> \$7.82 + \$4.32 = \$12.14 <b>2023-24</b> \$8.67 + \$4.62 = \$12.99
Total reduction in dispensing fee revenue in 2023-24 (\$m) at 100% take-up (benchmark measures)	<b>\$1,442.9 m</b> [110.8 million scripts * \$13.02]
Total reduction in patient co-payments in 2023-24 (\$m)	<b>\$967.6 million</b>
Governing Policy	Modified 7CPA, with potentially further changes

Source: Tulipwood Economics analysis based on Relational Insights Data Lab (Griffith University) analysis.

<sup>150</sup> The Office of Impact Analysis, in their assessment, use a population growth rate of 1.6% per year. For analytical consistency, we use the same growth rate, which is based on the latest ABS population figures (September 2022) where the reported annual population growth rate is 1.63%.

## C.6 Impacts across time

The timeframe for the analysis has been set at 4 years in order to line up with the OIA impact assessment. However, there are likely to be both short-run and long-run adjustment impacts as a result of the policy change.

The short-run impacts identified are:

- Financial adjustment for pharmacies (-ve)
- Fiscal losses to the Australian Government because the co-payments foregone are greater than the dispensing fees saved (-ve)
- Financial savings for PBS listed medicines patients (+ve)
- Travel time savings for PBS listed medicines patients from fewer GP and Pharmacy visits (+ve)

The long-run impacts are likely to extend beyond the four-year modelling timeframe and include:

- Adverse health impacts on Australians, particularly those from lower socio-economic background, outer regional, remote and very remote parts of Australia, and/or those Australians who are vulnerable in terms of their health status (-ve)
- Increased travel costs to visit some pharmacies (as a result of fewer and more geographically dispersed pharmacies) (-ve)
- Additional fiscal costs of dealing with health impacts (-ve)

## C.7 Benefits and costs by economic sector

In this section, the benefits and costs of the policy change are identified by economic sector. Economic benefits and costs are different from financial benefits and costs because, in addition to the financial impacts on the community pharmacy sector, impacts that are not solely captured by the industry are also counted in the analysis. These impacts include those accruing to the consumers of PBS medicines and the Australian community (including taxpayers) more broadly.

We identify four main groups, being:

- Consumers of the 325 PBS listed medicines.
- The community pharmacy sector.
- The Australian community, which encompasses all of those Australians not directly affected by the policy in the first instance, including taxpayers and welfare recipients, and users of pharmacy services (other than for the 325 medicines affected by the policy change).
- The Australian and state and territory governments.

Importantly, the Government sector i.e. the Australian and state and territory governments, do not gain or lose welfare (as they are institutions not people) but simply facilitate the

transfer of welfare between groups in society. Taxes are treated as transfers between households and government, and there is a deadweight cost to raising taxes if more taxes need to be raised to support the policy change.<sup>151</sup> In other words, increased government expenditure requires an increase in the transfer of resources from households to government. Accordingly, only the first three groups are counted in the welfare analysis.

### C.7.1 Consumers of the 325 PBS listed medicines

Consumers of the 325 PBS listed medicines that will extend to 60-day dispensing will, on the one hand, gain from reduced co-payments and fewer visits to the GP and pharmacy, but, on the other hand, many of the most vulnerable of these consumers will potentially suffer negative health impacts from overdose and drug mismanagement. Overall, the outcome for consumers, *ex ante*, is unclear. Table C-4 lists the benefits from the perspective of these consumers.

**Table C-4 Identification of consumer benefits of policy change**

Consumers of the 325 PBS listed medicines	Explanation
Consumer surplus from reduced PBS co-payments	Consumers benefit from paying a reduced number of co-payments per year because they are receiving two months of medicines (for a single co-payment) instead of one month of medicines. This benefit is limited by the per person co-payment ceilings in place. Note that, in the CBA model, this benefit is fully offset by the reduction in government revenue, which means a reduction in public expenditure, which is a loss to the Australian community sector. The BCR does not change.
Consumer surplus from reduced pharmacy visits	Consumers of the 325 PBS 60-day MDQ dispensing benefit from visiting their pharmacy (on average) 6 times less per year, scaled back (to 20 per cent, or 1.2 visits) for the times they would have visited nearby anyway to undertake another task in the immediate vicinity of the pharmacy (e.g. local shops or post office visit). The costs of the visits are estimated as time and fuel costs (at a percentage of the average wage rate to reflect not all Australians are employed). The time cost of 15 minutes is exactly that used by DHAC in their OIA submission. Our estimate of the opportunity cost of leisure (at \$21.18/hr) is lower and more conservative than DHAC's estimate (at \$36/hr).
Consumer surplus from reduced GP visits	Consumers benefit from visiting their GP one less time per year per relevant in-scope PBS medicine prescribed. Similar to the above, this benefit is scaled back (to 20 per cent) to account for "seeing the GP anyway" and/or another task in the immediate vicinity of the GP clinic or obtaining the script over the phone or online. Our time cost of 30 minutes is below and more conservative than that used by DHAC in their OIA submission (at 35 minutes). And, as above, our estimate of the opportunity cost of leisure (at \$21.18/hr) is lower and more conservative than DHAC's estimate (at \$36/hr).

Source: Tulipwood Economics and RIDL.

Table C-5 lists the potential costs of the policy change to 60-day dispensing.

<sup>151</sup> The deadweight cost (known as the Marginal Excess Burden) of raising Federal taxes has been estimated to be around 20 to 30 cents in the dollar depending on the type of tax (see, for example, Treasury Working Paper 2015-01).

**Table C-5 Identification of consumer costs of policy change**

Consumers of the 325 PBS listed medicines	Explanation
<p>Monetised value of increased deaths and illness from increased overdose (-ve)</p>	<p>It is assumed that more medicines in the home could lead to an increase in the incidence of illness and death as a result of an increased prevalence of overdose. We use research undertaken by the <a href="#">National Drug &amp; Alcohol Centre at the University of NSW</a> and measures of the Value of a Statistical Life (VSL) to estimate the welfare cost.</p> <p>Moreover, it seems curious that on the one hand the Australian Government reduced pack sizes for certain OTC drugs (i.e. paracetamol) because of the risk of overdose, and yet has seemed to ignore this possible effect in the MDQ policy. See here: <a href="https://www.tga.gov.au/news/media-releases/tga-makes-final-decision-reduce-paracetamol-pack-sizes#:~:text=From%201%20February%202025%2C%20new,to%2016%20tablets%20or%20capsules">https://www.tga.gov.au/news/media-releases/tga-makes-final-decision-reduce-paracetamol-pack-sizes#:~:text=From%201%20February%202025%2C%20new,to%2016%20tablets%20or%20capsules</a></p> <p>It is assumed that the additional deaths from prescription drug overdoses in the Policy Case is 0.1 per 100,000 GP/pharmacist interactions foregone. The VSL is set at the OIA guidelines of \$5.3 million.</p> <p>The rate of illness in the Policy Case is assumed to be 100 times greater than the death rate (i.e. 10 in 100,000 per GP/Pharmacist interactions foregone. The Willingness to Pay for 1 Disability Adjusted Life Year (DALY) is assumed to be \$50,000 (which is within the DHAC range for considering new PBS medicines) and the disability factor is assumed to be 0.5.</p>
<p>Monetised value of increased deaths and illness from missed diagnoses (-ve)</p>	<p>It is assumed that fewer visits to the GP and pharmacist could lead to an increase in the incidence of illness and death as a result of fewer serious illnesses being diagnosed. This was difficult to quantify as there is scant literature on the topic. To maintain a conservative bias in the modelling, we did not quantify this impact as part of the CBA.</p>
<p>Monetised cost of drug shortages and drug mismanagement (-ve)</p> <p>Note: this cost is transferred to the Australian taxpayer</p>	<p>It is worth noting that there are at least 230,000 hospitalisations a year attributable to medication-related issues, costing \$1.2 billion a year.<sup>152</sup> Medicines adherence is an important and valued role for community pharmacists.</p> <p>It is assumed that medicine shortages could lead to an increase in the incidence hospitalisations as a result of the addictive or harmful withdrawal effects of some drugs.</p> <p>Australia currently imports over 90 per cent of its PBS listed medicines and, as at 20 May 2023, the Therapeutic Goods Administration’s Medicine Shortage Reports Database has 733 active ingredient and dosage forms reported as either low or critical supply. This means that community pharmacies may seek to hold larger inventories where possible to maintain continuity of supply to vulnerable patients.</p> <p>A comparison between the TGA list of medicines currently being monitored for shortages and the PBS items affected by MDQ policy change undertaken by RIDL as part of this study reveals that 16 per cent of the items in scope are experiencing availability issues. Out of the affected medicines:</p> <ul style="list-style-type: none"> <li>• 62 PBS items (6.4 per cent) have limited availability i.e. 536 medicines.</li> <li>• 9 PBS items (0.9 per cent) are experiencing a reduction in supply until the stock is exhausted i.e. 237 medicines.</li> <li>• 84 PBS items (8.7 per cent) are completely unavailable i.e. 901 medicines.</li> </ul> <p>Although there may be alternatives for some of these medicines, it is important to note that individual consumers may have specific</p>

<sup>152</sup> Source: <https://www.safetyandquality.gov.au/about-us/latest-news/media-releases/australia-joins-international-push-halve-medication-errors>

Consumers of the 325 PBS listed medicines	Explanation
	<p>requirements. Merely switching to a different brand can be manageable but changing the actual molecule may lead to negative side effects or be incompatible with other existing health conditions the consumers. Additionally, it is worth noting that alternatives or different brands may also be subject to shortages, as consumers have likely explored those options when their preferred drug was unavailable.</p> <p>Moreover, many of the drugs in question are prescribed for chronic diseases, primarily affecting elderly consumers. Consumers with cognitive impairments such as Alzheimer’s may struggle with changes in medication dosages. Even the appearance and taste of the pill can pose challenges.</p> <p>Therefore, it might be oversimplifying the issue to state that alternative medicines are available. Assuming a fixed quantity of each drug in moderate to severe shortage is available to Australia, the issuing of 60-day supply means that that fixed quantity will be sufficient for only as few as half as many Australians as it currently is. If alternatives are unavailable or inappropriate for the other half, patients will be adversely affected, worsening the impact even at times of moderate national shortage, and when shortages are localised.</p> <p>There is also a related effect of an increased probability of drug mismanagement for patients juggling multiple medicines and their interactions. This impact is assumed to be short-term, over 1-4 years, as supply chains adjust to the new arrangements. A study by the Pharmaceutical Society of Australia (2019) found: “250,000 hospital admissions annually are a result of medication-related problems. The annual costs for Australia are \$1.4 billion. An additional 400,000 presentations to emergency departments are likely to be due to medication-related problems. And 50% of this harm is preventable.”</p> <p><a href="https://www.psa.org.au/wp-content/uploads/2019/01/PSA-Medicine-Safety-Report.pdf">https://www.psa.org.au/wp-content/uploads/2019/01/PSA-Medicine-Safety-Report.pdf</a></p> <p>The rate of hospitalisation is assumed to be 10 per 100,000 GP/Pharmacist interactions foregone. Hospital costs per admitted patient is assumed to be \$5,335 in 2023-24 and is sourced from the <a href="#">National Hospital Cost Data Collection report</a> (Public Sector Round 24 (Financial Year 2019-20), October 2021).</p>
<p>Aged Care pharmacy service quality reduction e.g. Webster packs; nurses, (-ve)</p> <p>Note: this cost is transferred to the Australian taxpayer</p>	<p>Community pharmacy currently provides a number of services to the Aged Care sector, either free, below cost or at cost. The increased financial pressure placed on Community Pharmacy could result in the sector withdrawing these services, which would be replaced by higher-cost nursing services or in-patient hospital services.</p> <p>Of the 188,000 Australians currently in permanent or respite residential Aged Care facilities, we assume that 75 per cent are provided pharmacy services from the community pharmacy sector.<sup>153</sup> According to the Australian Commission of Safety and Quality in Health, up to 91 per cent of individuals in Australian residential Aged Care facilities are prescribed more than five concomitant medicines, and up to 74 per cent of residents take more than nine medicines.<sup>154</sup></p> <p>We estimated an increased cost to the Australian taxpayer of transferring this dispensing role from Community Pharmacy to higher cost nurses or</p>

<sup>153</sup> <https://www.gen-agedcaredata.gov.au/Topics/People-using-aged-care#:~:text=Aged%20care%20use%20in%20Australia,-The%20Australian%20Government&text=On%2030%20June%202022%2C%20approximately,and%203%2C500%20usin%20transition%20care>

<sup>154</sup> <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/national-baseline-report-quality-use-medicines-and-medicines-safety-phase-1-residential-aged-care>



Consumers of the 325 PBS listed medicines	Explanation
	GPs working in the residential Aged Care sector. It is assumed that the cost of packing a Webster pack is \$11.60 per resident per week. <sup>155</sup>

### C.7.2 Community pharmacy sector – dispensers of PBS medicines

The community pharmacy sector provides a wide range of health services on behalf of the Australian Government. The primary service is the safe dispensing of medicine, for which pharmacies receive a dispensing fee (generally of \$7.82) and an AHI fee (generally a Tier 1 rate of \$4.32 for price below \$100). The average dispensing fee, for most PBS listed medicines is, therefore, \$12.55 per dispense (\$13.00 in 2023-24). Table C-6 lists the benefits and costs from the perspective of the community pharmacy sector i.e. the pharmacists who own pharmacies and their employees.

**Table C-6 Community pharmacy impacts**

Community Pharmacy sector	Explanation
<b>Benefits</b>	
Doubling of the RPMA for 1,093 regional and remote community pharmacies	Of the claimed re-investment back into community pharmacy we identified the RPMA as being a positive additional contribution to Community Pharmacy, at \$19.9 million per year over the four-year period (i.e. \$79.6 million in nominal terms over four years).
<b>Costs</b>	
Reduction in profits from reduction in dispensing revenue	Like any business, a community pharmacy must earn a return on its capital invested to stay in business. It is assumed that the loss in dispensing revenue flows straight through to the pharmacy bottom line (i.e. net profit). This is because, in the short-run, the cost structure of the business is fixed and, consequently any change in revenue is the equivalent of a change in producer surplus (i.e. profit).
Reduction profits from retail sales as a result of the reduction in foot traffic	As above, a community pharmacy must earn a return on its capital invested to stay in business. The move to 60-day dispensing reduces 'foot traffic' in pharmacies such the community pharmacy retail sales decline by \$20 per visit avoided (of which, a gross margin of \$6 per visit is counted as a loss in producer surplus). The average retail spending figure is based on pharmacy level financial data supplied by several accounting firms.
Reduction in profits from an increase in the cost base	The transition to the new dispensing arrangements will increase storage costs (incl. refrigeration) to manage supply-chain risk, and administration and handling costs. These increased costs, without compensation, will reduce profits (i.e. producer surplus).  To maintain the conservative bias in the modelling, we do not measure this impact quantitatively, but rather discuss it qualitatively.

<sup>155</sup> The \$11.60 figure is sourced from the Indigenous Dose Administration Aids pricing schedule. See here: <https://www.ppaonline.com.au/programs/medication-adherence-programs-2/indigenous-dose-administration-aids>



### C.7.3 The Australian community (incl. taxpayers and other groups)

The Australian taxpayer effectively suffers the gains and losses accruing to the Australian Government budget.

- There will be a reduction in public expenditure as a result of the reduction in Community Pharmacy tax payments (-ve).
- There will be a reduction in public expenditure from the loss in co-payment revenue (-ve).
- There will be an effective increase in public expenditure from the savings made from paying less in dispensing fees (+ve).
- There will be an increase in public expenditure from the policy forcing a shift to higher cost pharmacy services delivery options (like nurses in aged care managing medicines instead of pharmacists making Webster packs).
- There will be a net reduction in human capital (proxied by the loss in gross wages paid) as a result of an increase in long-term unemployment and some pharmacy workers dropping out of the labour force.
- There will be a cost to pharmacy consumers from the closure of regional pharmacies, forcing consumers to travel further or seek alternative, higher cost, options for care.

This is shown in Table C-7.

**Table C-7 Impacts on the Australian community**

Australian community	Explanation
<b>Benefits</b>	
Gain in public expenditure from reallocation of dispensing fees not paid to pharmacists	The Australian Community gains from a diversion of public expenditure away from the Community Pharmacy sector. It is assumed that the dispensing fees not paid are reallocated to other budget priorities or debt reduction. Either option benefits the Australian community via increased services or lower taxes in the future.
<b>Costs</b>	
Loss in public expenditure from loss in Pharmacy tax payments	The reduction in pharmacy revenue reduces their company tax payments to the Australian Government (by 30 cents in the dollar). <sup>156</sup> This has a negative impact on the Australian Government's operating statement and reduces public expenditure.
Loss of public expenditure from loss in co-payment revenue	Similarly, the Australian Government receives less in PBS co-payments, which has a negative impact on the operating statement and reduces public expenditure.
Inc. in pub exp in Aged Care sector (eg. nurses instead of pharmacists)	Due to current cross-subsidisation (i.e. pharmacists providing services to Aged Care for free, below cost or at cost), the 60-day dispensing policy is assumed to raise the costs of meeting certain government-sponsored Community Pharmacy objectives, such as servicing the Aged Care

<sup>156</sup> Pharmacies registered as companies would pay the 25% company tax rate. However, many pharmacists are sole traders or Partnerships, which pay tax at their marginal rate.

Australian community	Explanation
	community. It is assumed these additional costs provide no additional benefits, but simply meet the quality objectives of the Base Case.
Net reduction in human capital (proxied by an increase in long-term unemployment and pharmacy workers dropping out of the labour force).	<p>From an economic perspective it can be assumed that most of the unemployed pharmacy workers will return to work in another job, whether in a closely related sector to pharmacy or a completely different industry. Pharmacists are highly educated and can work in other pharmacy-related fields such as research, consulting or in hospitals. Pharmacy assistants have retail and customer service experience and could transfer to other customer-facing roles. In a cost-benefit analysis framework, only the economic (or 'social welfare') loss is what is known as human capital — which relates to a situation of long-term unemployment or dropping out of the labour force permanently.</p> <p>In estimating the economic cost of unemployment, we assumed a rate of long-term unemployment by MMM region as a result of moving to the 60-day MDQ policy.</p> <ul style="list-style-type: none"> <li>- In MMM 1 &amp; 2 regions, it was assumed that 10 per cent of the gross job losses would be unemployed for an average of 6 months. Some would be unemployed for less than 6 months, some for more, and a small proportion of older workers would choose not to re-enter than labour force.</li> <li>- In MMM 3 &amp; 4 regions, it was assumed that 25 per cent of the gross job losses would be unemployed for an average of 12 months. Similar to the above, the 12 months represents an average. In these large and small regional towns, it is assumed that the rate of frictional unemployment would be higher than in the big, deep labour markets of Australia's capital cities.</li> <li>- In MMM 5, 6 &amp; 7 regions, it was assumed that 50 per cent of the gross job losses would be unemployed for an average of 2 years. Again, some workers would be re-employed in much less than 2 years, but other workers would choose to permanently drop out of the labour force. In these small rural and remote towns, the rate of frictional unemployment would be higher again than in the large and small regional towns, indicating a longer duration of unemployment especially to the extent that these workers might be older than the average in the capital cities.</li> </ul> <p>In this analysis, the value-added foregone is the gross wage foregone. The average gross wage foregone of around \$100,000 has been estimated based on an average pharmacist salary of \$120,000 and pharmacy/retail assistant's salary of \$55,000 based on a 1:2.3 ratio between a pharmacist and pharmacy worker.</p>
Cost to communities of pharmacies closing - quality reduction and time	<p>There is a cost to the Australian Community from pharmacy closures, which will increase the cost of seeking medicines or other treatment and advice, as well as reducing the quality of that alternative treatment to the next best option. To maintain a conservative bias in the modelling, we've only modelled the first of these two effects.</p> <p>Based on the pharmacy level financial modelling, we estimated that, at a minimum, 200 pharmacies will close. As a result there are an estimated 5.84 million lost interactions with pharmacies whereby a patient needs to find the next best alternative option. The incremental cost of finding the alternative option is assumed to be, on average, \$10.</p> <p>In terms of the impacts by year, 37.7% of the impact accrues in Yr-1, 42.3% in Yr-2, 10% in Yr-3 and 10% in Yr-4. The scale is related to the</p>

Australian community	Explanation
	timing of the medicines rollout on the one hand, and the GP take-up rate on the other hand.

## C.8 CBA welfare impact assumptions

Table C-8 lists the main assumptions used in the CBA model.

**Table C-8 Assumptions used in the Cost Benefit Analysis (CBA)**

Assumption	Description	Level (Sensitivity)
Willingness to Pay for an additional year of life	A standard measure used by the Australian Department of Health to assess the cost effectiveness of new treatments.	\$50,000 (\$45,000; \$55,000)
Social discount rate	A social discount rate, which is applied in economic analysis, accounts for the social as well as private costs and benefits of an investment over time.	7% (5%; 9%)
VSL	Value of a Statistical Life	\$5.3 million
VSLY	Value of a Statistical Life Year	\$227,000
Population growth rate	Used to grow the number of scripts over the four-year period from 2023-24	1.6%
Opportunity cost of leisure time (\$/hour)	Used to estimate the benefit of avoided visits to the GP and Pharmacy	\$21.18. Note: OIA use \$36/hr, which we consider too high
Time costs (GP)	Time cost to visit a GP	30 minutes (Tulipwood-RIDL) 35 minutes (OIA)
Time costs (Pharmacy)	Time costs to visit a pharmacy	15 minutes (Tulipwood-RIDL) 15 minutes (OIA)
Proportion of time for unique GP or pharmacy vis	The proportion of the number of visits to a GP and pharmacist that the patient “was going there, or near there, anyway” as part of another chore.	80%  i.e. only 20% of these potential avoided visits are counted in the CBA. As OIA noted, very often GPs and Pharmacies are co-located. Moreover, patients and consumers choose to ‘bundle up’ chores to minimise the costs of travel time and commuting costs (e.g. fuel costs).