Evaluation of the Residential Medication Management Review Program

Appendix D
Survey Report

Prepared for
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Reading this Report

Reading the tables

- Questions and responses are written in Italics.
- The base for each column is given in parentheses under the column header.
- ‘n/a’ means that the particular cell is not applicable and no result can be reported.
- Subtotals are right justified and printed in parentheses.
- Proportions are rounded to the nearest whole percent.

Reading the graphs

- The relevant survey questions are presented underneath the graph.
- Each column is a percentage of the base.
- The base for the graphs refers to the total number of responses upon which the percentages have been calculated. This is indicated under the left-hand corner of the graph.

Acronyms used in this report

Acronyms used throughout this report are presented in the introduction to the main report.
1. Accredited Pharmacist Survey

An online survey was administered to Accredited Pharmacists using Campbell Research's in-house online survey tool. Emails were sent to 1,814 pharmacists via the Australian Association of Consultant Pharmacy (AACP) on 21 October 2009. Each address contact on the AACP database received an email link and an invitation to complete the online survey. A reminder email was sent out by the AACP a week after the initial invitation and the survey was withdrawn from field on 10 November 2009. A total of 338 Accredited Pharmacists completed the survey representing a 19% response rate.
1.1 Profile of Accredited Pharmacists

To gain an understanding of the Accredited Pharmacists represented in the survey, respondents were asked about length of experience in the sector, when they became accredited and the location from which they operate.

1.1.1 Length of experience in pharmacy sector

Accredited pharmacists had substantial experience in the pharmacy sector with the majority (73%) having at least ten years experience and one in five having more than 30 years experience (Figure 1). Only one in ten (13%) were recent graduates who had been in the industry for 1 to 5 years.

Q2. How long have you been working in the pharmacy sector?

Base: Accredited Pharmacists n=338

Year of accreditation

The year in which pharmacists became accredited to do Medication Reviews also demonstrates the breadth of experience of responding pharmacists (Figure 2):

- A quarter (26%) of pharmacists had been accredited for 1 to 3 years, that is between 2007 and 2009
- A quarter (26%) had been accredited for 4 to 7 years
- A quarter (26%) had been accredited for 8 to 10 years
A fifth (22%) had been accredited for more than 10 years.

**Q3.** What year did you become accredited to do Medication Reviews?

**Base:** Accredited Pharmacists n=338
Location of pharmacy

Almost six in ten Accredited Pharmacists worked in Victoria (30%) or New South Wales (27%). Only a minority came from the Territories (Figure 3).

Q4. In what state or territory is your main office or pharmacy?
Base: Accredited Pharmacists n=338

Metropolitan and non-metropolitan locations have all been represented throughout Australia (Figure 4):

- Almost six in ten (56%) Accredited Pharmacists were from a metropolitan area
- Two in ten (22%) were from a regional centre
- Two in ten (20%) were from a rural area
- A minority (2%) of Accredited Pharmacists worked in a remote area.
Q5. Is this office or pharmacy located in a metropolitan, regional centre, rural or remote area?

Base: Accredited Pharmacists n=338

The sample has achieved a good cross section of Accredited Pharmacists representing different levels of experience throughout all regions of Australia.
1.2 Number and Nature of RMMRs

RMMRs conducted by Accredited Pharmacists in the last 12 months

Overall, six in ten (60%) Accredited Pharmacists had conducted a RMMR in the last 12 months (Figure 5). Of Accredited Pharmacists who responded to the survey, a higher proportion of those from Victoria (71%), South Australia (69%) and Queensland (65%) and had done a RMMR in the last 12 months compared with New South Wales (51%) and Western Australia (46%). There wasn’t a significant difference by the location of the pharmacy.

Figure 5: Incidence of RMMRs in the last 12 months

Q6. Have you done any RMMRs in the last 12 months?

Base: Accredited Pharmacists n=338
Note: Tasmania, the ACT and NT are not included in this chart due to very low number of responses.

Half of those who had not conducted a RMMR in the last 12 months cited other pharmacists holding the service agreement as RMMR Providers (53%) as the reason for not pursuing RMMRs (Figure 6). Other reasons for not conducting an RMMR in the last 12 months included:

- A lack of time (29%)
- Not being interested in conducting RMMRs (17%)
- RMMRs not being profitable (16%)
- No Aged Care Homes being in their area (10%)
- Being unable to get another pharmacist to replace them while conducting RMMRs (5%).
Among the more frequently mentioned other responses was a preference to conduct HMRs, a lack of co-operation from GPs and homes, and a lack of confidence on the part of pharmacists to undertake RMMRs.
Four in ten accredited pharmacists did not undertake a RMMR in the previous 12 months.

**Figure 6: Reasons for not conducting RMMRs**

- Other pharmacists hold RMMR contracts: 53%
- Lack of time: 29%
- Not interested: 17%
- RMMRs not profitable: 16%
- No ACH in area: 10%
- No other pharmacists to replace: 5%
- Other: 27%

Q36. What are the main reasons that you have not conducted a RMMR in the last 12 months?

Base: Accredited Pharmacists who have not conducted an RMMR in the last 12 months n=134

Six in ten Accredited Pharmacists had conducted an RMMR in the last 12 months. Those not conducting RMMRs cited contracts (service agreements with Aged Care Homes) held by other RMMR Providers as the main reason for not pursuing RMMRs (53%), a lack of time (29%) or a lack of interest (17%). Perceptions that RMMRs were not profitable was also identified as a reason for not conducting RMMRs.
Number of RMMRs in the last 12 months

The number of RMMRs conducted by the 60% of Accredited Pharmacists who had done any in the last 12 months varied widely (Figure 7). As few as one RMMR had been conducted, and up to 17% of pharmacists reported that they had conducted more than 500 Reviews.

Close to a third (33%) of those Accredited Pharmacists who did Reviews reported doing one RMMR a week or less (less than 50 RMMRs in a year).

On the other hand one in three (34%) reported doing upwards of 5 RMMRs a week (250 or more a year). (Figure 7).

Figure 7: Number of RMMRs conducted in the last 12 months

Q11. In the last 12 months, approximately how many RMMRs did you conduct?

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months and provided a response n=203
Accredited Pharmacists working in metropolitan areas were significantly more likely to conduct more than 500 RMMRs in a year (28%) than those working in regional centres (6%) and rural/remote areas (2%). Pharmacists working in rural/remote areas tended to conduct fewer RMMRs, with nearly half conducting only 1 - 50 RMMRs in the last 12 months.

**Figure 8:** Number of RMMRs conducted by location of pharmacist

Q11. In the last 12 months, approximately how many RMMRs did you conduct?

Q5. Is this office or pharmacy located in a metropolitan, regional centre, rural or remote area?

Base: RMMRs conducted in the last 12 months n=203
Number of Aged Care Homes where RMMRs were conducted in last 12 months

The number of Aged Care Homes visited by Accredited Pharmacists conducting RMMRs also varied widely. Just under three in ten (27%) Accredited Pharmacists visited just the one Aged Care Home (Figure 9). Four in ten (41%) visited between two and five homes and just over three in ten (33%) visited six or more. Very few (1%) Accredited Pharmacists indicated that they visited over 50 homes in a year.

Figure 9: Number of Aged Care Home receiving RMMRs in the last 12 months

Q10. *In the last 12 months, how many Aged Care Homes did you visit to conduct RMMRs?*

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months and provided a response n=200
In a trend similar to that seen for number of Reviews: Accredited Pharmacists working in metropolitan areas were the most likely to visit a greater number of Aged Care Homes in the last 12 months (73% visiting 3 or more Aged Care Homes) (Figure 10). Those working in regional centres and rural/remote areas were most likely to only visit one to two Aged Care Homes per year (63% and 65% respectively).

Figure 10: Number of Aged Care Homes visited by location of pharmacist

Q10. In the last 12 months, how many aged care homes did you visit to conduct RMMRs?

Q5. Is this office or pharmacy located in a metropolitan, regional centre, rural or remote area?

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months and provided a response n=200
Location of RMMRs

In total, the 204 Accredited Pharmacists surveyed had conducted 66,940 RMMRs in the last 12 months. When based on the number of RMMRs conducted in the last 12 months (Figure 11):

- Two in three (64%) RMMRs had been conducted in a metropolitan location
- One in three (36%) RMMRs had been conducted in a non-metropolitan location – few in a remote area (2%).

A small proportion (6%) of non-metropolitan based Accredited Pharmacists conducted RMMRs at a metropolitan based Aged Care Homes. The vast majority (94%) only conducted RMMRs in a non-metropolitan area.

Figure 11: Location of RMMRs

Q12. In the last 12 months, approximately what proportion of those RMMRs were for residents in metro locations and what proportion for residents in non-metro locations?

Base: RMMRs conducted in the last 12 months n = 66,940

Two thirds of the RMMRs in the last 12 months were conducted in a metropolitan area. One in three metropolitan Accredited Pharmacists also conduct RMMRs for non-metropolitan residents.
**RMMRs conducted by a supply pharmacy**

Accredited Pharmacists who had conducted an RMMR in the last 12 months were asked about the arrangements for supply pharmacy, that is, if the RMMRs that they conduct are for a pharmacy which supplies medications to Aged Care Homes.

There was no consistent supply pharmacy arrangement (Figure 12):

- Four in ten (43%) Accredited Pharmacists indicated that all of the RMMRs that they conduct were for a pharmacy which supplied medications to Aged Care Homes
- Two in ten (21%) noted that some of the RMMRs were for a supply pharmacy
- Close to four in ten (36%) indicated that there was no arrangement between the pharmacy and the Aged Care Homes.

**Figure 12: RMMRs conducted by a supply pharmacy**

Q7. *Do you conduct any RMMRs for a pharmacy which supplies medications to Aged Care Homes (supply pharmacy)?*

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204

Six in ten Accredited Pharmacists who had conducted RMMRs in the last 12 months acted for a supply pharmacy.
Contracting arrangements for RMMRs

There are various ways by which Accredited Pharmacists were contracted and reimbursed for RMMRs. Almost half of Accredited Pharmacists (45%) worked as a contractor for a community pharmacy RMMR Provider, with another one in ten (10%) working for a company specialising in Reviews and quality management systems (Figure 13).

One third of Accredited Pharmacists (33%) worked as a sole practitioner contracting directly to the Aged Care Homes without the inclusion of another organisation such as a community pharmacy.

One fifth of Accredited Pharmacists conducted RMMRs as part of their work, either through the pharmacy that they owned (11%) or for another type of company that they owned (11%).

Figure 13: Contracting arrangements for RMMRs

- Part of work at own pharmacy: 11%
- Part of work for other company: 11%
- Consultant pharmacist for other pharmacy: 45%
- Consultant pharmacist for other company: 10%
- As sole practitioner/small business: 33%
- Other: 7%

Q8. What contracting and payment arrangements do you use when you conduct RMMRs? (Thinking of the last 12 months only).

Multiple response allowed.

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204

Pharmacists most commonly worked as a consultant pharmacist to a community pharmacy, or as a sole practitioner contracting directly to the Aged Care Home.
Payment arrangements for RMMRs

When conducting RMMRs, four in ten Accredited Pharmacists were either paid by the RMMR Provider on a per RMMR basis (43%) and the same proportion claimed the RMMR directly from Medicare Australia (43%) (Figure 14). Fewer Accredited Pharmacists were paid a salary (21%).

Figure 14: Payment arrangements for RMMRs

Q9. What are the payment arrangements when you conduct RMMRs?

Multiple response allowed

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204

Most Accredited Pharmacists were either paid by the RMMR Provider on a fee for service basis or claimed the RMMR directly from Medicare.
1.3 Outputs of RMMRs

Outputs or outcomes of RMMRs were explored among Accredited Pharmacists who had done RMMRs in the last 12 months, including the identification of adverse drug events, recommendations that had arisen from RMMRs and the health outcomes for residents of Aged Care Homes.

Identification of apparent adverse drug events

The identification of adverse drug events for residents of Aged Care Homes was a common output of RMMRs. Only a minority of Accredited Pharmacists (3%) indicated that they had not identified any adverse drug events in the last 12 months (Figure 15):

- Almost half (45%) indicated that there had been an adverse drug event up to ten times in the year - 1 to 5 (26%) and 6 to 10 (19%)
- Over a fifth (24%) noted an adverse drug event between 11 and 30 times
- A quarter (24%) of pharmacists estimated that they identified apparent adverse drug events for residents over 30 times in the last year.

Figure 15: Identification of apparent adverse drug events

Q15: Thinking back over the last 12 months, how often did you identify apparent adverse drug events for residents of Aged Care Homes?

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204
Adverse drug events (ADEs) were commonly identified through RMMRs. One quarter of Accredited Pharmacists indicated they had identified more than 30 such ADEs in the last 12 months.
Recommendations as a result of RMMRs

The most common recommendations that had come out of the Reviews conducted in the last 12 months by Accredited Pharmacists were (Figure 16):

- Cessation of a medicine; 34% had recommended this in more than 30 percent of the RMMRs they had conducted and 19% had done so for 10 percent or fewer cases.
- Decrease of a medicine dose; 28% had recommended this in more than 30 percent of the RMMRs.

A change in the mode of medicine administration occurred slightly less often - 51% had recommended this for 10 percent or less of the RMMRs conducted. Commencement of a new prescription or the commencement of a new non-prescription item was also recommended less frequently.

Accredited Pharmacists infrequently recommended an increase in the medicine dose as a result of the RMMR - 10% had never done this in the last 12 months and another 61% had only done this for between 1% and 10% of the Reviews conducted.

Figure 16: Recommendations as a result of RMMRs

Q13. Of all the Reviews that you have done in the last 12 months, in what proportion of those Reviews would you have recommended the following?

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204
Accredited Pharmacists indicated the most common recommendations included in RMMR reports were the cessation of a medicine and a decrease in the medicine dose.

**Impact of RMMRs on health outcomes for residents**

Accredited Pharmacists were very positive about health outcomes resulting from RMMRs.

Almost all (90%) agreed that as result of RMMRs, changes made to medication resulted in positive health outcomes for residents (Figure 17) while only 1% agreed that there were negative health outcomes as a result of changes in medication.

However, a small but notable proportion (10%) of Accredited Pharmacists were unsure about positive outcomes resulting from RMMRs.

**Figure 17: Impact of RMMRs on health outcomes of residents**

Q14. **Thinking back over the last 12 months, please indicate how strongly you agree or disagree with the following statements**

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204

While Accredited Pharmacists were very positive about the positive impact of RMMRs, one in ten expressed uncertainty about whether RMMRs were genuinely leading to improvements in health outcomes.
Frequency of GP action on recommendations from RMMRs

In general Accredited Pharmacists believed that GPs acted on the recommendations of the Reviews (Figure 18):

- Half (52%) believed that their recommendations were acted on *some of the time.*
- A slightly lower proportion (37%) believed that GPs acted on recommendations *most of the time.*
- Only 2% believed that GPs *always* acted on the recommendations.

One in ten (9%) Accredited Pharmacists believed that GPs rarely acted on the recommendations following an RMMR.

**Figure 18: Frequency that GPs act on recommendations from RMMRs**

![Bar Chart]

Q16. *Thinking of the recommendations you have made in Reviews you have done in the last 12 months, how often do you believe that GPs have acted on those recommendations?*

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months (n=204)

In general Accredited Pharmacists believed that GPs acted on the recommendations of Reviews.
1.4 Payment and costs

Amount received per RMMR

Accredited Pharmacists who had conducted an RMMR in the last 12 months were asked how much they received per RMMR conducted.

One quarter (23%) were paid a salary (Figure 19). The remainder were reimbursed on a per-RMMR basis, most commonly, the full payment of $130 (36%). Another

- 12% received between $101 and $129
- 11% received $100
- 14% received $51 to $99
- 4% received up to $50.

Figure 19: Amount received per RMMR

Almost four in ten Accredited Pharmacists received the full claimable payment per RMMR.

Q17. In general, how much do you receive per RMMR conducted?
Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204
Costs incurred when conducting RMMRs

A range of costs are incurred in the process of conducting RMMRs. The most common costs identified through the online survey, included (Figure 20):

- The cost of software and IT (83%)
- The time taken to liaise with GPs (72%)
- Administrative overheads (67%).

Close to six in ten reported costs associated with inefficient record keeping at Aged Care Homes (64%), costs associated with long distance travel (62%) and the time taken to pursue dispensing histories (57%).

Figure 20: Costs incurred when conducting RMMRs

Q18. What are the costs you incur when involved with RMMRs?
Multiple response allowed
Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204

Accredited Pharmacists conducting RMMRs reported a range of costs, most commonly the cost of IT infrastructure required to conduct RMMRs.
1.5 Collaborative RMMRs

Accredited Pharmacists who had conducted RMMRs in the last 12 months were asked about the extent of Collaborative Reviews, barriers to conducting such Reviews, their opinion of GP involvement and commitment to Collaborative Reviews in the future.

Incidence of Collaborative RMMRs

The vast majority (88%) of Accredited Pharmacists who had conducted RMMRs in the last 12 months had conducted some Collaborative Reviews although the proportion varied substantially (Figure 21). Half (50%) had conducted more than 50% of their Reviews as Collaborative Reviews (20% had conducted more than 90 percent as Collaborative Reviews).

Q19. In the last 12 months, what proportion of the RMMRs you have conducted have been Collaborative Reviews with a GP?
Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204
Accredited Pharmacists working in rural/remote locations were more likely to conduct 91% or more of their RMMRs as Collaborative Reviews (41%) compared with those in regional (20%) or metro (10%) areas indicating a strong pattern of co-operation between GPs and Accredited Pharmacists the more distant the Aged Care Home from metropolitan areas. This contrasts with concerns that aged care residents in Aged Care Homes in more distant locations are receiving a lower level of RMMR service.

Figure 22: Incidence of Collaborative RMMRs by Location of Pharmacist

Q19. In the last 12 months, what proportion of the RMMRs you have conducted have been Collaborative Reviews with a GP?

Q5. Is this office or pharmacy located in a metropolitan, regional centre, rural or remote area?

Reasons for Pharmacist Only Reviews

Accredited Pharmacists who had conducted fewer than half of their Reviews as Collaborative Reviews were asked why this was the case. Over half (55%) indicated that GPs did not respond to their invitations to become part of Collaborative Reviews. Four in ten (43%) stated that GPs were too busy to take part in Collaborative Reviews. Ten percent acknowledged that they had not sought GP involvement as they believed GPs did not value RMMRs and 8% said they didn’t see much value gained through involving GPs in the process.
Attitudes to GP involvement in RMMRs

Accredited Pharmacists who had conducted at least one Collaborative Review in the last 12 months were asked for their opinion about GP involvement in RMMRs.

The vast majority saw benefits of including GPs in the Review process (Figure 23):

- 87% agreed (46% strongly) that involvement of GPs makes changing a medication regime easier – only 3% disagreed.
- 86% agreed (37% strongly) that the GP adds value to the Review process – only 5% disagreed.

Accredited Pharmacists were somewhat divided in their response to the statement ‘without the GP’s involvement, there is little point in conducting a Review’ – 31% agreed and 54% disagreed. That is, some Accredited Pharmacists thought the role of the GP crucial in conducting Reviews, though others considered there still to be merit in conducting Reviews even when not conducted as a Collaborative Review.

Q21. Thinking of the GPs with whom you conduct Collaborative Reviews, would you agree or disagree with the following statements?

Base: Accredited Pharmacists who have conducted some Collaborative Reviews in the last 12 months n=186

The vast majority of Accredited Pharmacists conducting Collaborative Reviews valued this process.
Level of cooperation from GPs involved in RMMRs

Where Collaborative Reviews are taking place, a high level of cooperation is indicated between GPs and Accredited Pharmacists. Two in three (65%) described the relationship as cooperative (Figure 24). Another 28% felt GPs to be neither cooperative nor uncooperative. Only a minority (3%) had found GPs uncooperative.

Of the pharmacists who conducted 500+ RMMRs in the last 12 months, 85% of them found that GPs were cooperative. This is significantly higher than the level of cooperation reported by pharmacists who conducted fewer RMMRs (60%).

Figure 24: Level of cooperation from GPs involved in RMMRs

Q22. How would you describe the level of cooperation you currently receive from GPs in relation to RMMRs?

Base: Accredited Pharmacists who have conducted an RMMR in the last 12 months n=204

A high level of cooperation is indicated between GPs and Accredited Pharmacists in relation to RMMRs where Reviews are conducted as Collaborative Reviews.
**Future number of Collaborative Reviews**

There was a strong desire by Accredited Pharmacists who had done Reviews in the last 12 months to do more Collaborative Reviews in the future:

- Almost seven in ten (69%) indicated that they would like to do more Collaborative Reviews with GPs in the future.
- One fifth (19%) would like to maintain the current ratio of Collaborative Reviews.

Only 3% of Accredited Pharmacists indicated that they would prefer to do fewer Collaborative Reviews in the future.

**Figure 25: Future number of Collaborative Reviews**

There is a strong desire by Accredited Pharmacists who have done Reviews in the last 12 months to do more Collaborative Reviews in the future.
1.6 Conducting RMMRs in the next 12 months

Accredited Pharmacists who would like to conduct RMMRs in the next 12 months

Four in ten (40%) Accredited Pharmacists had not conducted any RMMRs in the last 12 months. Of these:

- Six in ten (60%) would like to conduct RMMRs in the next 12 months
- A quarter (25%) would not like to conduct RMMRs in the next 12 months
- (15%) were uncertain.

Changes needed for Accredited Pharmacists to conduct RMMRs

For additional Accredited Pharmacists to take up RMMRs the main changes that would need to take place were for service agreements to become available (56%) and for more time to be available for RMMRs (50%). These were also the two most frequently mentioned reasons for not conducting RMMRs in the last 12 months (Figure 26). One in three (35%) mentioned that the payment for RMMRs would have to increase.

Figure 26: Changes needed for Accredited Pharmacists to conduct RMMRs

Q38. What would have to change in order for you to start conducting RMMRs?
Multiple response allowed
Base: Accredited Pharmacists who have not conducted an RMMR in the last 12 months n=134
1.7 Quality Use of Medicines

Quality Use of Medicines (QUM) is part of the RMMR Program. QUM encompasses learning and education sessions for Aged Care Homes staff provided by the RMMR Provider. QUM provision in the last 12 months was assessed.

Number of times medication advisory activities provided in the last 12 months

Of the Accredited Pharmacists who had done RMMRs in the last 12 months, the frequency with which medication advisory activities had been provided varied (Figure 27):

- Most (93%) Accredited Pharmacists had advised members of the health care team on medication issues
- Eight in ten (79%) had participated in Medication Advisory Committees
- Seven in ten (69%) had participated in policy and procedure activities
- Six in ten (64%) had assisted in the development of nurse-initiated medication lists
- Over half (60%) had provided drug use evaluations (DUEs).

Not only had a higher proportion of Accredited Pharmacists advised members of the health care team on medication issues; they had done this more often than any of the other activities (36% had done so 31 or more times in the last 12 months). Close to half of Accredited Pharmacists had been involved between 1 and 10 times in the other four medication advisory activities.

Figure 27: Number of medication advisory activities provided in the last 12 months

Q39. In the last 12 months, how often have you provided the following services to staff at Aged Care Homes?

Base: Accredited Pharmacists who have conducted RMMRs in the last 12 months and provided the number of RMMRs n=203
Number of times education sessions provided in the last 12 months

Of the Accredited Pharmacists who had done RMMRs in the last 12 months, the vast majority had provided education sessions to staff at Aged Care Homes in that 12 month period (Figure 28):

- Nine in ten (88%) had provided drug information for medical practitioners and/or staff at the Aged Care Homes (23% had done so more than 30 times)
- Eight in ten (82%) had provided in-service sessions for disease state management (13% had done so more than 30 times).

Figure 28: Number of times education sessions provided in the last 12 months

Q39. In the last 12 months, how often have you provided the following services to staff at Aged Care Homes?

Base: Accredited Pharmacists who have conducted RMMRs in the last 12 months and provided the number of RMMRs n=203
**Number of times quality improvement services provided in the last 12 months**

The main areas of quality improvement in which Accredited Pharmacists provided sessions in the last 12 months included:

- Assisting facilities to maintain their accreditation standards (80% had provided such sessions and 14% had done so more than 30 times)
- Assessing the practical requirements of medication management (65% had provided such information sessions and 10% had done so more than 30 times)
- Conducting medication administration audits and/or surveys (58% had provided these services and 7% had done so more than 30 times).

It is of note that more Accredited Pharmacists had *not* been involved in:

- Assisting in the development of quality indicators (55% had not been involved in the last 12 months and 41% had been involved) or
- Assessing the competency of residents to self-administer medications (55% had not been involved in the last 12 months and 43% had been involved).

**Figure 29: Number of times continuous improvement provided in the last 12 months**

<table>
<thead>
<tr>
<th>Service</th>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assist facility to maintain accredit. standards</td>
<td>19%</td>
<td>52%</td>
<td>11%</td>
<td>14%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Conduct medication admin audits and/or surveys</td>
<td>39%</td>
<td>41%</td>
<td>9%</td>
<td>7%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Assessed practical requirements of medication management</td>
<td>30%</td>
<td>44%</td>
<td>9%</td>
<td>10%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Assist development quality indicators</td>
<td>55%</td>
<td>30%</td>
<td>6%</td>
<td>2%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Assess competency for residents to self-administer</td>
<td>55%</td>
<td>31%</td>
<td>6%</td>
<td>4%</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

**Q39. In the last 12 months, how often have you provided the following services to staff at Aged Care Homes?**

**Base:** Accredited Pharmacists who have conducted RMMRs in the last 12 months and provided the number of RMMRs n=203
The QUM activities most often provided by Accredited Pharmacists in the last 12 months included advising members of health care teams on medication issues, providing drug information for medical practitioners and/or Aged Care Homes staff and assisting facilities to maintain their accreditation standards.
2. General Practitioner Survey

In consultation with the Department, the population for the GP survey was those who had claimed for RMMRs in the past 12 months. The most effective way of reaching this population was a hardcopy print survey approach. In response to Statistical Clearing House recommendations, Campbell Research randomly selected 50% of GPs from the database provided by Medicare.

Campbell Research posted 2,540 surveys on 28 October 2009. A reminder letter was sent two weeks after initial posting and the survey was withdrawn from field on 20 November 2009. A total of 386 surveys were received representing a 15% response rate.

2.1 Profile of General Practitioners

To gain an understanding of the GPs represented in the survey, respondents were asked about the number of years they had been practising, the type of practice in which they worked and the location of their practice.

Number of years as a GP

Most of the GPs in the survey (87%) had been in practice as a GP for more than 10 years (Figure 30). The average number of years in practice was 24 years.

Figure 30: Number of years as a GP

Q1. How long have you been practising as a GP (at this and other practices in Australia and overseas)?

Base: All GPs n=381
Practice type

The majority of the GPs (68%) in the survey worked in a group practice with 17% in sole practice and 10% in a corporate practice (Figure 31).

Figure 31: Practice type

<table>
<thead>
<tr>
<th>Practice Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole practice</td>
<td>17%</td>
</tr>
<tr>
<td>Group practice</td>
<td>68%</td>
</tr>
<tr>
<td>Corporate practice</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>

Q2. Is this practice (the practice where you received this letter) a …

Base: All GPs n=381
Location of practice

The majority (62%) of the GPs surveyed worked in New South Wales (34%) or Victoria (28%) (Figure 32).

Figure 32: State of practice

Q4. In what state/territory is this practice?

Base: All GPs n=381
Just over half (52%) of the GPs surveyed worked in metropolitan areas with 21% in regional centres, 25% in rural areas and 2% in remote areas (Figure 33).

The majority of the Queensland GPs surveyed (67%) worked outside Brisbane while the majority of NSW GPs (57%) worked in Sydney. The Victorian GPs were split evenly between those who worked in Melbourne (50%) and those who worked in the non-metropolitan areas.

Figure 33: Region of practice

Q3. Is this practice located in a metropolitan, regional centre, rural or remote area?
Base: All GPs n=381

Table 1: Region by No. of Years as a GP

<table>
<thead>
<tr>
<th>Q3.</th>
<th>Region by No. of Years as a GP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (381)</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>%</td>
</tr>
<tr>
<td>Non-Metropolitan</td>
<td>48</td>
</tr>
</tbody>
</table>

Base: All GPs n=381
2.2 Number and nature of Collaborative Reviews by GPs

Number of Collaborative Reviews in the last 12 months

Most GPs (83%) were able to estimate how many Collaborative Reviews they participated in during the last 12 months – 17% didn’t know.

Of those who knew how many Collaborative Reviews they had participated in, there was an even spread in the number of Collaborative Reviews participated in. A quarter (23%) had participated in 1 to 5 Reviews, 22% in 6 to 10 Reviews, 29% in 11 to 20 Reviews, 13% in 21 to 30 Reviews and 13% had participated in over 30 Collaborative Reviews (Figure 34).

The average number of Collaborative Reviews in which GPs had participated was 18.1.

The metropolitan GPs averaged 20.0 Reviews in the last 12 months compared with an average of 18.4 in regional centres and 14.1 in rural/remote areas. Longer serving GPs (over 25 years) participated in more Reviews in the last 12 months (21.9) than GPs in practice for 25 years or less (15.5).

Figure 34: Number of Collaborative Reviews in the last 12 months

Q5. Approximately how many Collaborative Reviews have you participated in during the past 12 months?

Base: All GPs who knew how many Collaborative Reviews participated in n=317
Incidence of Collaborative Reviews for patients

Just over half (52%) of the GPs who responded to the survey said all of the Reviews conducted for their patients were done as Collaborative Reviews, while 6%\(^1\) of the GPs said none were conducted as Collaborative Reviews.

On average, GPs indicated that 82% of the Reviews conducted for patients of the GP respondents were done as Collaborative Reviews.

Interest in having more Reviews done as Collaborative Reviews

Almost a third (31%) of all the GPs surveyed would like to have more of the Reviews conducted for their patients done as Collaborative Reviews (Figure 35). Half (49%) are happy to have the same proportion of Reviews as is currently conducted done as Collaborative Reviews, while only 5% would want to have fewer Collaborative Reviews.

Figure 35: Interest in having more or less Reviews done as Collaborative Reviews

Q7a. Of all the Reviews conducted for your patients in aged care homes, would you like to have…

Base: All GPs n=381

\(^1\) This small proportion of GPs may have responded to this item incorrectly as GPs contacted for the survey selected on the basis that they had claimed at least one Medicare Australia Item 903 (collaborative reviews) in the last 12 months
Those GPs who want more Reviews conducted as Collaborative Reviews currently have, on average, 68% of the Reviews conducted on their patients done as Collaborative Reviews. In contrast, the current average for GPs who want to stay with the same number of Collaborative Reviews is 93%. (Table 2).

### Table 2: Reviews conducted as Collaborative Reviews by Interest in having More/Less done as Collaborative Reviews

<table>
<thead>
<tr>
<th>Q6.</th>
<th>Q7a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of all the Reviews conducted for your patients in aged care homes, what proportion are done as Collaborative Reviews?</td>
<td>Of all the Reviews conducted for your patients in aged care homes, would you like to have…</td>
</tr>
<tr>
<td>Total</td>
<td>Want More Collaborative Reviews</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>(381)</td>
<td>%</td>
</tr>
<tr>
<td>(114)</td>
<td></td>
</tr>
<tr>
<td>(181)</td>
<td></td>
</tr>
<tr>
<td>(18)</td>
<td></td>
</tr>
</tbody>
</table>

Average no. of Reviews conducted as Collaborative Reviews  

| 82 | 68 | 93 | 75 |

Base: All GPs n=381

**Ideal number of Collaborative Reviews for patients**

Six in ten (58%) of the GPs surveyed said they would like all of the Reviews conducted for their patients to be done as Collaborative Reviews, while 3% of the GPs said they would like none to be conducted as Collaborative Reviews.

On average, GPs would like 91% of the Reviews conducted on their patients in aged care homes to be done as Collaborative Reviews.
Attitude towards RMMRs by GPs

Most of the GPs surveyed believed the RMMRs were of some value to their patients (84%) and some value to them as a GP (85%) with a third saying they were very valuable (Figure 36). A notable 14% of GPs believed that RMMRs were of no value to them as a GP.

GPs in rural/remote areas were more likely to believe that RMMRs were very valuable (43%) to their patients compared with 31% of metropolitan GPs and 30% of those in regional centres. Also newer GPs (1-15 years as a GP) were more likely to believe RMMRs were very valuable (42%) compared to 32% of older GPs (over 15 years).

Figure 36: Perceived value of RMMRs

Q8. In your experience how valuable are RMMRs to your patients in aged care homes?

Q9. In your experience, how valuable are RMMRs to you as a carer?

Base: All GPs n=381
There is very strong agreement amongst GPs that it is essential for GPs to be involved in the Review process – 74% in strong agreement / 21% in agreement. Only 2% disagreed with this (Figure 37).

Rural / remote GPs are most likely to strongly agree (84%) as are those GPs who have participated in over 20 Reviews in the last 12 months (86%).

**Figure 37: Importance of GP involvement in RMMRs**

Q10. *Would you agree or disagree with the following statement?*

*It is essential for the GP to be involved in the Review process.*

**Base:** All GPs n=381
Level of cooperation from pharmacists involved in Collaborative Reviews

Three-quarters (75%) of GPs surveyed described the Accredited Pharmacists conducting the Collaborative Reviews as cooperative. Only 3% said they were un-cooperative and 19% said they were neither cooperative nor un-cooperative.

Most of the GPs (92%) who had participated in over 20 Collaborative Reviews in the last 12 months described the pharmacists as cooperative. In contrast, 72% of those GPs who had participated in less than 20 Collaborative Reviews in the last 12 months described the pharmacists as cooperative.

The GPs in NSW were the least likely to describe the pharmacists as cooperative (64%) with the Victorian GPs the most likely (84%).

While the base of 18 is too small to make a definitive assessment, only 44% of those GPs who said they would like to have fewer Collaborative Reviews found the pharmacists cooperative. This compares to 81% of those GPs who want more or about the same number of Reviews.

**Figure 38: Level of cooperation from pharmacists involved in Collaborative Reviews**

<table>
<thead>
<tr>
<th>Level of Cooperation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative</td>
<td>75%</td>
</tr>
<tr>
<td>Neither cooperative nor uncooperative</td>
<td>19%</td>
</tr>
<tr>
<td>Un-cooperative</td>
<td>3%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Q11.** How would you describe the level of cooperation you currently have from the pharmacists conducting Collaborative Reviews for you?

**Base:** All GPs n=381
Factors limiting the incidence of Collaborative Reviews

The main factor mentioned (by 38% of GPs) as limiting the number of Collaborative Reviews conducted for their patients in aged care homes is that pharmacists don’t advise the GPs that the Reviews have been scheduled (Figure 35). Also mentioned was that the GPs don’t find the Reviews helpful (13%) or they are too busy to take part in them (12%).

Figure 39: Factors limiting the incidence of Collaborative Reviews

Q12. What factors limit the proportion of Collaborative Reviews conducted for your patients in aged care homes?

(multiple response question)

Base: All GPs n=381
Payment for Collaborative Reviews

The current Medicare benefit for a GP for a Collaborative Review is $96 per patient referred. The GPs were asked if this amount was enough to cover the costs of their involvement with RMMRs.

The majority of GPs (60%) said the amount was enough to cover their costs with a further 11% saying it was more than enough. However, a quarter (25%) said the benefit was not enough to cover their costs including 4% of GPs who said it was nowhere near enough.

Figure 40: Payment for Collaborative Reviews

Q18. The current Medicare benefit for a Collaborative Review (item 903) is $96.00 per resident reviewed. In general, would you describe the Medicare benefit as…

Base: All GPs n=381
2.3 Outputs of RMMRs

Provision of RMMR reports to GPs

Most GPs (88%) said that most of the time they receive copies of the Medication Review reports for their aged care home patients (both Collaborative and Pharmacist only). A further 9% of GPs received the reports some of the time and 2% said they never receive the reports (Figure 41).

Figure 41: Provision of RMMR reports to GPs

Q13: Do you receive copies of Medication Review reports for your aged care home patients (both Collaborative and Pharmacist only reports)?

Base: All GPs n=381
Identification of adverse drug events

Three-quarters (76%) of the GPs said that the pharmacists did identify adverse drug events for their patients in aged care homes in the last 12 months.

Over half (53%) reported that pharmacists did identify adverse drug events 1 to 5 times. A further 12% said the pharmacists identified adverse drug events 6 to 10 times and 7% said they were reported over 10 times.

A quarter (24%) of the GPs said that the pharmacists did not identify any adverse drug events for their patients in aged care homes.

Figure 42: Identification of adverse drug events

Q17. Thinking back over the last 12 months, how often did the pharmacist identify apparent adverse drug events for your patients in aged care homes?

Base: All GPs n=381
Usefulness of RMMRs for patients

The GPs believed that the RMMRs were most useful in assisting with the decision in the cessation of a medicine (68% finding it useful) and with changes in the mode of administration of a medicine (66%) (Figure 43). The majority (62%) also found RMMRs useful in the decision to decrease the medicine dose.

The area where the lowest proportion of GPs (36%) considered RMMRs useful was in the commencement of a new non-prescription item, such as vitamins.

Across all these areas, it is the GPs in rural/remote areas and those GPs with less than 15 years experience as a GP who are the most likely to find the RMMRs useful.

### Figure 43: Usefulness of RMMRs for patients

<table>
<thead>
<tr>
<th>Decision</th>
<th>Very Useful</th>
<th>Useful</th>
<th>Neutral</th>
<th>Not very useful</th>
<th>Not at all useful</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessation of medicine</td>
<td>22%</td>
<td>46%</td>
<td>15%</td>
<td>6%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Change in mode of medicine administration</td>
<td>22%</td>
<td>44%</td>
<td>15%</td>
<td>7%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Decrease of a medicine dose</td>
<td>18%</td>
<td>44%</td>
<td>18%</td>
<td>8%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Increase of a medicine dose</td>
<td>13%</td>
<td>35%</td>
<td>26%</td>
<td>12%</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td>Commencement of a new prescription</td>
<td>13%</td>
<td>32%</td>
<td>23%</td>
<td>14%</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>Commencement of a new non-prescription item</td>
<td>7%</td>
<td>29%</td>
<td>29%</td>
<td>15%</td>
<td>16%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Q14.** How useful are the Medication Review (RMMR) reports in assisting with the following decisions about your aged care home patients?

**Base:** All GPs n=381
Following the Accredited Pharmacist’s recommendations

The recommendations GPs were most likely to follow were those which related to the change in the mode of administration of a medicine. For this type of recommendation, almost half (47%) of the GPs would follow the recommendation 31% of the time or more often, while only 7% would never follow the pharmacists recommendation (Figure 44).

The two areas where GPs are most likely to say they would never follow the pharmacist’s recommendation are in the increase of a medicine dose and the commencement of a new non-prescription item. For both areas, 13% said they never follow the pharmacist’s recommendation on these two items.

Over half (52%) of the GPs in rural/remote areas followed the Accredited Pharmacist’s advice on the decrease of a medicine dose 31% of the time or more often, compared with 36% of metropolitan GPs and 36% of GPs in regional centres.

Figure 44: Following the Pharmacist’s recommendations

Legend: Never 1-10% 11-30% 31%+ Don’t know

Q15: Overall, what proportion of the time would you follow the pharmacist’s recommendation for each of the following?

Base: All GPs n=381
Impact of RMMRs on health outcomes for patients

All the GPs surveyed were asked if they agreed or disagreed that the changes made to medication as a result of Reviews led to positive health outcomes or if they led to negative health outcomes for residents.

The majority (60%) of GPs agreed that the changes made to medication as a result of the Reviews had led to positive health outcomes while only 6% agreed that the changes had led to negative health outcomes (Figure 45).

Figure 45: Impact of RMMRs on health outcomes for patients

Q16: Thinking back over the last 12 months, please indicate how strongly you agree or disagree with the following statements...

Base: All GPs n=381

The newer GPs (1 - 5 years as a GP) were more likely to agree than the older GPs that changes made to medication as a result of the Reviews had led to positive health outcomes (Table 3).
### Table 3: Changes led to Positive Outcomes by No. of Years as a GP

<table>
<thead>
<tr>
<th>Q16.</th>
<th>Changes made to medication as a result of Reviews, led to positive health outcomes for residents?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>Agree, led to positive outcomes</td>
<td>60</td>
</tr>
</tbody>
</table>

Base: All GPs n=381
3. **Aged Care Homes Survey**

Following consultation with Aged Care Associations, to maximise the effectiveness in distributing surveys to Directors of Nursing and other senior staff in Aged Care Homes a hardcopy print survey approach was adopted. In response to Statistical Clearing House recommendations, Campbell Research randomly selected 50% of Aged Care Homes from the publicly available government managed database from inclusion in the survey.

Campbell Research posted 2,500 surveys on 28 October 2009 (16 surveys were returned to sender). A reminder letter was sent two weeks after initial posting and the survey was withdrawn from field on 20 November 2009. A total of 332 surveys were received representing a 13% response rate.
3.1 Profile of Aged Care Homes

To gain an understanding of the nature of Aged Care Homes represented in the survey, respondents were asked their position, number of years they had worked in the sector and the size and location of the Aged Care Homes.

Position in Aged Care Homes

In the Aged Care Homes survey, the majority (58%) of respondents worked as the Director of Nursing (Figure 46). Other managerial positions were accounted for by just over one in ten respondents (13%) and slightly fewer were a Clinical Care coordinator (9%) or a Registered nurse (7%).

Homes with up to 40 beds were less likely to have the Director of Nursing (41%) respond to the survey compared to larger facilities (65%). Conversely they were more likely to have someone in another managerial position (24%) respond on behalf of the Aged Care Home.

Figure 46: Position in Aged Care Homes

Q1. What is your position at this Aged Care Homes?

Base: Aged Care Homes n=333
**Length of experience in aged care sector**

A range of experience was indicated for those who responded to the Aged Care Homes survey. This indicates that a cross section of opinions has been captured:

One in ten (12%) had been in the industry for 1 to 5 years (Figure 47). A further fifth (21%) had been in the industry for 6 to 10 years; four in ten (41%) for 11 to 20 years and a quarter (26%) for more than 20 years.

The respondents, on average, had worked for 16.2 years in the aged care industry.

**Figure 47: Length of experience in aged care sector**

Q2. How long have you worked in aged care (all experience in aged care, not just in your current role)?

Base: Aged Care Homes n=333

A range of experience was indicated for respondents to the Aged Care Homes survey.
Size of Aged Care Homes

Of all Aged Care Homes included in the survey:

- 78% had high care beds
- 71% had low care beds.

Half of the Aged Care Homes operated exclusively as a high or low care facility and half had both high and low care beds: 27% had only high care beds; 22% had only low care beds; and 51% had both high and low care beds.

On average, there were 66 beds per home – 39 high care beds, 27 low care beds (Figure 48).

Counting all beds in the facility:

- 26% had up to 40 beds
- 25% had 41 to 60 beds
- 29% had 61 to 100 beds
- 17% had more than 100 beds (up to 305 beds).

Rural/remote facilities had fewer beds (49 on average) compared with regional (79 beds) and metropolitan facilities (73 beds). Rural/remote facilities also had fewer high care beds (23 beds on average) than regional (48 beds) and metropolitan facilities (47 beds).

Figure 48: Average Number of Beds in Aged Care Homes

Q3. How many high care beds and low care beds does this facility have?

Base: Aged Care Homes n=333
Based on the proportion of high care to low care beds:

- Close to half (46%) of Aged Care Homes mainly operated high care beds, that is at least 61% of their beds were classified as high care.
- Two in ten (21%) Aged Care Homes had between 40% and 60% of high care beds.
- A third (33%) of Aged Care Homes mainly operated low care beds.

**Figure 49: Size of Aged Care Homes**

Q3. How many high care beds and low care beds does this facility have?

Base: Aged Care Homes n=333

The size of Aged Care Homes ranged from small to large and with a mix of those mainly operating high care beds, a fairly even split between high and low care beds and facilities with mainly low care beds.
Location of Aged Care Homes

Almost six in ten of the Aged Care Homes were located in New South Wales (32%) or Victoria (26%) (Figure 50). This distribution was similar to that of Accredited Pharmacists.

Figure 50: State of Aged Care Homes

Q4. In what state/territory is this Aged Care Homes?

Base: Aged Care Homes n=333
Metropolitan and non-metropolitan locations have all been represented throughout Australia (Figure 51):

- Half (50%) of Aged Care Homes were in a metropolitan area
- Almost two in ten (17%) were in a regional centre
- Three in ten (29%) were in a rural area
- A minority (1%) of Aged Care Homes were in a remote area.

**Figure 51: Region of Aged Care Homes**

Q5. *Is this home located in a metropolitan, regional centre, rural or remote area?*

Base: Aged Care Homes n=333

The sample has achieved a good cross section of Aged Care Homes throughout all regions of Australia.
3.2 Number and nature of RMMRs at Aged Care Homes

Number of times Accredited Pharmacist visited to do RMMRs in the last 12 months

In the last 12 months, the number of times that an Accredited Pharmacist had been to an Aged Care Home to conduct a RMMR ranged from none to as many as 64 (Figure 52):

- A minority reported no visits (1% - representing one Aged Care Home)
- Two in ten (19%) had 1 or 2 visits
- Four in ten (44%) had 3 or 4 visits
- Two in ten (17%) had 5 to 9 visits
- One in ten (11%) had been visited 10 or more times in the last 12 months for RMMRs.

The average number of visits in the last 12 months was 5.4.

The average number of visits to Aged Care Homes with up to 40 beds was 3.9 increasing to 5.5 at homes with 41-80 beds and to 6.5 at homes with over 80 beds.

Figure 52: Number of times visits in the last 12 months

Q6. How many times has an Accredited Pharmacist come to this Aged Care Homes to do Medication Reviews in the last 12 months?

Base: Aged Care Homes n=333
Half the Aged Care Homes had no more than 4 visits a year by an Accredited Pharmacist to do RMMRs in the last 12 months.
Number of RMMRs conducted in a single visit

Generally Accredited Pharmacists will conduct multiple RMMRs in a single visit to an Aged Care Home:

- 17% have between 1 and 5 RMMRs conducted in a single visit
- 32% have 6 to 10 RMMRs conducted in a single visit
- 25% have 11 to 20 RMMRs conducted in a single visit
- 11% have more than 20 RMMRs conducted by Accredited Pharmacists in a single visit.

Many respondents (15%) were unable to provide an estimate.

The average number of Reviews in a single visit is 14.1. This varies from an average of 9.8 at Aged Care Homes with up to 40 beds, 12.8 at Homes with 41-80 beds and 19.8 at Homes with over 80 beds.

Figure 53: Number of RMMRs conducted in a single visit

Q8. In a single visit, how many Medication Reviews does the Accredited Pharmacist do, on average?

Base: Aged Care Homes n=333

Half of all Aged Care Homes had up to 10 RMMRs conducted by an Accredited Pharmacist in a single visit.
Length of a single visit in Aged Care Homes

The length of a single visit by an Accredited Pharmacist to an Aged Care Homes to conduct RMMRs ranged from 1 hour to 40 hours. The average time was 5.7 hours. This varied from an average of 4.9 hours at Aged Care Homes with up to 40 beds, 5.3 hours at Homes with 41-80 beds and 7.3 hours at Homes with over 80 beds.

A quarter (27%) visited for up to 3 hours, 26% for 4-5 hours, 41% for 6-10 hours and 6% were there for over 10 hours (Figure 54).

Figure 54: Length of a single visit in Aged Care Homes

Q9. On average, how long does a single visit take for the Accredited Pharmacist?

Base: Aged Care Homes who provided a response n=280
Preparation time for RMMRs in Aged Care Homes

Aged Care Homes require preparation time before and after a visit by an Accredited Pharmacist.

The greatest time requirement for the Aged Care Homes is after the visit. Half (49%) spent at least one hour following up on the accredited pharmacist’s visit including reviewing reports and contacting GPs (Figure 55).

Before the visit, about seven in ten Aged Care Homes estimated that they spent less than 1 hour preparing for the pharmacist’s visit (71%) and accommodating them during the visit (72%).

Very few spent more than 2 hours on any one of these activities. About one in ten respondents said that the question didn’t apply to them or were unable to provide an estimate of the time involved in preparation.

**Figure 55: Preparation time for RMMRs in Aged Care Homes**

- **Prepare for the pharmacist’s visit**: 71% spent < 1 hour, 14% spent 1-2 hours, 3% spent > 2 hours, 12% No answer/Not Applicable.
- **Accommodate the pharmacists during visit**: 72% spent < 1 hour, 14% spent 1-2 hours, 4% spent > 2 hours, 10% No answer/Not Applicable.
- **Follow up on accredited pharmacist’s visit**: 39% spent < 1 hour, 10% spent 1-2 hours, 40% spent > 2 hours, 11% No answer/Not Applicable.

Q10. For each visit by the Accredited Pharmacist, how many hours of work are required of Aged Care Home staff to...

Base: Aged Care Homes n=333

On average, more time is spent by staff within Aged Care Homes after the RMMRs have been conducted compared to the preparation time before and during the visit by the Accredited Pharmacist.
3.3 Coverage of RMMRs

Reach of RMMRs

RMMRs are, for the most part, being provided to residents when they are required. Three-quarters (74%) of aged care staff surveyed thought that Medication Reviews were always conducted when required, with another 18% indicating that they were sometimes conducted when required (Figure 56). A small minority (3%) thought RMMRs were seldom or never done when required.

Staff at Aged Care Homes in rural/remote areas were the least likely to say that Medication Reviews were always conducted when required – 68% in rural/remote areas compared to 79% in metropolitan areas and 77% in regional centres.

Figure 56: Reach of RMMRs

Staff in Aged Care Homes considered that RMMRs are, for the most part, reaching residents when they are required.
Contracting arrangements for RMMRs in Aged Care Homes

Various contracting arrangements were indicated between Accredited Pharmacists conducting RMMRs and the Aged Care Homes in which they were conducted. Almost half of Accredited Pharmacists (45%) were contracted to the home through the supply pharmacy and another five percent were contracted through another pharmacy owned by someone else.

One third of Accredited Pharmacists (33%) worked as a sole practitioner contracting directly to the Aged Care Homes.

Over one in ten (12%) indicated that the Accredited Pharmacist conducted RMMRs through another company specialising in Reviews and quality managements systems.

These responses were similar to that reported by Accredited Pharmacists (Figure 57).

Figure 57: Contracting arrangements for RMMRs in Aged Care Homes

Q7. Is the Accredited Pharmacist who visits your Aged Care Homes contracted…

Accredited Pharmacists most commonly contracted to the home through the supply pharmacy.
3.4 Outputs of RMMRs

Outputs and, where possible, outcomes of RMMRs were explored, including the extent of adverse drug events, recommendations that had arisen from RMMRs and the health outcomes for residents of Aged Care Homes.

Provision and value of RMMR reports to Aged Care Homes

Almost all (97%) Aged Care Home respondents reported receiving Medication Review reports. Those in Aged Care Homes highly valued the Medication Review reports prepared by the Accredited Pharmacist. Two thirds (63%) rated them very useful for informing the medication management of residents and another quarter (27%) rated them as useful. One percent of respondents said that the report was not useful for medication management of residents.

Figure 58: Value of RMMR reports to Aged Care Homes

Q12. How useful are these reports for informing medication management of your residents?

Base: Aged Care Homes n=333

Aged Care Homes found the medication reports very useful for informing the medication management of their residents.
Identification of apparent adverse drug events

As reported by staff in Aged Care Homes, the identification of adverse drug events for residents was a common output of RMMRs. Two-thirds (67%) of staff believed that an Accredited Pharmacist had identified an apparent adverse drug event in the last 12 months:

- Almost half (46%) indicated that there had been an adverse drug event identified 1 to 5 times in the last 12 months
- 13% noted an apparent adverse drug event had been identified between 6 and 10 times
- 8% estimated that an Accredited Pharmacist had identified apparent adverse drug events for residents more than 10 times in the last year.

Around two in ten (23%) of staff in Aged Care Homes did not think that any apparent adverse drug events had been identified in the last 12 months by Accredited Pharmacists conducting RMMRs. Another one in ten (10%) were uncertain.

Accredited Pharmacists were more likely to indicate the identification of adverse drug events for residents of Aged Care Homes through RMMRs compared with Aged Care Home staff (refer to Figure 59).

Figure 59: Identification of apparent adverse drug events

Q15. Thinking back over the last 12 months, how often do you believe that an Accredited Pharmacists has identified apparent adverse drug events for residents of this Aged Care Homes?

Base: Aged Care Homes n=333
Staff in Aged Care Homes often indicated that apparent adverse drug events were identified through the RMMRs conducted by Accredited Pharmacists, though to a lesser extent than that reported by the Accredited Pharmacist.

**Recommendations as a result of RMMRs**

The most common recommendations that had come out of the Reviews conducted in the last 12 months by Accredited Pharmacists, as reported by staff in Aged Care Homes, were:

- Cessation of a medicine
- Decrease of a medicine dose.

The least common recommendation was for the commencement of a new non-prescription item.

About a quarter of respondents reported that the pharmacists recommended cessation of medicine (28%) and decrease of a medicine dose (24%) in at least 11% of the RMMRs (Figure 60). In contrast only 12% of respondents reported that the pharmacists recommended the commencement of a new non-prescription item in at least 11% of the RMMRs.

While the ranking of these recommendations was similar to that of Accredited Pharmacists, the incidence of this occurring was less often noted by staff in Aged Care Homes compared with the Accredited Pharmacists.

**Figure 60: Recommendations as a result of RMMRs**

![Figure 60: Recommendations as a result of RMMRs](image)

Q13. Thinking back over the last 12 months, what proportion of the time has an Accredited Pharmacist made the following recommendations for residents of this Aged Care Homes? It will help by thinking of the number of residents you have had in the past 12 months.

Base: Aged Care Homes n=333
The most common recommendations resulting from RMMRs – as recalled by Aged Care Home staff - were the cessation of a medicine and a decrease in the medicine dose.

**Impact of RMMRs on health outcomes for residents**

Overall, staff from Aged Care Homes were very positive about the health outcomes resulting from RMMRs, though less positive than Accredited Pharmacists (Figure 61).

Three in four (75%) agreed that as a result of RMMRs, changes made to medication resulted in positive health outcomes for residents (Figure 61). Only 7% agreed that the changes had resulted in negative outcomes.

**Figure 61: Impact of RMMRs on health outcomes for residents**

![Graph showing impact of RMMRs on health outcomes](image)

**Q14.** Thinking back over the last 12 months, please indicate how strongly you agree or disagree with the following statements…

Base: Aged Care Homes n=333

While most staff from Aged Care Homes were positive about the impact of RMMRs, a small minority believe some negative outcomes had occurred.
Resident types poorly serviced by RMMRs

One third (34%) of those from Aged Care Homes noted some resident types whom they thought were poorly provided for by Medication Reviews (Figure 62). The two groups mentioned most often were:

- Those recently discharged from hospital (14%)
- Those who have recently entered an Aged Care Homes (14%).

Figure 62: Resident types poorly serviced by RMMRs

Q17. Are there any types of residents whom you think are particularly poorly provided for by Medication Reviews?

Multiple response allowed
Base: Aged Care Homes n=333

One third of those from Aged Care Homes noted some resident types whom they thought were poorly provided for by RMMRs, and most often these were residents who had been recently discharged from hospital and those who had recently entered the home.
3.5 Quality Use of Medicines

Quality Use of Medicines (QUM) is part of the RMMR Program. QUM as part of the RMMR Program encompasses three different areas of activity:

- Medication advisory activities
- Education
- Continuous improvement

QUM assistance for Aged Care Home staff provided by the RMMR Provider in the last 12 months was assessed as part of the Aged Care Home survey.

Number of times medication advisory activities provided in the last 12 months

Based on those who provided a valid response (not “don’t know”), the results show that in nearly all of the Aged Care Homes (95%) accredited pharmacists have advised members of the health team on medication issues – over a quarter (27%) have been advised over 10 times in the last 12 months (Figure 63).

In about a third of Homes, the pharmacists have not provided assistance in development of nurse initiated medication lists (38%), participation in policy and development activities (36%) and in drug use evaluations (33%).

In the areas of drug use evaluations, participation in Medical Advisory Committees and in the participation in policy and development activities, smaller Aged Care Homes (1 - 40 beds) and Homes in rural/remote areas were the least likely to have accredited pharmacists provide these services.
Figure 63: Number of medication advisory activities provided in the last 12 months

Q18: In the last 12 months, how often has an Accredited Pharmacist provided the following services to your Aged Care Homes?

Base: Aged Care Homes who provided a response. In chart order from the top: n=311, 300, 264, 301, 304

- Advise members of health care team on medication issues:
  - Never: 5%
  - 1-10 times: 68%
  - 11-20 times: 15%
  - 21-30 times: 5%
  - 31+ times: 7%

- Participate in Medication Advisory Committee:
  - Never: 19%
  - 1-10 times: 76%
  - 11-20 times: 4%
  - 21-30 times: 1%

- Drug use evaluations:
  - Never: 33%
  - 1-10 times: 53%
  - 11-20 times: 8%
  - 21-30 times: 5%

- Participate in policy and procedure development activities:
  - Never: 36%
  - 1-10 times: 62%
  - 11-20 times: 1%

- Assist in development of nurse-initiated medication lists:
  - Never: 38%
  - 1-10 times: 59%
  - 11-20 times: 2%
  - 21-30 times: 1%
Number of times education sessions provided in the last 12 months

Most of the Aged Care Homes (89%) reported that an Accredited Pharmacist had provided drug information for medical practitioners and/or staff – 13% had done so more than 10 times in the last 12 months (Figure 64).

Three-quarters (75%) reported that the Pharmacist had provided in-service sessions for disease state management – 5% had done so more than 10 times in the last 12 months. Nearly all Homes in regional centres (94%) had been provided with these sessions compared to only 67% of rural/remote Homes and 73% of metropolitan Homes.

Figure 64: Number of times education sessions provided in the last 12 months

Q18. In the last 12 months, how often has an Accredited Pharmacist provided the following services to your Aged Care Homes?

Base: Aged Care Homes who provided a response. In chart order from the top: n=295, 312
Number of times continuous improvement services provided in the last 12 months

Continuous improvement activities were the area of QUM least likely to be provided by Accredited Pharmacists, based on the findings of the Aged Care Home staff survey.

In the last 12 months, the main area of continuous improvement in which Accredited Pharmacists provided assistance to Aged Care Homes was in assisting facilities to maintain their accreditation standards - 85% had received support (Figure 65).

Around half of Aged Care Homes staff had received support from Accredited Pharmacists in assessing the practical requirements of medication management (52%) and in conducting medication administration audits and/or surveys (51%).

Four in ten (41%) had been assisted in the development of quality indicators and only 13% had been assisted in assessing the competency of residents to self-administer medications.

Figure 65: Number of times continuous improvement provided in the last 12 months

Q18. In the last 12 months, how often has an Accredited Pharmacist provided the following services to your Aged Care Homes?

Base: Aged Care Homes who provided a response. In chart order from the top: n=309, 300, 304, 292, 305
Value of QUM activities to staff in Aged Care Homes

The usefulness of these QUM activities was assessed for various staff members. The QUM activities was found to be valuable for the clinical care co-ordinator (at 97% of Homes), the senior nurses (98%), the Director of Nursing (96%), the other nurses (93%), the aged care staff overall (87%) and the personal care assistants (61%) (Figure 66).

The QUM was not found to be of use to the personal care assistants in a quarter (23%) of the Aged Care Homes. The QUM was of most value to personal care assistants in smaller Aged Care Homes (1-40 beds) where 83% of the smaller Homes found it useful compared to 60% of Homes with 41-80 beds and less than half (45%) of the larger homes with over 80 beds.

Figure 66: Value of QUM activities to staff in Aged Care Homes

Q19. Overall, how useful are these QUM activities for the following staff members?

Base: Aged Care Homes who provided a response. In chart order from the top: n=142, 262, 263, 237, 285, 245