

*Combined  
Review of  
Fifth  
Community  
Pharmacy  
Agreement  
Medication  
Management  
Programmes  
Final Report*

*Australian Government  
Department of Health*

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Fifth Community  
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*Final Report*

*January 2015*



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## Acknowledgements

The research team would like to thank the Australian Government Department of Health for funding this project as part of the Fifth Community Pharmacy Agreement.

The research team would like to thank Laurent Billot and his team at The George Institute for Global Health for their contribution in statistical analysis of the 5CPA programme data and practitioner survey data.

Further, the research team would like to thank the project expert advisors – Tricia Greenway (consumer engagement), Dr Chris Mitchell (general practice), Rick Samimi (community pharmacy) and Sue Macri (aged care) for their valuable input over the course of the project.

The research team would also like to give special thanks to the organisations and individuals that were involved in the stakeholder consultations, the consumer focus groups, the practitioner focus groups, and the administration of the practitioner survey.

Finally, the research team would like to thank the Programme Reference Group (PRG) who provided expert advice and guidance to the team during this project:

Ms Toni Riley - Pharmacist - Pharmacy Guild of Australia  
Dr Alison Roberts - Consultant Pharmacist - Pharmaceutical Society of Australia (PSA)  
Ms Sue Kirsas - Pharmacist - Society of Hospital Pharmacists of Australia (SHPA)  
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## Acronyms and abbreviations

5CPA	5 <sup>th</sup> Community Pharmacy Agreement
CALD	Culturally and Linguistically Diverse
CHF	Consumer Health Forum
CI	Clinical Interventions
DAA	Dose Administration Aid
GP	General Practitioner
HMR	Home Medicines Review
MAC	Medicine Advisory Committee
MBS	Medicare Benefits Scheme
MM	Medication Management
PBS	Pharmaceutical Benefits Scheme
PGA	Pharmacy Guild Australia
PSA	Pharmacy Society of Australia
QUM	Quality Use of Medicines
RACF	Residential Aged Care Facility
RACGP	Royal Australia College of General Practitioners
RMMR	Residential Medication Management Review
SS	Staged Supply
SHPA	Society for Hospital Pharmacists

## Definitions

The following definitions have been provided to assist with consistent interpretation of terms related to the 5CPA review. The definitions used below are applicable to the period July 2010 to 1 March 2014.

<b>Accredited Pharmacist</b>	Registered Pharmacist who has current accreditation to conduct medication management reviews from an approved accreditation body.
<b>Clinical Intervention (CI)</b>	A professional activity undertaken by a Registered Pharmacist directed towards improving quality use of medicines, resulting in recommended changes to a consumer's medication therapy, means of administration or medication-taking behaviour.
<b>Community Pharmacy</b>	A pharmacy approved to dispense pharmaceutical benefits as defined in Section 90 of the <i>National Health Act 1953</i> .
<b>Dose Administration Aids (DAA)</b>	A sheet of hermetically sealed blisters of medicines set out in a calendar pack that must be tamper proof once packed. There are a number of commercially available products on the market.
<b>Home Medicines Review (HMR)</b>	A comprehensive medication review conducted by an Accredited Pharmacist in the consumer's home to enhance the quality use of medicines and reduce the number of adverse medicines events.
<b>HMR Service Provider</b>	Any of the following who have been granted approval by DHS, under the Programme Specific Guidelines to provide HMR Services in accordance with the HMR Programme Specific Guidelines and the MMR Programme Terms and Conditions: <ul style="list-style-type: none"> <li>• An owner of an approved Section 90 Community Pharmacy;</li> <li>• An Accredited Pharmacist; or</li> <li>• A business that employs or has a service contract with one or more accredited pharmacists to conduct Home Medicines Reviews on their behalf.</li> </ul>
<b>Local Government Area (LGA)</b>	Local Government Areas are a commonly used Australian Statistical Geography Standard in line with the most recent 2011 Census. The number of LGAs and their boundaries can change over time.
<b>MedsCheck/Diabetes MedsCheck</b>	Provide a review of a consumer's medications in the pharmacy. They focus on education and self-management, aiming to increase the consumer's quality use of medicines and subsequently reducing the amount of adverse medication-related events experienced by consumers.
<b>Health Practitioners / Practitioners</b>	The terms health practitioner and practitioner are used to describe all health professionals who contributed and/or participated in this review and include general practitioners, pharmacists and nurses.
<b>Registered Pharmacist</b>	A person who holds a general (non-provisional) registration as a pharmacist with the Pharmacy Board of Australia and has a Pharmacist Registration Number.
<b>Residential Medication Management Review (RMMR)</b>	A comprehensive medication review by an accredited pharmacist that is resident-focused involving a systematic evaluation of the resident's complete medication regimen. The programme aims to enhance the quality use of medicines and reduce the number of adverse medicines events by assisting residents of Commonwealth funded residential aged care facilities and their carers with their medication regime.

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<b>Service Payment</b>	The amount Australian Government will pay to a HMR Service Provider for each eligible HMR service provided.
<b>Staged Supply (SS)</b>	The provision of PBS medicines in instalments where requested by the prescriber or consumer. Staged Supply instalments may be made daily, weekly or as directed.
<b>Service Provider</b>	<p>The entity being paid for the service.</p> <p>Any of the following who have been granted approval by DHS, under the Programme Specific Guidelines to provide Medication Management programmes and services in accordance with the Programme Specific Guidelines and the MMR Programme Terms and Conditions:</p> <ul style="list-style-type: none"><li>• An owner of an approved Section 90 Community Pharmacy;</li><li>• An Accredited Pharmacist; or</li><li>• A business that employs or has a service contract with one or more accredited pharmacists to conduct Home Medicines Reviews or Residential Medication Management Reviews on their behalf.</li></ul>

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# Executive summary

The level of investment in Community Pharmacy Agreements has demonstrated significant and exponential growth. This is partially attributable to the expansion of pharmacist delivered programmes and services, which has occurred in response to the rapidly changing needs of primary health care across Australia. In a period of health reform, the challenge for primary health care is to respond effectively to an ageing population, the growing prevalence of chronic diseases and inequities in access to health care in a way that is sustainable in over the long-term.

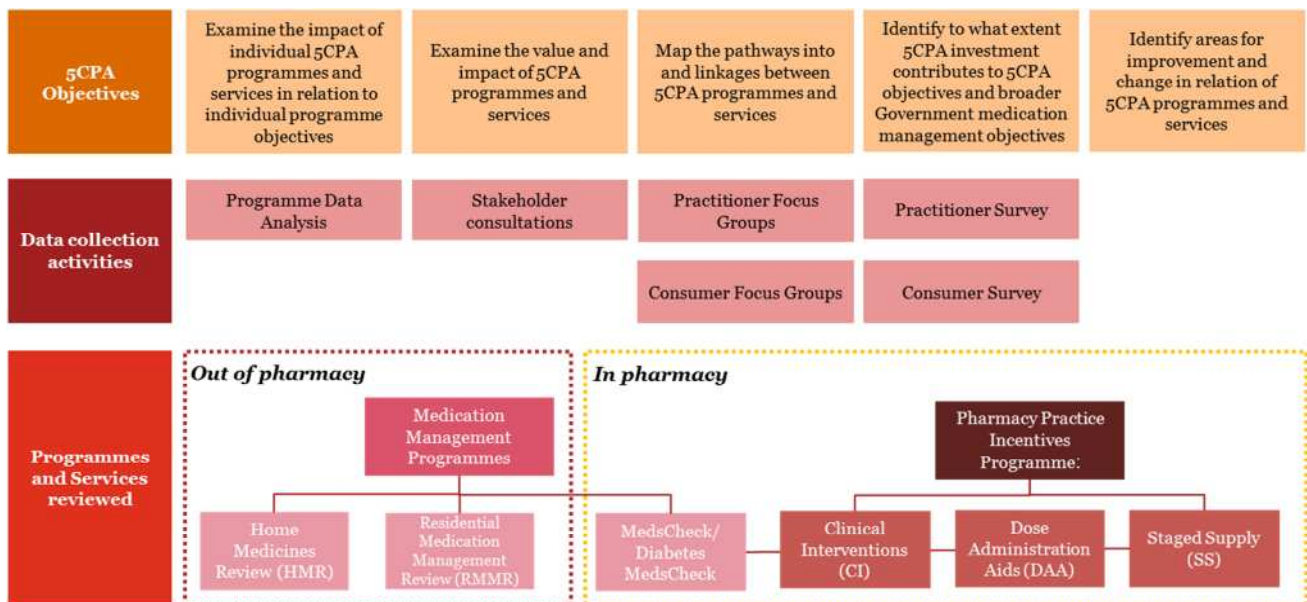
The 5CPA provides for a suite of Medication Management programmes and services, in which the Government has invested approximately \$427 million over 5 years (2010 to 2015). The collective aim of these programmes is to improve the quality use and individual management of medicines, minimising the number of adverse events experienced by people taking multiple medicines, particularly high-risk groups such as the elderly.

Guided by the Review Framework, the combined review of 5CPA medication management programmes assessed the overarching objectives of the Medication Management programmes and services via four areas of investigation - findings from this Review are presented and discussed in line with these areas of investigation:

- 1 Support for health policy and achievement of 5CPA objectives
- 2 Coordination and integration of 5CPA medication management programmes
- 3 Implementation of 5CPA medication management programmes
- 4 Impacts and outcomes of the 5CPA medication management programmes and services

Figure one outlines the overall scope of the Review, including overall objectives, data collection activities and the programmes and services.

**Figure one: Review objectives, data collection activities and programmes and services**



## ***Key Findings***

### **Support for health policy and achievement of 5CPA objectives**

- 5CPA programmes and services were perceived by stakeholders and health practitioners to add value as part of an overall preventative strategy for consumers. Stakeholder and health practitioners also perceived that programmes and services were well aligned with the overall policy intent of increasing the role of pharmacists working with consumers to improve their confidence with medicines management and, through this, achieving better health outcomes.
- Consumers indicated a high level of satisfaction for Medication Management programmes and services delivered by their pharmacists, regardless of age, general health status and number of medicines.

When considered in the context of previous Community Pharmacy Agreements, all stakeholders were overwhelmingly supportive of the role community pharmacy plays in primary care and their contribution to improving health, reducing medication misadventure, educating consumers, and improving confidence and adherence. Despite this support, there remains significant potential to more fully harness community pharmacy participation for future agreements. Better aligning the delivery of Medication Management programmes and services to the distribution of health need across Australia is one such improvement that could be made.

### **Coordination and integration of 5CPA medication management programmes**

- 5CPA programmes and services were delivered as standalone programmes, with the vast majority of consumers receiving either a MedsCheck, RMMR or HMR – less than 2% received a combination of programmes.
- Individual 5CPA programmes and services were seen as fulfilling a specific purpose, with little integration or interaction between programmes and services and unclear linkages or pathways between one programme and another.
- Though minimal areas of overlap or duplication between programmes were identified, the majority of practitioners reported that there were ongoing gaps in the existing programmes and services, resulting in unmet needs of the consumer.

The findings suggest that health practitioners did not deliver individual Medication Management programmes and services as a "continuum", tailored to increasing levels of medication management complexity. The majority of practitioners perceived HMRs, RMMRs, MedsChecks/Diabetes MedsChecks or CIs to predominantly be medication management or risk prevention tools, rather than screening and diagnostic tools. However, stakeholders identified that there was potential to use certain programmes and services like MedsChecks/Diabetes MedsChecks and Clinical Interventions as screening tools to assess level of clinical and consumer need to inform whether more intensive interventions are required.

Factors influencing why health practitioners referred or provided a specific programme or service overwhelmingly consisted of considering complexity of medication regimes, level of medication adherence/compliance and existing relationships with consumers. While the importance of applying clinical judgement to understand individual consumer needs was emphasised by practitioners, in practice, the interaction between assessment of consumer need and delivery of appropriate intervention appears to be complex and influenced by interdependent factors. Consequently, clinical judgement is likely to differ from one practitioner to another and Review findings do not currently inform to what extent consumer needs were uniformly addressed.

### **Implementation of 5CPA medication management programmes**

- Overall, practitioners reported being reasonably satisfied with their involvement in the Medication Management programmes and services. In general, they also reported being satisfied with the benefit their consumers received through Medication Management programmes and services.
- Transparency around overall governance of the 5CPA Medication Management programmes and services was viewed to be sub-optimal by stakeholders, who noted that including a broader range of peak bodies in

discussions about future Community Pharmacy Agreements would achieve better representation of the collective interests of the sector.

- The number of service claims rejected across Medication Management programmes and was around 10%, the most common reasons for which were related to administrative processes.
- Pharmacists who participated in this review identified that in delivering the suite of programmes, additional continuous professional development specific to diagnosis and triage would be valuable to improve and adapt their skills over time.

Findings from this Review identified a need for more sophisticated and efficient administrative processes to be available. Pharmacists who participated in this review identified that in delivering the suite of programmes, additional continuous professional development specific to diagnosis and triage would be valuable to improve and adapt their skills over time. While resources and implementation support were available, findings indicate that the potential for error via duplication and rejection of claims was reasonably high. Reviewing currently available resources and implementation support could be a useful way to improve administrative requirements and reduce errors.

### **Impacts and outcomes of the 5CPA medication management programmes and services**

- In general, Medication Management programmes and services were delivered in proportion to the coverage of pharmacists across Australia, indicating good national reach of services. However, there is opportunity to consider how reach may be enhanced to better address health need across Australia in a manner that complements existing regional programmes and services.
- Consumer need, the complexity of disease, and medication regime were by far the three most common factors reported by practitioners as triggering decisions to refer and provide interventions. However, practitioners described their assessment of consumer need and subsequent clinical decisions to be based on a reasonably broad set of clinical judgements.
- Stakeholders and practitioners indicated that 5CPA programmes were difficult to access for consumers due to low consumer awareness, information on programmes not being readily available to consumers and low GP engagement and awareness to refer consumers to the relevant programmes, particularly for Aboriginal and Torres Strait Islanders and CALD peoples.
- The volume and delivery of Medication Management programmes and services changed over the course of the 5CPA to reach a broader population. MedsChecks/Diabetes MedsChecks and HMRs were delivered to younger consumers, RMMRs were delivered to older consumers and all Medication Management programmes and services were delivered to consumers managing fewer health conditions and fewer medicines. While some sensitivity in the delivery of programmes and services to policy and administrative changes may be expected, the findings suggest that health practitioners may also have been increasingly managing medication and medication risk earlier and over a longer lifespan. While GP engagement with pharmacists in the provision of programmes and services appears to have improved, collaboration remains suboptimal. For MedsCheck/Diabetes MedsCheck, Clinical Intervention (CI), Dose Administration Aids (DAA) and Staged Supply (SS) services, apart from brief phone calls or faxes to confirm a prescription or dosage, very little collaboration between GPs and Pharmacists was noted. Notwithstanding this the need for greater collaboration was universally supported by all stakeholders who participated.

Based on the overall views of stakeholders, providers and consumers, there is virtually universal buy-in to the downstream benefits of the Medication Management programmes and services. Practitioners and consumers alike saw clear benefit in the suite of Medication Management programmes and services as contributing towards improving the health outcomes of consumers. Perceived benefits were in line with findings from prior reviews and included healthier consumers, improved medicine compliance and confidence, de-prescribing medicines and assisting GPs with geriatric pharmacology.

The perceived value of each Medication Management programme and service by health practitioners differed, judging by the uptake and delivery of certain programmes over others. The general perception was that when Medication Management programmes and services addressed consumer need and were performed well, HMRs and RMMRs provided the most value/benefit to the consumer in achieving positive health outcomes and providing education on medication safety and adherence. While direct behavioural and health outcomes were

not assessed in this Review, consumers who received MedsCheck/Diabetes MedsCheck or HMR services perceived positive impacts on their health, confidence with medicines, experienced reduced side-effects and improved their understanding of medicines, regardless of age. An important part of the 5CPA was its ambitions for collaboration, communication and interaction between health professionals in the delivery of these programmes/services. Stakeholders reported that Medication Management programmes and services have indeed facilitated better collaboration with GPs and other health professionals, but there is a way to go before the full value of the collaborative model may be realised.

## ***Implications and opportunities for future***

Findings from this Review demonstrate little doubt that programmes and services provided by community pharmacy are valuable for managing consumer medication and medication risk, and contribute to overall improved health outcomes for Australians. The question that remains is how best to optimise the value of community pharmacy, in particular, exploring what models might deliver best return on investment for Government in future Community Pharmacy Agreements. Moving into the next phase of planning for future Community Pharmacy Agreements, there are several opportunities to consider including:

- **Design and trial of service models specific to pharmacy with appropriate reimbursement models.** Likely to be a long-term endeavour, there is opportunity to design and trial specific pharmacy models, based on needs-based frameworks, with supporting reimbursement schemes during the 6CPA. Integrating triage and assessment of clinical need, professional development, comprehensive data collection, cost-benefit, auditing and monitoring functions alongside these models will be critical to inform future discussions in order to mobilise an effective and acceptable community pharmacy model that addresses consumer need across Australia. In addition to this, the complexity of RACFs as unique settings should be catered for, perhaps separately to this Review but as a priority to inform design of the next Agreement.
- **Trialling incentivised models for professional collaboration.** There is opportunity to specifically fund or incentivise professional collaboration via designing a model based on patient outcomes, with a focus on quality of services delivered. Design of such a model should minimise administrative processes related to programme delivery and consider the potential for unintended consequences, including quality assurance processes, appropriate monitoring and auditing of programmes and services.
- **Reliable cost-benefit analysis is critical.** This will require a more sophisticated approach towards collection of data, linking programme data (multiple datasets, including at consumer level) combined with regular auditing and reporting requirements to enable consumer health outcomes to be more effectively monitored and measured.
- **Increasing education and awareness of programmes and services.** Increasing education and awareness of Medication Management programmes and services for consumers and other health professionals should reduce barriers to access and was highlighted frequently as an improvement consideration for future Agreements. There is opportunity to canvas the value of introducing a range of evidence-based guidance to support the delivery of Medication Management programmes and services, including the provision of education and training for clinical screening and diagnostic skills.
- **Applying flexibility in administration processes.** Applying some flexibility in the administration of the programmes and services to allow for cultural differences/rurality in certain target groups provides an opportunity to improve access and reach. It was suggested that quality assurance could be enhanced through appropriate monitoring and auditing of programmes and services.
- **Establishing appropriate monitoring and auditing processes.** More sophisticated approaches towards collection of data, linking programme data (multiple datasets, including at consumer level) combined with regular auditing and reporting requirements will enable consumer health outcomes to be more effectively monitored and measured over time. This increases the potential for consumer outcomes and cost benefits to be measured, as well as reducing the potential for error and duplication

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# 1 Overview of the Review

*This section outlines the background and context to the Review, delivery and changes to programmes, the purpose and key objectives, scope, overview of the approach and project governance arrangements*

## 1.1 Background and context to the Review

Primary health care in Australia is rapidly changing to meet the challenges of an ageing population, increasing prevalence of chronic disease and the challenges in equity in access to health care. To support the sustainability of the Australian health care system, the Federal Department of Health (the Department), in partnership with State and Territory governments and other key stakeholders, is managing a period of health reform. The Fifth Community Pharmacy Agreement (5CPA), the most recent agreement made between the Australian Government and the Pharmacy Guild of Australia (the Guild) commenced 1 July 2010 and recognises community pharmacy's contribution to primary health care and the role it can play in a more coordinated, consumer-centred model of care towards achieving sustainability. This contribution is acknowledged in terms of the delivery of the Pharmaceutical Benefits Scheme, the dispensing of medications and the provision of other programmes and services which impact the health of Australians.

The provision of programmes under the 5CPA includes a suite of Medication Management programmes, in which the Government has invested approximately \$427 million. The collective aim of these programmes is to improve the quality use and individual management of medicines, minimising the number of adverse events experienced by people taking multiple medicines, particularly high-risk groups such as the elderly. In turn, the collective objective of the programmes is to meet medication and related service needs so that optimal health outcomes and economic objectives are achieved.

The suite of Medication Management programmes have been developed to address differing levels of consumer medication complexity and need across the population. For example, MedsCheck and Diabetes MedsCheck services were intended to assist consumers with less complex medication needs by delivering a lower intensity intervention with a focus on consumer education and self management, while HMRs and RMMRs were intended to assist consumers with more complex medication needs by delivering a higher intensity intervention. In theory, there is potential for lower intensity interventions to interact with higher intensity interventions via a continuum of care, where lower intensity interventions are used to determine whether additional, and higher intensity, interventions are required for increasingly complex consumers and/or for consumers for whom further intervention is necessary.

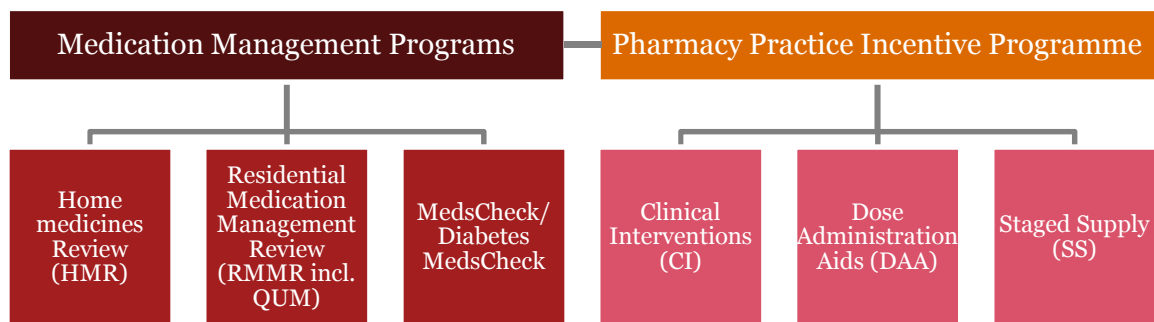
However, selecting which Medication Management programme to deliver from the suite of available options in reality is likely to be influenced by a number of factors outlined in further detail below. As such, several potential models of delivery were possible. The uptake and volume of services delivered may have been influenced by several consumer or pharmacist related factors such as:

- Population/regional health need: prevalence of chronic disease
- Continuum of complexity: consumer comorbidities, number of medications and medication adherence
- Cost: overall allocated funding for each programme or service, or, reimbursement to pharmacist per programme or service delivered
- Time: capacity of the community pharmacist to undertake particular programmes and services

- Business models: emerging pharmacy/pharmacist business models
- Regional services: the availability of existing regional services aimed towards managing chronic disease
- Programme changes: changes to services and programmes that occurred during 5CPA implementation

This Review was undertaken from 1 July 2010 and uses available programme data up to February 2014 in its analyses. In this report, we draw findings from various data sources to construct a model of uptake and delivery for the various programmes and services. The Medication Management programmes and services included in this Review are outlined in Figure 1.

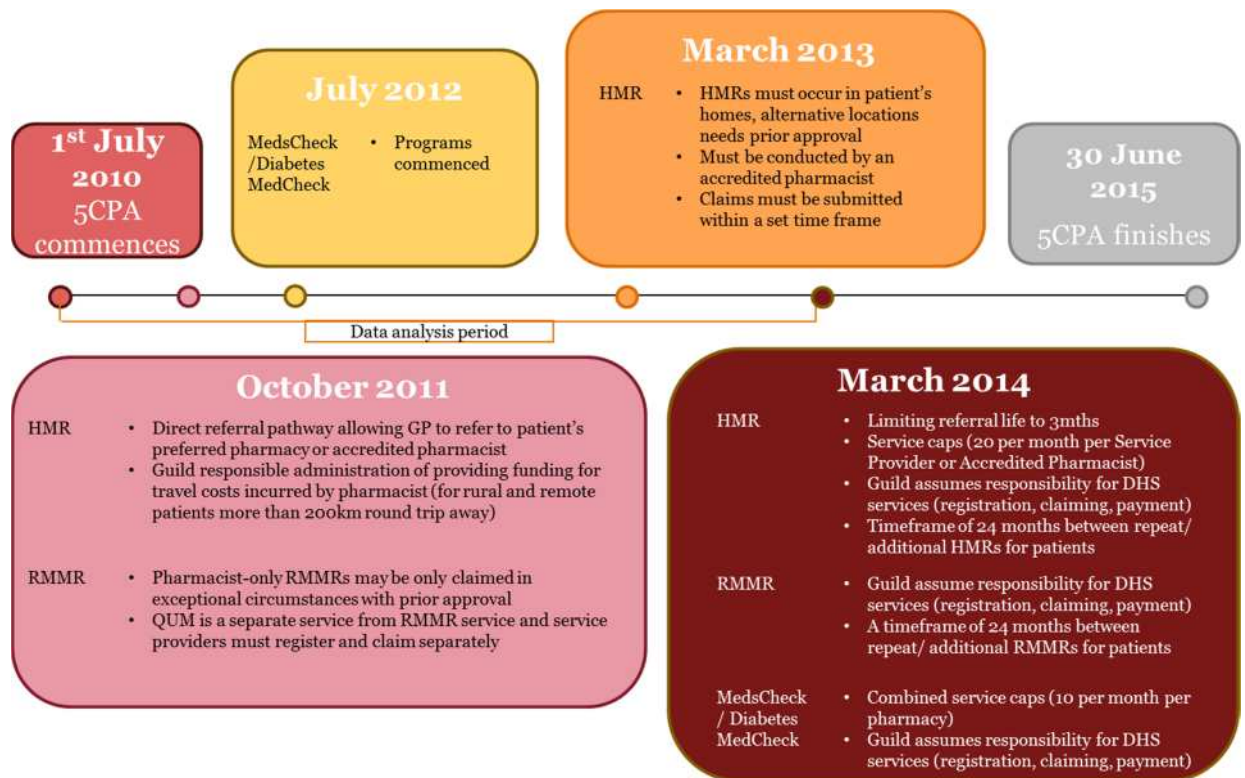
**Figure 1: Medication Management programmes**



## ***1.2 Delivery of programmes and changes***

This Review analysed data between 1<sup>st</sup> July 2010 (the commencement of the 5CPA) and 28 February 2014 (most recent data available at the time of extraction). A number of changes were made over the course of the 5CPA, some of which are captured in the data. Changes introduced in March 2014 are not included in this Review due to availability of data during extraction and analysis. An overview of all changes that occurred from 1 July 2010 December 2014 is outlined in Figure 2 below.

**Figure 2: Guide to changes throughout 5CPA**



### **HMR**

Home Medicines Review (HMR) is designed to enhance the quality use of medicines and reduce the number of adverse medicines events through a comprehensive medication review conducted by an Accredited Pharmacist in the consumer’s home.

To be eligible for a HMR, the consumer must be referred by the consumer’s General Practitioner (GP). The consumer must satisfy the following mandatory HMR service eligibility criteria: the consumer is a current Medicare/DVA card holder, is living in a community setting, is at risk of experiencing medication misadventure, and the GP confirms that there is an identifiable clinical need and the consumer will benefit from an HMR service. The HMR must be conducted by a pharmacist accredited to perform HMRs face-to-face in the consumer’s home apart from exceptional cases (cultural reasons or safety concerns).

Prior to 28 February 2014, consumers could receive one HMR in any 12-month period. From 1 March 2014, consumers could receive one HMR in any 24 month period. However, repeat services could be conducted within 24 months if the referring GP considered an HMR to be clinically necessary (no approval needs to be sought).

HMR services conducted in one calendar month must be claimed on or before the last day of the next calendar month. Claims submitted outside these time frames will not be paid. . Pharmacists and/or pharmacies receive a payment for approved HMR services delivered within two weeks of referral, paid for by the Australian Government through the 5CPA, with an additional rural loading available for rural pharmacists and/or pharmacies to cover travel costs. GPs receive a payment for HMR referral services, paid for by the Australian Government through Medicare.

### **RMMR**

Residential Medication Management Review (RMMR) is a comprehensive medication review by an accredited pharmacist that is resident focused involving a systematic evaluation of the resident’s complete medication regimen. The programme aims to enhance the quality use of

medicines and reduce the number of adverse medicine events by assisting residents of Commonwealth funded residential aged care facilities and their carers with their medication regime.

A RMMR is intended to assist the GP by identifying and advising on relevant medication related problems. The accredited pharmacist collaborates with the GP and suggest strategies for effective and improved medication management so optimal health outcomes can be achieved.

To be eligible for an RMMR, the consumer must be a current permanent resident of a government funded Residential Aged Care facility. Prior to 28 February 2014, residents could receive one RMMR in any 12-month period. From 1 March 2014, residents could receive one RMMR in any 24 month period. As with HMRs, repeat services could be conducted within 24 months if the GP considered an RMMR to be clinically necessary (no approval needs to be sought).

From 1 March 2014, accredited pharmacists were required to conduct RMMR services within ninety days of receiving each referral in order to be paid. There were no restrictions on timely RMMR service delivery prior to this. The RMMR service fee is paid according to the date of service and is paid monthly once the claim form is submitted and approved by Medicare. Pharmacist RMMR services are paid for by the Australian Government through the 5CPA. Related GP collaborative review services are paid for by the Australian Government through Medicare (eg. MBS Item 903).

From October 2011, QUM services were re-defined as a separate and distinct service from RMMRs and could be arranged via a separate service agreement with relevant aged care facilities. Prior to this, QUM and RMMR services were integrated as one service.

### *MedsCheck/Diabetes MedsCheck*

MedsChecks/Diabetes MedsChecks are both in-pharmacy, consumer-centred services funded by the Australian Government through the 5CPA.

MedsChecks/Diabetes MedsChecks provide a review of a consumer's medications in the pharmacy. They focus on education and self-management, aiming to increase the consumer's quality use of medicines and subsequently reducing the amount of adverse medication-related events experienced by consumers.

MedsChecks/Diabetes MedsChecks must be conducted in a pharmacy approved by Medicare and by a registered pharmacist. To be eligible for a MedsCheck, the consumer must meet the mandatory eligibility criteria including: the consumer is a Medicare/DVA card holder, the consumer has not received a MedsCheck/Diabetes MedsCheck, HMR or RMMR in the last 12 months, the consumer is living at home in the community setting, and the consumer is taking five or more prescription medicines or has had a recent significant medical event.

Consumers are eligible for a Diabetes MedsCheck if they are a Medicare/DVA card holder, have not received a MedsCheck/Diabetes MedsCheck, HMR or RMMR in the last 12 months, are living at home in the community setting, have recently been diagnosed with type 2 diabetes, or has less than ideally controlled type 2 diabetes and is unable to gain timely access to existing diabetes education/health services.

A pharmacy approved to provide MedsChecks/Diabetes MedsChecks services and where consumer eligibility criteria has been met, will be paid the set service fee for each MedsChecks/Diabetes MedsCheck service. Claims are paid to the approved pharmacy.

### *Clinical Interventions*

Clinical Interventions form part of the Pharmacy Practice Incentives (PPI) Program. The PPI programme and its six priority areas recognise the beneficial health outcomes that can be achieved through the delivery of quality Services to an agreed standard in Community Pharmacy. The PPI programme has been designed to ensure that consumers receive the

highest quality of care, information, advice and services through a robust quality framework. PPI payments will be provided to Eligible Community Pharmacies over the period of the 5CPA.

Clinical Interventions are a professional activity undertaken by a Registered Pharmacist directed towards improving quality use of medicines and resulting in a recommendation for a change in a consumer's medication therapy, means of administration or medication-taking behaviour.

An incentive payment is paid four times per year to eligible community pharmacies participating in this priority area that meet the programme requirements and accreditation requirements when providing a Clinical Intervention service. Clinical Interventions do not include generic medicine substitution or routine prescription-related counselling, CMI provision or professional activities directed towards improving QUM undertaken during HMR, RMMR, MedsCheck or Diabetes MedsCheck services.

An eligible pharmacy is entitled to claim incentive payments four times a year for recording Clinical Interventions using the D.O.C.U.M.E.N.T classification system – note that only Cis recorded under the D.O.C.U.T. portions can be claimed. Clinical Intervention services are paid for by the Australian Government through the 5CPA.

### *Dose Administration Aids*

Dose Administration Aids (DAA), as part of the PPI Program, are a sheet of hermetically sealed blisters of medicines set out in a calendar pack that must be tamper evident once packed. There are a number of commercially available products on the market.

An eligible community pharmacy is entitled to claim incentive payments four times a year for providing DAAs meeting the following criteria: the consumer's medicines in the DAA are dispensed and packed by the pharmacy in accordance with the quality standard in the pharmacy, or the consumer's medicines in the DAA are dispensed by the claiming pharmacy but packed at another site; and the DAA consumer is not living in a government funded RACF or a correctional facility.

The Guild and the Australian Government jointly assess the payment amount the eligible community pharmacy is entitled to receive for the DAA priority area. This is based on the number of services and pharmacy size (e.g. prescription volume). The eligible community pharmacy claimable prescription volume is sourced from the Department of Human Services records.

Pharmacists intending to deliver DAA services under funding provided by third parties must ensure that the programme requirements implemented by the third party do not contravene any of the requirements of professional practice standards. If the provision of a DAA service is to be funded or subsidised by arrangements other than payment by the consumer, depending on the programme arrangements the pharmacist is responsible for meeting any third party requirements. Due care must be taken as such requirements may specify, for example, the type of DAA to be supplied, eligibility criteria for the consumer, and documentation required for payment and for audit purposes.

### *Staged Supply*

Staged Supply, as part of the PPI program, involves the provision of PBS medicines in instalments where requested by the prescriber. Staged Supply instalments may be made daily, weekly or as directed. Staged Supply services specifically exclude medicines supplied under the Section 100 Opioid Dependence Treatment Program. An incentive payment will be paid annually to eligible community pharmacies for offering a Staged Supply service and meeting the programme and accreditation requirements for offering a Staged Supply service.

Payment for Staged Supply is prospective. To be eligible for payment the eligible pharmacy is required to retain evidence to demonstrate the pharmacy has met the requirements, lodged the PPI Declaration each year as part of the pharmacy's accreditation cycle and provided the

required evidence at the eligible community pharmacy’s next accreditation assessment. Staged Supply services are paid for by the Australian Government through the 5CPA.

### 1.3 The purpose of the Review

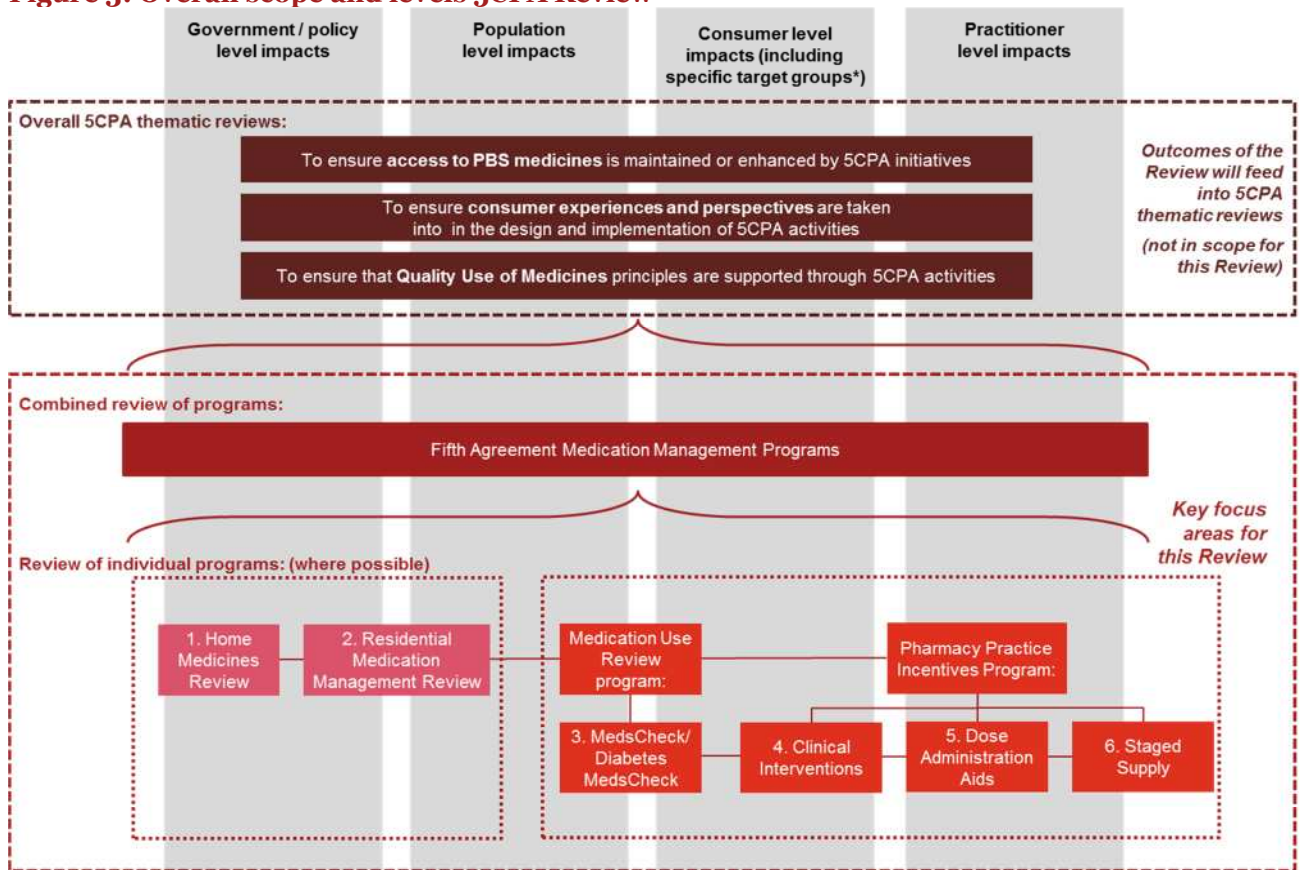
As part of the 5CPA, there is a requirement for the Commonwealth and the Guild to undertake a review of the Agreement prior to its expiry. The overall aim of the Review is to better inform how 5CPA Medication Management programmes and services contribute to improving consumer health outcomes. The Review will also be important to inform future investment by the Australian Government in pharmacy programmes and services so they are appropriately targeted and have a strong need-based focus. More specifically, the objectives of the Review are to:

<p>A. Examine the impact of individual 5CPA MM programs in relation to achieving their individual program objectives</p>	<p>B. Examine the investment value of each specific program, including the impact of the services these programs deliver in isolation or in conjunction with other MM programs and services</p>	<p>C. Map the pathways into and linkages between 5CPA MM programs and services</p>	<p>D. Identify if 5CPA investments in MM programs/services are contributing to achieving the objectives of the 5CPA and broader government policy, in relation to medication management.</p>	<p>E. Identify areas of 5CPA MM programs for improvement/changes.</p>
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### Scope of this Review

We note that this Review is occurring within a broader context of evaluating overall 5CPA activities. Figure 3 provides an overview of the scope of this Review and how it informs the broader context of work.

**Figure 3: Overall scope and levels 5CPA Review**



Activities which were included in the scope of this review were: This review:

- A combined review of the Medication Management programmes and services, through qualitative and quantitative analysis, to make an overall assessment of the value and impact of the 5CPA Medication Management programmes as a whole.
- Assessment of the impact and achievement of programmes at the overall government/policy level (and overall 5CPA impacts), population level, consumer level and practitioner level.

Whilst the outcomes of this Combined Review will feed into overall thematic review for the 5CPA (access, consumer experience, quality use of medicines) which will report on how 5CPA programmes/services/elements are jointly contributing to the achievement of the 5CPA objectives, the thematic review does not form part of the scope of this project.

## 1.4 Review framework

The overarching 5CPA Evaluation Framework, developed by the Department in consultation with the Guild and input from key stakeholders via the PRG, provided the basis for developing the high level programme logic and draft Review framework for this project. An iterative process was undertaken through consultation early in the project to refine both the logic and the framework, to confirm that it met the requirements of the Review.

The final Review framework has been used throughout the course of this project to inform data collection tools and data analysis plans. The final Review framework for this project is attached at Appendix B.

Table 1 below provides an overview of which Review questions were addressed in each data collection activity:

**Table 1: Overview of review framework**

		Programme data	Stakeholder consultation	Consumer focus group	Practitioner focus group	Consumer survey	Practitioner survey
<b>Areas of investigation</b>							
<b>Area of investigation: Support for health policy and achievement of 5CPA objectives</b>							
1	What evidence is there that 5CPA Medication Management programmes support wider Australian Government health policies?		✓		✓		
2	Have the 5CPA Medication Management programmes contributed to achieving the overall objectives of the Agreement?		✓		✓		
<b>Area of investigation: Coordination and integration of 5CPA Medication Management programmes</b>							
3	How do the 5CPA Medication Management programmes interact with one another - including common characteristics, duplication and gaps?		✓		✓		✓
<b>Area of investigation: Implementation of the 5CPA Medication Management programmes</b>							
4	Have the 5CPA Medication Management programmes been managed as agreed with the parties to the Agreement and have Agreement Governance Arrangements supported the programmes?		✓				
5	Have the 5CPA Medication Management programmes been implemented as planned and what have been the barriers and facilitators? i.e. implementation of new programmes under the 5CPA or changes to existing programmes and considering which stage of implementation the programmes are in		✓		✓		✓
6	To what extent do pharmacists use programme specific guidelines and PSA professional guidelines and other resources to deliver 5CPA Medication Management programmes? What other information/resources would be useful?		✓		✓		✓

## Overview of the Review

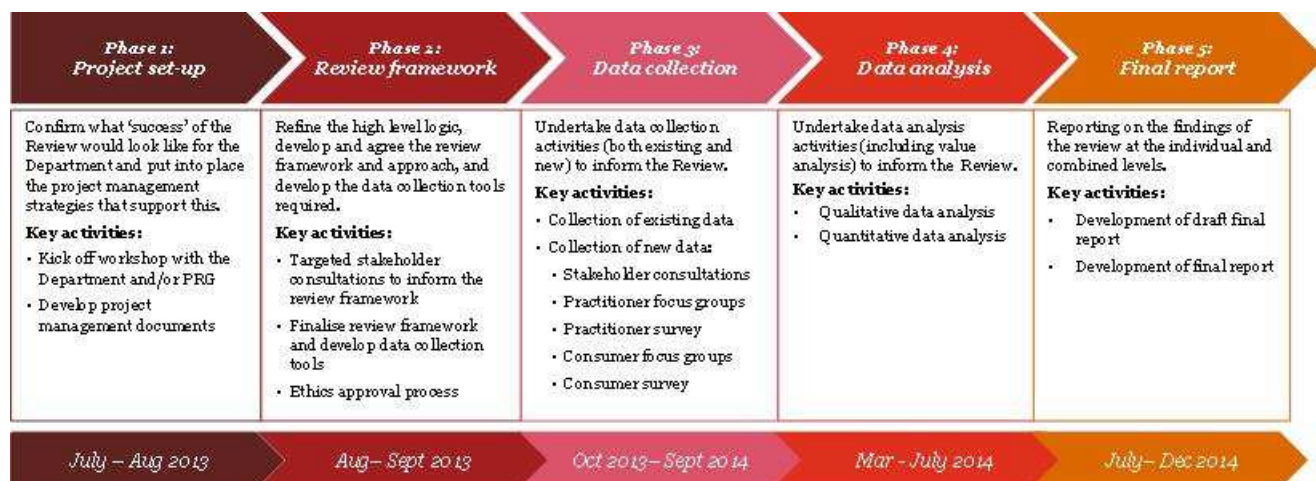
7	What are the areas for improvement to the 5CPA Medication Management programmes?		✓	✓	✓	✓	✓
<b>Area of investigation: Impacts and outcomes of 5CPA Medication Management programmes</b>							
8	What has been the demand/uptake of 5CPA Medication Management programmes?	✓					
9	What are the characteristics or circumstances of people who utilise the programmes (including reason for referral) and what evidence is there of benefit to consumers?	✓	✓	✓	✓	✓	✓
10	To what extent have the outcomes of the 5CPA Medication Management programmes been achieved and to what extent are they attributable to the programmes? Have any unintended consequences of the 5CPA Medication Management programmes emerged and how have they been addressed?		✓	✓	✓	✓	✓
11	Did changes (if any) to the programmes introduced under the Fifth Agreement meet their intended outcomes (for both new programmes and existing programmes which continued)?		✓		✓		

## 1.5 Overview of Review methodology and timeline

Based on the objectives of the project, a five-phased approach to the project was developed and undertaken. The project commenced in July 2013 and concluded in December 2014.

The key activities in each of these phases, as well as the timing of these, are detailed in Figure 4.

**Figure 4: Summary of approach**



A detailed approach for each activity can be found in Chapter 3.

## 1.6 Project governance

The project was overseen by the Programme Reference Group (PRG) which is responsible to the Agreement Consultative Committee and the Minister for Health for providing advice on the policy dimensions of new and continuing programmes under the 5CPA. Advice includes the scope, objectives, target groups and evaluation requirements of the programmes. The PRG, which included representatives from PGA, PSA, SHPA, health economics, programme evaluation, rural pharmacy, community pharmacy, pharmacist credentialing, CHF, GP and Allied Health/nursing, provided expert input into and oversight to the research for this Review. There was interaction at an individual level with key personnel and collectively when the PwC Research Team met with the PRG in April 2014, at which time a stakeholder consultation was also undertaken.

Throughout the course of the project, PwC's panel of experts; Tricia Greenway (expert adviser – consumer engagement), Dr Chris Mitchell (expert adviser – general practice), Rick Samimi (expert adviser – pharmacy) and Sue Macri (expert adviser – aged care) provided valuable insights to the project and contribution to deliverables.

## 1.7 Roadmap to this report

The purpose of this Final report is to outline key findings of the Review, including findings from the analysis of full programme data, stakeholder consultations, consumer focus groups, practitioner focus groups, practitioner survey and consumer survey. It also includes the consideration of findings against the Review Framework and opportunities for the future.

The appendices provide detailed analysis of each review activity.

## Overview of the Review

<b>Overview of the Review</b> <b>Chapter 1</b> 1.1 Background and context to the Review 1.2 Delivery of programs/services and changes 1.3 Purpose of the Review 1.4 Review framework 1.5 Overview of methodology and timelines 1.6 Project governance 1.7 Roadmap to this Report	<b>Key findings</b> <b>Chapter 2</b> 2.1 Full program data analysis 2.2 Stakeholder consultations 2.3 Consumer focus groups 2.4 Practitioner focus groups 2.5 Practitioner survey 2.6 Consumer survey 2.7 HMR hospital referral pathway consultation	<b>Discussion</b> <b>Chapter 3</b> 3.1 Discussion of findings against Review Framework 3.2 Value and benefit of Medication Management programs and services 3.3 Implications and opportunities for the future	<b>Appendices</b> <b>Chapter 4</b> Appendix A Reach of medication management programmes and services Appendix B Review framework Appendix C Stakeholder consultations Appendix D Consumer focus groups Appendix E Practitioner focus groups Appendix F Practitioner survey Appendix G HMR referral pathway consultations Appendix H Reference list Appendix I Consumer survey
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This diagram will be repeated throughout the report, highlighting each relevant chapter where appropriate.

## 2 Key findings

*This section details key findings from the data collection activities conducted for this Review. Methodological details for each activity are provided in the Appendix.*

Chapter 1	Chapter 2	Chapter 3	Chapter 4
<b>Overview of the Review</b> <ul style="list-style-type: none"> <li>1.1 Background and context to the Review</li> <li>1.2 Delivery of programs/services and changes</li> <li>1.3 Purpose of the Review</li> <li>1.4 Review framework</li> <li>1.5 Overview of methodology and timelines</li> <li>1.6 Project governance</li> <li>1.7 Roadmap to this Report</li> </ul>	<b>Key findings</b> <ul style="list-style-type: none"> <li>2.1 Full program data analysis</li> <li>2.2 Stakeholder consultations</li> <li>2.3 Consumer focus groups</li> <li>2.4 Practitioner focus groups</li> <li>2.5 Practitioner survey</li> <li>2.6 HMR hospital referral pathway consultation</li> </ul>	<b>Discussion</b> <ul style="list-style-type: none"> <li>3.1 Discussion of findings against Review Framework</li> <li>3.2 Value and benefit of Medication Management programs and services</li> <li>3.3 Implications and opportunities for the future</li> </ul>	<b>Appendices</b> <ul style="list-style-type: none"> <li>Appendix A Reach of medication management programmes and services</li> <li>Appendix B Review framework</li> <li>Appendix C Stakeholder consultations</li> <li>Appendix D Consumer focus groups</li> <li>Appendix E Practitioner focus groups</li> <li>Appendix F Practitioner survey</li> <li>Appendix G HMR referral pathway consultations</li> <li>Appendix H Reference list</li> </ul>

In this section, we present key findings chronologically from completed data collection activities conducted as part of this Review, along with an overview of purpose, approach and overall results. This includes key findings from the full programme data analysis, stakeholder consultations, consumer focus groups, practitioner focus groups, practitioner survey and consumer survey.

Figure 5 illustrates the data collection cycle and presents how data collected from earlier activities was used to inform the approach and content of later activities. In particular, a gap analysis was initially undertaken to determine which data collection activities were most appropriate to meet the objectives and information requirements of the evaluation. Note that findings from the gap analysis are not presented in this report.

**Figure 5: Data collection cycle**



### 2.1 Programme data analysis

Findings from analyses of programme data for Medication Management programmes (HMR, RMMR, MedsCheck/Diabetes MedsCheck), the Pharmacy Practice Incentives programme

(Clinical Interventions, DAA and Staged Supply) and Quality Use of Medicines initiatives between 1 July 2010 and 28 February 2014 are presented below. Please see below (section 3.1.2) for notes and limitations relevant to programme data analysis.

### **Summary of key findings – programme data analysis**

All findings reported in the following summary of findings refer to across Australia, between July 2010 and February 2014:

#### **Geographical trends:**

- The distribution of pharmacists delivering 5CPA Medication Management programmes and services across Australia generally reflected the distribution of community pharmacy across the country.
- The majority of pharmacists were located in NSW, Victoria and Queensland.
- 17% of pharmacists were located in outer regional/remote/very remote Australia.
- RMMR service delivery differed to the geographic distribution of community pharmacy. Compared to all other services, the percentage of RMMR services delivered by pharmacists located in inner and outer regional Australia was higher in proportion to pharmacists delivering this service in major cities.

#### **Reach of the 5CPA programmes:**

- Using diabetes prevalence and programme delivery as a proxy to explore programme reach, indicative analyses demonstrate potential opportunities for targeted programme delivery relative to need.
- The present findings indicate that, potentially, optimal reach of Programme services is not due to a lack of pharmacists available to deliver services overall.

#### **Consumer trends:**

- 890,058 consumers received Medication Management programmes (i.e. HMR, RMMR and MedsCheck) with the vast majority only receiving one Medication Management program.
- Over time, Medication Management programmes and services were delivered to a broader population –MedsChecks/Diabetes MedsChecks and HMRs were delivered to younger consumers, RMMRs were delivered to older consumers and all programmes were delivered to consumers managing fewer health conditions and medicines.

#### **Combinations of medication review services:**

*(note: it was only possible to merge consumer data across HMR, RMMR and MedsCheck/Diabetes MedsCheck programmes)*

- Combinations of medication review services delivered to the same consumer over time were rare – delivered to only 2.2% of consumers.
- For consumers who received combinations of services, the most common combination was HMR and MedsCheck, followed by HMR and RMMR.

#### **HMR trends:**

- A total of 8,159 service providers participated in delivering HMR services, of which 76% had a unique registration number and 87% submitted claims. For the 7080 service providers that submitted claims, 28% did not have a registration number.
- The median number of HMR services conducted per service provider was 16.
- 88% of HMRs were conducted in the home during this time period. From March 2013, this percentage increased to almost 100%. Common reasons for not conducting HMRs in the home prior to March 2013 included *consumer's preference* and *consumer and GP convenience and expedience*.
- 11% HMR claims were rejected with a median of 5 rejected claims per service provider.

The most common reasons for rejected HMR claims included *missing data* and *accredited pharmacist not known to Medicare*.

- Approximately 16,016 GPs (identified as having different referral identification numbers) referred consumers to receive HMRs, with a median length of 12 days between an HMR referral and receiving the service.

**RMMR trends:**

- A total of 842 service providers participated in delivering RMMR services, of which 93% had a unique registration number and 90% submitted claims. For the 755 service providers that submitted claims, 8% did not have a registration number.
- The median number of RMMR services provided per pharmacist was 131.
- 7.2% claims were rejected due to RMMR service *already claimed on date of service, service agreement was not current on date of service, accredited pharmacist was not current on date of service* and *pharmacist review within 12 months of last RMMR service*.
- Approximately 33,527 GPs (identified as having different referral identification numbers) referred consumers to receive RMMRs.

**MedsCheck/Diabetes MedsCheck trends:**

- A total of 5162 pharmacies participated in delivering MedsCheck/Diabetes MedsCheck services, of which 76% had a unique registration number, and 55% submitted claims. All pharmacies that submitted claims had a registration number.
- The median number of MedsCheck/Diabetes MedsCheck services provided per pharmacist was 24.
- 13% of MedsCheck claims were rejected due to *patient receiving HMR/MUR/RMMR service within a 12 month period, patient record not found, pharmacist was not working for the provider on the service date*.
- The main outcomes/recommendations of the MedsCheck/Diabetes MedsCheck service were *patient was educated on how to best use their medicines and or device information provided on medicine and or disease state-no further action required* and *referred patient to prescriber*.
- 13% of total MedsChecks/Diabetes MedsChecks were Diabetes MedsChecks.

**PPI trends:**

- A total of 6,216 pharmacies (with unique registration numbers) submitted claims for PPI services overall.
- 5,909 pharmacies submitted claims for DAAs, 22,571,080 consumers were provided DAA services<sup>1</sup>.
- 5,970 pharmacies submitted claims for 6,729,876 Clinical Interventions services
- 5,577 pharmacies received payments for being accredited to provide Staged Supply services.

**5CPA expenditure:**

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<sup>1</sup> This does not refer to individual consumers, as one consumer may have received multiple DAA services over the data collection period.

Note: records for expenditure specifically paid out for HMR, RMMR and MedsCheck services were not made available for this Review.

- A total of \$71,225,306 was paid as part of the PPI programme for DAAs.
- A total of \$44,051,451 was paid as part of the PPI programme for Clinical Interventions.
- A total of \$11,231,152 was paid as part of the PPI programme for Staged Supply services.

**QUM:**

- A total of 426 service providers submitted 18,574 claims for 105,201 QUM activities.
- The most common types of QUM activities claimed were: *providing drug information for medical practitioners and ACF staff* (15%) and *advising members of the health care team on a range of issues, including storage, administration, adverse effects and compliance* (12%).

### 2.1.1 Purpose

The purpose of analysing the 5cPA programme data was to assess the uptake and volume of Medication Management programmes and services delivered over the duration of the 5CPA.

### 2.1.2 Notes and Limitations

Note 1: Whilst 5CPA programme data refers to ‘patient’ data, we have used the term ‘consumer’ to keep terms consistent throughout this document.

Note 2: The term “service provider” has been used in reference to data analysed for services delivered, claimed and accepted by both Business Entities and Section 90 Pharmacies.

Across all accepted Medication Management programme and service claims, 12.5% of service providers were identified as Business Entities, and 87.5% of service providers were identified as Section 90 pharmacies.

Note 3: There were a number of limitations to full programme data which impacted our approach towards data analyses. These included:

- Data collected as part of the claims process provided limited insight on uptake and volume of programmes and services since multiple services could be submitted under one claim. For this reason, we have presented service level data where possible, merging accepted, rejected and claims datasets to conduct more accurate analyses.
- Consumer level data was de-identified and not linked to other data sources (e.g. Medicare and hospital data); therefore, it was not possible to determine the impact of participating in specific programmes on consumer outcomes, outside of that particular episode of care.
- Consumer demographic data, such as age and gender, was only available for HMR, RMMR and MedsCheck/ Diabetes MedsCheck, therefore data was not able to be linked across all 6 datasets. Postcode is not captured at the consumer level within any program/service dataset, therefore analysis of the data could not be performed for socio-economic indicator (SEIFA) or remoteness (ARIA).
- The number of medicines and health conditions of consumers is only captured within the MedsCheck/Diabetes MedsCheck dataset, resulting in the inability to analyse trends over time and potential investment value, including impact, for other programmes and services.
- The inability to analyse programme data beyond 28 February 2014 limits the capacity to measure how the administrative changes to programmes and services implemented on 1 March 2014 has affected the uptake and volume of programmes and services.

Note 4: We have included min and max values in all the tables below to keep consistency in presentation of data and to present overall range. However, please note that some max values are extreme outliers and are likely to be errors in data entry and must be interpreted with caution.

### 2.1.3 Approach

#### Gap analysis

Prior to extracting full programme data, samples of programme data for HMR, RMMR and MedsCheck/Diabetes MedsCheck programmes were assessed for quality and to determine whether it would sufficiently meet expected information needs. This gap analysis informed both the qualitative data collection activities and the quantitative data analysis plan.

The gap analysis identified that data collected as part of the claims processes for the Medication Management programmes and services provided limited insight on the demographics of the individual consumer, along with the impacts and outcomes of the programmes.

Further, as consumer level data was de-identified and not linked to other data sources (e.g. Medicare, hospital), it was not possible to determine the value of the consumer's participation in individual programmes outside of that particular episode of care.

#### Data analysis of full programme data

The data analysis plan was formed based on the gap analysis and quality check of sample programme data.

Provider data was linked by practitioner ID across all datasets (i.e. [HMR, RMMR, MedsCheck/Diabetes MedsCheck, DAA, Clinical Interventions and Staged Supply).

Unique identifiers were allocated to consumer level programme data which allowed for linkages in the data across the HMR, RMMR and MedsCheck/Diabetes MedsCheck datasets. Linkages of consumer data to the PPI dataset (i.e. DAA, Clinical Intervention and Staged Supply) were not possible, as consumer level data is not captured for PPI.

Discrete variables were summarised using frequencies and percentages. Continuous variables including changes over time were summarised using means and standard deviations (SD) or medians and interquartile ranges (IQR). Data were summarised using bar charts, line charts or pie charts, which were used to look at the variables for regional or time period analysis

### 2.1.4 Results

The following section draws from multiple datasets to explore the demand and uptake of MM programmes and services and the characteristics of practitioners delivering/referring to, as well as consumers using, these programmes and services. The following descriptions have been provided to define each data set used in the analyses and to help with interpretation of findings:

- **Registered data:** refers to the total number of pharmacists and pharmacist-types registered to deliver MM programmes and services. This is identified via a practitioner ID. A service provider that is also a pharmacist, may only submit claims for reimbursement if registered according to individual programme requirements; therefore, our analyses assume that all pharmacists who submit a claim are registered.
- **Claims data:** refers to the total number of claims submitted by each service provider. One claim may be submitted for the delivery of multiple services. Services within one claim may be accepted and/or rejected and/or neither accepted nor rejected.
- **Service data:** refers to the number of services delivered by pharmacists. Each service may be rejected or accepted; therefore, analyses of rejected service claims draw from service data, not claims data. Multiple services may be delivered to the same consumer

## Key findings

over time; however, the same consumer could not be identified in service data unless consumer data was available.

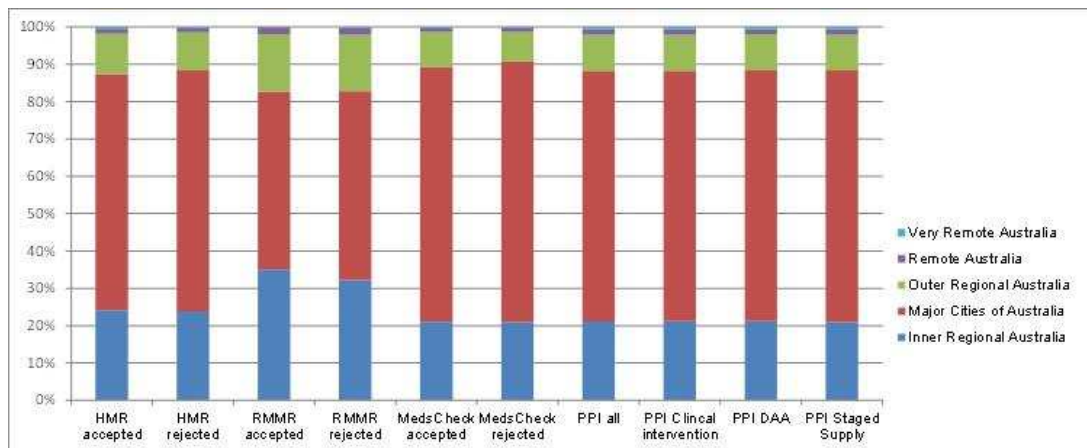
- **Consumer data:** refers to the number of consumers receiving services. This is identified by consumer data. Over time, one consumer may receive multiple services. Multiple services delivered to the same consumer may be distinguished using this dataset.
- **Accepted and rejected data:** a service may be accepted or rejected based on the service meeting the eligibility requirements for consumers and service providers. Accepted data and rejected data are separate datasets and do not include a pharmacist ID. Since service providers who are a pharmacist may only submit claims for reimbursement if registered (as above), our analyses assume that all pharmacists represented in accepted and rejected data are registered.

Specific limitations to datasets used for particular analyses are noted throughout this section to assist the reader with interpretation. Medians are mainly used to describe data, particularly where large outliers are present. However, means and ranges are provided in tables to demonstrate distribution of data. Below are the high level results from the programme data analysis.

### **Geographical trends:**

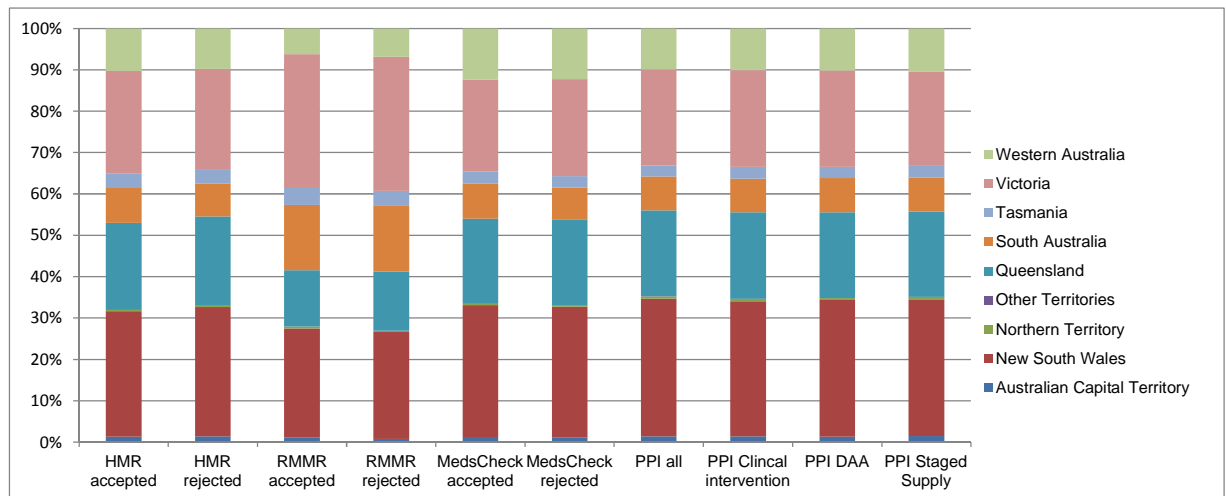
- Across Australia, the majority of pharmacists delivering Medication Management programmes and services (>45%) were located in major cities. Less than 35% were located in inner regional and less than 15% were located in outer regional areas. Less than 2% were located in remote and very remote Australia. See Figure 6 below.
- No differences were noted in the percentage of claims that were accepted and rejected for all Medication Management programmes and services by regional location or by state. See Figure 6 and Figure 7.

**Figure 6: Distribution of pharmacists across Australia delivering MM programmes and services**



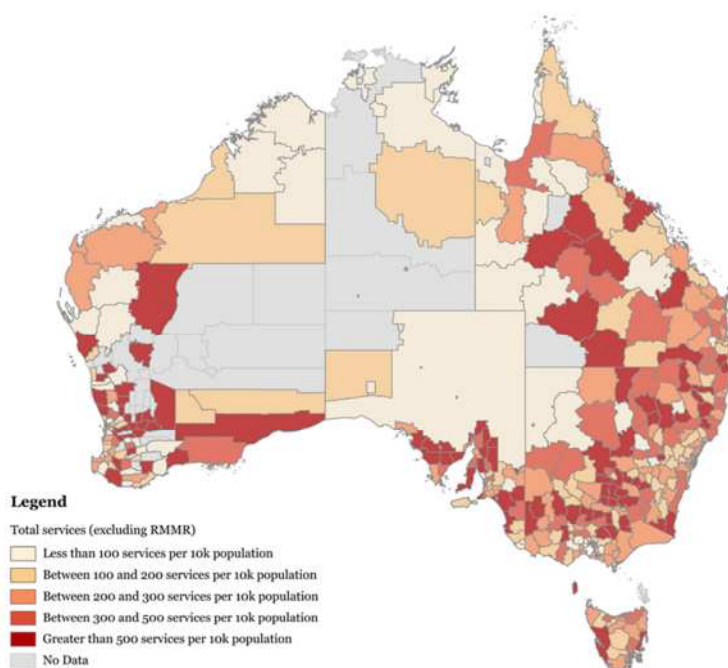
- Across Australia, approximately 30% of service providers delivering Medication Management programmes and services were located in NSW, 25% in Victoria, 20% Queensland, 10% in WA and less than 10% in all other states and territories. See Figure 7 below.

**Figure 7: Distribution of pharmacists delivering MM programmes and services across Australian states and territories**

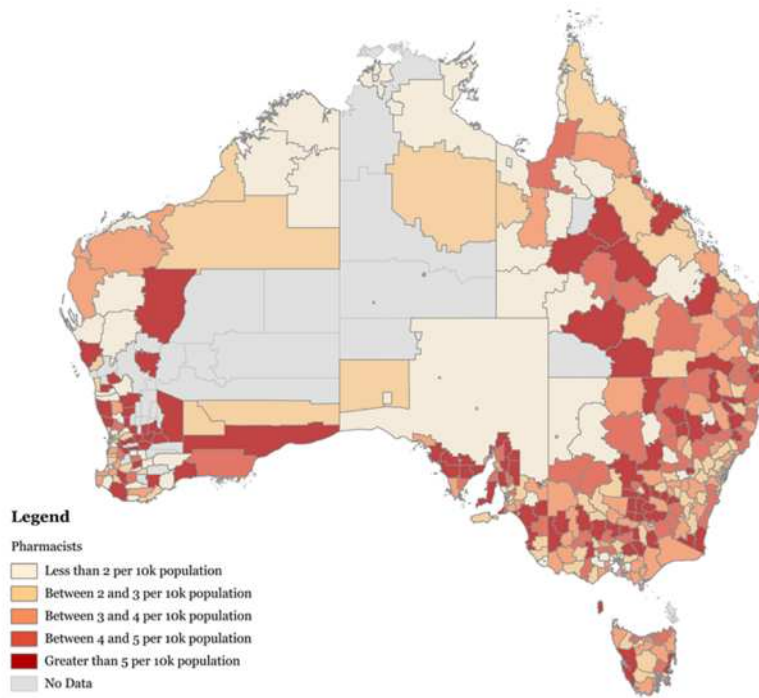


- Across Australia, Medication Management programmes and services were delivered largely in proportion to the coverage of pharmacists across Australia. See Figure 8 and Figure 9 below.
- However, some areas where a lower proportion of services were delivered relative to higher pharmacist coverage, particularly in regional areas of South Australia, New South Wales, Queensland and Western Australia and conversely, a higher proportion of services were delivered relative to a lower proportion of pharmacists. See Figure 8 and Figure 9 below.
- See Appendix A for an indicative analysis of 5CPA programme and service reach.

**Figure 8: Total MM services, excl RMMR, per 10,000 population by LGA**



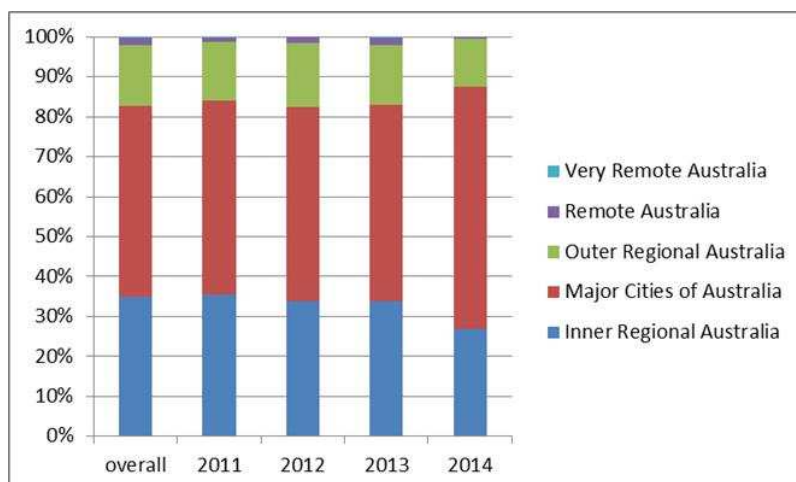
**Figure 9: Total pharmacists per 10,000 population by LGA**



RMMR service delivery differed to the geographic distribution of community pharmacy. Compared to all other services, the percentage of RMMR services delivered by pharmacists located in inner and outer regional Australia was higher in proportion to pharmacists delivering this service in major cities. See Figure 10 below.

- Differences between RMMR service delivery to other MM programmes are expected, since the delivery of RMMRs is related to the distribution of residential aged care facilities as well as community pharmacies.

**Figure 10: Percentage of RMMR services delivered by location**



## Consumer trends

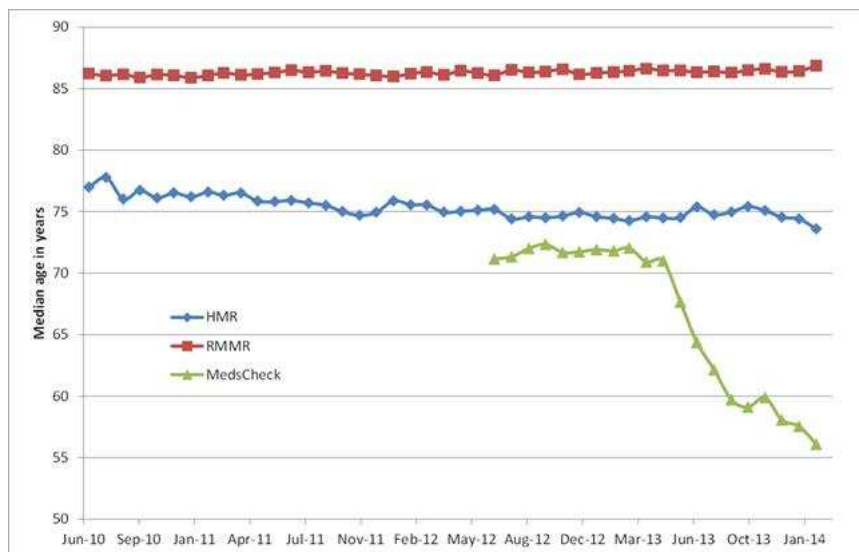
Analysis of consumer data for Medication Management programmes was conducted by merging MedsCheck claims data, HMR accepted data and RMMR accepted data by consumer ID. This analysis could not be conducted for PPI services as no consumer data was available.

- In total, 890,058 consumers received Medication Management programmes (i.e. HMR, RMMR and MedsCheck).
- The majority of consumers who received Medication Management programmes received one programme only, with similar numbers of different consumers receiving each MM programme as follows:
  - 306,713 different consumers received MedsCheck services
  - 304,510 different consumers received RMMR services
  - 278,835 different consumers received HMR services.
- Looking at the average age of consumers who received Medication Management programmes, consumers who received MedsChecks were younger by approximately 10 years compared to consumers who received HMRs, who were approximately 10 years younger than consumers who received RMMRs. See Table 2 below.
- Over the time period analysed, the average age of consumers who received RMMRs increased whilst the average age of HMR and MedsCheck consumers decreased. See Figure 11 below.

**Table 2: Average age of consumer**

Variable	Mean	Min	Max	Median
MedsChecks age in years	60.6	0.1	103.9	<b>64.0</b>
HMR age in years	72.9	0.2	113.4	<b>75.0</b>
RMMR age in years	84.7	0.6	113.1	<b>86.3</b>

**Figure 11: Median age of HMR, RMMR and MedsCheck consumer**



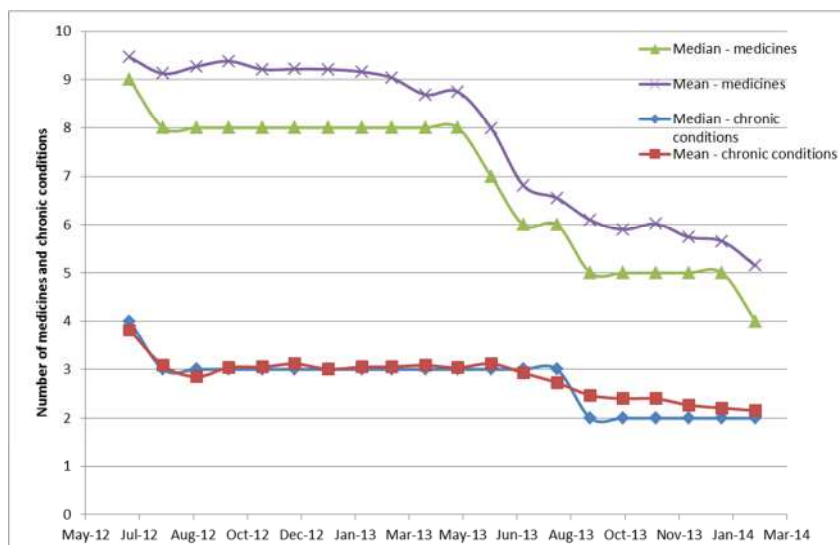
## Key findings

- Data analysed for MedsChecks demonstrate that the median number of medicines per consumer was 6 and the median number of chronic conditions per consumer was 2. Data on number of medicines and number of chronic conditions by consumer was unavailable for HMRs and are not presented here. See Table 3 below.
- Over the period of time analysed, the number of medicines per consumer and the number of health conditions per consumer decreased. Note that this data is cross-sectional, representing a general observation of trends over time and does not indicate that decreases are due to participating in the program. See Figure 12 below. Trends are based on accepted an/or paid claims using service delivery date.

**Table 3: Number of medicines and chronic conditions per consumer (MedsChecks/Diabetes MedsChecks data only)**

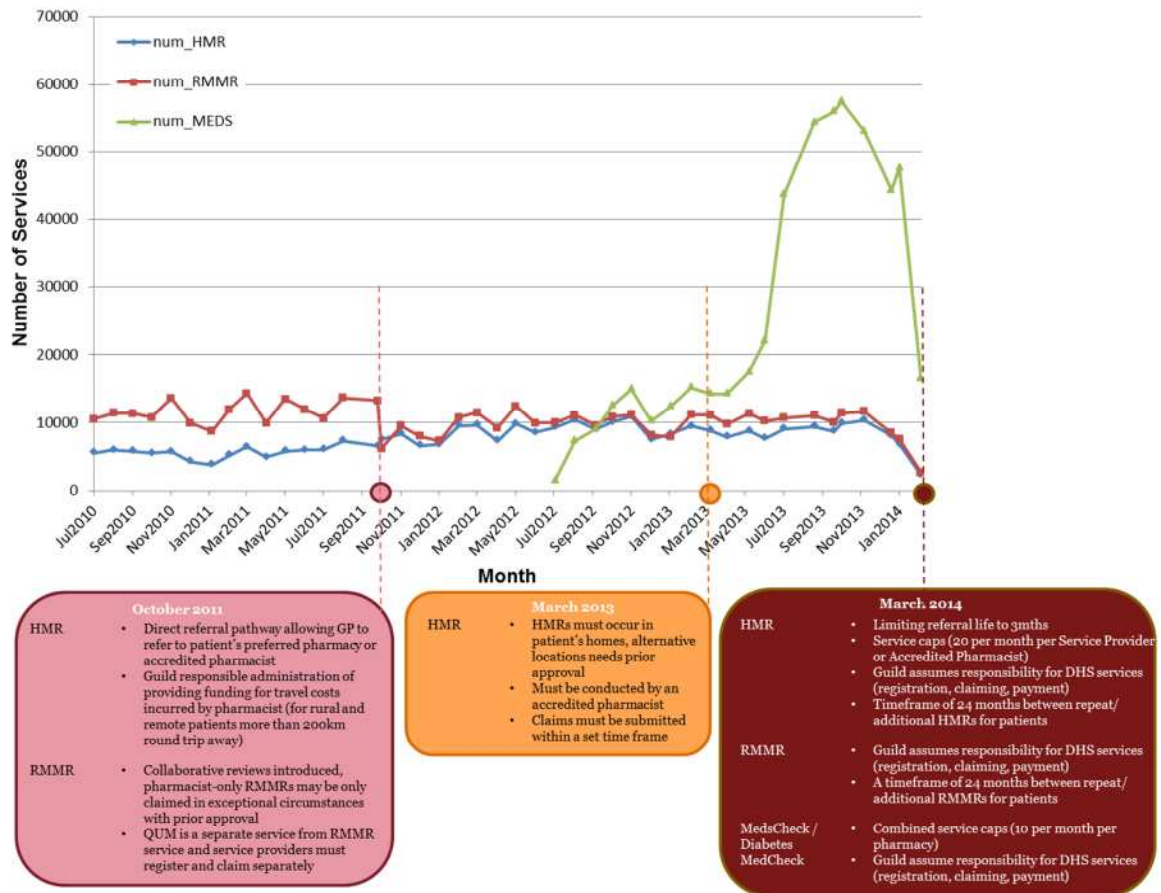
Variable	Mean	Min	Max	Median
Number of Medicines	6.9	0	98	<b>6</b>
Number of Chronic Conditions	2.6	0	74	<b>2</b>

**Figure 12: Number of medicines and chronic conditions per consumer (MedsCheck/Diabetes MedsCheck)**



- Generally, decreases in number of medicines and chronic conditions were mainly observed after March/May 2013, with minimal change evident between August 2012 and March/May 2013. See Figure 13 below.
- Figure 16 presents number of services delivered over time alongside the timing of administrative changes to the Program. The timing of the service delivery illustrated in fig 16 accurately reflects trends in service delivery over time. Since the trends are based on accepted and/or paid claims using service delivery date, the trends are not affected by administrative processes, for example delays that may have occurred from time to time in processing claims.

**Figure 13: Number of services delivered over time, against timeframes when changes to programmes/services occurred**

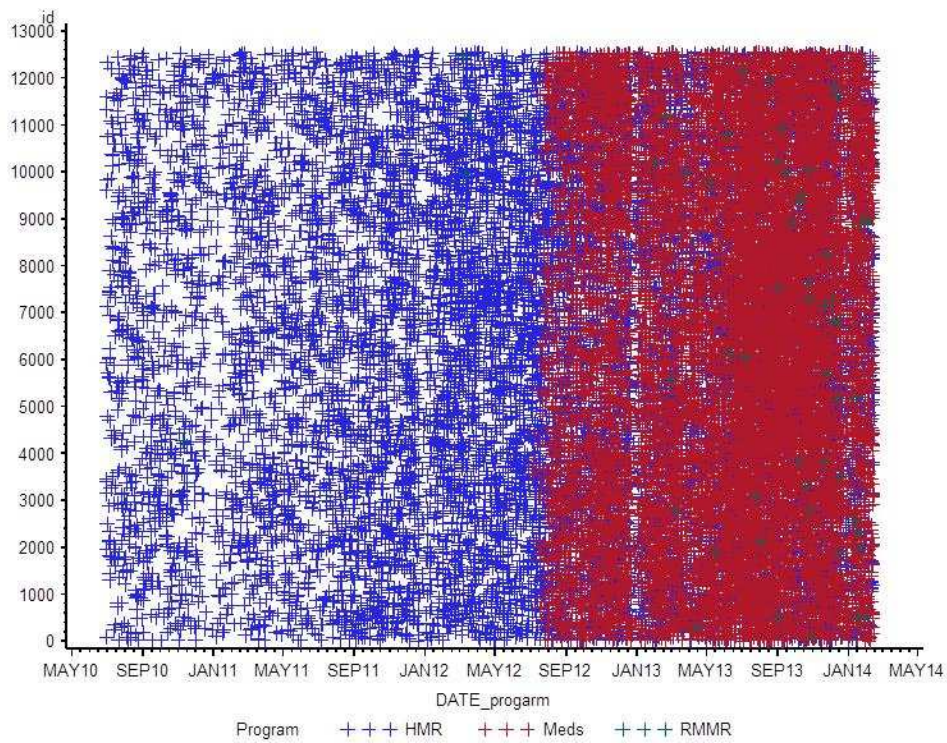


**Combinations of medication review services:**

(Note: it was only possible to link consumer data across HMR, RMMR and MedsCheck/Diabetes MedsCheck programmes).

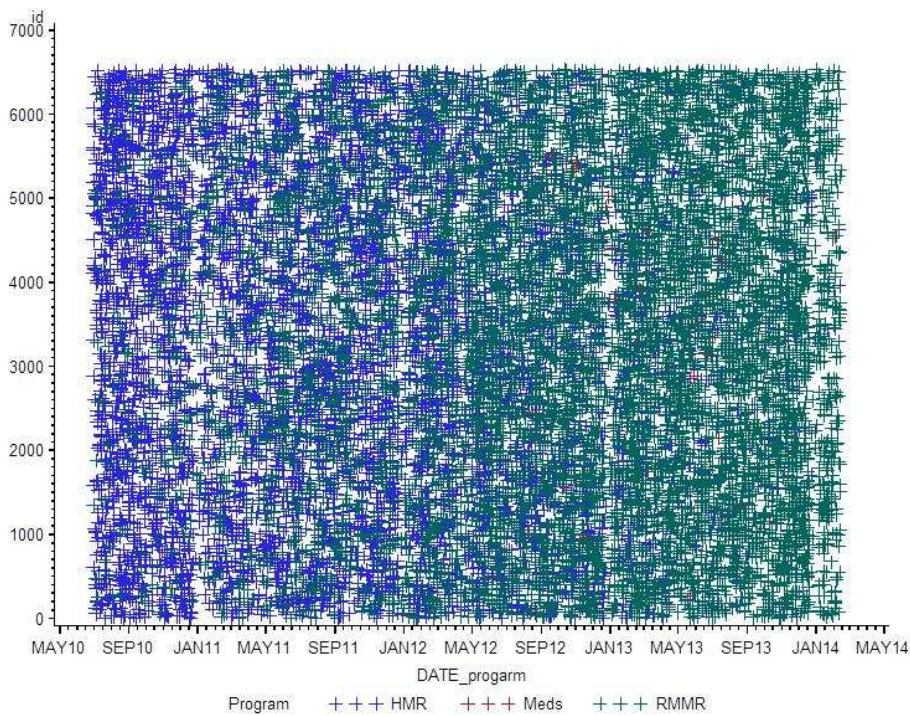
- Combinations of medication review services delivered to the same consumer over time were rare – delivered to 19,685 (2.2%) of consumers.
- 2.2% of consumers (12,574) amongst total HMR data (278,835) and MedsCheck data (306,713) received both HMRs and MedsChecks: the most common order for receiving this combination of services was a HMR followed by a RMMR. Figure 14 below shows each of the 12,574 consumers (marked per cross) receiving both services in the order in which they were received.

**Figure 14: 12,574 consumers in HMR and MedsCheck**



- 1.1% (6,529) of consumers amongst total HMR services (278,835) and RMMR services (304,510) received both a HMR and RMMR services: the most common order for receiving this combination of services was a HMR followed by a MedsCheck. Figure 15 below shows each of the 6,529 consumers (marked per cross) receiving both services in the order in which they were received.

**Figure 15: 6529 consumers in HMR and RMMR**



## Key findings

- Less than 1% of the total number of consumers that received a HMR, RMMR or MedsCheck received a combination of these services with 527 consumers receiving a combination of RMMR and MedsCheck services, and 55 consumers received a combination of HMR, RMMR and MedsCheck services.

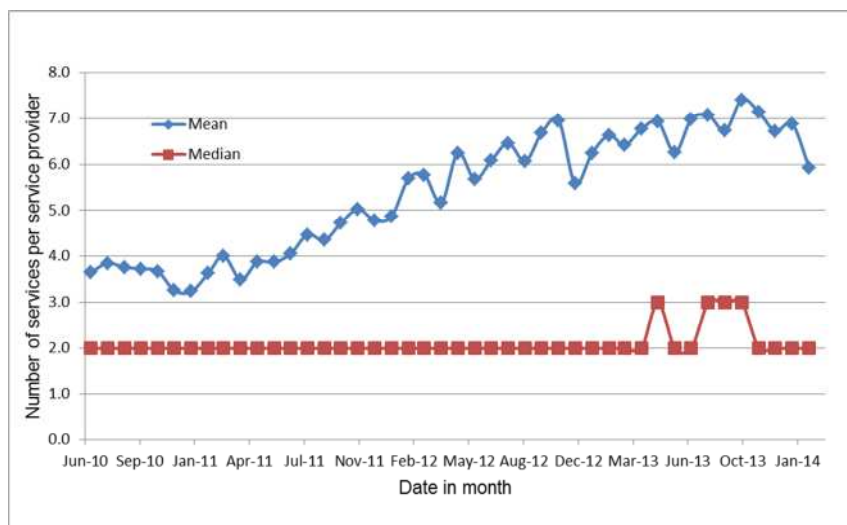
### *HMR trends*

- A combination of claims, service, accepted and rejected data was used to analyse HMR trends.
- A total of 8,159 service providers participated in delivering HMR services, of which 76% had a unique registration number and 87% submitted claims. For the 7080 service providers that submitted claims, 28% did not have a registration number.
- Total HMR services delivered was 406,041, with a median number of 16 HMR services conducted per service provider, with 50% of service providers conducting between 5 and 47 HMRs each. This remained steady over the majority of the time analysed with brief fluctuations between March 2013 and October 2013. See Table 4 and Figure 16 below.

**Table 4: HMR services delivered per service provider**

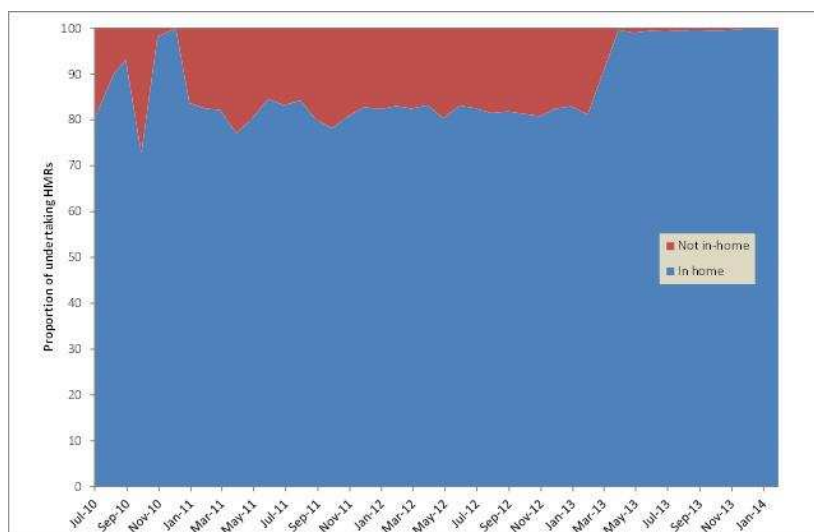
Variable	Mean	Min	Max	Median
HMR services per service provider	58.8	1	11923	<b>16</b>

**Figure 16: HMR services delivered per service provider**



- Approximately 88% of HMRs were conducted in the home during this time period. This percentage increased to almost 100% from March 2013, likely due to the introduction of a compliance requirement specifying that all HMRs must occur in the home unless prior approval is acquired – this change was introduced in March 2013. Common reasons for not conducting HMRs in the home prior to March 2013 included *patient's preference* and *patient and GP convenience and expedience*. See Figure 17 below.

**Figure 17: Location of HMRs conducted**



- A total of 43,347 (11%) HMR claims were rejected with a median of 5 rejected claims per pharmacist. The most common reasons for rejected HMR claims included *missing data* and *accredited pharmacist not known to Medicare*. See Table 5 and Figure 18 below.

**Table 5: HMR rejections per service provider**

Variable	Mean	Min	Max	Median
HMR rejections per service provider	10.9	1	3126	5

**Figure 18: Reasons for HMR rejections**



- Over the time period analysed, approximately 16,016 different GPs referred consumers to receive HMRs. The median length of time between an HMR referral and receiving the service was 12 days. See Table 6 below.

**Table 6: Time between referral and service**

Variable	Mean	Min	Median
Time between referral and service (days)	25.48	0	12

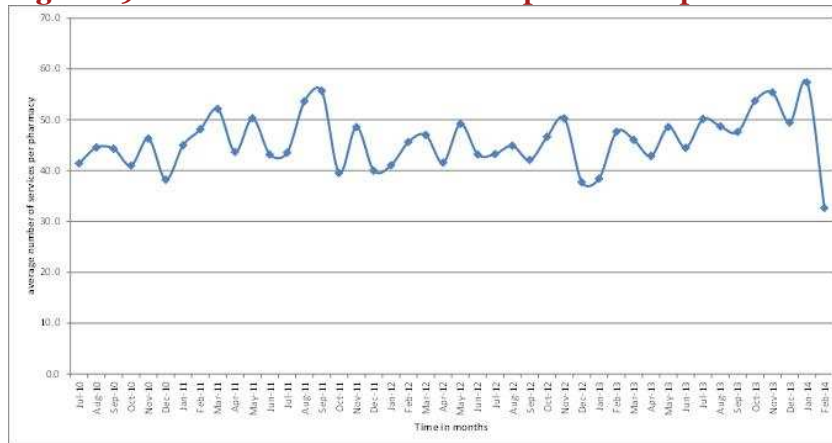
### RMMR trends

- A total of 842 service providers participated in delivering RMMR services, of which 93% had a unique registration number and 90% submitted claims. For the 755 service providers that submitted claims, 8% did not have a registration number.
- A total of 511,890 RMMR services were conducted, with a median number of 131 RMMR services conducted per pharmacist, with 50% of pharmacists conducting between 52 and 326 RMMRs each. Despite small fluctuations, the number of services conducted remained relatively consistent over the time period. See Table 7 and Figure 19 below.

**Table 7: RMMR services conducted per service provider**

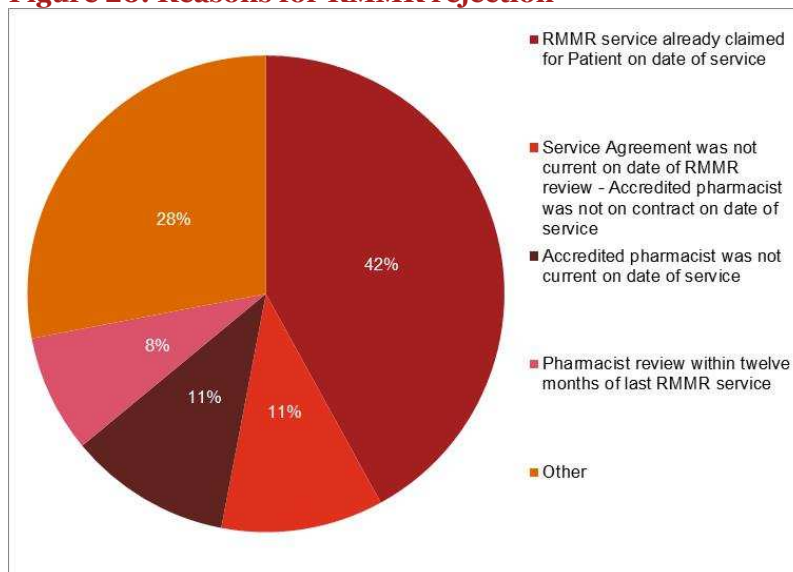
Variable	Mean	Min	Max	Median
RMMR service per service provider	678	1	60582	131

**Figure 19: RMMR services conducted per service provider**



- A total of 36,789 (7.2%) of RMMR services were rejected. Common reasons for rejection included: *RMMR service already claimed on date of service (42%), service agreement was not current on date of service (11%), accredited pharmacist was not current on date of service (11%) and pharmacist review within 12 months of last RMMR service (8.5%).*

**Figure 20: Reasons for RMMR rejection**



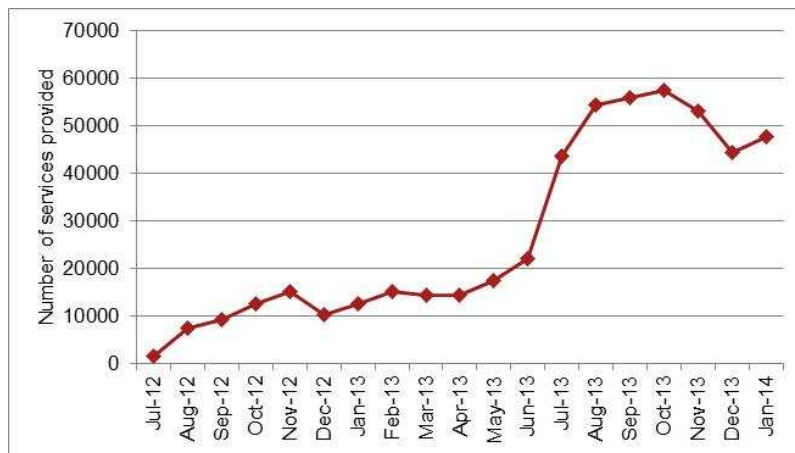
## Key findings

- Approximately 33,527 GPs (identified as having different referral identification numbers) referred consumers to receive RMMRs.

### ***MedsCheck/Diabetes MedsCheck trends:***

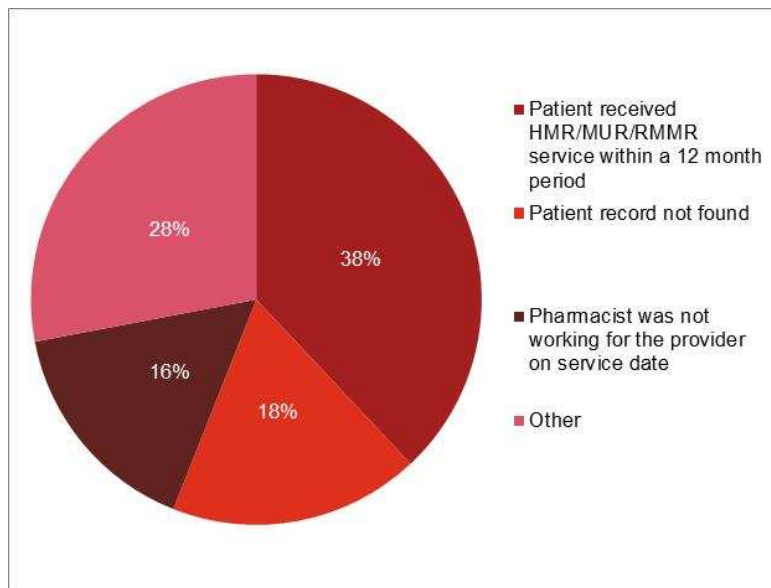
- A total of 5162 pharmacies participated in delivering MedsCheck/Diabetes MedsCheck services, of which 76% had a unique registration number, and 55% submitted claims. All pharmacies that submitted claims had a registration number.
- A total of 601,174 MedsCheck/Diabetes MedsChecks were conducted, with a median number of 53 MedsCheck/Diabetes MedsChecks provided per pharmacy, with 50% of pharmacies conducting between 7 and 86 MedsCheck services each. *Note that this analysis is conducted using claims and accepted data and excludes rejected data.*
- The number of MedsCheck/Diabetes MedsChecks provided remained relatively steady between July 2012 and May 2013, followed by a significant increase from May 2013 onwards. See Figure 21 below.

**Figure 21: MedsChecks/Diabetes MedsCheck services provided**



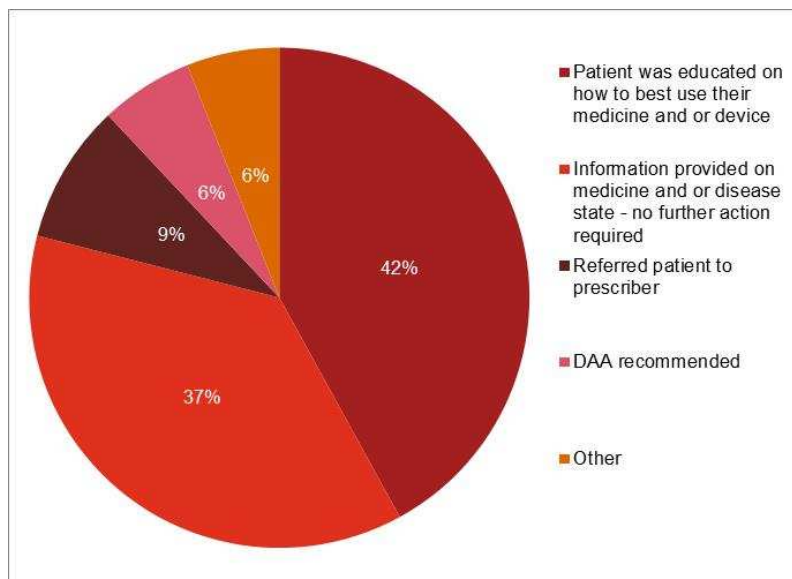
- Of the MedsCheck/Diabetes MedsCheck claims made by pharmacies, 77,231 (13%) were rejected. The most common reasons for rejection were; *patient receiving HMR/MUR/RMMR service within a 12 month period (38%), patient record not found (18%), pharmacist was not working for the provider on the service date (16%)*. See Figure 22 below.

**Figure 22: Reasons for MedsCheck/Diabetes MedsCheck rejections**



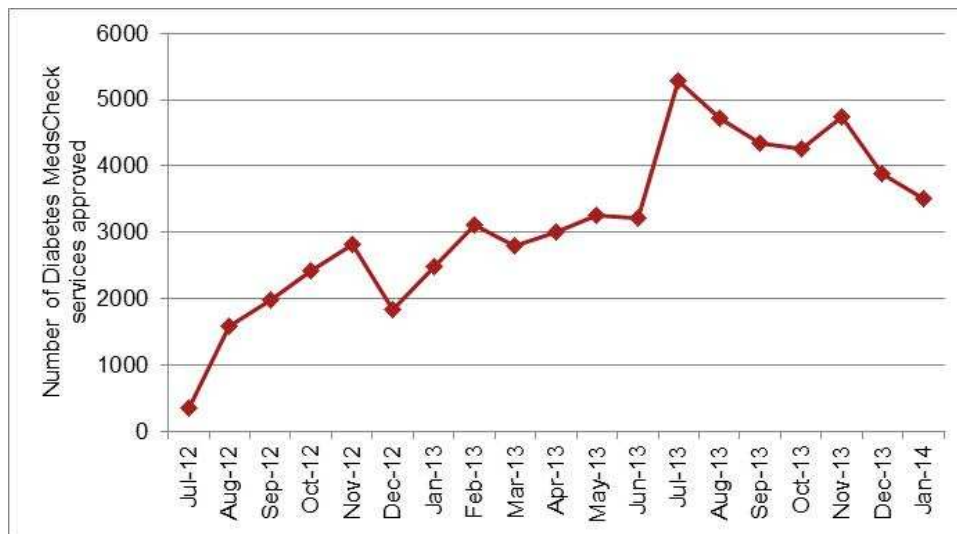
- The main outcomes and recommendations recorded for their MedsCheck/Diabetes MedsCheck service were: *patient was educated on how to best use their medicines and or device (42%), information provided on medicine and or disease state-no further action required (37%), referred patient to prescriber (9%).*
- DAAs were recommended for 34,603 (6%) of consumers and HMRs were recommended for 2,149 (<1%).

**Figure 23: Outcome for MedsCheck/Diabetes MedsCheck service**



- Of total MedsCheck/Diabetes MedsChecks services, 12% (69914) were Diabetes MedsChecks.
- 13% of Diabetes MedsChecks service claims were rejected.
- The number of Diabetes MedsChecks approved for payment over the period analysed increased (despite fluctuations) peaking in August 2013 followed by a decline. See Figure 24 below.

**Figure 24: Number of Diabetes MedsChecks paid**

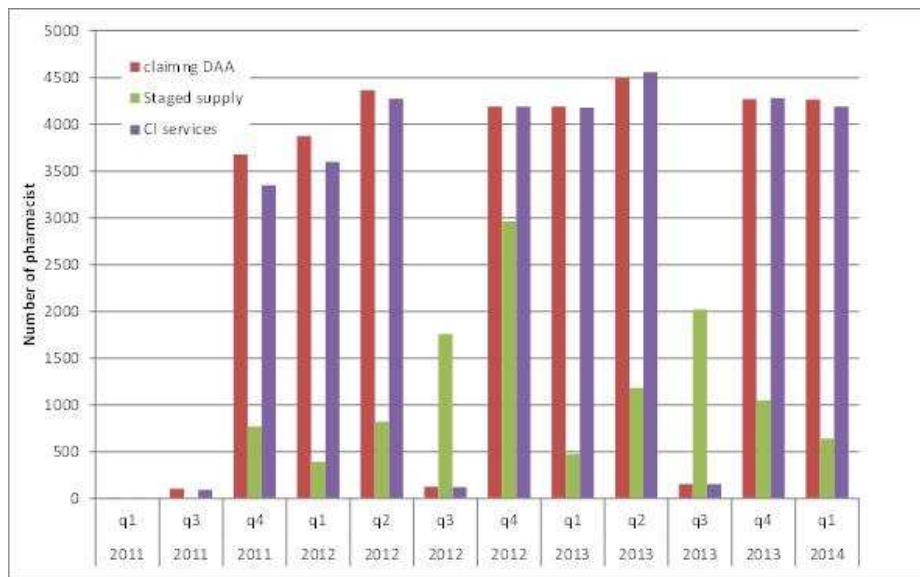


### ***PPI trends***

- PPI data was analysed using claims data. Claims for multiple DAA and Clinical Intervention services may be submitted by one pharmacy on the same claim, generating the same claim ID for these two services. The same pharmacy may also submit a claim for Staged Supply services but by generating a different claim ID on a different date. Analyses of Staged Supply services looks at the number of Staged Supply claims submitted by pharmacies that also submitted claims for DAAs and Clinical Interventions.
- A total of 6,216 pharmacies (with unique registration numbers) submitted claims for PPI services overall:
  - 5909 pharmacists submitted claims for DAAs delivered to 22,571,080 consumers<sup>2</sup>. The number of pharmacies submitting claims for DAAs and Clinical Interventions (see below) were generally comparable.
  - 5970 pharmacies submitted claims for 6,729,876 Clinical Interventions.
  - 5577 pharmacies received payments for being accredited to provide Staged supply services. The number of pharmacies receiving payments for Staged supply accreditation was smaller compared to pharmacies receiving payments for providing DAAs and/or CIs.

<sup>2</sup> This does not refer to individual consumers, as one consumer may have received multiple DAA services over the data collection period

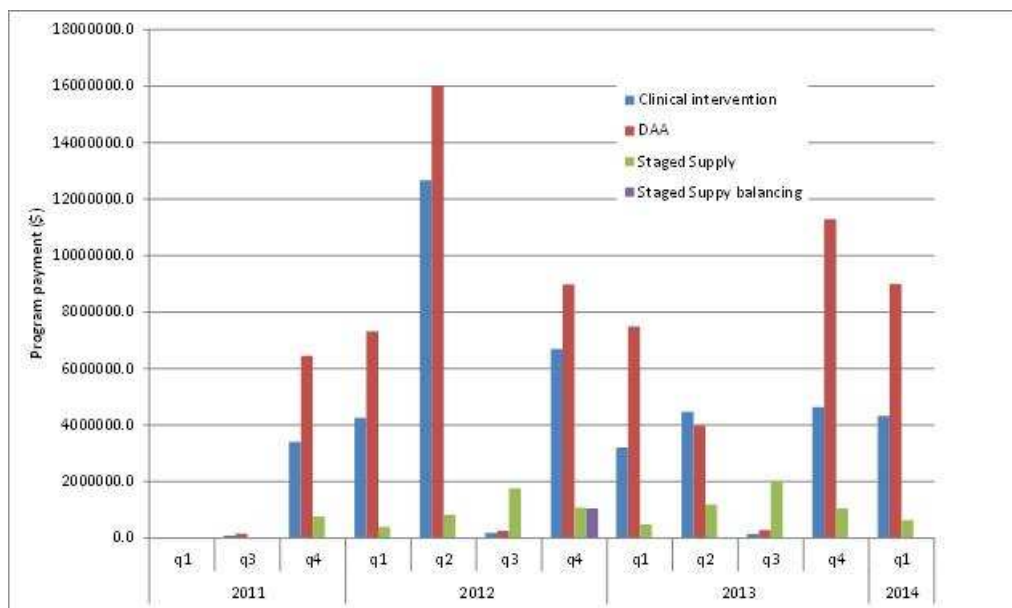
**Figure 25: Number of pharmacies claiming PPIs**



### 5CPA Expenditure

- A total of \$126,507,909 was paid as part of the PPI programme, broken down as follows:
  - A total of \$71,225,306 was paid as part of the PPI programme for DAAs
  - A total of \$44,051,451 was paid as part of the PPI programme for Clinical Interventions.
  - A total of \$10,191,000 was paid as part of the PPI programme for Staged Supply Services. In addition to this there was a once off balancing payment in 2012 of \$1,040,151.

**Figure 26: Programme payment as part of PPI programme per quarter**



## QUM

- A total of 426 service providers submitted 18,574 claims for 105,201 QUM activities.
- The most common types of QUM activities claimed were: providing drug information for medical practitioners and ACF staff (15%) and advising members of the health care team on a range of issues, including storage, administration, adverse effects and compliance (12%). Table 8 below shows numbers and types of QUM activities claimed.

**Table 8 Number and type of QUM activities**

Type of QUM activity	Frequency	Percent
Provide drug information for medical practitioners and ACF staff, including provision of newsletters.	15,751	15%
Advise members of the health care team on a range of issues, including storage, administration, dose forms, compatibilities, therapeutic and adverse effects and compliance.	12,718	12%
Provide in-service sessions for nursing staff and carers or residents on medication therapy, disease state management or prescribing trend issues.	12,047	11%
Participate in Medication Advisory Committees.	11,676	11%
Assist the facility to meet and maintain medication management accreditation standards and to comply with regulatory requirements.	10,235	10%
Advise on and assess medication storage requirements, monitoring and standards	9,161	9%
Participate in policy and procedure development activities.	6,695	6%
Assist in the development of policies and procedures to address medication management concerns	5,593	5%
Assist in the development of nurse-initiated medication lists.	5,351	5%
Conduct medication administration audits and surveys on medication errors, altered dosage forms and psychotropic drug use.	5,211	5%
Assist with the development of, and report on, quality indicators and other quality measures.	4,174	4%
Participate in Drug Usage Evaluation (DUE).	3,949	4%
Assess competency of residents to self-administer medications.	2,636	3%
Invalid Activity - Claim is rejected	4	0%
	<b>105,201</b>	<b>100%</b>

## 2.2 Stakeholder consultations

Below is a summary of the main themes that emerged from stakeholder consultations. These have been used as part of the triangulation of data collected in the evaluation to distil key findings. See Appendix C for a list of participants and consultation discussion guide.

### Summary of themes raised – stakeholder consultations

- Policy and strategy:** The majority of stakeholders indicated that the policy intent for the Medication Management programmes was in line with wider primary health care policies and also with the objectives of the 5CPA and the Quality Use of Medicines (QUM) policies. However some stakeholders did indicate that there is opportunity for the Medication Management programmes to better support primary care services by being more widely accessible to consumers. All stakeholders agreed that generally the programmes/services added value and should be part of the overall preventative strategy for consumers.
- Governance:** Some stakeholders expressed dissatisfaction with the level of transparency in the governance of the 5CPA Medication Management programmes. In particular, concerns were expressed about the 5CPA negotiations only involving the Department of Health and the Pharmacy Guild of Australia, which is only one of several peak bodies. Better representation of interests would be achieved if a broader range of peak bodies were to participate.
- Access:** The majority of stakeholders commented that Medication Management programmes were difficult to access for consumers due to: low consumer awareness; information on programmes not readily available to consumers; and low GP engagement and awareness. For CALD and Aboriginal and Torres Strait Islander populations, access was cited as particularly difficult given various cultural concerns with conducting HMRs in the home. For rural and remote communities, access was determined by the availability of an accredited pharmacist to undertake the reviews, and cost/travel time to undertake these services was a barrier for pharmacists.
- Implementation:** Many stakeholders felt that a multidisciplinary, collaborative approach to programmes/services would aid in the implementation of the programmes and benefit the impacts and outcomes for consumers. It was also suggested that funding should be allocated to support implementation to prevent inconsistencies in the way that programmes are delivered. Stakeholders also expressed concerns about the low level of implementation support provided by the credentialing body and/or the 5CPA information portal following initial training. It was generally noted that there was potential for investment in implementation activities to yield faster and more complete uptake of Programmes, as well as more consistency in the quality of delivery of Programmes. This could be interpreted to mean more resourcing, better targeted resourcing, or both.
- Interaction, delivery, reporting:** The majority of stakeholders commented that there was neither little interaction nor a clear flow between the programmes/services. It was generally acknowledged that the collaboration, communication and interaction intended in the delivery of these programmes/services was not being realised.
- Impacts and outcomes:** All stakeholders commented that Medication Management programmes were contributing to improving consumer health outcomes and consistent perceived benefits were cited as: improving consumer health; reducing hospital admissions due to medication misadventures; educating consumers about correct medication adherence; and improving consumers' confidence/compliance in taking medicines. However the majority of stakeholders also commented that impacts and outcomes of the services needed to be reviewed regularly to ensure that the budget was being well spent and cost effective. Due to the programmes and reviews being undertaken in isolation to other initiatives within primary health care, it is often difficult to attribute health outcomes to having received a Medication Management program.

Stakeholders reported that Medication Management programmes and services have facilitated better collaboration with GPs and other health professionals, however at an early stage of evolution.

- **Areas for improvement:** The most commonly cited areas for improvement were:
  - increasing education and awareness of Medication Management programmes for consumers and other health professionals
  - funding arrangements could readjust to better facilitate programme objectives, for example funding of HMRs and RMMRs could be moved out of CPA into a different funding model, such as MBS
  - improving and providing funding for models of collaboration between pharmacists and health professionals
  - applying some flexibility in the administration of the programmes and services to allow for cultural differences/rurality in certain target groups
  - quality assurance could be enhanced by applying more stringent and appropriate monitoring and auditing of programmes and services
  - applying a more sophisticated approach to collection of data, linking programme data and regular reporting to enable consumer health outcomes to be more effectively evidenced.

### *2.2.1 Purpose*

The purpose of the stakeholder consultations was to ascertain key stakeholder perspectives on the Medication Management programmes which relate to the areas of focus for the Review.

The consultations focused on better understanding the stakeholder/stakeholder organisation's views on the following:

- Involvement in Medication Management programmes, background and context for the consultation
- Medication Management programmes overall, from a policy, strategy, governance and funding perspective
- Target groups for Medication Management programmes
- Implementation of the Medication Management programmes
- Medication Management program/professional guidelines, training and support
- Medication Management programmes interaction, delivery and reporting
- Impacts and outcomes of Medication Management programmes for both primary health care and consumers
- Suggestions for improvement and other comments.

### *2.2.2 Approach*

The stakeholder consultations were semi-structured in nature, and were carried out primarily via teleconference, with four conducted in person. There were 41 consultations undertaken (with over 50 individuals) across a range of stakeholder groups (e.g. Government, peak bodies, disease and illness representative bodies, community pharmacists, general practitioners, residential aged care facilities etc.).

The stakeholders for consultation were agreed with the Department. Of those contacted to participate in the consultations, six declined to participate. There were no responses from 11 organisations/individuals, despite follow-up of original email with at least two phone calls.

A summary of consultation participants can be found in Appendix C.

As a result of advertisements for consumer focus groups, we received numerous enquiries from peak organisations and individual pharmacists regarding the project. Several of these enquiries resulted in stakeholder consultations.

A discussion guide was provided to participants prior to the consultations which outlined the context of the Review and the types of questions that would be asked. The discussion guide was circulated to our project expert advisers and the Australian Government Department of Health ('the Department') for input prior to finalisation and is included in Appendix C for reference. The discussion guide was followed closely in the consultations, each of which ran for approximately 60-90 minutes.

The consultation guide was categorised under the following key topics:

- Policy, strategy governance and funding
- Access
- Implementation
- Interaction, delivery and reporting
- Impacts and outcomes
- Areas for improvement.

Overall there were 41 consultations undertaken (with over 50 individuals) across a range of stakeholder groups (e.g. Government, peak bodies, disease and illness representative bodies, community pharmacists, general practitioners, residential aged care facilities etc.).

## 2.3 Consumer focus groups

Below is a summary of the main themes that emerged from consumer focus groups. These have been used as part of the triangulation of data collected in the evaluation to distil key findings. See Appendix D for a list of organisations approached and a consultation discussion guide.

### Summary of themes raised - consumer focus groups

- **Context:** Approximately three quarters of the consumers who participated in the focus groups had received an HMR and approximately half had received DAAs. MedsChecks and DAAs were most common amongst CALD consumers, and DAAs were most common amongst Aboriginal and Torres Strait Islander consumers. No consumers in the RMMR focus group reported having received an RMMR, it is noted that they had in fact received one however were not aware that this had been performed. No consumers had received Staged Supply. No Aboriginal and Torres Strait Islander consumers reported having received an HMR.
- **Awareness:** Most consumers, particularly Aboriginal and Torres Strait Islander consumers, noted that there was very low awareness in the community that these programmes and services are available, how to access them and the value they provide. Many more consumers could benefit from these programmes and services if they were appropriately advertised, and awareness was raised.
- **Communication:** There were mixed responses as to whether GPs and other health professionals communicate with pharmacists to manage consumers' health, however the majority of consumers felt this was a very important (some noted essential) factor when managing medicines, especially for those with complex health conditions. All Aboriginal and Torres Strait Islander consumers noted the importance of good communication with their health professionals/carers and the importance of a trusting relationship between pharmacist and consumer.
- **Areas for improvement:** HMRs were seen as highly valuable by all consumers who had received them, through preventing medicine-related adverse events and providing consumers with education and comfort that their medicines are being managed effectively. No Aboriginal and Torres Strait Islander consumers who participated in the focus group had received an HMR and participants noted that they would not feel comfortable having a pharmacist come into their home to

review their medicines.

All consumers who use DAAs, apart from Aboriginal and Torres Strait Islander consumers, found this service to be very helpful for managing multiple medicines, however the cost associated with this service was thought to be too high. Aboriginal and Torres Strait Islander consumers had mixed responses to DAAs, with some noting that DAAs took away some of the consumer's control over managing their medicines.

All CALD consumers who received a MedsChecks commented that this service was becoming common practice in a culturally friendly pharmacy, with a private consultation area, is the best way forward.

- **Where could there be change:** Many consumers noted that while MedsChecks and Diabetes MedsChecks were valuable, in order for them to be done effectively, pharmacies needed to have a private consultation space.

More awareness of medication management services is needed in the community.

Consumers who had received HMR services noted that they were a key part of maintaining their health and “keeping on top of their medicines”. HMRs were viewed to be a core part of the preventative healthcare strategy, and should be available as a yearly service.

Generic branding of medicines was a source of confusion and difficulty for many consumers, especially for CALD communities where language is a barrier. Obtaining regular medicines lists noting both names (the original and the generic) from the pharmacist could assist with this.

Aboriginal and Torres Strait Islander consumers emphasised the importance of electronically controlled health records or a system to better track pharmacy services received, particularly as they are often a transient population, moving from place to place, changing pharmacists and doctors and do not carry their health records with them. It was also noted that electronically controlled health records would enable pharmacists to identify consumers that are “doctor shopping” for multiple medications and scripts.

### *2.3.1 Purpose*

The purpose of the consumer focus groups was to gather in-depth information from consumers who have previously used or are currently using the Medication Management programmes and services to understand their experience with these programmes and services and any impacts participating in these programmes have had on their medication management.

The following key topics were explored:

- **Contextual information:** including experience with medicines, interactions with the healthcare system as a result of medicine use, relationships with healthcare professionals relating to medication management
- **Experience:** with participating in Medication Management programmes
- **Outcomes and impacts:** as a result of using Medication Management programmes
- **Satisfaction:** with using Medication Management programmes and suggestions for improvement.

### *2.3.2 Approach*

The following methods were used to recruit participants to participate in the consumer focus groups:

1. Engaging a number of consumer organisations and peak bodies to recruit suitable participants
2. Utilising our project expert advisers and their networks
3. Engaging with our network of community pharmacists to target consumers.

While sampling for the focus groups was not intended to be representative of the Australian population, broad consumer participation was encouraged to explore different groups of consumers' experiences in more detail. In order to obtain broad participation, we initially approached several national and state-based organisations to assist with circulating focus group details and recruiting participants. We approached organisations that worked directly with consumers on a daily basis and/or had existing relationships with consumers, including Asthma Australia, Consumers Health Forum, Health Issues Centre and National Seniors Australia. A full list of organisations is included in Appendix D.

A number of enquiries from peak organisations and individual health practitioners about the project were received as a consequence of this initial approach, resulting in several stakeholder consultations and additional organisations/individual pharmacists willing to assist with circulating information to their consumers. In addition to this, information was circulated by Terry White pharmacies in the Brisbane, Sydney and Melbourne CBDs to encourage their consumers to participate in the focus groups.

Despite numerous approaches to circulate information broadly and trying various recruitment strategies, we experienced considerable difficulty obtaining consumer participation in these focus groups. Six consumer focus groups were conducted with 44 participants, as outlined in Table 9. Each focus group ran for approximately 1.5 to 2 hours.

**Table 9: Consumer participation**

No	Date	Consumer group	State	Metro/rural/remote	Number of attendees	Programmes
1	12 Feb 14	RACF residents	SA	Metro	5	RMMR
2	4 Mar 14	Pain management	QLD	Rural/remote	7	HMR, DAA, CI
3	12 Mar 14	Mixed	VIC	Metro	2	None, commented on expectations
4	1 April 14	Mixed	NSW	Rural	9	HMR, DAA, CI
5	1 April 14	CALD	VIC	Metro	10	HMR, MedsCheck, DAA
6	7 Oct 14	Aboriginal and Torres Strait Islander	NSW	Metro	5	MedsCheck, DAA
					<b>44</b>	

A Consumer Focus Group Discussion Guide, reviewed and approved by the Department, was used by facilitators to ensure consistency in the information gathered across the focus groups. Prior to beginning each focus group, participants were provided with the Participant Information Sheet, which was discussed with the group and a consent form, collecting basic demographic information from each participant. Ethics approval was received from the Department of Health Human Ethics Committee prior to conducting the focus groups.

All consumer focus group discussions were facilitated by an experienced PwC project team member or our consumer project adviser, with a second PwC team member present to document the conversation. On arrival, the facilitator informed participants that their responses would be de-identified and that the views documented would be used as a part of a report on recommendations to the Department.

Participants were offered reimbursement for their local travel expenses by way of taxi vouchers or parking validation. A prize draw was explored as an incentive for participation in the focus groups (e.g. to win one of five vouchers etc.). Upon consultation with consumer organisations, we were advised that offering an incentive based on chance could be seen as devaluing their contribution to the project, so this option was removed.

Participants self-selected to participate in these focus groups, the themes presented in this report are not intended to be representative of or generalisable to the overall population, but instead provide useful information about how Medication Management Programmes and Services are used and regarded consumers.

## 2.4 Practitioner focus groups

Below is a summary of the main themes that emerged from practitioner focus groups. These have been used as part of the triangulation of data collected in the evaluation to distil key findings. See Appendix E for the consultation discussion guide.

### Summary of themes raised – practitioner focus groups

**Context:** The majority of self-selected participants were involved with HMRs and RMMRs, with some involvement in MedsCheck/Diabetes MedsCheck, DAAs, Staged Supply and Clinical Interventions.

**Consumer characteristics:** All participants noted that the programmes and services benefit a range of consumers and that there is little differentiation between high, medium and low levels of consumer need with regards to medication management. Early intervention at any level of need was seen as beneficial. The most commonly noted characteristics of consumers with medication management needs were: chronic disease and co-morbidity, poly-pharmacy, post discharge from hospital, dementia, recent change in medicines or health condition, low socio-economic status, poor health literacy, Aboriginal and Torres Strait Islander, CALD, social dysfunction, and mental/behavioural disability.

Participants also frequently noted that providing an intervention helps to better understand clinical need and that in fact in many occasions consumer needs are not evident in advance of the intervention.

**Medication Management programmes addressing consumer need:** All participants commented that, when performed well, HMR and RMMR provided the most value/benefit to the consumer in achieving positive health outcomes and providing education on medication safety and adherence, as well as providing costs savings to the health system through de-prescribing and preventing hospital admissions due to medication misadventure.

There were mixed views on the MedsCheck/Diabetes MedsCheck program, some participants noted that, when performed well, there was value by providing a medication management service to those that did not require a full review along with improving consumers' knowledge and education, whilst others expressed their concerns regarding the lack of quality of the reviews as well as the lack of collaboration with consumers' GP. It was commonly noted that MedsChecks/Diabetes MedsChecks were a good screening service for an HMR, but not a holistic view of medication management. Participants did not consider this to be an alternative for HMRs.

The majority of participants commented that Clinical Interventions, aside from being a screening tool, were not hugely valuable and presented more of an administrative burden compared to the financial and consumer benefits they bring.

DAAs were seen as an essential part of medication management in RACFs by all participants involved in RMMRs. All participants commented that DAAs address medication adherence needs in the community and reduce medication misadventure.

All participants involved in Staged Supply commented that this programme fulfils a need in the community and was a valuable service for managing medicines of vulnerable consumers, e.g. those that are drug dependent or living in a dangerous environment.

**Eligibly criteria and targeting:** Participants commented that whilst there was a target market for these programmes, there were no specific marketing strategies or recruitment activities directed at those most in need of these programmes. The majority of participants thought the eligibility criteria of the programmes were good in principle but that more consideration should be given to individual consumer need and the clinical judgement of the pharmacist.

**Implementation:** Many participants felt that a multidisciplinary, collaborative approach to programmes/services would aid in the implementation of the programmes and benefit

the impacts and outcomes for consumers. It was also suggested that funding should be allocated to support implementation to prevent inconsistencies in the way that programmes are delivered. It was generally noted that there was potential for investment in implementation activities to yield faster and more complete uptake of Programmes, as well as more consistency in the quality of delivery of Programmes. This could be interpreted to mean more resourcing, better targeted resourcing, or both. The targets might be improvement to the payment and claiming system, other administrative systems or targeting awareness of the Programmes. It was suggested that the focus should be optimising uptake of various programmes and services.

**Barriers to access:** All participants commented that the main barriers to access were: the limited awareness and engagement with the Medication Management programmes by consumers and GPs; cultural difficulties for conducting HMRs in the home for people of Aboriginal and Torres Strait Islander descent, people of CALD backgrounds, people of low socio economic status and people with behavioural or social difficulties; access to the programmes in rural and remote areas was determined by the availability of an accredited pharmacist to undertake reviews; and the cost of DAAs to consumers and RACFs.

**Policy and strategy:** The majority of participants indicated that the policy intent for the Medication Management programmes was in line with wider primary health care policies and also with the objectives of the 5CPA and the Quality Use of Medicines (QUM) policies by achieving positive health outcomes for consumers and providing education and improving consumers' confidence in taking medicines. However participants did indicate that there is opportunity for the Medication Management programmes to better support primary care services with appropriate access. All participants agreed that generally the programmes/services added value and should be part of the overall preventative strategy for consumers.

**Governance:** Some participants expressed dissatisfaction with the level of transparency in the governance of the 5CPA Medication Management programmes. In particular, concerns were expressed about the 5CPA negotiations only involving the Department of Health and the Pharmacy Guild of Australia, which is only one of several peak bodies. Better representation of interests would be achieved if a broader range of peak bodies were to participate.

**Unintended consequences:** The majority of participants commented that Medication Management programmes, particularly HMR, RMMR and MedsCheck/ Diabetes MedsCheck, unintentionally foster business models that rely on quantity rather than quality; some business entities and discounters are opportunistically taking advantage of the payments available for conducting these services and the absence of robust clinical/quality auditing procedures; some accredited pharmacists have become financially dependent on the funding received from HMRs/RMMRs.

**Interaction between programmes:** The majority of participants commented that there was little interaction and that there was not a clear flow between Medication Management programmes, each program/service was seen as fulfilling a specific purpose and do not necessarily form part of a continuum. At the same time, some participants did note that, potentially, some programmes/services could form part of a care continuum, for example a Clinical Intervention HMR could lead to another program/service, MedsCheck might act as a screening tool for an HMR.

**RACF unique features:** The majority of participants commented that complexities of geriatric pharmacology necessitate more collaboration between pharmacists and GPs, particularly with regards to the increasing complex health conditions that residents face as their body physically declines and medication needs change. Decreasing knowledge and clinical skill of RACF staff (i.e. the people who are managing/administering medications) and high staff turnover rate in RACFs was also noted as a concern. All participants involved in QUM commented on the success of these activities, which are highly beneficial particularly to nurses whom are generally receptive to the educational opportunities.

**Collaboration:** The majority of participants felt that collaboration between practitioners had improved over the years but still has a way to go. All participants agreed that there was a need for greater collaboration, and that the degree of collaboration is dependent on the level of trust and respect between the health care professionals. Case conferencing and participation in Medication Advisory Committee meetings were reported as the main

forms of successful collaboration. Some participants also commented that having a pharmacist on staff within a medical practice was a successful model of collaboration. It was also widely suggested that collaboration be funded/incentivised.

**Areas for improvement:** The most commonly cited areas for improvement were:

- **Collaboration** – the collaborative model could be improved, and ideally would include: immediate feedback between GP and pharmacist; GP and pharmacist servicing the consumer together; education between professionals; case conferencing funding for pharmacists; feedback mechanism in place and incentivised for GPs; medication chart lists provided; secure messaging between consumer, pharmacist, GP and nurse.
- **Quality assurance** – the quality assurance of programmes could be enhanced by: more stringent and appropriate monitoring and auditing of claims and services provided, allowing transparency about whether programmes and services are being conducted appropriately and holding all health practitioners to the same level of accountability; regular auditing would likely discourage undesirable practices, and allow for funding to be appropriately planned; with the ageing population, health professionals require increased clinical knowledge and expertise with the complexities of geriatric pharmacology to ensure quality is maintained.
- **Funding arrangements** – Funding arrangements could readjust to better facilitate programme objectives: funding of HMRs and RMMRs could be moved out of CPA into MBS, thereby also enabling them to be subject to the same clinical audit procedures; appropriate funding should be allocated to each health professional to incentivise collaboration for the benefit of the consumer, for example case conferencing and attendance at Medication Advisory Committee (MAC) meetings.
- **Exploring referral pathways** - More education and awareness is required for consumers and health professionals regarding programmes and the benefits they can provide, broadening referral pathway options to include hospitals, nurse practitioners and specialists, could provide greater access for consumers who may encounter barriers in accessing the programmes and services; for example, consumers may not have a regular GP or may visit a GP who is not engaged with Medication Management programmes. It was noted that broadening the referral pathway should still include communication with consumers' GP, so that they are kept informed. Whilst it was intended that HMR hospital referrals be implemented under the 5CPA, it had not been implemented at the time of this research. Eligibility criteria of the programmes should be more targeted towards individual consumer needs based on the pharmacists' clinical judgement.
- **Administrative arrangements could be more efficient** - More sophisticated collection of data and linking of programme data to other data sets such as hospital admissions, MBS and Pharmaceutical Benefits Scheme (PBS) would enable consumer health outcomes to be more effectively evidenced; some flexibility in the administration of the programmes and services should be available to allow for cultural differences in certain target groups such as Aboriginal and Torres Strait Islanders and culturally and linguistically diverse (CALD) communities.

### 2.4.1 Purpose

The purpose of the provider focus groups was to better understand the experiences, outcomes and impact of the Medication Management programmes and services from a health provider point of view – specifically general practitioner, pharmacist and residential aged care facilities. Focus groups were conducted with general practitioners, pharmacists (mix of pharmacy owners, accredited pharmacists and registered pharmacists) and residential aged care facility staff, exploring the following overarching topic areas:

- **Contextual information**, for example, what programmes and services practitioners are involved in
- **Types of consumers that generally have medication management** needs and require some form of intervention

## Key findings

- **Targeting** of and eligibility for Medication Management programmes and services including non-5CPA Medication Management programmes and services
- **Interactions** between the Medication Management programmes and services including non-5CPA Medication Management programmes and services
- **(RMMR only)** Medication management needs of consumers in residential aged care facilities
- **Collaboration** between health professionals and consumers with regards to medication management (primary focus on collaboration between health professionals)
- **Suggestions** for how to evolve services and support for improved Medication Management in the future. In particular, gaps in effort and areas of duplication.

### 2.4.2 Approach

The following three methods were used to recruit participants to the health practitioner focus groups:

1. Engaging with key peak bodies: e.g. Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Australian Association of Consultant Pharmacists, Australian Medicare Locals Alliance, National Prescribing Service, National Rural Health Alliance, National Aged Care Health Alliance.
2. Utilising our project expert advisors and their networks: in particular our pharmacy, GP and aged care advisors.
3. Engaging with our network of community pharmacists and general practitioners.

While a number of approaches were used to advertise and recruit participants to gather broad input and representation, participants self-selected to participate in consultation activities. As a result, health professionals who participated in practitioner focus groups were primarily practitioners who were already engaged in Medication Management programmes, the majority of whom were involved with HMR and RMMR programmes. Therefore, themes presented in this section of the report are not intended to be representative of or generalisable to the overall practitioner population, but instead provide useful information about how Medication Management Programmes and Services are regarded, used and implemented by health professionals.

Eleven focus groups were carried out with 67 participants, as outlined in Table 10, with each focus group running for approximately 1.5 to 2 hours.

**Table 10: Practitioner focus groups**

No	Date	Practitioner	State	Metro/rural/r emote	Number of attendees	Method
1	26 May	RACF nurses	National	Mixed	5	Teleconference
2	2 April	Pharmacists	National	Metro	7	Teleconference
3	3 April	Pharmacists	National	Metro	8	Teleconference
4	7 April	RACF nurses	NSW	Mixed	6	Face to face
5	8 April	Pharmacists	WA	Metro	8	Face to face (2 sessions on the same day)
6	10 April	Pharmacists	National	Rural/remote	8	Teleconference
7	11 April	Mixed practitioner (pharmacist, GP, nurse)	VIC	Metro	7	Face to face
8	14 April	Pharmacist	National	Metro	3	Teleconference
9	5 May	Mixed practitioner	QLD	Metro	5	Face to face

No	Date	Practitioner	State	Metro/rural/r emote	Number of attendees	Method
		(pharmacist, GP, nurse)				
10	6 May	GP	National	Mixed	3	Teleconference
11	15 May	Pharmacist	NSW	Rural	7	Face to face
					<b>67</b>	

A Practitioner Focus Group Discussion Guide, reviewed and approved by the Department, was used by facilitators to ensure consistency in the information gathered across the focus groups. The discussion guide was circulated to our project expert advisers and the Australian Government Department of Health ('the Department') for input prior to finalisation and is included in Appendix E for reference.

All practitioner focus group discussions were facilitated by an experienced PwC project team member, with a second PwC team member present to document the conversation. On arrival, the facilitator informed participants that their responses would be de-identified and that the views documented would be used as a part of a report on recommendations to the Department.

Participants were offered reimbursement for their local travel expenses by way of taxi vouchers or parking validation.

Eleven practitioner focus groups were conducted with 67 participants. Participants self-selected to participate in these focus groups, and as a result, the themes presented in this section are not intended to be representative of or generalisable to the overall practitioner population, but instead provide useful information about how Medication Management Programmes and Services are regarded, used and implemented by health professionals.

## 2.5 Practitioner survey

Below is the summary of key findings from the practitioner survey. See Appendix F for a copy of the survey tool.

Note: While out of scope for this Review, changes to 5CPA programmes and services introduced from 1 March 2014, may have influenced practitioners' responses, in particular questions regarding satisfaction with programmes and services. There is no way to determine to what extent these changes may have influenced responses.

### Summary of key findings – practitioner survey

**Participants:** 767 survey responses were received in total.

By profession: 719 pharmacists (94%); 25 GPs (3%); 23 nurses (3%).

By program/service: 80% of survey respondents were involved in HMR; 33% were involved in RMMR; 46% were involved in MedsCheck/Diabetes MedsCheck; 60% were involved in Clinical Interventions; 57% were involved in DAA; 52% were involved in Staged Supply; and 51% were involved in QUM services. 4% of practitioners were not involved in any programmes/services.

**Interaction and linkages between the programmes/services** – (asked of all survey respondents)

Less than half (42%) of total survey respondents agreed or strongly agreed that the linkages/pathways between the programmes/services were clearly identified.

Less than half (43%) agreed or strongly agreed that the programmes interact with each other appropriately and there were minimal areas of overlap or duplication.

More than half (60%) agreed or strongly agreed that there were gaps in the services provided, resulting in unmet needs of the consumer.

**Factors influencing clinical decision making** – (asked of pharmacists and GPs)

The vast majority of pharmacists and GPs reported the top three factors influencing clinical decision-making were:

- the complexity of the consumer's medication regime (90%)
- the level of medication adherence/compliance (83%); and
- the relationship with/knowledge of the consumer and their medication needs (82%).

Among pharmacists involved in each 5CPA service, the most common aspects of consumer's needs influencing clinical judgement to provide a particular service were:

HMR: to better assess the medicines that the consumer is taking (87%); enabling a more in-depth discussion with the consumer (86%); and better understand other factors that may impact on the consumers' health (85%).

RMMR: collaboration can occur with GP and facility staff who will be administering the medicines (94%); to better understand other factors in the facility that may impact on the consumers' health (84%); and to better assess the medicines that the consumer is taking (66%).

MedsCheck/Diabetes MedsCheck: being able to address the consumers' needs right away (82%); consumer needs educating about medicines/health conditions (80%); and consumer may require a less intensive medicines review (67%).

Clinical Interventions: the consumer has an acute need for assistance with their medicines (78%); the consumer needs educating about medicines/health conditions (75%); and allows better documentation/record of what I do (70%).

The majority of pharmacists reported that the point at which they make the clinical decision to provide a particular service/intervention was: when a referral for service is received from a GP (76%), or, somewhat less commonly, during interaction with the consumer during the dispensing process (63%). Only half of responding pharmacists reported making clinical decisions about service provision through delivery of a clinical intervention (50%).

#### **Screening/diagnostic/intervention tools** - (asked of pharmacists only)

Overall, HMR, RMMR, MedsCheck/Diabetes MedsCheck and Clinical Interventions were not viewed as screening and diagnostic tools. Rather, they were viewed as either predominantly medication management intervention tools or medication risk prevention tools.

DAA and Staged Supply services are viewed as being purpose specific, with non-adherence the main reason for recommending a DAA (78%) and risk of intentional misuse as the main reason for recommending consumers receive Staged Supply (67%).

Clinical Interventions were seen by the majority of participants (69%) to be quite distinct from advice given during routine counselling that occurs during dispensing.

#### **Satisfaction** - (asked of all practitioners who reported involvement in the particular service)

Health professionals reported differing levels of satisfaction for involvement with particular services. A majority reported being satisfied or very satisfied with their involvement in DAA (77%) and CI (67%) programmes/services. Just over a half of those involved in HMR (60%) MedsCheck (57%) SS (55%) and RMMR (55%) reported being satisfied or very satisfied.

For those who noted being dissatisfied or very dissatisfied with their involvement in programmes and services, the greatest level of dissatisfaction was for HMRs (20%). Across HMRs, RMMRs and MedsChecks, the majority noted their reason for dissatisfaction was due to the regular policy changes, particularly the recent capping, and expressed discontent at the limited peak body representation.

The vast majority of health professionals reported being satisfied or very satisfied with the benefit their consumers receive through programmes/services: DAA 95%; HMR 92%; RMMR 83%; MedsCheck 80%; CI 79%; Staged Supply 65%. Dissatisfaction with the benefit their consumers received was minimal, below 3% for each of the programmes

and services. **Non participation in 5cpa Medication Management programmes and services** - (asked of respondents who reported not being involved in the particular service)

The most common reasons for not being involved in particular programmes/services was that they were not applicable to their working arrangements: not being accredited/approved to provide the service, the service not being available in the pharmacy they work in, or facility service agreement not in place.

Other common reasons for not being involved in programmes and services: not having enough time and capping making participation in the programmes not financially viable.

**Collaboration** – (asked of all respondents who reported involvement in the particular services)

GPs reported communicating with pharmacists after the service somewhat more commonly than pharmacists reported communicating with the GP (asked of pharmacists and GPs).

- For pharmacists that were involved in Medication Management services (i.e. HMR, RMMR and MedsCheck/Diabetes MedsCheck), just over half (59%) of survey respondents noted they communicated with the GP after the service was delivered either every time or almost every time.
- For GPs, the majority (71%) noted they communicated with the pharmacist after the service was delivered either every time or almost every time.

There was consistency in the views of the value pharmacists bring to the care team (asked of all GPs and nurses):

- An additional clinically appropriate health provider to screen consumers for medication management issues (86%) and specialist knowledge of medicines (82%) were reported by both GPs and nurses as the main areas of value that a pharmacist brings to their consumers.
- GPs were consistent in their views of the main triggers to bring a pharmacist into their consumer's care team (only asked of GPs): when it is clear that a consumer needs an intervention for their medication management/adherence (83%); and /or, when it is clear a consumer needs an HMR (79%).

The majority of GPs reported several other influential factors when bringing pharmacists into their consumers' care:

- As a source of up to date information on existing or new drugs (75%); and as a core part of team care arrangements (75%).

### **Training and education**

The majority of health professionals (72%) said they had received training and education for Medication Management programmes and services.

The majority of all health professionals (68%) agreed or strongly agreed that they would benefit from further education and training to deliver or support these programmes and services.

In addition, the majority of pharmacists (69%) agreed or strongly agreed that they would benefit from further (clinical) education and training to improve their screening/diagnostic skills to better understand consumers' needs at any point in time.

## **2.5.1 Purpose**

The purpose of the online practitioner survey was to obtain a programme view of key practitioner indicators (e.g. satisfaction, facilitators/barriers, service delivery model, collaboration etc.) in relation to their participation in the programmes/services. The data will be used to augment any existing practitioner programme data results.

The practitioner survey tool (see Appendix F) consisted of 59 questions designed to explore health professionals':

- Current involvement in medication management programmes and service

## Key findings

- Views on the coordination and integration of the programmes and services
- Decision factors and clinical judgement used with regards to the programmes and services
- Frequency and methods of communication
- Views on impacts and outcomes of the programmes and services
- Views on education and training with regarding the programmes and services
- Suggested areas for improvements to the programmes and services.

### 2.5.2 Approach

#### Survey design

The online practitioner survey tool was informed by the findings of the gap analysis performed on the programme data and the finding from the practitioner focus groups.

The draft survey tool was developed by PwC in conjunction with project advisers, reviewed by the Department, with subsequent revisions made.

Whilst the final approved practitioner survey tool contained 59 questions in total, not all questions were asked of each respondent. The tool was filtered based on which profession and involvement in which medication management programmes were selected.

Roy Morgan Research was engaged to undertake programming and hosting of the survey via an online questionnaire (Computer Assisted Web-Interview). The survey was estimated to take between 15 and 20 minutes to complete and was in field for approximately 3 weeks. All completed surveys went into a draw to win one of three Apple products worth over \$600.

#### Sampling methodology

The methodology for sampling practitioners through this survey sought participation through two methods: (1) the survey link was sent via email to targeted pharmacists who fit certain claiming profiles; and (2) a broad distribution of the survey link was sent via peak bodies and organisations to their members.

- For the targeted approach to pharmacists, we aimed to sample approximately 300-400 pharmacists from each of the following 6 claiming profiles over the 5CPA data collection period (1 July 2010 to 28 Feb 2014):
  1. Claiming for all programmes except RMMR, but more than 55% of claiming is for HMR - Result: 62 pharmacists claim majority HMR, proportionate to their total claiming pattern
  2. Claiming for RMMR and PPI and/or MedsCheck, but more than 55% of claiming is for RMMR - Result: 204 pharmacists claim majority RMMR, proportionate to their total claiming pattern
  3. Only HMR or RMMR or both (no MedsCheck or PPI) - Result: 3,007 pharmacists only claim for HMR or RMMR or both, no MedsCheck or PPI (randomly selected 400 for inclusion in sample)
  4. MedsCheck/Diabetes MedsCheck plus all others except RMMR, but over 75% is MedsCheck/Diabetes MedsCheck - Result: 113 pharmacists do majority MedsCheck/ Diabetes MedsCheck, proportionate to their total claiming pattern
  5. Claiming for everything, PPI approximately 55%, MedsCheck/Diabetes MedsCheck 30% then HMR or RMMR 15% - Result: No pharmacists claim in this pattern

## Key findings

- No pattern for claiming, tend to use all things most of the time, equally or 'other' -  
Result: Randomly selected 400 pharmacists that don't fit any of the above profiles.

In total, a sample of 1613 pharmacists fitting the above claiming profiles was extracted from 5CPA programme data, for which email addresses were available for 1061. These 1061 pharmacists were sent emails directly inviting them to participate in the online survey.

- For the broad sampling approach, the link to the survey was distributed by peak bodies and other organisations via communication tools like websites, newsletters, weekly publications and electronic notice-boards. Peak bodies and organisations that distributed information about the project, survey and survey link included Pharmacy Guild of Australia, Pharmaceutical Society of Australia (PSA), Australian Association of Consultant Pharmacy (AACP), Professional Pharmacists Australia (PPA), Pharmacy Daily publication, Rural Doctors Association of Australia (RDAA), Australian College of Rural and Remote Medicine (ACCRM), Royal Australian College of General Practice (RACGP), and Australian College of Nursing (ACN).

## Survey analysis

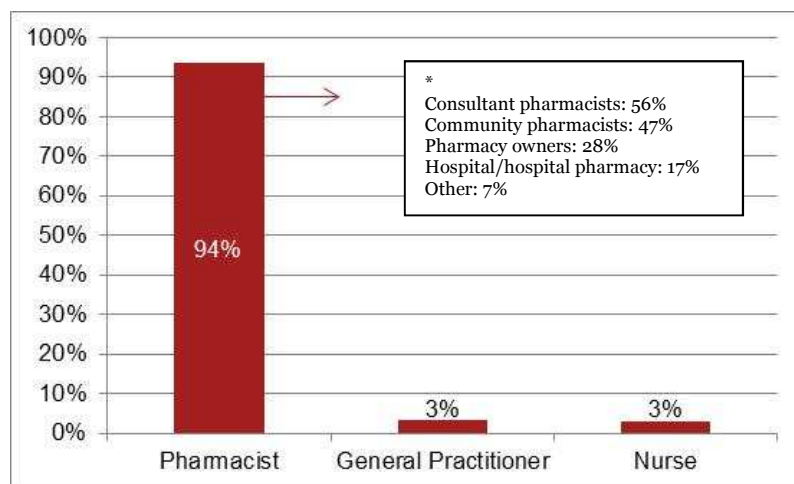
The analysis of the survey data was undertaken by the George Institute, in collaboration with PwC. Descriptive analysis only was undertaken, every survey question was described using number and percentage for categorical variables and mean and standard error for continuous variables.

## 2.5.3 Results

### Participants

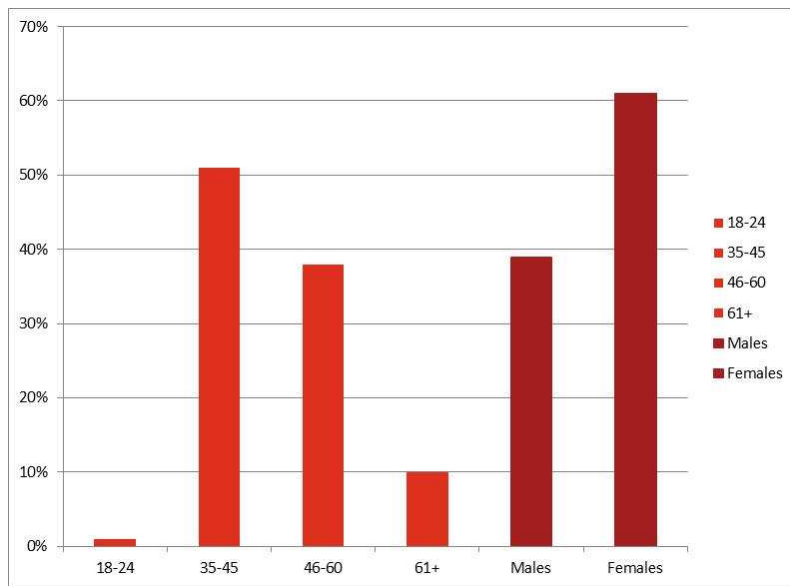
In total, 767 survey responses were received; 719 pharmacists; 25 GPs; 23 nurses.

**Figure 27: Professions of survey participants**

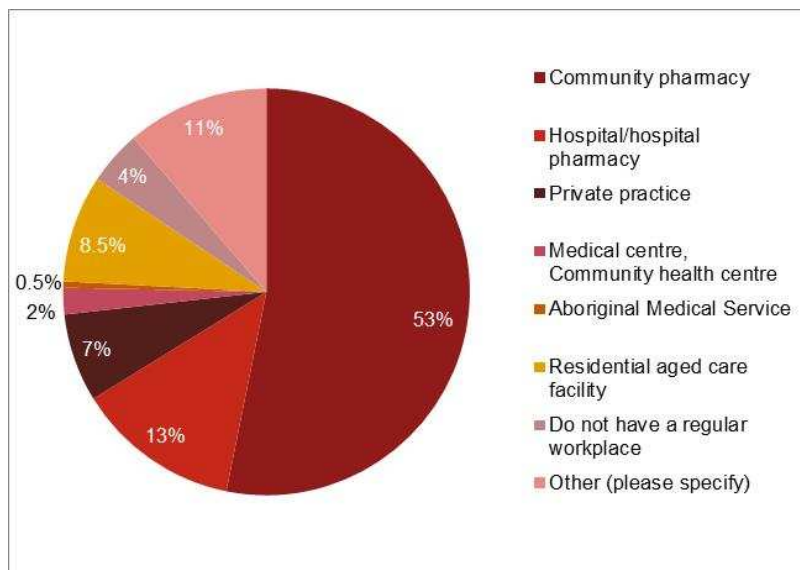


\*participants could choose multiple responses; therefore individual pharmacists may perform multiple roles.

**Figure 28: Age and gender of survey participants**

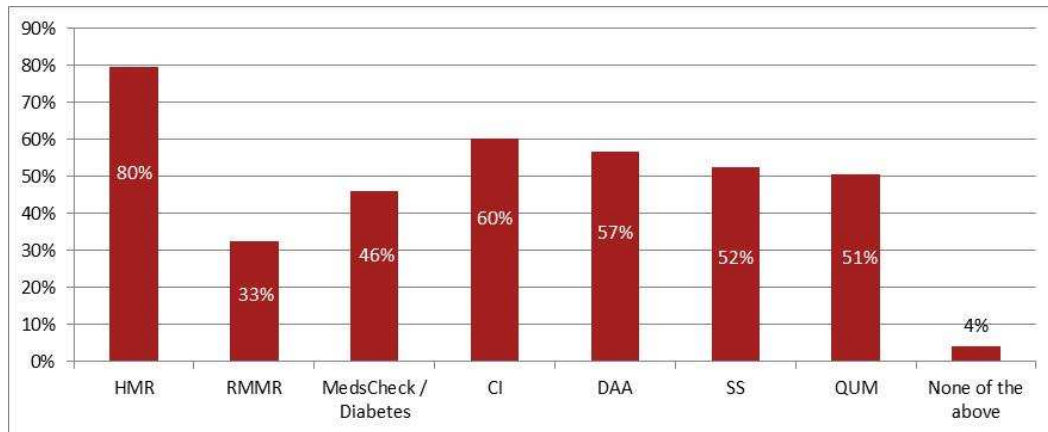


**Figure 29: Types of workplaces where survey participants spend the majority of their time**



The majority of participants (80%) were involved in HMR, with RMMR having the least involvement (33%).

**Figure 30: Participant involvement with Medication Management programmes/services**



***Interaction and linkages between the programmes/services***

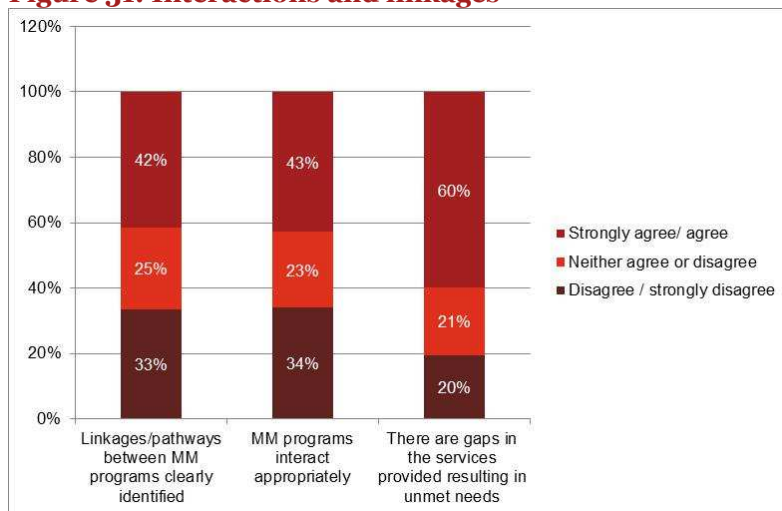
*(Asked of all participants)*

Less than half (42%) of total survey respondents agreed or strongly agreed that the linkages/pathways between the programmes/services were clearly identified. Less than half (43%) agreed or strongly agreed that the programmes interact with each other appropriately and there were minimal areas of overlap or duplication.

More than half (60%) agreed or strongly agreed that there were gaps in the services provided, resulting in unmet needs of the consumer.

This was also reflected in stakeholder consultations and practitioner focus groups, with the majority of participants noting little integration or interaction between programmes and services, and that there did not seem to be a clear flow from one programme or service to another. Each programme and service was viewed to fulfil a specific purpose and did not necessarily form part of a continuum or a hierarchy of programmes and services.

**Figure 31: Interactions and linkages**



## ***Factors influencing clinical decision making***

(Asked of pharmacists and GPs)

The vast majority of pharmacists and GPs reported that top three determining factors influencing clinical decision-making were:

- 1 The complexity of the consumer's medication regime (90%)
- 2 The level of medication adherence/compliance (83%)
- 3 The relationship with/knowledge of the consumer and their medication needs (82%)

See Table 11 below for the full list of response options:

**Table 11: Reasons influencing clinical decision making**

<b>Factors</b>	<b>%</b>
1 The complexity of the consumer's medication regime	90%
2 The level of medication adherence/compliance	83%
3 Your relationship with/knowledge of the consumer and their medication needs	82%
4 Recent events or incidents that the consumer has had	76%
5 The number of medicines the consumer is taking	75%
6 The consumer's health literacy	74%
7 Information received from another health professional	67%
8 Availability of your time to speak to the consumer	45%
9 Having provided another medication management or PPI service to the consumer	34%
10 The fee associated with the program/service	31%
11 Other reason not mentioned above (please specify)	15%

Among pharmacists involved in each 5CPA service, the most common aspects of consumer's needs influencing clinical judgement to provide a particular service were:

**HMR:** to better assess the medicines that the consumer is taking (87%); enabling a more in-depth discussion with the consumer (86%); and better understand other factors that may impact on the consumers' health (85%),

See Table 12 below for the full list of response options:

**Table 12: Factors influencing HMR clinical decision making**

<b>Factors</b>	<b>%</b>
1 I can see/better assess the medicines that the consumer is taking	87%
2 It enables me to have a more in-depth discussion with the consumer	86%
3 I get to see/better understand other factors that may impact on the consumers health	85%
4 Family members and/or carers can be involved	80%
5 I can spend a longer period of time with the consumer	78%
6 There is more privacy/ the consumer is more comfortable than in the pharmacy	76%
7 I feel the consumer will get a greater benefit/outcome than in the pharmacy	68%
8 Other reason not mentioned above	19%
9 I get better remunerated by going to a consumers home	18%

## Key findings

RMMR: collaboration can occur with GP and facility staff who will be administering the medicines (94%); to better understand other factors in the facility that may impact on the consumers' health (84%); and to better assess the medicines that the consumer is taking (66%).

See Table 13 below for the full list of response options:

**Table 13: Factors influencing RMMR clinical decision making**

	<b>Factors</b>	<b>%</b>
1	Collaboration can occur with GP and facility staff who will be administering the medicines	94%
2	I get to see/better understand other factors in the facility that may impact on the consumers health	84%
3	I can see/better assess the medicines that the consumer is taking	66%
4	It is procedure to conduct a medicines review upon admission to the aged care facility	55%
5	Family members and/or carers can be involved	54%
6	I get remunerated by going to the facility to conduct the review	33%
7	Other reason not mentioned above	15%

MedsCheck/Diabetes MedsCheck: being able to address the consumers' needs right away (82%); consumer needs educating about medicines/health conditions (80%); and consumer may require a less intensive medicines review (67%).

See Table 14 below for the full list of response options:

**Table 14: Factors influencing MedsCheck/Diabetes MedsCheck clinical decision making**

	<b>Factors</b>	<b>%</b>
1	I can address the consumers' needs right away	82%
2	The consumer needs educating about medicines/health conditions	80%
3	The consumer may require a less intensive medicines review	67%
4	I can capitalise on the consumer being in the pharmacy	64%
5	The consumer was not referred by a GP	54%
6	It is more convenient for me	39%
7	The level of remuneration	24%
8	Other reason not mentioned above	11%

Clinical Interventions: the consumer has an acute need for assistance with their medicines (78%); the consumer needs educating about medicines/health conditions (75%); and allows better documentation/record of what I do (70%).

See Table 15 below for the full list of response options:

**Table 15: Factors influencing Clinical Interventions decision making**

	<b>Factors</b>	<b>%</b>
1	The consumer has an acute need for assistance with their medicines	78%
2	The consumer needs educating about medicines/health conditions	75%
3	Allows better documentation/record of what I do	71%
4	Allows me to spend more time with the consumer than the counselling	40%
5	The level of remuneration	30%
6	Other reason not mentioned above	16%

The majority of pharmacists reported that the point at which they make the clinical decision to provide a particular service/intervention was: when a referral for service is received from a GP (76%), or, somewhat less commonly, during interaction with the consumer during the dispensing process (63%). Only half of responding pharmacists reported making clinical decisions about service provision through delivery of a clinical intervention (50%).

See Table 16 below for full list of response options:

**Table 16 Point at which pharmacists make the clinical decision to provide a particular service**

	<b>Points in time when decision is make to provide a service</b>	<b>%</b>
1	When a referral for service is received from a GP	76%
2	During the interaction with the consumer in Pharmacy - through the dispensing process	63%
3	During the interaction with the consumer in Pharmacy - through the delivery of a clinical intervention	50%
4	After delivery of another service to a consumer	26%
5	During/after a visit to a consumer's home	23%

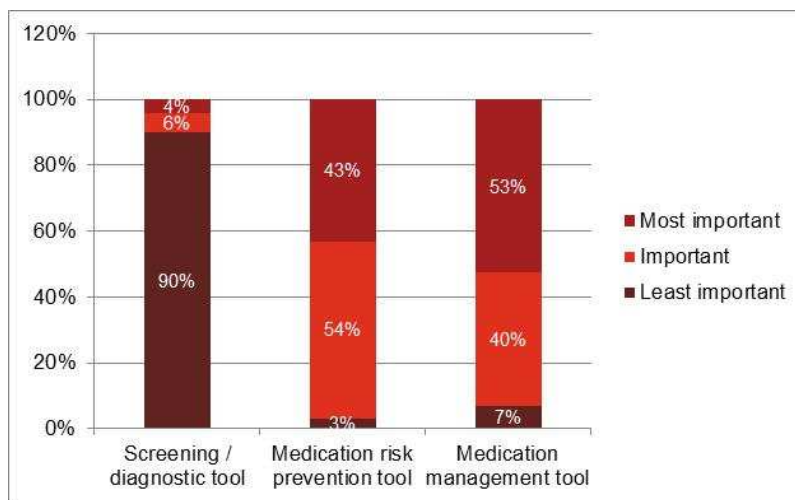
Points in time when decision is make to provide a service		%
6	Other	10%

### Screening/diagnostic/intervention tools

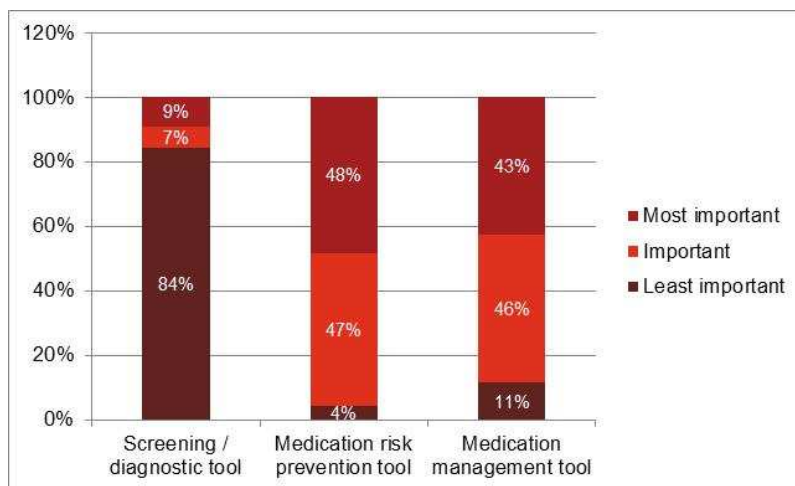
(Asked of pharmacists only)

Overall, HMR, RMMR, MedsCheck/Diabetes MedsCheck and Clinical Interventions were viewed as either predominantly medication management intervention tools or medication risk prevention tools rather than screening and diagnostic tools. See Figure 32, Figure 33, Figure 34 and Figure 35 below:

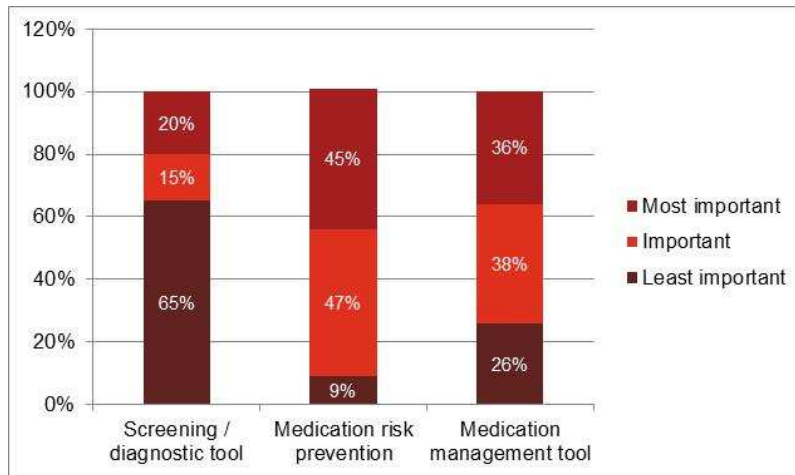
**Figure 32: Screening/diagnostic/intervention tool - HMR**



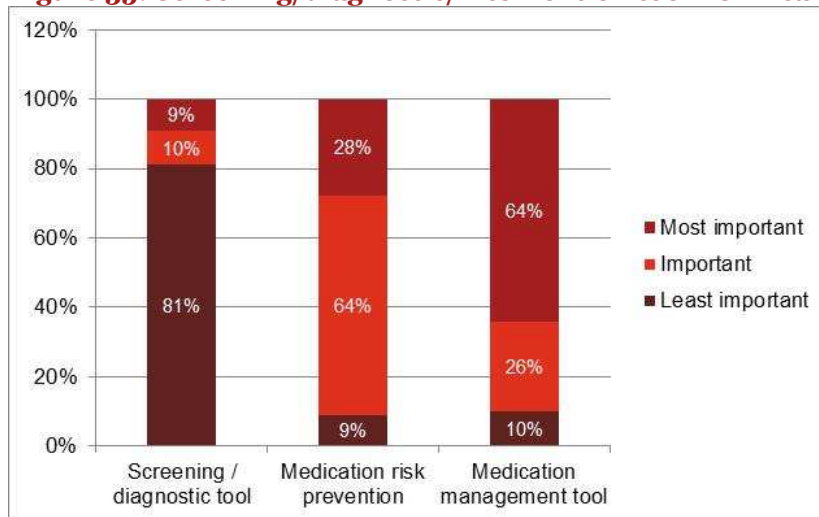
**Figure 33: Screening/diagnostic/intervention tool – RMMR**



**Figure 34: Screening/diagnostic/intervention tool - MedsCheck/Diabetes MedsCheck**



**Figure 35: Screening/diagnostic/intervention tool - Clinical Interventions**



DAA and Staged Supply services are viewed as being purpose specific, with non-adherence the main reason for recommending a DAA (78%) and risk of intentional misuse as the main reason for recommending consumers receive medicines under a Staged Supply arrangement (67%). See below for full list of response options:

**Table 17 Participants selected their top three reasons for recommending consumers to use a DAA**

Reasons for recommending consumers to use a DAA	%
1 Non-adherence	79%
2 Age/mental frailty	42%
3 Risk of medication misadventure	40%
4 Recent medication misadventure	38%
5 5 or more medicines	35%
6 Poor health literacy	24%
7 Complex condition/co-morbidity	15%
8 Recent discharge from hospital	12%
9 High risk medicines	6%
10 Recent changes in health conditions	5%
11 Other (please specify)	3%
12 Interactions between medicines	1%

13 Recent changes in living conditions 1%

**Table 18 Participants selected their top three reasons for recommending consumers receive services under Staged Supply arrangement**

Reasons for recommending consumers to receive Staged Supply	%
1 Risk of intentional misuse	67%
2 High risk medicines	35%
3 Recent medication misadventure	34%
4 Risk of medication misadventure	32%
5 I never recommend	29%
6 Unintentional non-adherence	20%
7 Other (please specify)	8%
8 Age/mental frailty	7%
9 Poor health literacy	6%
10 Complex condition/co-morbidity	3%
11 Recent changes in living condition	2%

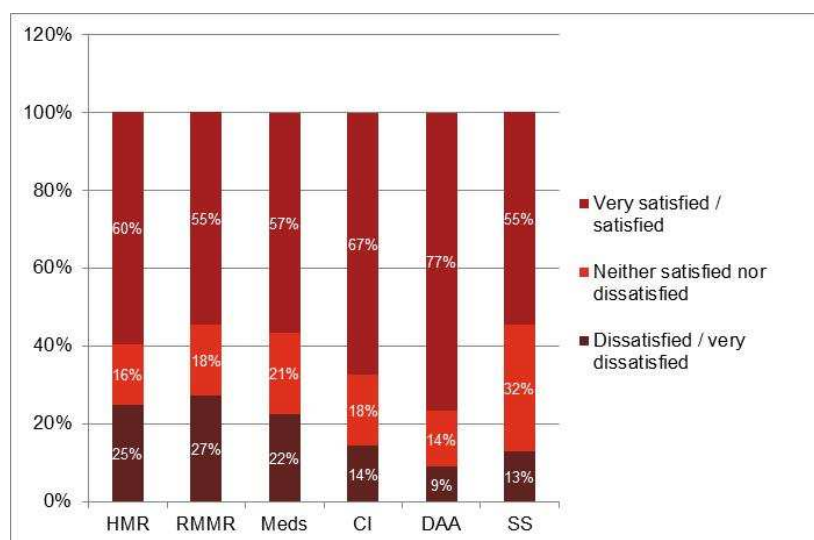
Clinical interventions are seen to be quite distinct from advice given during routine counselling that occurs during dispensing (69%).

### Satisfaction levels

(Asked of all practitioners who reported involvement in the particular service)

Health professionals reported differing levels of satisfaction for involvement with particular services. A majority reported being satisfied or very satisfied with their involvement in DAA (77%) and CI (67%) programmes/services. Just over a half of those involved in HMR (60%) MedsCheck (57%) SS (55%) and RMMR (55%) reported being satisfied or very satisfied.

**Figure 36: Participant satisfaction with their involvement in programmes and services**



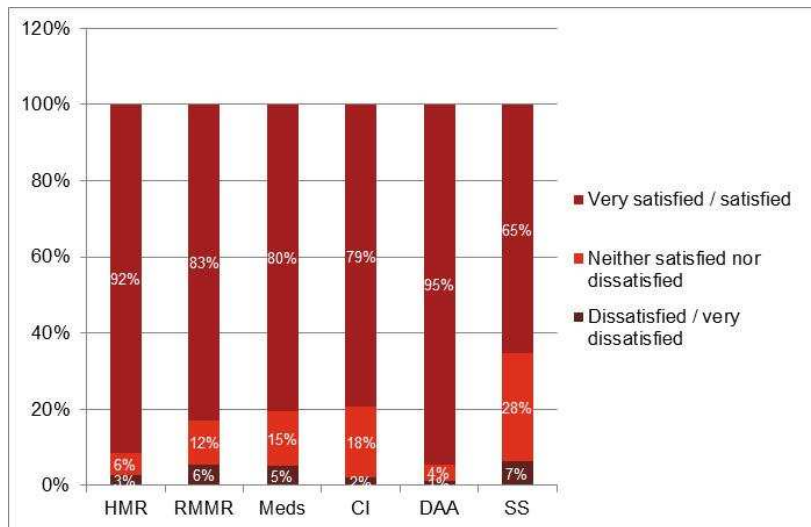
For those who noted being dissatisfied or very dissatisfied with their involvement in programmes and services, the greatest level of dissatisfaction was for HMRs (20%). Across HMRs, RMMRs and MedsChecks, the majority noted their reason for dissatisfaction was due to the regular policy changes, particularly the recent capping, and expressed discontent at the limited peak body representation.

The vast majority of health professionals reported being satisfied or very satisfied with the benefit their consumers receive through programmes/services (DAA 95%; HMR 92%;

## Key findings

RMMR 83%; MedsCheck 80%; CI 79%; Staged Supply 65%). Dissatisfaction for each of the programmes and services was below 3%.

**Figure 37: Participant satisfaction with the benefit consumers receive through programmes/services**



## ***Non participation in 5CPA Medication Management programmes and services***

*(Asked of respondents who reported not being involved in the particular service)*

The most common reasons for not being involved in particular programmes/services was that they were not applicable to the health professional's working arrangements: not being accredited/approved to provide the service, the service not being available in the pharmacy they work in, facility service agreement not in place (an absence of contract with an RACF) or limited demand, particularly due to demographic or hospital pharmacy setting.

Other common reasons for not being involved in programmes and services: not having enough time, staff or space, and capping making participation in the programmes not financially viable.

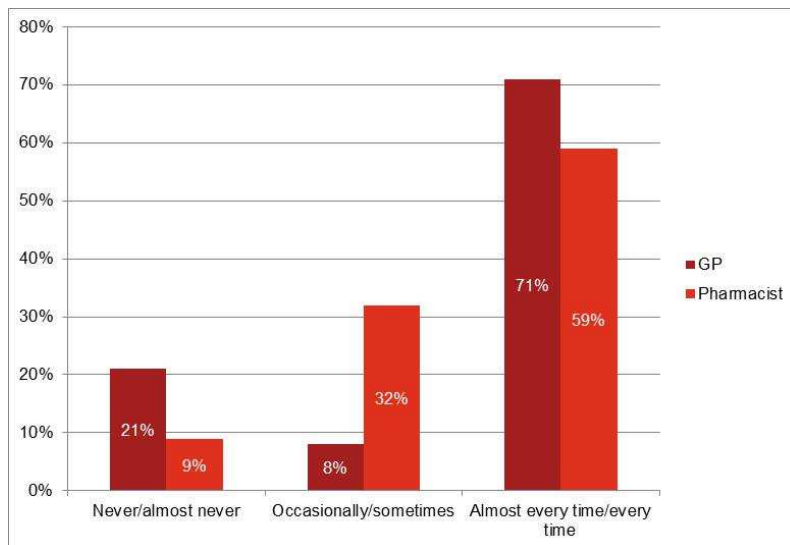
## ***Collaboration***

*(Asked of all respondents who reported involvement in the particular services)*

GPs reported communicating with pharmacists after the service somewhat more commonly than pharmacists reported communicating with the GP (asked of pharmacists and GPs):

- For the pharmacists that were involved in MM services, just over half (59%) of survey respondents noted they communicated with the GP after the service either every time or almost every time.
- For GPs, the majority (71%) noted they communicated with the pharmacist after the service either every time or almost every time.

**Figure 38: Frequency of communication after MM service**



There was consistency in the views of the value pharmacists bring to the care team (asked of all GPs and nurses):

- An additional clinically appropriate health provider to screen consumers for medication management issues (86%) and specialist knowledge of medicines (82%) were reported by both GPs and nurses as the main areas of value that a pharmacist brings to their consumers.

GPs were consistent in their views of the main triggers to bring a pharmacist into their consumer’s care team (only asked of GPs): when it is clear that a consumer needs an intervention for their medication management/adherence (83%); and /or, when it is clear a consumer needs an HMR (79%).

The majority of GPs reported several other influential factors when bringing pharmacists into their consumers’ care:

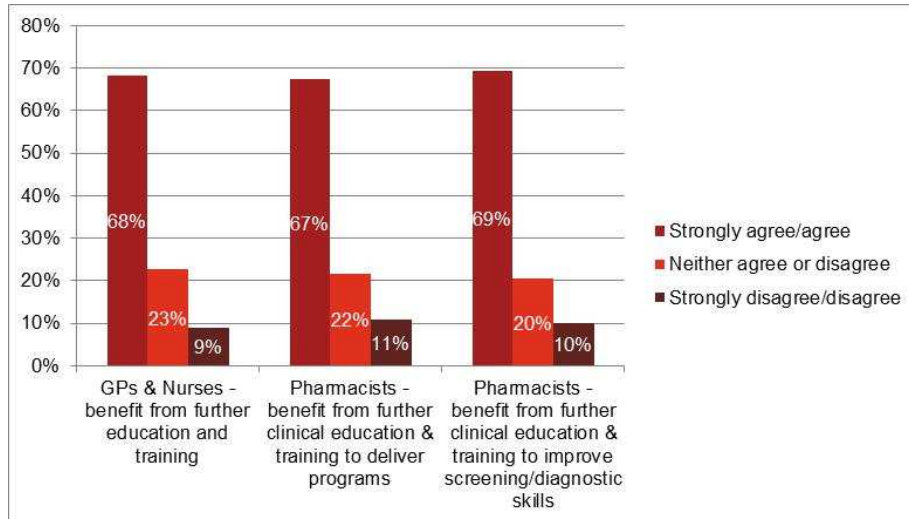
- As a source of up to date information on existing or new drugs (75%); and as a core part of team care arrangements (75%).

## Training and education

The majority of health professionals (72%) said they had received training and education for MM programmes and services.

The majority of all health professionals agreed or strongly agreed that they would benefit from further education and training to deliver or support these programmes and services, and the majority of pharmacists agreed or strongly agreed that they would benefit from further (clinical) education and training to improve their screening/diagnostic skills to better understand consumers' needs at any point in time.

**Figure 39: Participants views on further education and training**



## 2.6 Consumer survey

Below is the summary of key findings from the consumer survey. See Appendix I for participant information and a copy of the survey tool.

### Summary of key findings – consumer survey

**Note:** The distribution of participants who received HMR and MedsCheck/Diabetes MedsCheck services in the consumer survey was comparable to the distribution of participants who received similar services in our analyses of programme data. Further, responses of participants who accessed HMR or MedsCheck were nearly identical in their distribution; therefore, the results discussed in this chapter refer to the aggregated or overall result for all participants (unless stated otherwise).

#### Participants

- In total, 502 participants completed the survey - 260 participants identifying having received HMR services, 232 received MedsCheck/Diabetes MedsCheck services and 10 received a DAA.
- Overall, the majority of survey participants were located in three regions: VIC (33%); NSW (31%); QLD (21%), this pattern was the same for participants who had received HMR and MedsCheck/Diabetes MedsCheck services.
- The majority of participants were aged 50 years or older. Less than 1% of participants were aged 18-24. More than half (57%) of all survey participants were female.

### **General health status**

- The majority of survey participants (65%) perceived their health to range between good to excellent. Only 10% of participants perceived their health to be poor.

### **Relationship with pharmacist**

- Approximately 97% of survey participants reported that they visited the same pharmacy either all of the time or most of the time.

### **Knowledge of medication**

- Overall, more than 90% of survey participants either strongly agreed or agreed that they were knowledgeable about the medicines they were taking and what they were for. Differences in knowledge of medicine did not differ by age, general health status or by the number of medicines taken.

### **Medication adherence**

- Overall, the majority of participants were partially non-adherent (53%) to their medication while just under half of all participants were completely adherent (44%) to their medication.
- The level of complete medication adherence appears to increase with age from 35 years.
- Complete adherence was highest (57%) among participants who viewed their general health status to be excellent, decreasing with health status.
- There were no large differences in complete or partial medication adherence between people consuming a small number (1) of medicines compared to people consuming a higher number of medicines (10+).

### **Impact of programmes**

- The majority of participants either partially (52%) or completely agreed (39%) that receiving MedsCheck/Diabetes MedsCheck and HMR services had an impact on health, confidence, side-effect experiences and understanding of medicines.
- The majority of participants, regardless of age group, either completely agreed or partially agreed that receiving a MedsCheck/Diabetes MedsCheck or HMR service had a perceived impact on their health, confidence, side effects experienced and/or understanding of medicines.
- A higher percentage of participants who perceived their health status to be Excellent completely agreed that receiving a receiving a MedsCheck/Diabetes MedsCheck or HMR service had a perceived impact on their health, confidence, side effects experienced and/or understanding of medicines.
- A higher percentage of participants on fewer medicines completely agreed that receiving a MedsCheck/Diabetes MedsCheck or HMR service had a perceived impact on their health, confidence, side effects experienced and/or understanding of medicines.

### **Satisfaction**

- The majority of survey participants (95%) were either very satisfied or satisfied with

the service their pharmacist provided.

- Similarly, the majority of survey participants (89%) who received HMR or MedsCheck/Diabetes MedsCheck programmes completely agreed or agreed that they were satisfied with the programmes and services delivered by their pharmacist. The level of satisfaction for programmes and services delivered by pharmacists did not differ by age, general health status or by number of medicines.

### 2.6.1 Purpose

The consumer survey was a cross-sectional survey of people who had received an HMR or MedsCheck/Diabetes MedsCheck programme or service over the last 18 months. The purpose of the survey was to obtain a consumer perspective of indicators such as improved medication management, greater confidence in managing medicines, self-reported health status and satisfaction with programmes and services. Note that the consumer survey was only conducted at one point in time and is a retrospective measure of self-reported consumer perspectives.

The survey included the following key topics:

- **Contextual/demographic information:** including age, location, gender, CALD and Aboriginal and Torres Strait Islander origin, health conditions, health status, number of medicines, use of health professionals and medication adherence.
- **Experience:** with participating in Medication Management programmes, how and why the programme or service was received.
- **Outcomes and impacts:** including what has changed as a result of receiving the programme or service.
- **Satisfaction:** with using Medication Management programmes and suggestions for improvement.

### 2.6.2 Approach

A number of approaches were considered including conducting the survey at two points in time to measure changes in behaviour and health outcomes, administering a cross-sectional survey to understand consumer experience of MM programmes, in-depth case exemplars and focus groups. However, due to timeframes, feasibility and budget, the approach taken for the consumer survey was to administer it at one point in time.

Ethics approval was sought from the Department of Health Human Ethics Committee prior to administration of the survey. Development of the consumer survey was conducted by PwC in conjunction with project advisors and the Department.

Roy Morgan Research was engaged to program and administer the survey to approximately 500 consumers via telephone interview (CATI). The survey took approximately 20 minutes to complete.

Prior to administration of the survey tool, a pilot was undertaken with 50 consumers to test their understanding of the questions and the overall functionality of the survey.

#### Ethics process

On specific instruction from the Ethics Committee, PwC was given approval to recruit consumers who had previously received Medication Management programmes for the consumer survey through an opt in process. This process consisted of the Department sending letters to consumers advising them of the survey and providing details for them to opt in to register interest in participating by phoning PwC or registering their interest online. Once consumers provided consent to participate, their details were passed to Roy Morgan Research who conducted the survey via telephone with each consumer.

### Limitations

The design and methodology of survey administration introduced several biases and should be used in conjunction with findings from programme data analyses to provide indicative perspectives from consumers who received HMR and MedsCheck/Diabetes MedsCheck Services. The biases include:

- Letters were sent from the Department of Health to approximately 13,000 consumers who received a medication management programme or service over the last 18 months. Of these consumers, approximately 1,000 (7.5%) opted to participate in the survey, representing a selective group of survey respondents.
- Survey respondents were provided with a \$30 voucher to thank them for their time in participating in the survey. This may have had an impact on the group of people who opted to participate in the survey. Note that the decision to offer a \$30 voucher was strongly encouraged by our consumer representatives as fair compensation and proper practice across the health system for participation time.
- From survey analysis, the majority of survey participants saw the same pharmacist regularly, indicating that they had an established relationship with their pharmacist, which may have influenced their likelihood of participation – this again indicates that survey participants were a selective group.
- Note that the methodology we were able to administer was different to the proposed methodology outlined below. This discrepancy was largely accountable to not knowing exactly how many people of the 13,000 who were sent letters would register interest to participate in the survey.

### Survey design

The telephone consumer survey tool was informed by the findings of the gap analysis performed on the programme data and the finding from the consumer focus groups.

The draft survey tool was developed by PwC in conjunction with project advisers, reviewed by the Department, with subsequent revisions made.

Roy Morgan Research was engaged to undertake programming and administering of the telephone survey via Computer Assisted Telephone Interview (CATI). The survey was estimated to take approximately 20 minutes to complete and was in field for 2 weeks. All participants who completed the survey were sent a Coles/Myer gift voucher to the value of \$30.

### Intended sampling methodology

In order to achieve 500 completed consumer surveys, we aimed to sample approximately 1,500 consumers (sampling frame) who received services during the most recent 6 months of the 5CPA data collection period (1 July 2010 to 28 February 2014). The period of 6 months was used in order to better facilitate recall by the consumer of the programme/service experience.

In order to achieve a sampling frame of 1,500, we aimed to contact approximately 15,000 consumers inviting them to register their interest in participating in the survey, across the following sampling distribution:

- MedsCheck/Diabetes MedsCheck (60% of 15,000, proportionate to service delivery) – 9,000
- HMR (30% of 15,000, proportionate to service delivery) – 4,500
- RMMR (10% of 15,000) – 1,500.

## Key findings

A randomised sample of 15,000 consumers fitting the above distribution was extracted from 5CPA programme data, for which complete postal addresses were available for approximately 13,000. These 13,000 consumers were sent a letter from the Department directly inviting them to register their interest in participating in the survey.

Of these 13,000 consumers who were sent letters, 1,035 consumers registered their interest. Of the 1,035 registered, 502 consumers were called by Roy Morgan Research to participate in the survey.

### Survey analysis

The analysis of the survey data was undertaken by the George Institute, in collaboration with PwC. The analysis of the survey data was undertaken by the George Institute, in collaboration with PwC. Descriptive analysis only was undertaken, every survey question was described using number and percentage for categorical variables and mean and standard error for continuous variables.

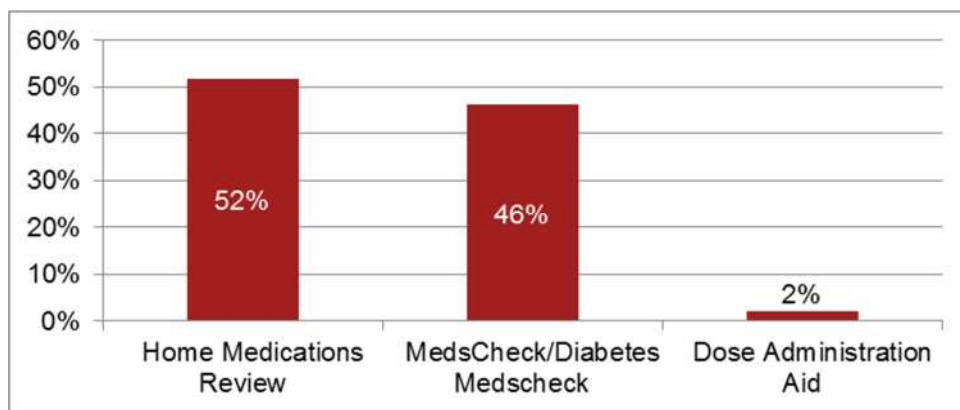
### 2.6.3 Results

The following section outlines detailed findings from the consumer survey.

#### *Participants*

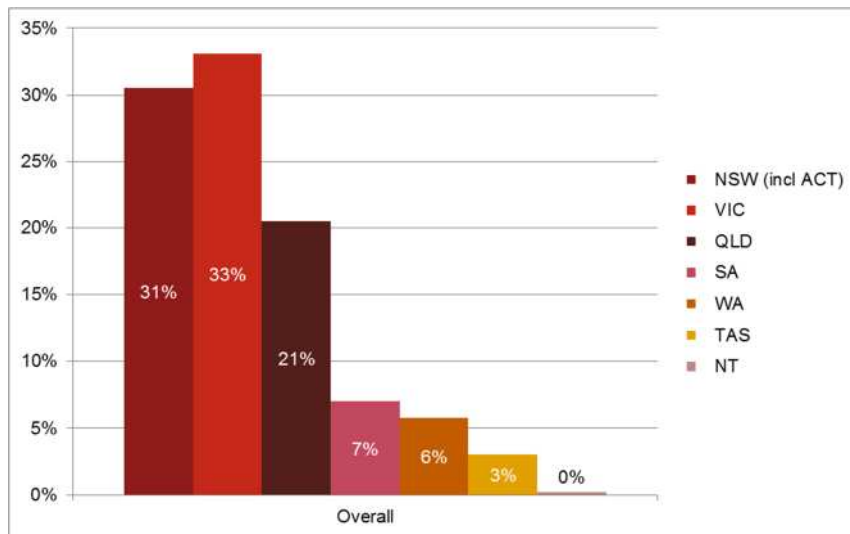
In total, 502 participants completed the survey, with 260 participants identifying having received HMR services, 232 have received MedsCheck/Diabetes MedsCheck services and 10 having received DAAs.

**Figure 40: Programs accessed by survey participants**



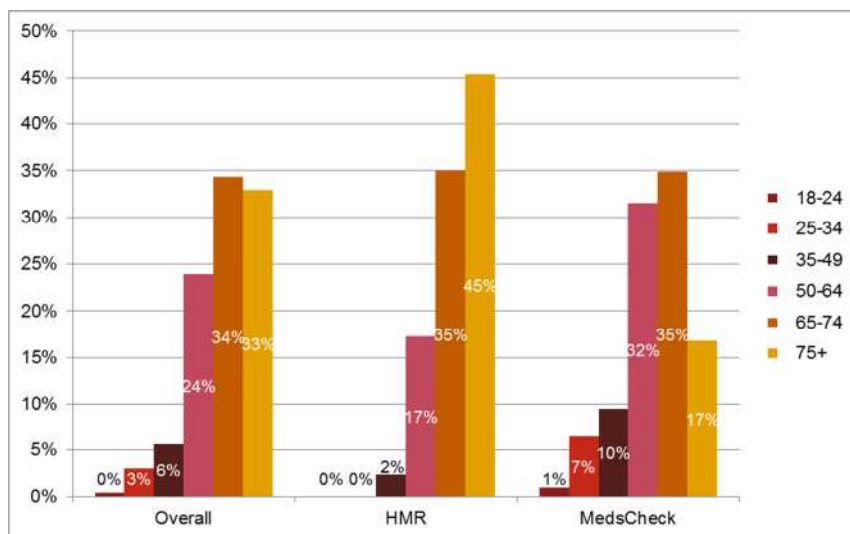
Overall, the majority of survey participants were located in three regions: VIC (33%); NSW (31%); QLD (21%), this pattern was the same for participants who had received HMR and MedsCheck/Diabetes MedsCheck services.

**Figure 41: Location of survey participants**



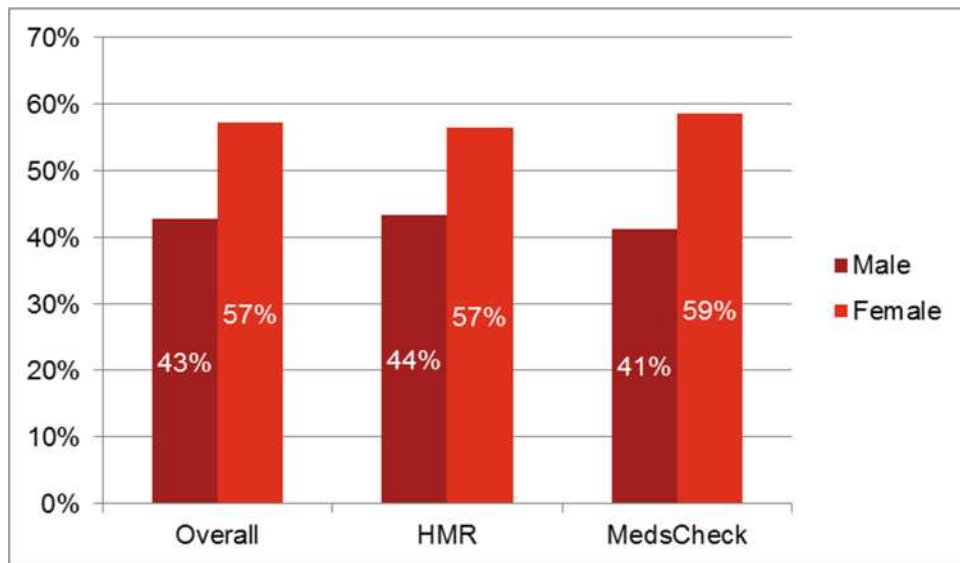
The majority of participants were aged 50 years or older. The largest group of participants were aged 65-74 (34%) while the smallest group were aged 25-34 (3%). Less than 1% of participants were aged 18-24. Compared to participants who received MedsCheck/Diabetes MedsCheck services, a higher percentage of patients aged 65+ years received HMR services. Conversely, a higher percentage of participants aged 25-64 years received MedsCheck/Diabetes MedsCheck services compared to HMR services.

**Figure 42: Age of survey participants**



The majority of survey participants were female (57%). This pattern was reflected similarly across participants who received MedsCheck/Diabetes MedsCheck and HMR services.

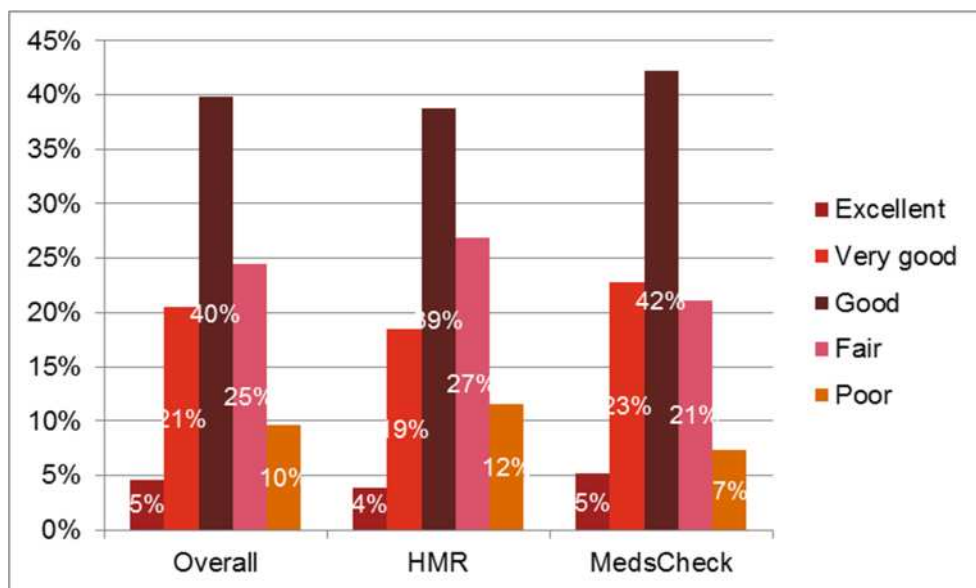
**Figure 43: Gender of survey participants**



**General health status**

The majority of survey participants (65%) perceived their health to range between good to excellent. Only 10% of participants perceived their health to be poor.

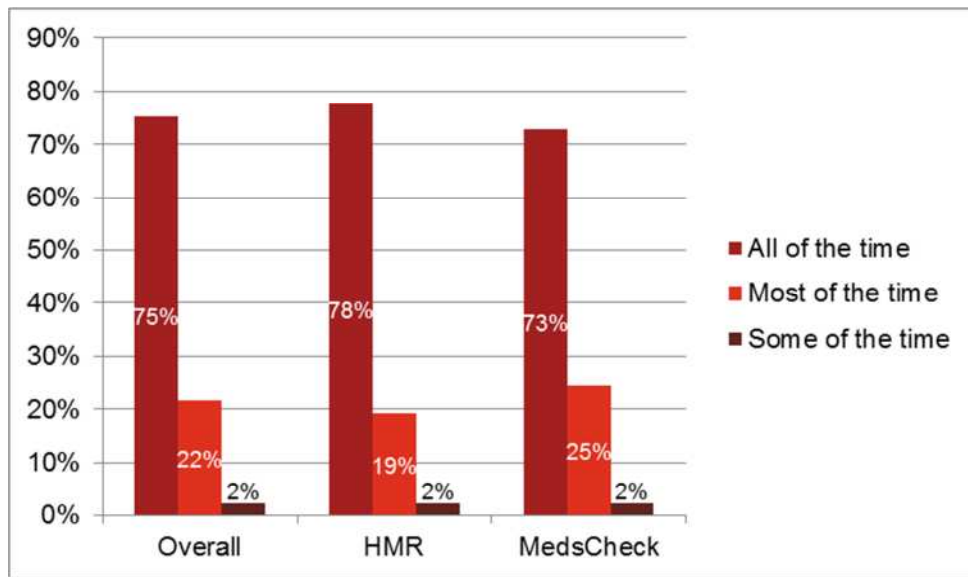
**Figure 44: Self-perceived health status**



**Relationship with pharmacist**

Approximately 97% of survey participants reported that they visited the same pharmacy either all of the time or most of the time. Zero participants reported never visiting the same pharmacy.

**Figure 45: Visits to same pharmacy**

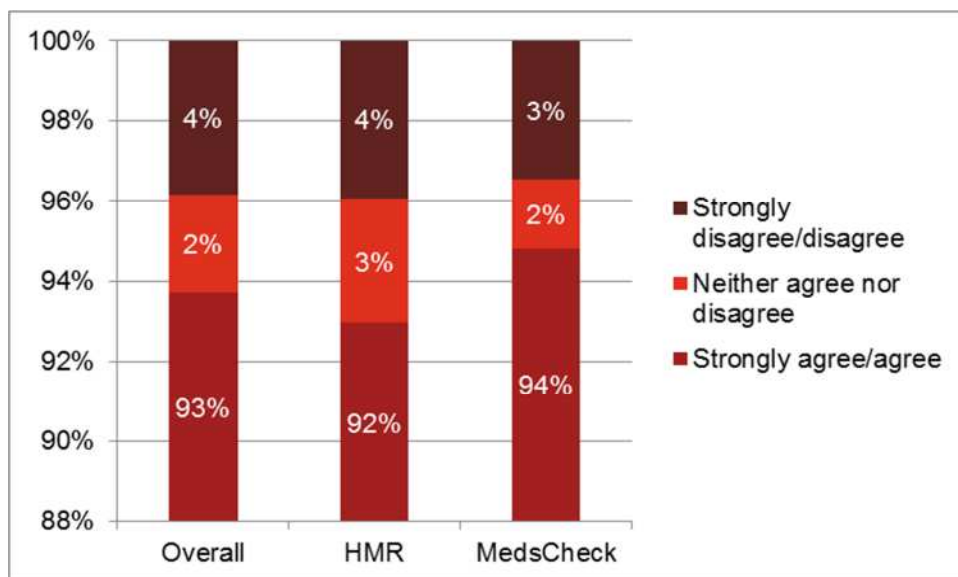


***Knowledge of medication***

The following group of figures demonstrate patterns in knowledge of medicine by participants who received MedsCheck/Diabetes MedsCheck and HMR services, by age, general health status and number of medicines.

Overall, more than 90% of survey participants either strongly agreed or agreed that they were knowledgeable about the medicines they were taking and what they were for. Only 4% of survey participants either strongly disagreed or disagreed. Differences in knowledge of medicine did not differ by age, general health status or by the number of medicines taken. In other words, knowledge of medicines and understanding of what they were for was perceived to be high (with over 90% of respondents either strongly agreeing or agreeing) across all age groups, all levels of health status (poor, medium and high) and across all levels of medicine complexity (low, medium and high).

**Figure 46: Knowledge of medication**



### Medication adherence

The following group of figures demonstrate patterns in medication adherence by participants who received MedsCheck/Diabetes MedsCheck and HMR services. Medication adherence was measured using the Medications Adherence Questionnaire, comprising a set of four validated questions to assess level of adherence. These questions have been presented as a composite variable to demonstrate complete, partial and non-adherence.<sup>3</sup> Patterns in adherence are presented by age group, general health status and number of medications consumed.

Figure 47 presents level of adherence for survey participants who received HMR and MedsCheck programmes. Overall, the majority of participants were partially non-adherent (53%) to their medication while just under half of all participants were completely adherent (44%) to their medication.

**Figure 47: Medication adherence composite**

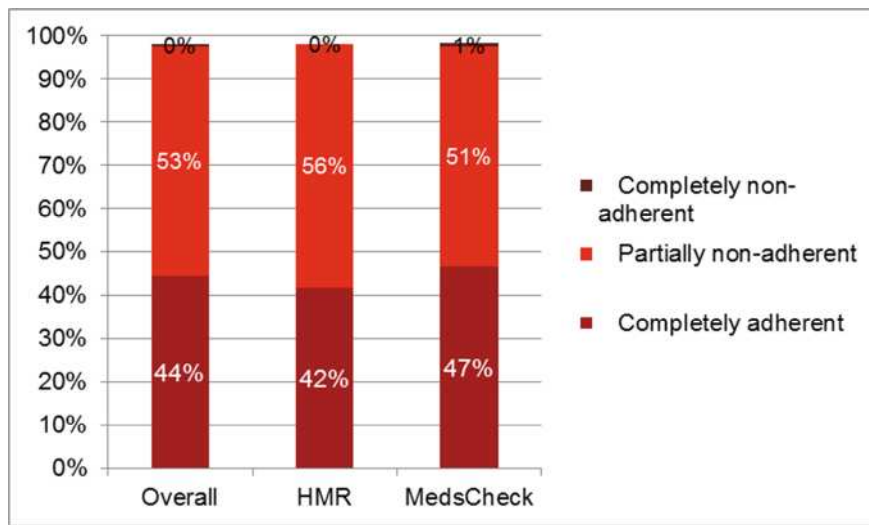


Figure 48 shows that level of complete medication adherence appears to increase with age from 35 years. This pattern appears to be mirrored by the level of partial adherence declining with age from 35 years.

<sup>3</sup> If the respondent answered 'Yes' to all 4 of the above questions, they are considered as 'Completely non-adherent'.  
 If they answered 'Yes' to any 1 of the questions, but not all, then they are considered 'Partially adherent'.  
 If they answered 'No' to all 4 of the questions, they are considered 'Completely adherent'.  
 If none of the above, they are considered 'Other'.

**Figure 48: Medication adherence composite, by age<sup>4</sup>**

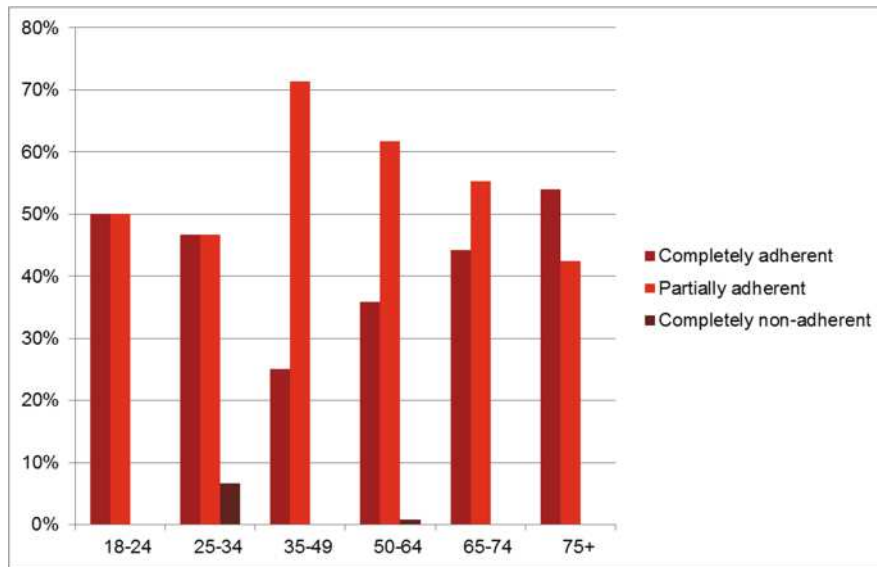


Figure 49 shows that complete adherence was highest (57%) among participants who viewed their general health status to be excellent, decreasing with health status. Partial adherence appeared to be highest among people who perceived their general health status to be good, fair or poor.

**Figure 49: Medication adherence composite, by general health status<sup>5</sup>**

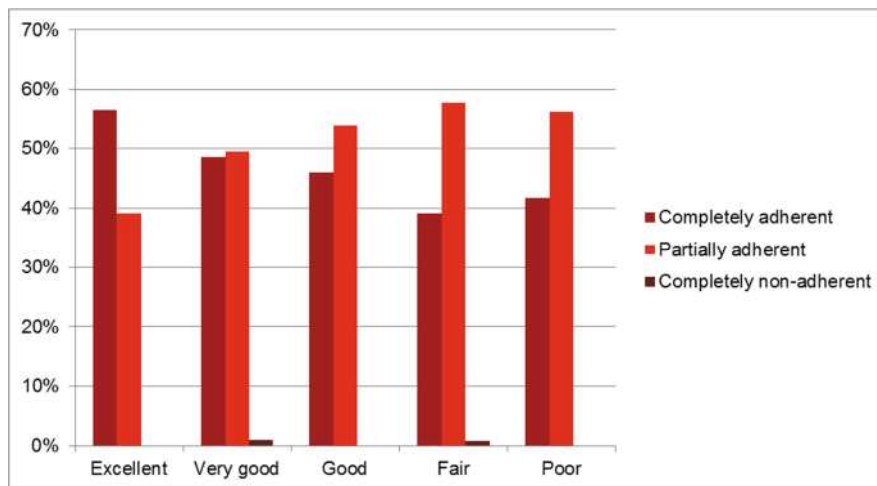
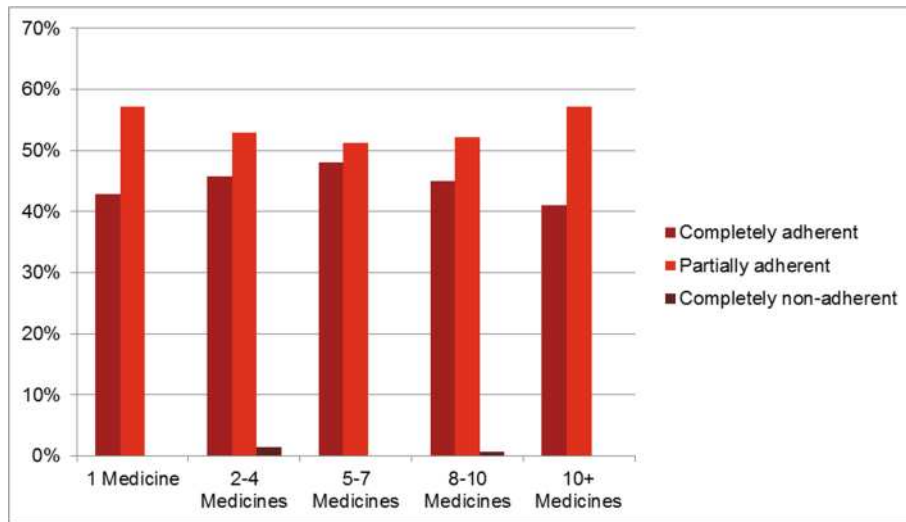


Figure 50 shows that there were no large differences in complete or partial medication adherence between people consuming a small number (1) of medicines compared to people consuming a higher number of medicines (10+).

<sup>4</sup> Limitation: The percentages reported for 'Completely non-adherent' and 'Other' consist of a small proportion of survey responses (2 and 10 respectively) relative to total survey responses (502). Therefore only the results for 'Partially adherent' and 'Completely adherent' (267 and 223 respectively) are representative and statistically significant for this composite result.

<sup>5</sup> Ibid.

**Figure 50: Medication adherence composite, by number of medications<sup>6</sup>**



### ***Impact of programmes***

The following group of figures presents programme impact on health, confidence, side effects and understanding of medicines for participants who received MedsCheck/Diabetes MedsCheck and HMR services. Questions for impact have been presented as a composite variable to demonstrate level of agreement<sup>7</sup> with the following questions:

- I have increased confidence about taking my medicines
- I feel better, my health has improved
- I have fewer side effects/interactions between my medicines
- I have a better understanding about my medicines and how to use them

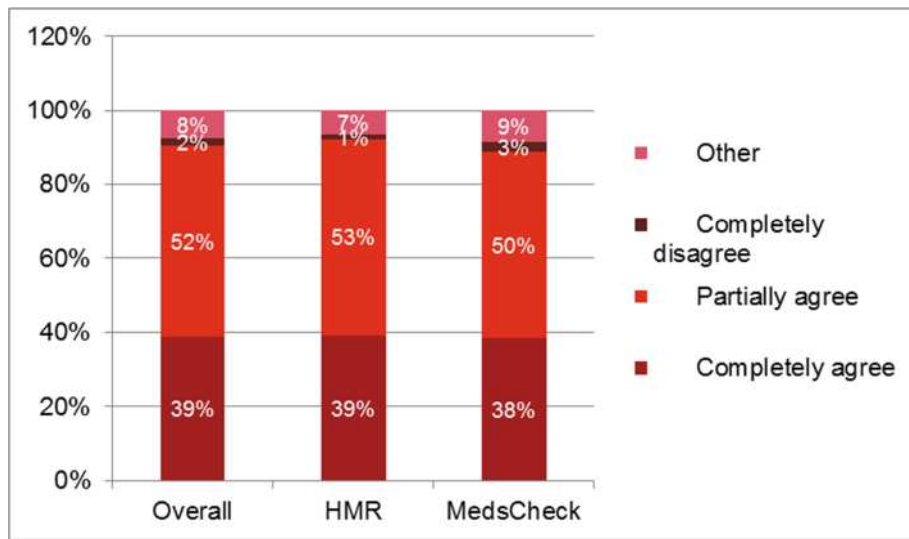
Patterns in adherence are presented by age group, general health status and number of medications consumed.

Figure 51 shows comparable results for survey participants who received MedsCheck/Diabetes MedsCheck and HMR services. Approximately 52% of participants partially agreed and 39% of participants completely agreed that receiving these services had an impact on health, confidence, side-effect experiences and understanding of medicines.

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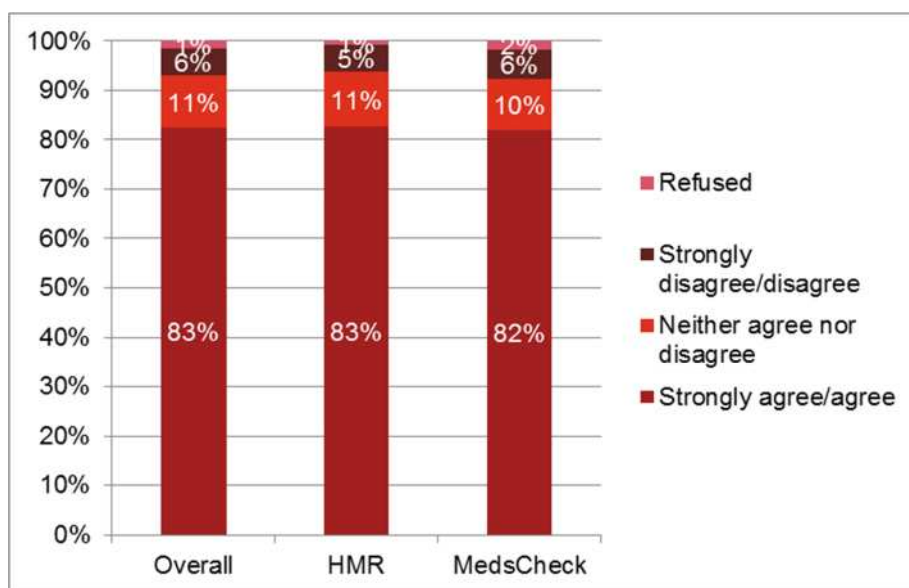
<sup>7</sup> If the respondent answered 'Strongly agree' or 'Agree' to all 4 of the above questions, they are considered to 'Completely agree'.  
 If they answered 'Strongly agree' or 'Agree' to any 1 of the questions, but not all, then they are considered to 'Partially agree'.  
 If they answered 'Disagree' or 'Strongly disagree' to all 4 of the questions, they are considered to 'Completely disagree'.  
 If none of the above, they are considered 'Other'.

**Figure 51: Composite score for Impact**



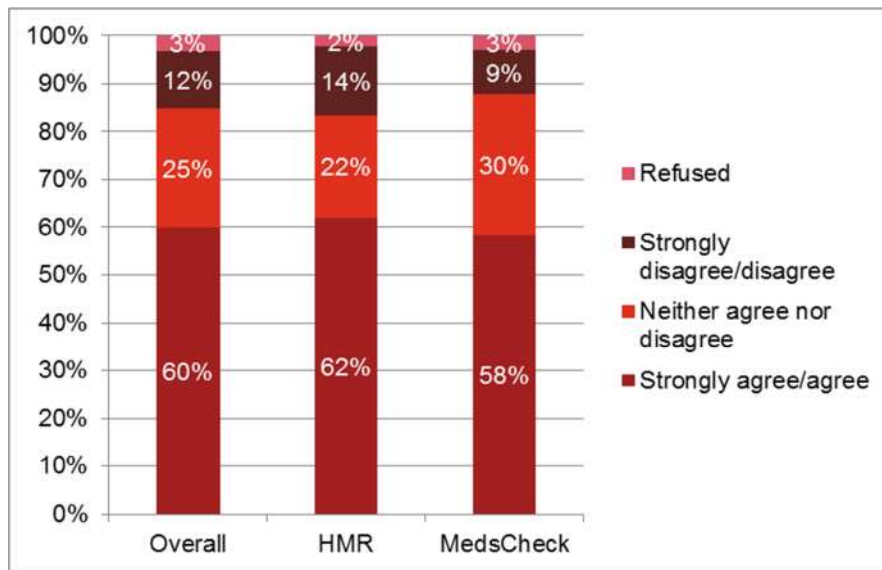
The majority (83%) of survey participants either strongly agreed or agreed that they had increased confidence about taking their medication. 6% either strongly disagreed or disagreed.

**Figure 52: Confidence with medication**



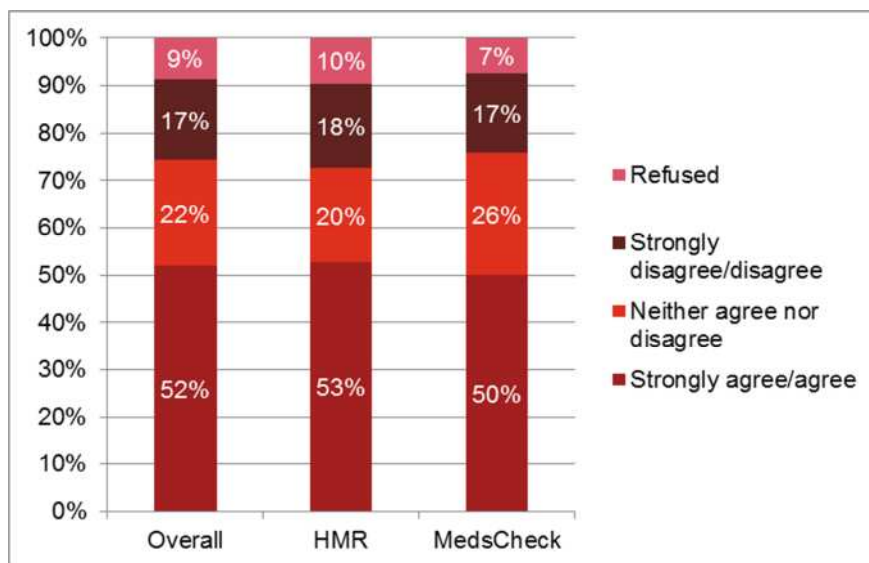
More than half (60%) of survey participants either strongly agreed or agreed that they felt better and that their health had improved. 12% of survey participants however either strongly disagreed or disagreed.

**Figure 53: Improvements to health**



Approximately half (52%) of all survey participants either strongly agreed or agreed that they had fewer side effects/interactions between their medicines. 17% of survey participants either strongly disagreed or disagreed.

**Figure 54: Side effects/interactions between medications**



The majority (84%) of survey participants either strongly agreed or agreed that they had a better understanding about their medicines and how to use them. 5% of survey participants strongly disagreed/disagreed.

**Figure 55: Understanding of medication**

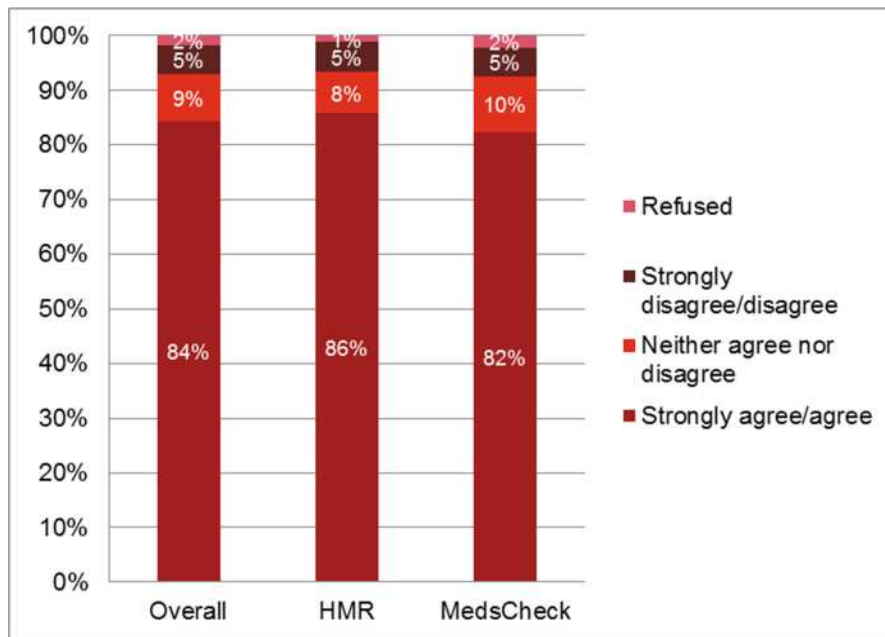
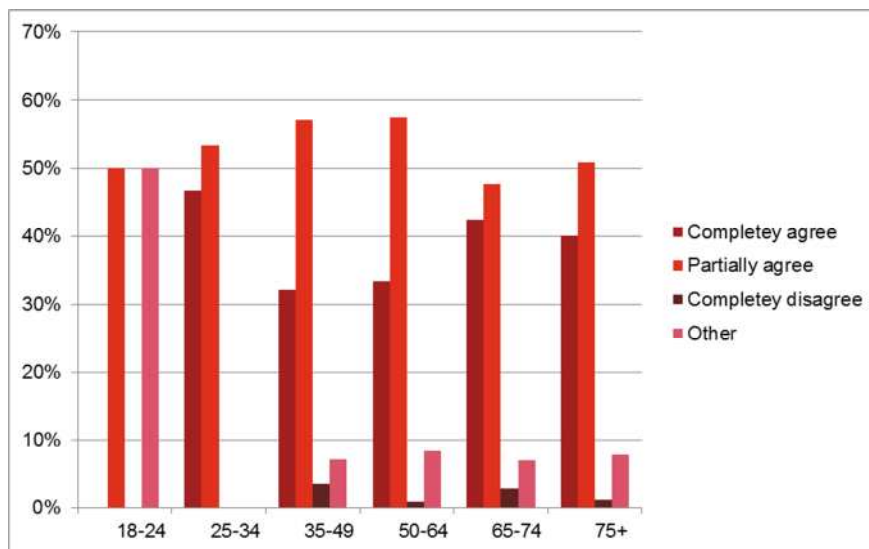


Figure 56 shows that the majority of survey participants, regardless of age group, either completely agreed or partially agreed that receiving a MedsCheck/Diabetes MedsCheck or HMR service had a perceived impact on their health, confidence, side effects experienced and/or understanding of medicines.

**Figure 56: Impact composite, by age<sup>8</sup>**



<sup>8</sup> Limitation: The percentages reported for 'Completely disagree' and 'Other' consist of a small proportion of survey responses (9 and 38 respectively) relative to total survey responses (502)/ Therefore only the results for 'Completely agree' and 'Partially agree' (195 and 260 respectively) are representative and statistically significant for this composite result.

Figure 57 shows overall, a higher percentage of participants who perceived their health status to be Excellent completely agreed that receiving a receiving a MedsCheck/Diabetes MedsCheck or HMR service had a perceived impact on their health, confidence, side effects experienced and/or understanding of medicines. This pattern seemed to decline with perceived poorer health status.

**Figure 57: Impact composite, by general health status<sup>9</sup>**

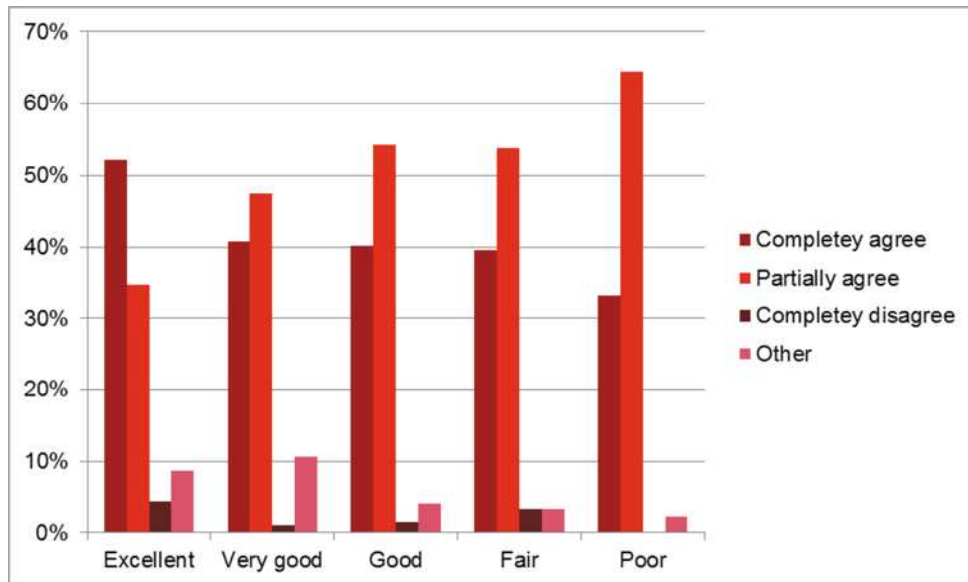
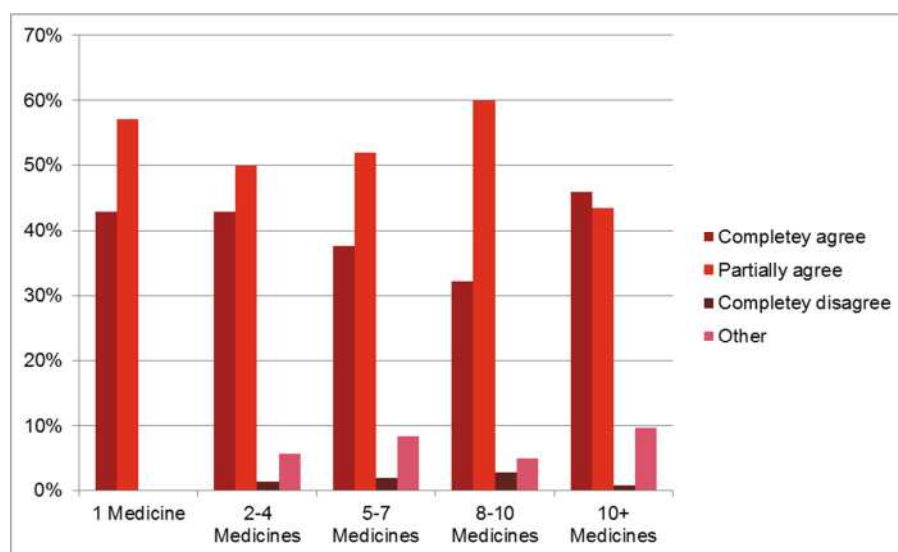


Figure 58 demonstrates that a higher percentage of participants on fewer medicines completely agreed that receiving a MedsCheck/Diabetes MedsCheck or HMR service had a perceived impact on their health, confidence, side effects experienced and/or understanding of medicines. While there is an indicative trend that level of agreement with receiving an impact decreased with a greater number of medicines, on the whole there were minimal differences between people who partially agreed or completely agreed that they experienced some impact by number of medicines.

<sup>9</sup> Ibid.

**Figure 58: Impact composite, by number of medications<sup>10</sup>**



### **Satisfaction**

The following group of figures presents survey participants' level of satisfaction with the programmes and services delivered by their pharmacist. Firstly we present findings for level of satisfaction with their pharmacist, followed by a composite variable to demonstrate level of agreement<sup>11</sup> with the following statements:

- I felt I was provided with trusted advice while receiving the service
- The pharmacist who conducted the service explained the results to me in a way that I could understand
- I was happy with the amount of time the pharmacist spent with me, it didn't feel rushed
- The pharmacist who conducted the service showed respect towards me and my culture when providing me with the service
- I was satisfied with the level of privacy offered to me by the pharmacist
- The pharmacist made me feel comfortable throughout the whole service

Patterns in satisfaction are presented by age group, general health status and number of medications consumed.

<sup>10</sup>Ibid.

<sup>11</sup> If the respondent answered 'Strongly agree' or 'Agree' to all 4 of the above questions, they are considered to 'Completely agree'.  
 If they answered 'Strongly agree' or 'Agree' to any 1 of the questions, but not all, then they are considered to 'Partially agree'.  
 If they answered 'Disagree' or 'Strongly disagree' to all 4 of the questions, they are considered to 'Completely disagree'.  
 If none of the above, they are considered 'Other'.

## Key findings

Figure 59 shows that almost the entire group of survey participants (95%) was either very satisfied or satisfied with the service their pharmacist provided. Only 2% of survey participants were either very dissatisfied or dissatisfied.

**Figure 59: Satisfaction with pharmacist**

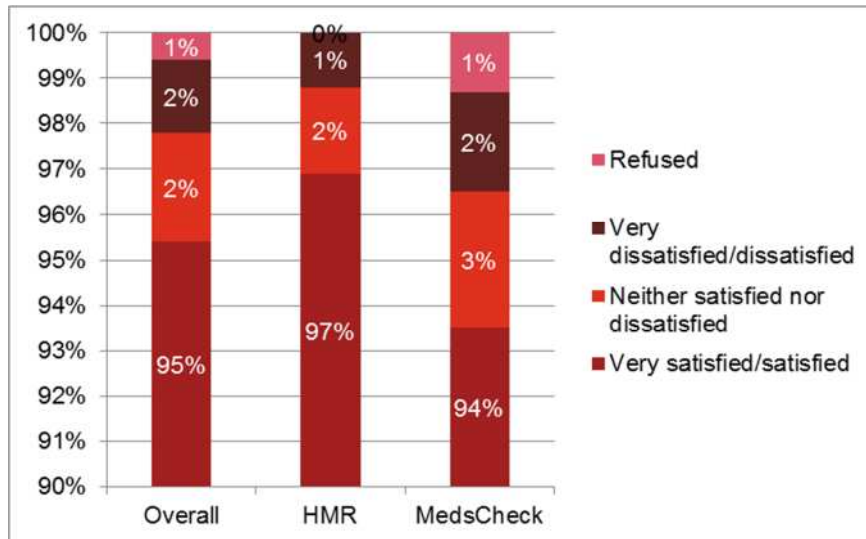
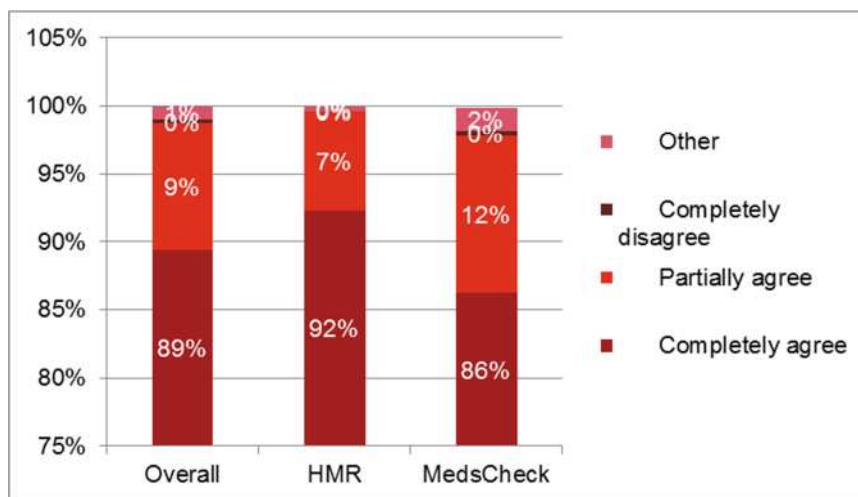
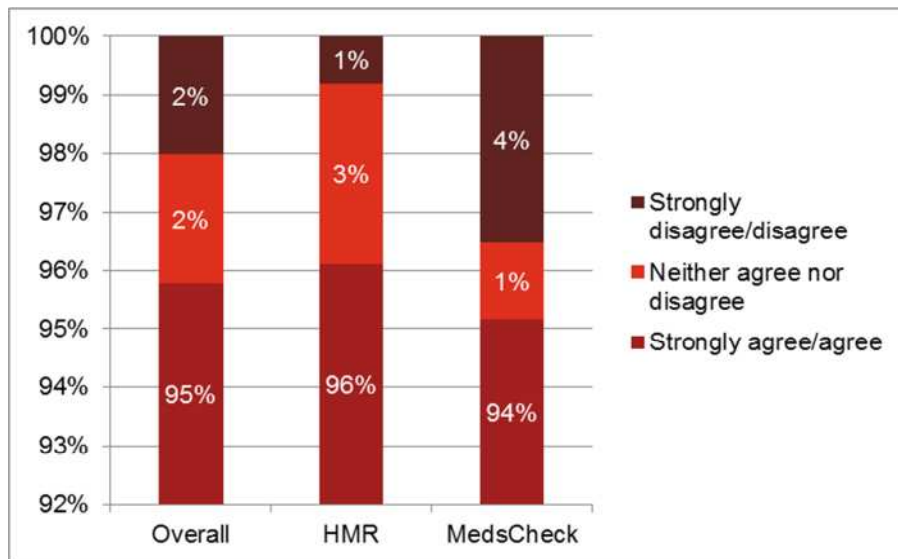


Figure 60 shows that across the composite variables described above, the majority of survey participants (89%) who received HMR or MedsCheck/Diabetes MedsCheck programmes completely agreed or agreed that they were satisfied with the programmes and services delivered by their pharmacist. This majority was consistent across all the variables assessed as follows.

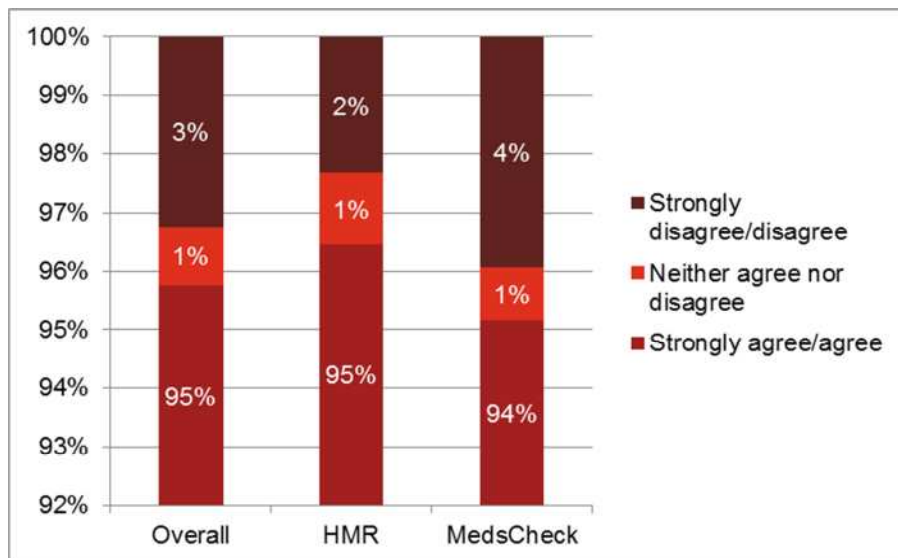
**Figure 60: Satisfaction composite**



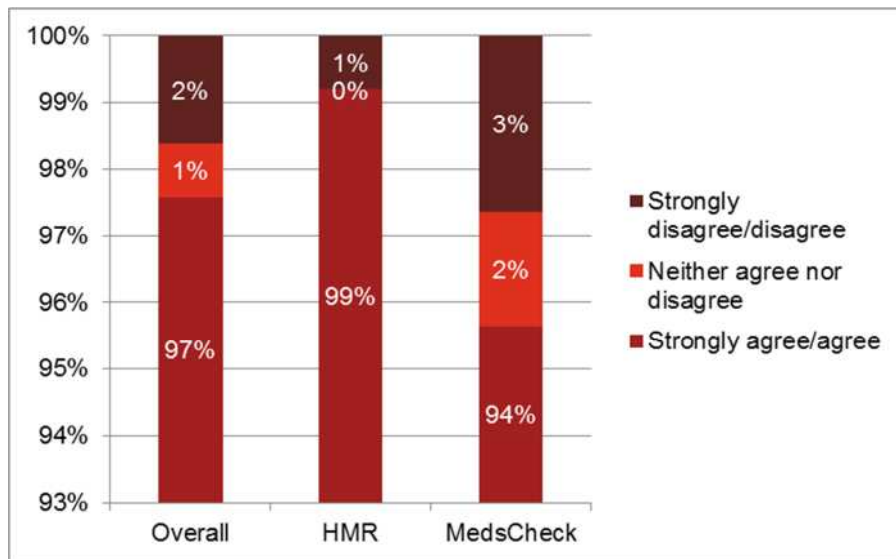
**Figure 61: Satisfaction with advice**



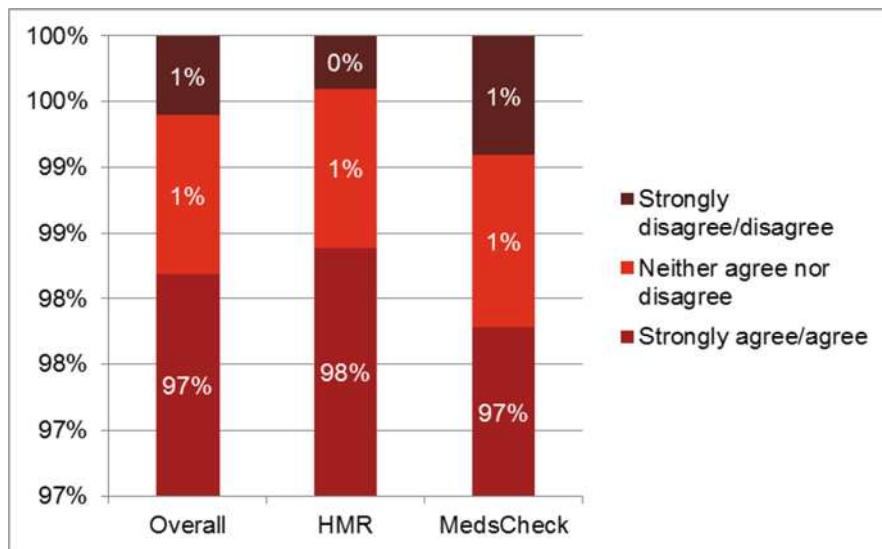
**Figure 62: Communication of results**



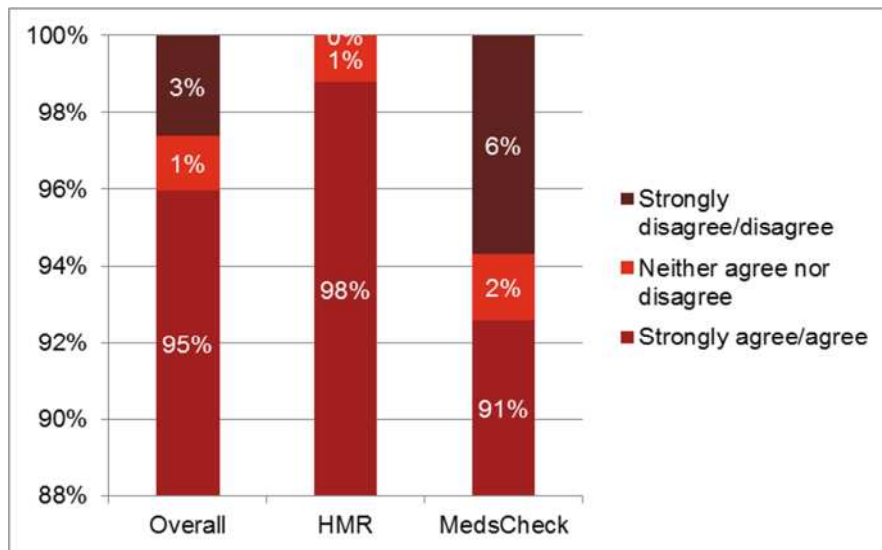
**Figure 63: Duration with pharmacist**



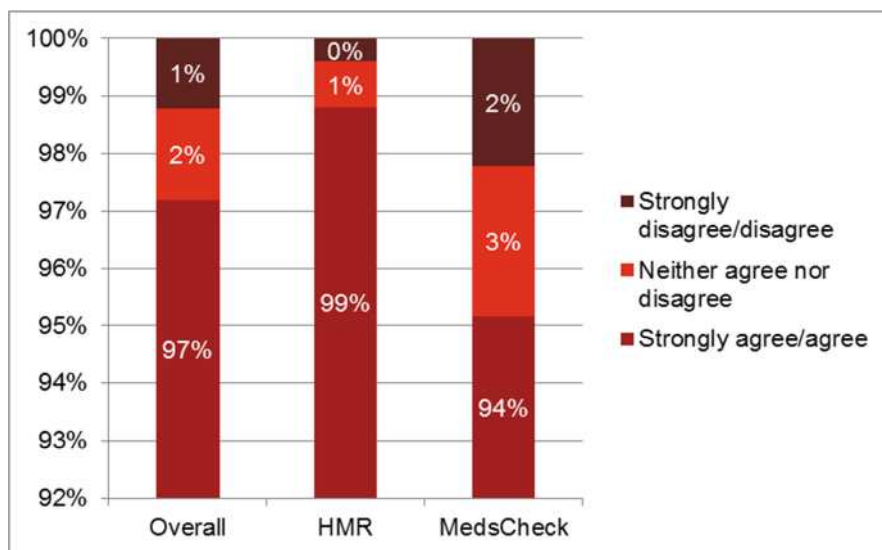
**Figure 64: Pharmacists' respect towards individual and their culture**



**Figure 65: Privacy at pharmacy**

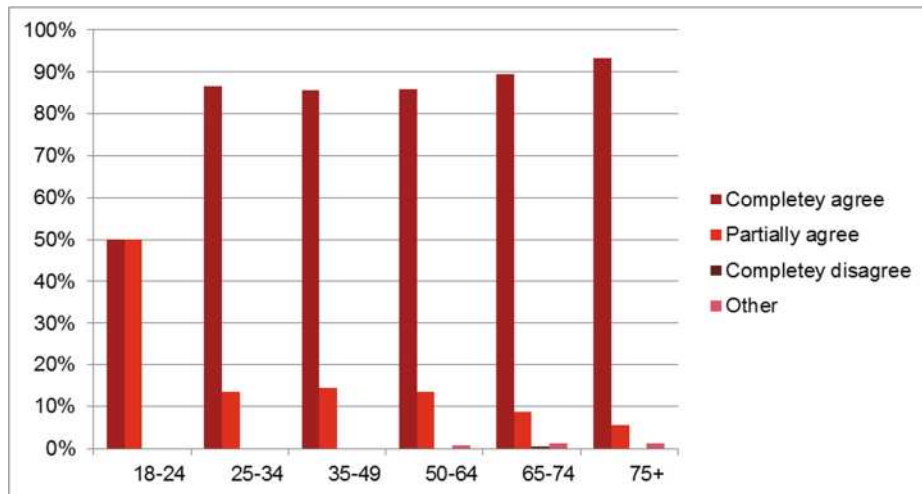


**Figure 66: Level of comfort with pharmacist**

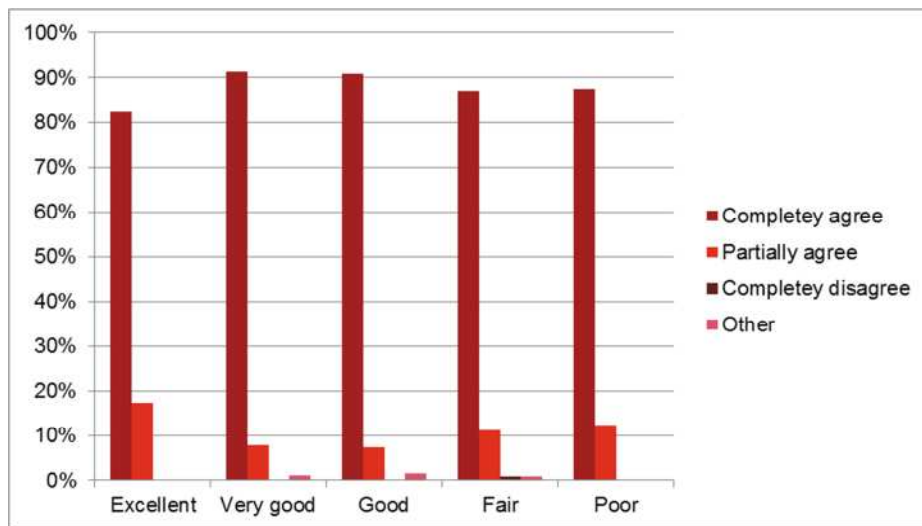


The following figures show that level of satisfaction for programmes and services delivered by pharmacists did not differ by age, general health status or by number of medicines.

**Figure 67: Satisfaction composite, by age<sup>12</sup>**

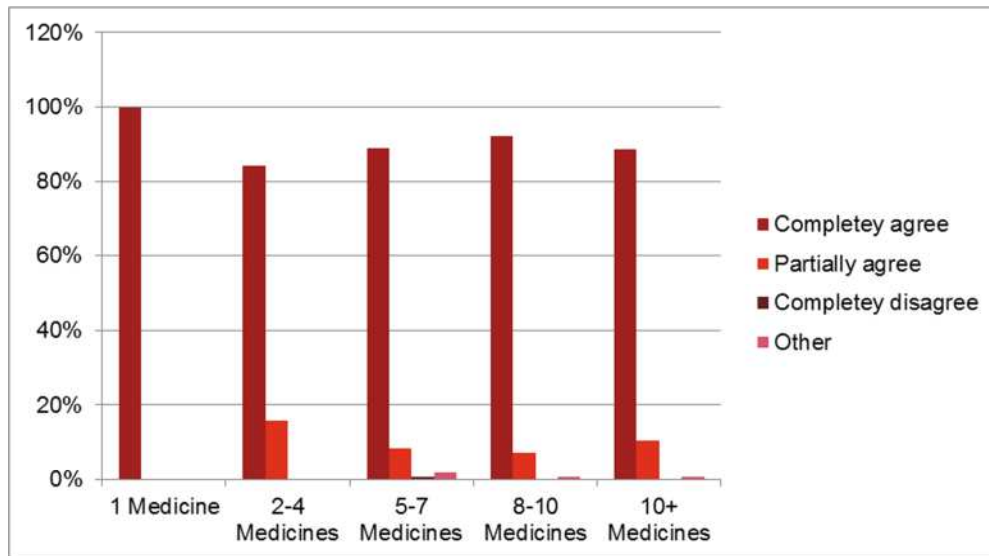


**Figure 68: Satisfaction composite, by general health status<sup>13</sup>**



<sup>12</sup> Limitation: The percentages reported for ‘Completely disagree’ and ‘Other’ consist of a small proportion of survey responses (1 and 5 respectively) relative to total survey responses (502). Therefore only the results for ‘Completely agree’ and ‘Partially agree’ (449 and 47 respectively) are representative and statistically significant for this composite result.

<sup>13</sup> Ibid.

**Figure 69: Satisfaction composite, by number of medications<sup>14</sup>**

## 2.7 HMR hospital referral pathway consultation

The Hospital Referral Pathway has been developed under the existing HMR programme to enable timely referral for a HMR service to patients deemed most at risk of medication misadventure within ten days of discharge from hospital, where they do not have access, or timely access, to a general practitioner (GP). This pathway aims to reduce the incidence of medicine misadventure and readmission post-discharge. It is also intended to improve continuity of care between the hospital and primary care sector. Using a phased approach, this pathway is being initially piloted with Monash Medical Centre Clayton, Victoria (“Monash”) and Calvary Hospital Lenah Valley, Tasmania (“Calvary”).

Below is the summary of key findings from the stakeholder consultations with the hospitals piloting this referral pathway. See Appendix G for more detail.

### Summary of themes raised – HMR hospital referral pathway

Both pilot hospitals commenced implementation of this pathway during the last quarter of 2014, to date 5 HMRs have been conducted through Calvary, and 1 HMR has been conducted through Monash. Pilots across the two hospitals began implementation in October 2014, with 6 referrals in total having been seen to date (December 2014).

#### Implementation:

- **Calvary:** potential patients for referral are identified via ward rounds conducted by clinical pharmacists in the hospital, working with specialists to identify and confirm eligible patients. Patients are then referred to an accredited pharmacist who conducts a

<sup>14</sup> Ibid.

#### HMR.

- **Monash:** operates a unique Home Outreach Medications Review for people living over 20 km from 6 hospital sites, with an established process for HMR hospital referrals as follows:
  - Referrals faxed to the hospital from other health care practitioners for any inpatient at high risk of med misadventure risk are passed to the clinical pharmacist who assesses the patient for risk and urgency of need
  - The hospital calls the patient to obtain verbal consent plus other contact details such as home address, pharmacy address and GP address
  - once consent is received from the consumer, the patient's GP receives the HMR report along with some information about the outreach programme
  - if the GP is unwilling to engage or unwilling to participate, the referring pharmacist will attempt to find an alternative GP within 10 days – the referring pharmacist also locates an appropriate HMR provider located near the patient
  - the HMR provider must conduct service and submit their report within 10 days - types of documents compiled and sent to the HMR provider include discharge summaries, pathology reports, in house quality questionnaire and other medical details
  - the HMR provider faxes copy of report back to referring pharmacist and a GP feedback form is faxed to the GP

#### **Patient criteria:**

For both sites, some consumers are identified during ward rounds, while other consumers are identified by the hospital pharmacist taking a medicines history at admission or at discharge.

While there is no strict eligible patient criteria for considering a referral, both sites indicated trying to select patients who benefit the most and consider a diverse range of variables including:

- lack of a GP or limited access to a GP
- patient is in “urgent” need of an HMR within ten days
- patient demonstrates confusion or lack of understanding
- poly pharmacy and/or their needs are complex
- new medicines are prescribed
- lack of social support or network

Monash has a specialist clinic available for some patients, who can't or prefer not to be seen in the home

#### **Challenges/barriers:**

- Stakeholders reported that better collaboration/communication between health practitioners would facilitate improved health outcomes for consumers and observed diversity in the level of engagement between GPs.
- Stakeholders noted the lack of funding to hospital pharmacists for this referral pathway

as a significant barrier. The process involved with identifying consumers and preparing materials for HMR referral takes approximately 1.5 hours per patient, on average. Without any payment to the hospital, there is minimal incentive for the hospital to support the scheme or for hospital pharmacists to be involved

– Calvary has tried to overcome the lack of payment for time, by taking 25% out of the HMR payment to the pharmacist who delivers the services and reinvesting that funding back into the hospital; however, this has an impact on the accredited HMR pharmacists, who are more likely to prioritise referrals from GPs, rather than referrals from the hospital.

- Without a streamlined process for referrals, there can sometimes be double handling of information, creating inefficiencies.

**Strengths/successes:**

- All stakeholders commented that positive patient feedback had been received from consumers who received the HMR service – though this is anecdotal and there is no mechanism in place to capture feedback.
- All stakeholders commented that HMRs do contribute to improving consumer health outcomes, and post discharge was noted as an important and high risk time for consumers, whereby close support for managing medicines has the potential to improve compliance and reduce the risk of readmission to hospital due to medication misadventure.
- Both sites commented that the impacts and outcomes of the services needed to be reviewed regularly to ensure that the budget was being well spent and continued to be cost effective. Due to the programmes and reviews being undertaken in isolation to other initiatives within primary health care, it is often difficult to attribute health outcomes to having received a Medication Management program.
- All stakeholders commented that medicines reconciliation is very important for the GP and the consumer.

**Areas for improvement:**

The most commonly cited areas for improvement were:

- funding arrangements could be readjusted to provide remuneration to pharmacists based inside the hospital to identify and refer patients for HMR, as needed. These funding arrangements could be allocated independently of CPA
- other peak bodies could be involved in negotiations of future CPAs, to allow further involvement for representatives of hospital pharmacists
- there is potential for clerical support to be provided to help gather patient information, which can be time consuming
- changes could be made to the 10 day follow up rule, which limits what accredited HMR pharmacists are realistically able to achieve

### **2.7.1 Purpose**

The purpose of the stakeholder consultations with the hospitals piloting this referral pathway was to ascertain perspectives on the Medication Management programmes which relate to the areas of focus for the Review.

This consultation focused on better understanding how the hospital referral pathway was implemented at the pilot sites and broadly covered:

## Key findings

- involvement in establishing and implementing the HMR hospital referral pathway
- uptake of the referral pathway
- the development and provision of any program/professional guidelines, training and support to assist with referrals
- impacts and outcomes of the referral pathway for both primary health care and consumers
- suggestions for improvement and other comments.

### *2.7.2 Approach*

The stakeholder consultations were semi-structured in nature, and were carried out via teleconference. Two consultations were undertaken (with 5 individuals in total).

The stakeholders for consultation were advised by the Department.

A discussion guide was provided to participants prior to the consultations which outlined the context of the Review and the types of questions that would be asked. The discussion guide was based on the stakeholder consultation guide for the broader consultations conducted earlier in the project, discussion guide is included in Appendix G for reference. The discussion guide was followed closely in the consultations, each of which ran for approximately 60 minutes.

# 3 Discussion

*This section provides a discussion of findings based on the four areas of investigation outlined in the Review Framework. Findings are discussed in the context of support for health policy and achievement of 5CPA objectives, coordination, integration, implementation, impacts and outcomes of Medication Management programmes and services. Opportunities for future Agreements are also discussed in view of Review findings.*

<b>Overview of the Review</b> Chapter 1 1.1 Background and context to the Review 1.2 Delivery of programs/services and changes 1.3 Purpose of the Review 1.4 Review framework 1.5 Overview of methodology and timelines 1.6 Project governance 1.7 Roadmap to this Report	<b>Key findings</b> Chapter 2 2.1 Full program data analysis 2.2 Stakeholder consultations 2.3 Consumer focus groups 2.4 Practitioner focus groups 2.5 Practitioner survey 2.6 Consumer survey 2.7 HMR hospital referral pathway consultation	<b>Discussion</b> Chapter 3 <b>3.1 Discussion of findings against Review Framework</b> <b>3.2 Value and benefit of Medication Management programs and services</b> <b>3.3 Implications and opportunities for the future</b>	<b>Appendices</b> Chapter 4 Appendix A Reach of medication management programmes and services Appendix B Review framework Appendix C Stakeholder consultation s Appendix D Consumer focus groups Appendix E Practitioner focus groups Appendix F Practitioner survey Appendix G HMR referral pathway consultations Appendix H Reference list Appendix I Consumer survey
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## 3.1 Discussion of findings against the Review Framework

### *Support for health policy and achievement of 5CPA objectives*

The review questions for this area of investigation explored the contribution of 5CPA Medication Management programmes and services to achieving the overall ambitions of the 5CPA, and supporting broader health policies such as the National Medicines Policy.

The suite of 5CPA programmes and services has been developed during a time of ambitious health reform to address the challenges of developing a sustainable health system for Australia. Some of these challenges include a growing ageing population, increasing prevalence of chronic disease, inefficiencies in the provision of healthcare services and inequities in accessing health care, experienced across Australia. Community pharmacy plays a critical role in addressing these challenges. The 5CPA harnesses the role of community pharmacy to meet medication and related service needs, such as timely access to affordable medicines and the quality use of medicines towards achieving optimal health outcomes and economic objectives, in line with the National Medicines Policy.

Findings from stakeholder consultations indicate that Medication Management programmes and services were largely viewed positively. Stakeholders were supportive of Medication Management programmes and services, which were in general, perceived to add value as part of an overall preventive strategy for consumers. Furthermore, the majority of stakeholders viewed the policy intent for the Medication Management programmes and services to be in line with wider primary health care policies and more consumer focussed objectives of 5CPA and Quality Use of Medicines (QUM) policies, by way of achieving positive health outcomes and providing education to improve consumer confidence with medicines management.

Findings from the consumer survey also provided support by way of level of satisfaction for medication management programmes and services delivered by their pharmacists, regardless of age, general health status and number of medicines. Few consumers were dissatisfied with the programmes and services delivered and several indicated a positive impact as a result of receiving a programme and service.

As the health reform agenda moves towards treating the patient as a whole, mobilising appropriate services to people with greatest need is important and should consider where pharmacists and medication management programmes can add best value within the broader sector. An indicative analysis of Medication Management programme reach relative to disease burden is presented in Appendix A as one approach towards better aligning delivery of services to need. More fully harnessing community pharmacy participation in the primary health care landscape offers opportunities for future agreements.

### *Coordination and integration of 5CPA Medication Management programmes and services*

The review questions in this area of investigation explored the extent to which 5CPA Medication Management programmes and services were complementary, included duplication, and identified where gaps were evident.

Findings from analyses of programme data demonstrate that Medication Management programmes were delivered as standalone programmes, with the vast majority of consumers receiving a MedsCheck, RMMR or HMR. Delivery of a combination of programmes was rare. Approximately two percent of consumers received a combination of programmes, with the most common combinations being a HMR and MedsCheck and a HMR and RMMR (in that order). No Aboriginal and Torres Strait Islander consumers consulted had received an HMR.

There is good evidence across global literature and prior reviews of professional pharmacist services delivered across Australia relating to the effectiveness of pharmacist delivered interventions.<sup>15,16</sup> Interventions involving pharmacists directly in medicines management via medicines reviews and via consultations between pharmacists and consumers (Clinical Interventions) demonstrate positive improvements in adherence and other key medicines use outcomes such as knowledge about medicines. DAAs have demonstrated benefits in improving medicines use and adherence, particularly for certain conditions like hypertension and cardiovascular disease<sup>17</sup>. DAAs delivered in community settings also demonstrate clinical value and demonstrate positive impacts on medicines management, satisfaction and clinical outcomes.<sup>18 19</sup>

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<sup>15</sup> •Roughhead L, Semple S, Vitry A, The Value of Pharmacist Professional Services in the Community Setting – A systematic review of the literature 1990-2002, Quality Use of Medicines and Pharmacy Research Centre, School of Pharmaceutical, Molecular and Biomedical Sciences, University South Australia

<sup>16</sup> Morrison A1, Wertheimer AI, Evaluation of studies investigating the effectiveness of pharmacists' clinical services. Am J Health Syst Pharm. 2001 Apr 1;58(7):569-77.

<sup>17</sup> Ryan R, Santesso N, Lowe D, Hill S, Grimshaw J, Pictor M, Kaufman C, Cowie G, Taylor M. Interventions to improve safe and effective medicines use by consumers: an overview of systematic reviews. Cochrane Database of Systematic Reviews 2014, Issue 4

<sup>18</sup> Mahtani KR, Heneghan CJ, Glasziou PP, Perera R. Reminder packaging for improving adherence to self-administered long-term medications. Cochrane Database of Systematic Reviews 2011, Issue 9.

<sup>19</sup> Lentile C, Lewis G. Effectiveness and cost effectiveness of dose administration aids (DAAs) – Final Report November 2004. School of Medicine, University of Queensland.

However, the global body of literature is less clear about to what extent delivering multiple interventions or increasing the intensity of interventions delivered improves medicines adherence and health outcomes. In other words, there is limited evidence to distinguish whether a dose response exists and/or which combination of programmes is most effective by way of behavioural and health outcomes in general. Direct behavioural and health outcomes were not assessed in this review as programme data did not collect follow up measures of impact by consumer and we were unable to implement a longitudinal design for the consumer survey to explore this further.

Findings indicate that Medication Management programmes and services were not delivered in a continuum of increasing level of intensity to meet the needs of increasing medication management complexity. Programmes and services were viewed as fulfilling a specific purpose, with HMRs, RMMRs, MedsChecks/Diabetes MedsChecks and CIs viewed as primarily being medication management or risk prevention tools. While stakeholders perceived there to be little integration or interaction between programmes and services in general, many noted the potential for MedsChecks/Diabetes MedsChecks services to act as screening tools to assess level of consumer need for more intensive services such as HMRs if their level of medication adherence remained poor, or if their health needs became more complex. Overall, minimal areas of overlap or duplication were identified by practitioners and health practitioners reported ongoing gaps in the existing programmes and services, resulting in unmet needs of the consumer.

Common factors reported to influence whether health practitioners referred or provided a service included complexity of the consumer's medication regime, level of medication adherence/compliance and their existing relationship with/knowledge of the consumer and their medication needs. Additionally, factors influencing Pharmacist's clinical judgements to provide an in-pharmacy medication review, as opposed to an in-home review, encompassed considerations of consumer needs for education about medicines or their health conditions. Remuneration was reported to be a minor influence in decision-making.

In practice, the circumstances triggering an intervention appear to be more complex than poly-pharmacy alone. The most common factor influencing delivery of a Clinical Intervention was *being able to respond to consumers' acute need for assistance with their medicines and education about medicines and health conditions*. Clinical Interventions were also commonly viewed as facilitating better documentation and record keeping at the consumer level, and an opportunity to make a clinical decision to provide a service/intervention. DAAs were viewed to specifically provide assistance with adherence, reducing the risk of medication misadventure and were seen as essential adjuncts to medication management, particularly in residential aged care facilities. However, while pharmacists are reimbursed for supplying DAAs within RACFs, RACFs are not. Health practitioners working in RACFs highlighted this to be a barrier, though were willing to bear the cost since DAAs were viewed to be an essential service. Staged Supply services were viewed to assist with managing intentional misuse and to fulfil a particular need in the community, particularly for managing the medicines of vulnerable consumers who are drug dependent or living in a dangerous environment.

At the outset of this report, we outlined the original intention of the 5CPA service delivery model, whereby lower intensity interventions could interact with higher intensity interventions via a continuum of care to respond to the needs of increasingly complex consumers and/or for consumers for whom further intervention is necessary. The findings from this review demonstrate that this particular continuum of care model is currently not reflected in practice. At the same time, the findings demonstrate the presence of common characteristics and appropriate consideration of consumer need to trigger referral to and delivery of medication management interventions. Thus, the interaction between assessment of consumer need and delivery of appropriate intervention is complex and influenced by interdependent factors.

There is opportunity to explore how lower intensity interventions like MedsChecks/Diabetes MedsChecks and Clinical Interventions may be used as screening and/or diagnostic tools to trigger the delivery of higher intensity interventions like HMRs and RMMRs where

appropriate. This will require consideration of a more sophisticated approach towards systematically assessing and linking consumer needs to the interventions or activities chosen by practitioners, whilst integrating clinical judgement by the pharmacist and involvement of the consumer. Considerations could include a review of existing capabilities and the provision of appropriate training, tools and guidance to support implementation of programmes within a suite of options. Models for funding such an approach are discussed further below.

### *Implementation of the 5CPA Medication Management programmes and services*

The evaluation questions in this area of investigation explored two broad themes: management and governance of the Medication Management programmes and services in line with the expectations of the 5CPA, barriers and facilitators to implementation and the information and resources used by pharmacists to deliver programmes and potential enhancements to these.

Overall, practitioners reported being reasonably satisfied with their involvement in the Medication Management programmes and services. In general, they also reported being satisfied with the benefit their consumers received through Medication Management programmes and services.

Transparency around overall governance of the 5CPA Medication Management programmes and services was viewed to be sub-optimal by stakeholders. In particular, concerns were expressed about 5CPA negotiations only involving the Department of Health and the Pharmacy Guild of Australia, which was noted to be only one of several peak bodies. Stakeholders who participated in this Review noted that involvement and consideration of a broader range of peak bodies in discussions about future Community Pharmacy Agreements would achieve better representation of the collective interests of the sector.

The number of service claims rejected across Medication Management programmes and services could be considered reasonably high, representing around 10% of submitted claims for each Medication Management programme and service. The most common reasons for rejecting service claims appeared to be related to administrative processes and could indicate that administrative arrangements were not as well established and/or as clear as expected. Themes from the stakeholder consultation identified a need for more sophisticated and efficient administrative processes to be made available. For instance, an electronic claiming process coupled with an auditable trail accessible to pharmacists would enable each pharmacist to check whether a claim has been submitted for a particular consumer within the 12 month timeframe, thereby reducing the potential for errors and subsequent rejection.

Alternatively, the reasonably high level of rejections may reflect that the information and resources available to pharmacists to deliver the programmes were sub-optimal. While, the majority of practitioners consulted reported that they received training and education for Medication Management programmes and services, there was also general agreement that further education and training to deliver or support these programmes and services would be beneficial. In particular, the majority of pharmacists reported that they would benefit from further (clinical) education and training to improve their screening and diagnostic skills in order to better understand consumers' needs over time.

Considering the availability of information and resources more broadly, general awareness of Medication Management programmes and services by both consumers and various practitioners was reported to be low. A lack of awareness, particularly noted among GPs was noted to be a barrier for consumer awareness and access of Medication Management programmes and services. Implementation of future Community Pharmacy Agreements would benefit from stronger and/or broader awareness and education campaigns about the various professional programmes and services available through pharmacists, including the provision of how to access them, thereby empowering the consumer (to ask) and the GP (to refer).

## *Impacts and outcomes of the 5CPA Medication Management programmes and services*

The evaluation questions in this area of investigation explored three broad themes, the demand for Medication Management programmes and services, the characteristics of consumers who used the programmes the success of programmes against their original ambitions, including the impact of changes to the programmes during the 5CPA.

### *Impact on demand for the programmes*

The average age of consumers receiving a medication review was highest for those receiving RMMRs, followed by HMRs and lowest for consumers receiving MedsCheck/Diabetes MedsChecks. This pattern reflects the likely path of morbidity across life course i.e. in-pharmacy reviews (MedsChecks) were delivered to younger consumers earlier in the trajectory of their disease, in-home reviews (HMRs) for older consumers with more chronic and complex care needs, and reviews in RACFs (RMMRs) for the oldest, most complex group of consumers. Also not unexpectedly, consumers receiving Medication Management programmes (MedsCheck/Diabetes MedsCheck specifically) were identified as taking greater than five medications (median of 6) and generally managed multiple chronic conditions (median of 2).

Over time, findings demonstrate that programmes and services were delivered to a broader population. MedsChecks/Diabetes MedsChecks and HMRs were delivered to younger consumers, RMMRs were delivered to older consumers and all programmes and services were delivered to consumers with fewer medicines and fewer health conditions. While a level of sensitivity to changes in policy and administration requirements may be expected, there are a number of plausible interpretations for observation of these trends.

Delivering MedsCheck and HMR programmes to younger participants might indicate a trend towards earlier intervention and delivering RMMR programmes to older recipients could suggest a respond to increased longevity in RACF settings. Given that clinical judgement was perceived to be critical in determining whether an intervention was delivered or not, the findings suggest that Medication Management programmes and services may be increasing their potential to manage medication risk more broadly.

### *Impact on consumer need*

As noted above, assessment of consumer need, and subsequent clinical decisions, were reported to be based on a broad set of clinical judgements. In terms of perceived benefits to the consumer, practitioners reported little differentiation between high, medium and low levels of consumer need. Furthermore, practitioners regarded Medication Management programmes and services as benefiting a range of consumers, whereby early intervention at any level of need was seen to be beneficial. Given that assessment of consumer need may be quite diverse in practice, there may be benefit in the provision of evidence-based guidance for assessing consumer need to guide service delivery.

However, consumer need does not necessarily guarantee access to 5CPA services. The majority of stakeholders indicated that Medication Management programmes were difficult to access for consumers due to low consumer awareness, information on programmes not being readily available to consumers and low GP engagement and awareness. For CALD and Aboriginal and Torres Strait Islander populations, access was cited as particularly difficult, including cultural concerns with conducting HMRs in the home.

Though the 5CPA did include a provision which enabled Aboriginal and Torres Strait Islander patients to receive an HMR outside the home via a prior approval process, we are unable to distinguish when this occurred within the current programme data. This finding is in line with previously raised concerns around the need for HMRs to be conducted in a consumer's home (unless prior approval was given), which is logistically difficult in many

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rural and remote areas, and culturally inappropriate in a number of situations for some population groups<sup>20</sup>. For rural and remote communities, access to services was determined by the availability of an accredited pharmacist to undertake medication reviews, and cost/travel time to undertake these services was noted as a barrier for pharmacists.

### *Impact perceived by consumers*

Findings from consumer and practitioner focus groups demonstrated that HMRs were perceived to provide the greatest benefit to consumers overall. For consumers, HMRs were viewed as preventing medicine related adverse events, whilst providing education and comfort/support. Consumers also perceived DAAs to be valuable, despite their cost being reported as a barrier. CALD consumers noted the importance of delivering Medication Management programmes and services in culturally sensitive settings.

Findings from the consumer survey indicate that consumers who received MedsCheck/Diabetes MedsCheck or HMR services perceived positive impacts on their health, confidence with medicines, experienced reduced side-effects and improved their understanding of medicines, regardless of age group.

### *Impact on service provider collaboration*

An important objective of the 5CPA was the ambition to enhance collaboration between pharmacists and GPs. To date, there appears to be no clear model in pharmacy where professional collaboration occurs in an effective and sustainable way across Australia. Examples of professional collaboration that appear to work well involve an understanding of local need or where a clear need is evident for health professionals to work together and towards a common goal for all health professionals involved<sup>21</sup>. Other best practice collaborative models cited in past reviews include a Canadian initiative placing pharmacists within primary health care teams<sup>22 23 24 25</sup> and a New Zealand initiative locating GPs, Nurses, Pharmacists and Allied Health Professionals within (or linked in with) the same health centre to enhance multidisciplinary care and reduce costs<sup>26 27</sup>.

Findings from this review indicate that the level of GP engagement with the programme has improved, but overall remains sub-optimal and a barrier to awareness, access and implementation. In general, practitioners have observed a shift in GPs' level of acceptance for

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<sup>20</sup> National Rural Health Alliance. The supply of medicines and pharmacy services in rural and remote Australia – discussion paper. National Rural Health Conference, July 2013.

<sup>21</sup> Pharmacy Guild of Australia. Professional Collaboration – summary of stakeholder consultations. February 2012.

<sup>22</sup> Pharmacy Guild of Australia. Professional Collaboration – summary of stakeholder consultations. February 2012.

<sup>23</sup> Innovative Pharmacy Practices Volume I: Overview and Analysis. < [http://blueprintforpharmacy.ca/docs/default-document-library/2011/04/19/Innovative\\_Pharmacy\\_Practices\\_Volume\\_I\\_final.pdf?Status=Master](http://blueprintforpharmacy.ca/docs/default-document-library/2011/04/19/Innovative_Pharmacy_Practices_Volume_I_final.pdf?Status=Master)>.

<sup>24</sup> Innovative Pharmacy Practices Volume II: Profiles of Pharmacy Practices. < [http://blueprintforpharmacy.ca/docs/default-document-library/2011/04/19/Innovative\\_Pharmacy\\_Practices\\_Volume\\_II\\_final.pdf?Status=Master](http://blueprintforpharmacy.ca/docs/default-document-library/2011/04/19/Innovative_Pharmacy_Practices_Volume_II_final.pdf?Status=Master)>.

<sup>25</sup> Dolovich et al (2008). Integrating Family Medicine and Pharmacy to Advance Primary Care Therapeutics. *Clinical Pharmacology & Therapeutics*. Vol. 83(6): p.913-

<sup>26</sup> Pharmacy Guild of Australia. Professional Collaboration – summary of stakeholder consultations. February 2012.

<sup>27</sup> Midlands Health Network Integrated Family Centres Report  
<https://provider.midlandshn.health.nz/clinical/uploads/Main/Integrated%20Family%20Health%20Centres%202011%20Report.pdf>

and respect of pharmacists' value and expertise in the area of medicines and medication management. Subsequently, the level of trust in Medication Management programmes and referrals into these programmes has increased. This observation was particularly evident in relation to HMRs and RMMRs. In contrast, there was very little evidence of collaboration between GPs and pharmacists for other programmes including MedsChecks/Diabetes MedsChecks, Clinical Interventions, DAAs and Staged Supply services, apart from brief phone calls or faxes to confirm that a prescription or dosage was noted.

Despite these variations, all stakeholders and practitioners supported the need for greater collaboration. Development of trusting relationships, increased awareness and engagement were identified as important enablers to improving collaboration. The degree of collaboration was identified as being dependent on the level of trust and respect in the relationship between health care professionals. When clearly apparent, GPs, nurses and pharmacists regularly collaborate with each other, seeking advice and learnings on specialties and competencies, resulting in perceived improved medication management (and health outcomes) for the consumer. This observation is entirely in line with prior work identifying enablers for collaboration.<sup>28</sup>

A number of barriers to collaboration were also noted. The number and nature of practitioners in a region has an impact on level of collaboration. Poor collaboration has been noted in remote areas with large numbers of locum GPs and a limited number of community pharmacies but also in metropolitan areas with several GPs and pharmacists in the area. Several practitioners stated concerns around the return on investment in relation to collaboration, noting little gain for large effort. Suggestions to improve the level of collaboration between GPs and pharmacists to improve consumer outcomes included the introduction of specific funding arrangements to incentivise collaboration e.g. via case conferencing and medication advisory committees.

Findings from previous reviews have suggested a range of factors to improve collaboration between GPs and pharmacists. Typical enablers listed for collaboration included the availability of ring-fenced funding, clear, transparent communication mechanisms supported by integrated technological advances, professional understanding and respect of various health professional's roles, co-location/working in teams and collaborative education and training between health professionals and whilst at university.<sup>6</sup>

The use of financial incentives to reward collaboration that improves quality of care is increasingly being used across many countries also engaged in similar significant health reform. Despite their growing popularity, there is currently little evidence to support the use of incentives to improve collaboration and the quality of healthcare delivered to consumers<sup>29</sup>. In Australia, the use of incentives are often incorporated into blended payment systems; however, unintended consequences do occur such as excessive referrals, increased quantity with no improvement in quality, under-servicing and at times reduced flexibility of service provision.<sup>30</sup> The introduction of pharmacy practice incentives was intended to be a good example of attaching payment to the demonstration of "real outputs" such as communication/collaboration. However, from the current review one unintended consequence with this service model has been the perceived effort to reward ratio among pharmacists. Some pharmacists reported being deterred by the small payment (particularly for Clinical Interventions) relative to the administration time involved to collate evidence of collaboration.

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<sup>28</sup> Pharmacy Guild of Australia Professional Collaboration -Summary of Stakeholder Consultations February 2012

<sup>29</sup> Scott A, Sivey P, Ait Ouakrim D, Willenberg L, Naccarella L, Furler J, Young D. The effect of financial incentives on the quality of health care provided by primary care physicians. *Cochrane Database of Systematic Reviews* 2011, Issue 9.

<sup>30</sup> Oliver-Baxter J, Brown L. Primary health care funding models. PHCRIS Research Roundup

### *Impact of changes to the programmes during the 5CPA*

As previously discussed, a number of trends in programme delivery were noted. These were observed against a background administrative changes and policy changes that were introduced to the Programme over the course of the 5CPA. While a certain sensitivity of programme delivery to policy and administrative changes over time is likely and expected, our findings do not presume a direct or unique causal link between the trends in service delivery over time and these.

Practitioners have suggested the need for more stringent monitoring and auditing of claims and services to allow transparency around whether programmes and services are being conducted appropriately, thereby discouraging any potential for inappropriate practices to occur in response to 5CPA changes.

## **3.2 Value and benefit of Medication Management programmes and services**

Practitioners and consumers saw clear benefit and value in the suite of Medication Management programmes and services as contributing towards improving the health outcomes of consumers. The perceived value of, and benefits received through, medication management programmes and services include:

- healthier consumers via prevented deaths, reduced adverse drug reactions, avoided hospitalisations and reduced costs to the health system
- improved medication compliance among consumers, empowerment and improved confidence of consumers to self-manage their medicines
- de-prescribing medicines, better use of drugs, dosing and interactions
- assistance for GPs in managing the complexities of geriatric pharmacology.

These align well with perceived benefits reported in previous reviews including, improving consumer health, reducing hospital admissions due to medication misadventures, educating consumers about correct medication adherence; and improving consumers' confidence, understanding of and compliance with taking medicines.<sup>31 32 33 34</sup>

Though we did not conduct a cost-benefit analysis in this Review, findings from previous reviews provide some insight towards informing the cost-benefits of medication management programmes and services. Previous reviews of HMRs and RMMRs have demonstrated viable cost effectiveness, including generating improvements in quality of life and future net benefits.<sup>35</sup> Reviews of DAA services have demonstrated improvements in non-

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<sup>31</sup> Stafford A, Tenni P, Peterson G, Doran C, Kelly W. The economic value of Home Medicines Reviews. The Pharmacy Guild of Australia

<sup>32</sup> Consumers Health Forum of Australia. Consumer Uptake of Home Medicines Reviews (HMR): An Analysis of the HMR Programme and its Sustainability. February 2013

<sup>33</sup> Campbell Research. Evaluation of the Residential Medication Management Review Programme – main findings report. May 2010

<sup>34</sup> Urbis. Evaluation of the Home Medicines Review Programme – Pharmacy Component. June 2005

<sup>35</sup> Urbis Keys Young, Evaluation of the Home Medicines Review Programme – Pharmacy Component, 2005

adherence and consumer safety,<sup>36</sup> thereby addressing avoidable hospital admissions which are estimated to cost the Australian health system \$660 million per year.<sup>37</sup> Incorporating a cost-benefit analysis in future Review is critical to informing (and quantifying) the extent of benefits gained in relation of level of investment.

### **3.3 Implications and opportunities for the future**

#### *What this Review doesn't inform*

While there are a number of issues that this Review does provide insight towards, there are still a number of things we don't know, and aren't able to answer based on the findings from this Review. These are outlined as follows:

- **Uniformity in addressing consumer needs:** While findings from this review indicate that consumers were in general satisfied by the service provided by their pharmacists in relation to medication management programmes and services, we are unable to draw any inferences on whether their needs were uniformly addressed by community pharmacists. For instance, how does consumer choice impact on whether and which programmes and services are delivered? And for example, if consumers were asked to pay for the services and programmes received, would the value of these services and programmes be perceived to be the same.
- **Chronic disease model of care for pharmacy:** While there is no specific chronic disease model of care for pharmacists and/or for pharmacy settings, there are several examples of pharmacist-physician and pharmacist-nurse co-management models of chronic disease care that demonstrate effectiveness and reiterate the benefits of professional collaboration. In these examples, primarily drawn from the UK, findings demonstrate that co-management for chronic disease management can improve patient outcomes and reduce the risk of medication misadventure.<sup>38 39 40</sup> This was an area that was noted to be a challenge in stakeholder and HMR referral consultations.
- **Understanding the economic benefits of medication management programmes and services:** We were unable to conduct a benefits analysis as part of this review and as a consequence are not able to make inferences about direct and indirect benefits resulting from delivering medication management programmes and services. The Department may wish to consider conducting a baseline benefits analysis to inform the health, social and economic benefits that result from these programmes implemented as part of the 6CPA and evaluate the cost-benefits as a result of 6CPA investment in the next Review.

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<sup>36</sup> Australian Department of Health and Ageing, Evaluation of the DAA/PMP programmes, PricewaterhouseCoopers, 2010

<sup>37</sup> Australian Department of Health and Ageing, Evaluation of the DAA/PMP programmes, PricewaterhouseCoopers, 2010

<sup>38</sup> George PP1, Molina JA, Cheah J, Chan SC, Lim BP .T2010 The evolving role of the community pharmacist in chronic disease management - a literature review. .Ann Acad Med Singapore. 2010 Nov;39(11):861-7.

<sup>39</sup> Borenstein JE1, Graber G, Saltiel E, Wallace J, Ryu S, Archi J, Deutsch S, Weingarten SR. Physician-pharmacist comanagement of hypertension: a randomized, comparative trial. Pharmacotherapy. 2003 Feb;23(2):209-16.

<sup>40</sup> Stephen M. Setter, Cynthia F. Corbett, Joshua J. Neumiller, Brian J. Gates, David A. Sclar and Travis E. Sonnett. Effectiveness of a pharmacist–nurse intervention on resolving medication discrepancies for patients transitioning from hospital to home health care. American Journal of Health-System Pharmacy November 15, 2009 vol. 66 no. 22 2027-2031

## *Community Pharmacy Agreement Architecture*

The findings from this Review indicate that programmes and services provided by community pharmacy are valuable for the management of health and contribute to improved health outcomes for Australian consumers. The outstanding question to be answered is how best to optimise the value of community pharmacy, in particular, exploring what models might deliver best return on investment for Government in future Community Pharmacy Agreements.

Community pharmacy models face the same challenge as other public health services. That is to design service delivery models that cost-effectively address population health need. The components of a needs-based utilisation framework, that follows evidence-based medicine principles could be developed to guide:

- An initial comprehensive assessment, with appropriate triage and assessment to identify clinical and consumer need.
- Consideration of need, including the intervention setting, for example Aboriginal Health Services, Local Health Districts, GP clinics, pharmacies, home-settings etc. in order to appropriately target particular demographics and access issues.
- Delivery of an appropriate medication management intervention.

Findings from this Review indicated reasonable agreement with and support for an adequate model that recognises and enhances the valuable contribution of community pharmacy. What remains less clear is how this model should be mobilised in the Australian context. As noted above, stakeholders and practitioners reported a wide range of important considerations, including professional development, professional collaboration mechanisms, incentives, facilitation of reach to target population groups and community pharmacy business models.

Development and implementation of a future model would need to address all of these considerations alongside a suitable re-imburement model with appropriate tools and metrics to shape service delivery in the desired direction for consumers, practitioners and Government. Finding this desired ‘sweet spot’ poses a number of critical design questions outlined as follows.

### **1. What are the most appropriate funding arrangements to better facilitate programme objectives?**

Over the last two decades, Community Pharmacy Agreements have increased in scope, recognising the key role played by community pharmacies in primary health care and the need to retain services that enhance patient medication management. As with previous Agreements, the 5CPA introduced new evidence-based programmes as part of a quality framework, with incentives available to accredited pharmacies to deliver high quality patient services. To date, updating funding arrangements has largely provided for the addition of services and programmes, each with a particular unit cost.

Recognition of variation in the complexity of consumer need has resulted in the design of a differentiated suite of programmes and services. While these programmes and services potentially sit along a continuum of complexity, findings from this Review suggest that more intensive programmes and services were not delivered to meet the needs of increasing medication management complexity. Instead, they appear to have been delivered as standalone programmes and services. Therefore, funding on the basis of an expected hierarchy of service complexity may not be the most appropriate funding arrangement. In this context, the appropriateness of funding arrangements could be considered against at least three ambitions: improving health outcomes for Australians; cost-effectiveness for government; and support for community pharmacy business models.

The challenge of funding services to address variation in consumer complexity is not new. In Australia and across comparable health systems like the UK and New Zealand, the evolution Australian Government Department of Health

of primary care funding models provide a logical starting point for considering the issue. Nationally, and internationally there is a move towards more strategic commissioning approaches which recognise the potential involvement for a range of health professionals, and includes a combination of population based capitation models and enhanced services for particular populations of need.

New Zealand provides an interesting case in point. The bedrock of its model is centred on capitation-based payments, calculated using numbers of the enrolled primary health organisation (PHO) population. This means that accredited and geographically based PHOs and their general practices are paid based on per capita enrolled, not the number of times a provider sees patients. The formula for calculating capitation payments takes into account the demographic make-up of the population. Importantly, the capitation-based payment system does not require a doctor to see each patient every time and in some cases, health services may sometimes more appropriately be provided by another health professional. In addition to this, *Care Plus* funding was recently introduced for general practices to better support people with high health needs due to chronic conditions. The aim of *Care Plus* is to improve chronic care management, reduce inequalities, improve primary health care teamwork and reduce the cost of services for high-need patients. A general practice that is part of a PHO can enrol a patient in *Care Plus* based on a set of mandatory clinical criteria, providing for more intensive clinical management by a doctor or nurse at a general practice setting.

In Australia, primary care funding remains largely based on a fee for service and non-enrolled basis. However, complementary features of this historical model are evolving and currently being tested. Two prominent initiatives have targeted GPs and GP practices, focusing particularly on encouraging the management of chronic and complex care needs in the primary care setting. Enhanced Primary Care (EPC) care planning items were introduced to the Medicare Benefits Schedule, and then in 2005 replaced by the Chronic Disease Management (CDM) items (721 -732). More recently, mechanisms to support proactive follow-up and management of patients with chronic conditions have been drawn from international experiences to inform development and trial of local initiatives. These include a national trial of Diabetes management, focussing on enrolment processes, led by the Department of Health and establishing Primary Health Networks (PHNs) to undertake strategic commissioning functions. PHNs will be responsible for increasing the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes and improving coordination of care to ensure patients receive the right care in the right place at the right time. They potentially offer the opportunity for pharmacy involvement as part of more broadly-based primary care commissioning.

## **2. Can and should community pharmacy funding arrangements be linked to strategically identified structured care protocols?**

Funding arrangements are increasingly reflecting structured needs-based clinical assessment and care protocols as a basis for new models, involving a broader range of health professionals in appropriate clinical care. A recent example is provided by the introduction of the *Extended Care Paramedics model* in several Australian jurisdictions, to improve the quality of and access to appropriate health care for people calling 000 who could be treated in a more appropriate setting away from the Emergency Department. The Extended Care Paramedic role is consistent with models implemented in other Ambulance services across Australia and overseas that are designed to better meet the more complex health needs of the community. The approach builds on other models aimed at extending the reach of care in the community, including virtual hospitals (also known as hospital in the home or hospital in the aged care home) and nurse practitioner models.

Examples of models where community pharmacy is involved in a structured care protocol for populations of particular need are also available. Warfarin management in community pharmacy settings offers a useful case study, where patients have demonstrated improved, dose determination, stability and compliance. Warfarin therapy is complicated by the variability of its biologic effect, its narrow therapeutic index, and the associated thrombotic or haemorrhagic events in the event of over- or under-anticoagulation; however, studies have demonstrated improved anticoagulation control through the frequent monitoring of the Australian Government Department of Health

international normalized ratio (INR), resulting in improved health outcomes. The usual model of care for patients taking anticoagulants involves attendance at a physician-run hospital-based clinic. However, over the last decade there has been increasing interest in developing other models of care, with studies from the UK<sup>41</sup> and US<sup>42</sup> demonstrating success with clinical protocol based approaches involving community pharmacy. Structured community pharmacy managed services include the use of chart review, laboratory interpretation, recommendations for warfarin dosage adjustments, physician and patient education, and coordination of follow-up in the outpatient anticoagulation clinic.

### **3. Where would clinical indicators be useful in a model for community pharmacy?**

Findings from this review indicate that HMRs provide the critical opportunity for more detailed/ sensitive understanding of consumer need. At the same time, the assessment of consumer need was reported as a reasonably diverse activity across clinical practice, and pharmacists themselves would welcome better training in such clinical judgements. In designing an appropriate model and funding scheme, there is opportunity to canvas the potential value of introducing a range of evidence-based guidance to support the delivery of Medication Management programmes and services in the future.

The basis for reimbursement will need to be specified when considering the inclusion of clinical indicators into the design of appropriate funding arrangements. Pharmacist delivered screening and diagnosis services for medication management could be one way to assess clinical and consumer need and select the appropriate service for delivery and/or referral. Allowing funding for an initial consultation with consumers to assess their medication management needs, similar to the GP consultation process may be one approach to consider as part of an overall service delivery model. Following the initial assessment of need, time spent with a patient may be one way to measure the delivery of service relative of complexity and health need. For example, a 5 minute medication review would translate to a low need while a 45 minute medication review would translate to a higher need, with appropriate funding allocated across this continuum for the provision of services. This approach is typically part of the Australian primary care model.

However, time-based indicators of service complexity are likely to require augmenting with additional clinical criteria to determine what should be paid for a service. This notion aligns with the current reform agenda being applied to public hospital funding across Australia. The introduction of Activity Based Funding (ABF) provides payments to hospitals for both the number and mix of patients they treat. By this model, a hospital receives funding for treating more patients (number), taking into account patients who are more complicated to treat than others (mix). ABF payments are intended to be fair and equitable, being based on the same price for the same service across public, private and not for profit providers of public hospital services. In the community pharmacy setting, the addition of some evidence based clinical indicators could provide a better basis for judging and appropriately reimbursing complexity.

### **4. How would a model best harness and build capacity in community pharmacy?**

Many stakeholders indicated that a multidisciplinary, collaborative approach to implementing Medication Management programmes and services would assist with enhancing impacts and outcomes for consumers. A potential corollary of a model based on

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<sup>41</sup> Ellis RF, Stephens MA, Sharp GB. Evaluation of a pharmacy-managed warfarin-monitoring service to coordinate inpatient and outpatient therapy. *Am J Hosp Pharm.* 1992 Feb;49(2):387-94.

<sup>42</sup> Foss MT, Schoch PH, Sintek CD. Efficient operation of a high-volume anticoagulation clinic. *Am J Health Syst Pharm.* 1999 Mar 1;56(5):443-9.

clinical criteria and structured care protocols, relates to the skills and capacity of the workforce. The need to build and enhance capacity across the primary care sector is well accepted and supported. Enhancing GP capacity to manage chronic and complex care patients, for instance, is a direct intention of establishing PHNs. Extended Care Paramedics undertake extensive training to enhance their patient assessment, decision-making and procedural skills. In this review, stakeholders and health service providers noted that the capacity of the sector would be significantly enhanced by specific skills in clinical screening, diagnostic skills and decision-making, supported by evidence-based guidance.

### **5. How should the community pharmacy model accommodate the full range of MM services?**

One complication in developing a comprehensive service model for the Community Pharmacy Agreement is that the current services do not fit, nor are they currently delivered across a continuum of complexity. For example, findings from this Review indicated that DAA and SS were viewed to address a specific purpose and did not fit along the same continuum as medication reviews.

Further, Residential Aged Care Facilities (RACF), as is the case in virtually all areas of health service provision, also presents a unique set of complexities. The change in resident and staff mix, increasing complexities of geriatric pharmacotherapies, and changing community expectations of shared decision-making are some of the features that contribute to RACF being a unique setting and likely requires development of a separate model and framework.

Overall, the critical challenge in designing a service model with appropriate funding arrangements for community pharmacy is to ensure that it caters for all levels of diversity (patients and settings), rather than to expect that a one-size-fits-all approach will address all needs appropriately.

### *Implementing improvements and changes*

Community Pharmacy Agreements over recent decades have assisted with improving health, reducing medication misadventure, educating consumers, and improving confidence and adherence. These Agreements have also contributed to increasing community pharmacy involvement as recognised health care practitioners in the primary care sector. Despite these successes, there is still significant potential to better harness the role of community pharmacy in primary care. Leading up to 6CPA discussions, the following implementation points should be considered to inform future Agreements:

- **Design and trial of a service models specific to pharmacy with appropriate reimbursement models.** Likely to be a long-term endeavour, there is opportunity to design and trial specific pharmacy models, based on needs-based frameworks, with supporting reimbursement schemes during the 6CPA. Integrating triage and assessment of clinical need, professional development, comprehensive data collection, cost-benefit, auditing and monitoring functions alongside these models will be critical to inform future discussions in order to mobilise an effective and acceptable community pharmacy model that addresses consumer need across Australia.
- **Reliable cost-benefit analysis is critical.** This will require a more sophisticated approach towards collection of data, linking programme data (multiple datasets, including at consumer level) combined with regular auditing and reporting requirements to enable consumer health outcomes to be more effectively monitored and measured.
- **Resourcing for implementation should target and enable specific implementation and roll out functions.** This finding reflects commentary from Pharmacists about the potential for investment in implementation activities to yield faster and more complete uptake of Programmes. This could be interpreted to mean more resourcing, better targeted resourcing towards high risk/high benefit consumers, or both. The targets might be improvement to the payment and claiming system, other administrative systems or targeting awareness of the Programmes. It was suggested that the focus should be optimising uptake of various programmes and services and consistent quality standards.

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- **Increasing education and awareness of programmes and services.** As discussed above, low levels of awareness about the programmes across the board were seen as barriers to access for consumers. Increasing education and awareness of Medication Management programmes and services for consumers and other health professionals was highlighted frequently as an improvement consideration for future implementations.
- **Applying flexibility in administration.** Another barrier to access concerned the particular needs of certain target groups. Applying some flexibility in the administration of the programmes and services to allow for cultural differences/rurality in certain target groups provides an opportunity to improve access and reach.
- **Appropriate monitoring and auditing processes.** While administrative burden was a source of complaint, there was recognition that future implementation would benefit from more targeted monitoring focusing specifically on quality of service. It was suggested that quality assurance could be enhanced through appropriate monitoring and auditing of programmes and services.



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*Combined  
Review of  
Fifth  
Community  
Pharmacy  
Agreement  
Medication  
Management  
Programs  
Final Report -  
Appendices*

*Australian Government  
Department of Health*

*Combined Review of  
Fifth Community  
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*Final Report -  
Appendices*

*January 2015*



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# Appendix A Reach of Medication Management Programmes and Services

## *Reach of 5CPA programmes and services*

An analysis of 5CPA programme reach (excluding RMMR) relative to disease burden was undertaken as a proxy in the absence of robust consumer data to explore distribution of pharmacy medication management services in relation to health need.

To provide an indicative comparison of medication management programme reach relative to the burden of chronic disease across Australia, we have provided a number of maps below by the following disease groupings: respiratory system disease, high cholesterol, arthritis, diabetes and circulatory system disease. While chronic disease burden is not the only indicator for unmet need or disease burden, we have presented disease groupings that are likely to capture people who are taking multiple medicines or who have complex medication management needs.

Most recent data for disease groupings have been taken from the Social Health Atlases of Australia 2014 (PHIDU)<sup>1</sup> which provides modelled estimates of prevalence for a selection of chronic diseases using data from various sources, including the Australian Health Survey 2011-2013. Note that we have not conducted any analyses relating to disease comorbidity for this report and data presented are not age-standardised.

- The maps below demonstrate that across Australia, there are certain “hot spots” of chronic disease. These “hot spots” differ by disease grouping. For example, there appears to be a high prevalence of respiratory system disease across the state of Victoria, while the prevalence of diabetes and arthritis are distributed more broadly throughout Eastern States.
- Figures 8 and 9 presented above demonstrated that Medication Management programmes and services were delivered largely in proportion to the coverage of pharmacists across Australia, as to be expected. The following maps provide an indication of how complex diseases, likely to require multiple medicines, are distributed across Australia and in concert with the distribution of pharmacist and existing distribution of services, presents a preliminary means to explore how medication management programmes and services are meeting the burden of health need across Australia.
- Comparing the prevalence of chronic disease to the distribution of pharmacists and the delivery of medication management programmes (excluding RMMR) across Australia, there is potential to explore whether the existing distribution of pharmacists and medication management service delivery is best meeting and reaching the areas of greatest need. These explorations should also consider other services and service providers available across relevant regions, who may be able to provide a more appropriate service. When considering the individual patient and their individual situation, a review of medications may not be the priority in the first instance, and finding the most appropriate service to meet their urgent needs for those at highest risk requires reflection on the broader primary care context.
- This provides useful information to explore how programmes may be better targeted towards health need and how pharmacists and the delivery of medication management programmes fit into the broader context of meeting individual patient need.

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<sup>1</sup> The University of Adelaide, Public Health Information Development Unit. Social Health Atlases of Australia: Chronic diseases and conditions (modelled estimates). Accessed December 2014. <http://www.adelaide.edu.au/phidu/help-info/about-our-data/indicators-areas/cha-usit/>

# Appendix B Review framework

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DRAFT FRAMEWORK FOR THE COMBINED REVIEW OF THE SCPA MEDICATION MANAGEMENT (MM) PROGRAMS

Evaluation questions	Domains	Program	Process	Indicators Output/Impact	Outcomes	Data type	Data Data source
<b>Area of investigation: Support for health policy and achievement of SCPA objectives</b>							
1) What evidence is there that SCPA Medication Management programs support wider Australian Government health policies?	Government/policy	All programs	- Documented on how SCPA MM programs intended to support wider Australian Government health policies	- Satisfaction with how programs have supported wider health policies - Evidence of how programs have supported wider health policies	NA	Qualitative	- Interviews/surveys/focus groups of DoHA and peak bodies representatives - Document review
2) How do the SCPA Medication Management programs contribute to achieving the overall objectives of the Agreement?	Government/policy	All programs	- Documented on how SCPA MM programs intended to contribute to overall objectives of Agreement	- Satisfaction with how MM programs have contributed to 5th agreement objectives - Evidence of how programs have contributed to 5th agreement objectives	NA	Qualitative	- Interviews/surveys/focus groups of DoHA and peak bodies representatives - Document review
<b>Area of investigation: Coordination and integration of SCPA Medication Management programs</b>							
3) How do the SCPA Medication Management programs interact with one another - including common characteristics, duplication and gaps?	Government/policy Consumer Practitioner (both pharmacist and prescriber)	All programs	- Description/mapping of how the SCPA MM programs interact with each other	- Satisfaction with how the programs interact - Identification of the common characteristics and synergies - Identification of areas of duplication or gaps between the programs - Changes in program usage/uptake (consumer and practitioner) resulting from the interaction between programs - Identification of the difference between what happens in practice vs. what is intended and is it the right fit?	- Changes in practitioner behaviour resulting from the interaction between programs - Outcomes for consumers from the interaction between programs	Qualitative	- Interviews/surveys/focus groups - Document review (including program and practice guidelines, program evaluation reports e.g. HMR research and evaluation reports, MedCheck (consider limitations of short timeframe and small numbers), DAA, and other research studies e.g. newly convened HMR eligibility refinement project, Clinical Intervention (PROMISE reports)
<b>Area of investigation: Implementation of the SCPA Medication Management programs</b>							
4) Have the SCPA Medication Management programs been managed as agreed with the parties to the Agreement and have Agreement Governance Arrangements supported the programs?	Government/policy Practitioner	All programs	- Description of Agreement Governance arrangements - Description of management of programs in these activities - Description of whether the program intent and aims have been met? - Description of how do the programs interact in practice (e.g. in triangle diagram based on complexity) vs. in theory using indicators/tables? - Is the flow between services logical?	- Satisfaction with the management of the programs - Satisfaction with the governance arrangements - Evidence of how programs have been managed as agreed with the parties to the agreement - Evidence of how Agreement Governance Arrangements have support the programs	NA	Qualitative	- Interviews with DoHA, the Guild and governance committees
5) Have the SCPA Medication Management programs been implemented as planned and what have been the barriers and facilitators? i.e. implementation of new programs under the SCPA or changes to existing and consolidating which stage of implementation the programs are in	Government/policy Practitioner (both pharmacist and prescriber)	All programs	- Description of how and when programs have been implemented and are provided through pharmacy	- Comparison of actual implementation with planned implementation (considering which stage of implementation different programs are in) - Satisfaction with the implementation of programs - Identification of barriers to implementation and how these have been overcome - Identification of facilitators to implementation (including workforce capacity issues e.g. did the programs integrate well or otherwise into existing pharmacist practice) - What has been the communications strategy (i.e. what data sources were developed and shared down)? - Identification of the role of and the use of the Pharmacy Charter and whether it has been used as intended - HMR/RRMM/MedCheck/Diabetes MedCheck specific: - Description of the service/business model for each type of review including how each review is being conducted (e.g. who conducted the review, time spent on the review, time spent with the consumer, time spent on the report to GP, did the GP make any changes to the medication regime based on the HMR/RRMM report)? - Report being provided to the GP includes a discussion of the report with GP (HMR only as reporting to GP is not an essential component of MedCheck/ Diabetes MedCheck) - Clinical interventions specific: - Description of how are Clinical Interventions currently being recorded (what software systems are being used/are CIs being recorded manually (paper)	NA	Qualitative	- Interviews/surveys/focus groups - Baseline information on the healthcare professional's views (e.g. pharmacist, GP), on the enablers and barriers for implementing programs available in the HMR, RRMM and MedCheck (note limitations of short timeframe and small numbers in MedCheck evaluation) evaluation reports
6) To what extent do pharmacists use program specific guidelines and PSA professional guidelines and other resources to deliver SCPA Medication Management programs? What other information/resources would be useful?	Practitioner	All programs	- Description of how pharmacists use PSA developed professional guidelines to deliver SCPA MM programs - Description of how pharmacists use SCPA developed program guidelines to deliver SCPA MM programs? - Description of how pharmacists use other resources (aside from PSA/SCPA resources) which are available to deliver SCPA MM programs - Description of how eligibility criteria are used - Description of how program Terms and Conditions are used	- Level of use of guidelines amongst pharmacists - Satisfaction with guidelines - Level of awareness of guidelines - Changes in knowledge and skills of pharmacists due to the guidelines - Changes in the confidence of pharmacists to provide the programs due to the guidelines - Identification of other information/resources which would be useful - Description of what resources were used and how - Description of satisfaction with the SCPA training/education resources	NA	Qualitative	- Interviews/surveys/focus groups (including pharmacists) - Document review (e.g. PSA guidelines, SCPA guidelines and other resources listed)
7) What are the areas for improvement to the SCPA Medication Management program?	Government/policy Consumer Practitioner (both pharmacist and prescriber)	All programs	NA	- Satisfaction with the MM programs - Identification of areas of improvement for MM programs	NA	Qualitative	- Interviews with peak bodies/surveys with pharmacist focus groups with consumers (consider appropriate methodology for each group to ensure adequate representation)

# Appendix C Stakeholder consultations

## 1 Participant list

Stakeholders who participated	
1	Department of Health (Federal)
2	Department of Human Services
3	Department of Veteran Affairs
4	QLD Department of Health (2)
5	SA Department of Health
6	Pharmacy Guild of Australia (2)
7	Pharmaceutical Society of Australia
8	Australia Association of Consultant Pharmacy
9	Society of Hospital Pharmacists of Australia
10	Royal Australian College of General Practitioners
11	Pharmacy Guild of Australia (2)
12	Pharmaceutical Society of Australia
13	National Prescribing Service
14	Medicines Australia
15	Australian Medicare Local Alliance (2)
16	Australian Private Hospitals Association
17	Australian College of Nursing
18	ACI Pain Network
19	Australian Pain Management Association
20	Apunipima Cape York Health Council
21	National Aboriginal Community Controlled Health Organisation

<b>Stakeholders who participated</b>	
22	Council on the Ageing
23	National Rural Health Alliance
24	Consumers Health Forum of Australia
25	Cancer Voices Australia
26	Chronic Illness Alliance
27	Diabetes Australia
28	Mental Health Council of Australia
29	Richard Chooi (Pharmacist)
30	Dr. Shane Jackson (Pharmacist)
31	Karolyn Huxhagen (Pharmacist)
32	Scott McCahon (Pharmacist)
33	Christine Wise (Pharmacist)
34	Dr Helen Archibald (GP)
35	Dr Brian Morton (GP)
36	Montefiore Homes (RACF)
37	Jewish Care (RACF)
38	Royal District Nursing Service (RACF)

## 2 Discussion guide



### Combined Review of the 5CPA Medication Management programs

#### Stakeholder consultation guide

##### 1. Background to the project

The Fifth Community Pharmacy Agreement (5CPA) commenced on 1 July 2010 and includes a range of Medication Management programs to the value of \$427 million. As part of the 5CPA, the Australian Government Department of Health and the Pharmacy Guild of Australia are required to undertake a review of the Agreement prior to its expiry, including a combined review of the Medication Management programs ("the Review").

The overall aim of the Review is to better inform how the Medication Management programs and services contribute to improving consumer health outcomes, as well as informing future investment in community pharmacy programs and services so that they are appropriately targeted and have a strong needs-based focus. The outcomes of the Review will be used to better understand how these programs and services contribute to improving consumer health outcomes and to inform future investment by the Commonwealth in community pharmacy programs and services so that they are appropriately targeted and have a strong needs-based focus.

The Medication Management programs and services which form part of the Review include: Home Medicines Review (HMR); Residential Medication Management Review (RMMR); MedsCheck/Diabetes MedsCheck; Clinical Interventions; Dose Administration Aids; and Staged Supply.

##### 2. About the consultations

Consultations are being undertaken across a range of stakeholder groups (e.g. Government, peak bodies, disease and illness representative bodies, community pharmacists, general practitioners, residential aged care facilities etc.).

The consultations will focus on better understanding your/your organisations views on the following:

- your involvement in Medication Management programs, background and context for the consultation
- Medication Management programs overall, from a policy, strategy, governance and funding perspective
- implementation of the Medication Management programs
- Medication Management program/professional guidelines, training and support
- Medication Management programs interaction, delivery and reporting
- impacts and outcomes of Medication Management programs for both primary health care and consumers
- suggestions for improvement and other comments.

The following pages outline some of the areas we would like to cover with you. The questions are a guide only and not all questions may be applicable to you and your organisation.

Thank you for agreeing to participate in the consultations, we look forward to speaking with you soon. If you would like any further information, please contact Jessica Li on (02) 8266 1038 or [jessica.a.li@au.pwc.com](mailto:jessica.a.li@au.pwc.com), or Monica Brabant on (02) 8266 1150 or [monica.brabant@au.pwc.com](mailto:monica.brabant@au.pwc.com).

# Appendix D Consumer focus groups

## 1 Organisations approached

In order to obtain broad participation and avoid bias in the consumer focus groups, our initial approach was to circulate information about the focus groups broadly through peak organisations. We approached several organisations to assist with circulation of focus group details and recruitment of participants, as outlined in Table 1.

**Table 1: Organisations approached**

Assisting organisation	State	Approach
Asthma Australia	National	Circulated flyer to members via newsletters
Arthritis Australia	National	Circulated flyer to state affiliates, who in turn were to circulate via website and newsletters (have not been successful in contacting state affiliates)
Australian Pain Management Association	National	Circulated flyer to consumer members via newsletters
Chronic Pain Australia	National	Circulated flyer to consumer members via Facebook and eBulletin
Consumers Health Forum	National	Circulated flyer to member organisations via newsletters, who in turn circulated to consumer members via emails/website
Diabetes Australia	National	Agreed to assist with circulation of flyer to members, unable to confirm that circulation occurred.
Health Consumers NSW	NSW	Approached, but did not hear back from
Health Issues Centre	VIC	Circulated flyer to consumer members and member organisations via newsletters
National Seniors Australia	National	Circulated flyer via website, also to state branches via email, who in turn circulated to consumer members via newsletters
National Rural Health Alliance	National	Circulated flyer via website and newsletters to consumer members
North Coast NSW Medicare Local	NSW	Circulated flyer to general practices and to consumers via newsletter
Pain Australia	National	Circulated flyer to consumer members via website and newsletter
Rare Voices Australia	National	Circulated flyer to consumer members via website and newsletter

## 2 Discussion guide

pwc.com.au

# *Combined Review of the 5CPA Medication Management Programs*

*Department of Health  
Consumer focus group  
guide  
January 2014*

## *Consumer focus group guide*

**pwc**

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# Appendix E Practitioner focus groups

## 1 Discussion guide

pwc.com.au

*Combined  
Review of the  
5CPA  
Medication  
Management  
Programs*

Department of Health  
Health care  
practitioner focus  
group guide  
April 2014

*Health care  
practitioner focus  
group guide - FINAL*

**pwc**

# Appendix F Practitioner survey

## 1 Survey tool



### CUSTOMISED CAWI FIELD QUESTIONNAIRE

#### R08362, PROVIDERS SURVEY

##### QUOTA INFORMATION

##### COMPLETE TOO FAST SCREENOUT (LEAVE BLANK IF UNSURE):

Are we to exclude people who complete the survey too fast? If yes, specify the time (in mins) deemed to be the minimum complete time for a valid survey: \_\_\_\_\_ mins.

##### DIRECTIVE FOR THE USE OF THE BACK BUTTON WITHIN THE LIVE SURVEY

(SELECT ONE, AND DELETE ALL OTHER OPTIONS)

- No back button anywhere in the survey

##### DIRECTIVE FOR MOBILE FUNCTIONALITY

(SELECT ONE, AND DELETE ALL OTHER OPTIONS)

- Do not render survey to mobile device, but allow survey to be accessed via mobile device

# Appendix G HMR Hospital Referral Pathway

## 1 Discussion guide



### Combined Review of the 5CPA Medication Management programs

#### HMR hospital referral pathway: stakeholder consultation guide

##### 1. Background to the project

The Fifth Community Pharmacy Agreement (5CPA) commenced on 1 July 2010 and includes a range of Medication Management programs to the value of \$427 million. As part of the 5CPA, the Australian Government Department of Health and the Pharmacy Guild of Australia are required to undertake a review of the Agreement prior to its expiry, including a combined review of the Medication Management programs ("the Review").

The overall aim of the Review is to better inform how the Medication Management programs and services contribute to improving consumer health outcomes, as well as informing future investment in community pharmacy programs and services so that they are appropriately targeted and have a strong needs-based focus. The outcomes of the Review will be used to better understand how these programs and services contribute to improving consumer health outcomes and to inform future investment by the Commonwealth in community pharmacy programs and services so that they are appropriately targeted and have a strong needs-based focus.

The Medication Management programs and services which form part of the Review include: Home Medicines Review (HMR); Residential Medication Management Review (RMMR); MedsCheck/Diabetes MedsCheck; Clinical Interventions; Dose Administration Aids; and Staged Supply.

In addition to reviewing Medication Management programs and services, we will also review the Hospital Referral Pathway which has been developed to enable timely referral for a HMR service to patients deemed most at risk of medication misadventure within ten days of discharge from hospital, where they do not have access, or timely access, to a general practitioner (GP). This pathway aims to reduce the incidence of medicine misadventure and readmission post-discharge. It is also intended to improve continuity of care between the hospital and community sector. Using a phased approach, this pathway is being initially piloted with Monash Medical Centre Clayton, Victoria and Calvary Hospital Lenah Valley, Tasmania.

##### 2. About the consultations

Consultations are being undertaken across a range of stakeholder groups (e.g. Government, peak bodies, disease and illness representative bodies, community pharmacists, general practitioners, residential aged care facilities etc.).

This consultation will focus on better understanding how the hospital referral pathway was implemented at your site and will broadly cover:

- your involvement in establishing and implementing the HMR hospital referral pathway at your site
- uptake of the referral pathway at your site
- the development and provision of any program/professional guidelines, training and support to assist with referrals
- impacts and outcomes of the referral pathway for both primary health care and consumers
- suggestions for improvement and other comments.

The following pages outline some of the areas we would like to cover with you.

# Appendix H Consumer Survey

## 1 Participant information sheet



### Participant Information Sheet

PARTICIPANT (CONSUMER) INFORMATION STATEMENT FOR CONSUMER SURVEY

Research Project

Title: The Combined Review of the Fifth Community Pharmacy Agreement (5CPA) Medication Management Programs

*This research project is endorsed and funded by the Federal Department of Health.*

Principal researchers:

Mr John Cannings

Dr Anne-Marie Feyer

Assoc Prof. Laurent Billot

(1) What is the study about?

Medication management programs and services delivered by pharmacists in community pharmacies are important for helping people improve their understanding and use of medicines. Programs and services like this help to reduce side effects and negative reactions when taking many medicines and helps people stay healthier.

This study aims to understand whether the medication management programs and services delivered by pharmacists are working as planned and helping people understand and manage their medicines better. The information that you provide will help the Australian Government Department of Health with planning for future community pharmacy programs and services.

(2) Why did you contact me?

Some time ago, you received a medication management program or service from your pharmacist. The program or service you received may have involved a review of your medicines in the pharmacy, in your home, or in your residential aged care facility.

When your pharmacist provided this service, they recorded that they provided this service to you on their database. This information is collected by the Australian Government Department of Health to provide payment to pharmacists for delivering the service.

The Department of Health has since contacted you to invite you to participate in this important study and to request that you contact PricewaterhouseCoopers (PwC) if you wish to be involved. You are being provided this Participant Information Sheet and Consent Form because you have contacted PwC indicating you wish to participate in this telephone survey.

(3) Who is carrying out the study?

PriceWaterhouseCoopers (PwC) is conducting this study on behalf of the Australian Government Department of Health. Roy Morgan Research is a survey house that PwC uses often to conduct surveys and will be contacting you shortly to ask you questions about the programs and services you received.

PwC

### 3 Survey tool

R08479 PHARMACY SERVICE SURVEY

Page 1 of 15



R08479

R08479 PHARMACY SERVICE SURVEY

October,  
2014

27/10/2014 11:36

 Collapse **All  
ANSWER  
Categories**

Good [Morning/ Afternoon/ Evening], my name is ([SAY NAME]) from Roy Morgan Research calling on behalf of the Department of Health. May I please speak to [%FIRSTNAME] [%LASTNAME]?

The Department of Health informed us that you have used the medication management programs and services provided through community pharmacy in the last 12 months and that you were willing to be contacted to participate in market research.

Today we are currently speaking with people like yourself, to ask a few questions to better understand your experiences and overall satisfaction with medication management programs and services provided through community pharmacy. We understand you have already received a [%PROGIDENT] service through community pharmacy, where... #/

**IF RECEIVED HOME MEDICINES REVIEW (HMR) READ OUT:**

a pharmacist visits you in your home to speak about your medicines, and then writes a report back to the GP who referred the service. The GP will discuss any recommendations with you and may make appropriate changes to your medicines. // #/

**IF RECEIVED RESIDENTIAL MEDICATION MANAGEMENT REVIEW (RMMR) READ OUT:**

a pharmacist comes to review your medicines in the resident of an aged care facility. The pharmacist conducts the review in collaboration with the GP and appropriate members of your healthcare team, to identify, resolve and prevent medication-related problems. The pharmacist then writes a report back to the GP. // #/

**IF RECEIVED MEDSCHECK/DIABETES MEDSCHECK READ OUT:**

a pharmacist conducts a review of all of your medicines in the pharmacy to identify any problems you may be experiencing and improve the use of your medicines. Your pharmacist will explain the service to you, obtain your agreement to do a MedsCheck and likely make an appointment for you to come into the pharmacy. At the appointment you will bring with you all your current medicines and the pharmacist will discuss them with you and agree an action plan or any follow-up actions. // #/

**IF RECEIVED DOSE ADMINISTRATION AID (DAA) READ OUT:**

A pharmacist prepares Webster or blister packs for your medicine, which you would collect regularly. They usually come in weekly/monthly packs. //

**INTERVIEWER: HIT ENTER TO CONTINUE TO NEXT INTRO PAGE**

To ensure we obtain the views of consumers regarding these programs and services, your participation in this survey is very important.

To thank you for your time and much needed contribution to this project, you will be provided with a \$30 gift voucher.

The survey will take approximately 15 minutes and will be used for research purposes only. Your answers will remain strictly confidential and will be anonymous. Being part of this survey is completely voluntary - if you do consent to participate, you can withdraw at any time. Your name and details will be protected from publication in any way by our privacy and ethics practices.

**IF ASKED HOW LONG IT TAKES:** The survey will take approximately 15 minutes depending upon your answers.

**IF THEY HAVE PRIVACY CONCERNS:** This survey is conducted in compliance with the privacy act. Any information you provide will be used only for research purposes. If you would like to call us and verify this study you can do so on 1800 337 332.

**IF ASKED WHAT HAPPENS TO THEIR RESPONSES:** Any of the personal details we collected are removed from your

file:///C:/Users/sharon%20ponniah/AppData/Local/Temp/wz120e/r08479.html

15/01/2015

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