



CAMPBELL RESEARCH & CONSULTING

**Home Medicines  
Review Program  
Qualitative Research  
Project  
Final Report**

Prepared for

Department of Health & Ageing  
Medication Management & Research Section  
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## **Executive Summary**

From late 2007 until mid 2008, Campbell Research & Consulting conducted a multi-staged research project on behalf of the Department of Health & Ageing, canvassing and analysing a wide range of views and experiences of the Home Medicines Review Program.

The key questions underlying this research were: what is HMR achieving and what is it meant to achieve? To consider these questions, we revisited the objectives of the HMR Program, in summary:

- Assist consumers to maximise the benefits of their medication and prevent the harmful consequences of medication misuse
- Achieve safe, effective and appropriate use of medications
- Improve quality of life and health outcomes
- Improve the consumer's and health professional's understanding about medications
- Facilitate cooperative working relationships between members of the health care team
- Target people living at home who may be at risk of medication misadventure

Following on from the HMR Program objectives, the objectives of this research project were to:

1. Identify gaps in access to the Program & the reasons for these gaps in access
2. Determine what drives participation in the Program, including identifying barriers & enablers relative to different target groups

Risk factors are therefore relevant to the findings of this research, and include suspected non-compliance or inability to manage medication-related therapeutic devices; attending a number of different doctors and discharge from a hospital in the last four weeks.

### **Wide range of views**

The study included review of more than 75 articles (since 2005), including 'grey' literature. It involved 31 in-depth interviews with stakeholders from peak medical and pharmacy bodies through to consumer and carer groups and research and other government organisations. A publicly advertised Call for Submissions phase was subsequently undertaken and led to receipt and review of 84 submissions. Full copies of all submissions were subsequently forwarded to the Department.

The final and key phases involved extensive qualitative research at the grassroots level with health professionals and consumers respectively. The 109 health professionals interviewed one-on-one around Australia included GPs, community pharmacy owners and managers and accredited pharmacists in community pharmacies as well as those working independently. The health professionals' interviews included those participating in the HMR Program as well as those not participating. A small number of other relevant health professionals were also interviewed, including palliative care nurse practitioners, the Royal Flying Doctor Service and staff in Aboriginal Health Services.

The additional qualitative component encompassed 28 in-depth interviews with consumers who had received a Home Medicines Review and some carers, as well as focus group discussions with 100 consumers (and some carers) who would have been clearly eligible, but who had not received a HMR.

Senior CR&C researchers conducted research in Townsville, Rockhampton, the Sunshine Coast, Bankstown, bayside Melbourne, Dandenong, mid-North rural South Australia, Geraldton and Carnarvon, Launceston, and across the wheatbelt communities of Western Australia. The range of locations were based on GP Divisions and were selected by the Department to represent a broad cross-section of Australian consumers and health professionals in areas with higher and lower levels of uptake of the HMR Program. The locations also enabled some coverage of Indigenous and multicultural consumers and coverage across all states.



## **Phase One: Literature Review**

The review of Australian and international literature since 2005 confirmed a widespread occurrence of adverse medication events impacting on health services as a result of issues arising following discharge from hospital – clearly seen as a key time for medication management and a time when consumers are disappointed with medication information.

The literature revealed a dearth of evidence identifying drivers of participation in HMRs by health professionals, but identified numerous barriers.

Research contained in recent literature does not provide strong evidence for effective outcomes or cost effectiveness of programs aimed at reviewing medication, however it confirmed that medication reviews continue to be supported as an important tool in the repertoire of GPs and pharmacists.

## **Phase Two: Stakeholder Consultations**

The HMR Program was highly valued by many of the stakeholders interviewed for this study. They generally considered the Program to be an effective tool with the *potential* for meeting its objectives but agreed the HMR Program could be strengthened.

Stakeholders considered there was strong anecdotal evidence to suggest HMRs are improving quality use of medicines but noted a lack of hard evidence. They were anxious to see evidence that the current HMR model improves patient outcomes significantly, particularly in relation to reducing medication error and hospitalisation. Most believed that increased uptake of the HMR Program would have the *potential* to reduce medication misadventure and hospitalisation if conducted within the first ten days after discharge from hospital.

## **Phase Three: Public Call for Submissions**

Many submissions included substantial detail and extensive data, while others presented the findings of studies undertaken by submitters within a specific setting (for example, within one GP Division, a regional area or a hospital). Submissions confirmed that studies measuring clinical effectiveness are lacking and that there is a strong demand for such information.

Submissions also revealed that those in greatest need of a HMR are the least likely to receive one and that solutions are required for post-hospital discharge to enable HMRs to assist high risk patients and prevent unnecessary hospital re-admissions.

A number of submissions detailed the reasons why the current model of HMRs is inappropriate for Indigenous consumers while emphasizing the need for the Program to be adapted so that it can effectively address an extremely high level of need among Indigenous consumers, who suffer from very high rates of medication misadventure and its damaging after-effects.

Many submitters outlined why they supported an *option* of direct referral to accredited pharmacists to address access gaps for many consumers. A number of peak bodies expressed opposition. Those supporting the direct referral pathway supported it as an additional option and not as a replacement of the existing model.

The inadequacies of the current travel allowance arrangements were clearly documented. Concerns around travel allowances emerged not only in remote and some rural areas, but also in metropolitan areas. The core concern was that travel allowances currently relate to the distance of the consumer from the community pharmacy whereas the problems arise with the distance of the consumer from the accredited pharmacist, who is often not located at the local community pharmacy.

## **Phase Four: Qualitative Research with Health Professionals**

The 109 health professionals interviewed for this research included those who had and those who had not referred for HMRs. The GPs who agreed to be interviewed were predominantly those who were more positive about HMRs. Others tended to refuse to participate despite repeated requests and reasonable incentives. For this reason, the findings of this research among health professionals could be considered to be ‘as good as it gets’ in relation to GP views of the HMR Program.

GPs are the gatekeepers of the Program and are critical to participation and access. Most GPs were ambivalent about HMRs and considered them ineffective in producing substantial improvements in a patient’s health. GPs generally favoured a highly selective approach with a focus on high risk patients. Their ambivalence appeared difficult to overcome, although evidence of clinical outcomes may assist.

Money is not the answer for GPs on HMRs - most considered current reimbursement adequate.

GPs who described themselves as ‘supporters’ of HMRs often reflected ambivalence through the sheer numbers of HMRs referred in a period of time, for example, six referrals in two to three years.

Most community pharmacy business owners or managers were ambivalent towards HMRs and even some GPs considered local pharmacists to be ambivalent.

The ambivalence of community pharmacies was closely related to them receiving no profit from HMRs, finding them time-consuming and encountering a lack of interest from local GPs, with a flow-on effect: little GP demand meant few referrals and so the pharmacies had little interest in the Program.

Most community pharmacies saw little or no value for customer loyalty as the customers tended to be loyal already. They provided HMRs because they wanted to offer a full service but did not actively seek them out. A number of community pharmacy interviewees believed that HMRs should be restricted to higher need patients and that beyond this they could be ‘*a waste of Government money*’.

Problems with travel allowances are clearly affecting delivery of HMRs in some rural, remote and metropolitan areas. The rules inherent in the PhARIA classifications were often not considered appropriate - problems arise with the distance of the accredited pharmacist from the consumer as the local pharmacy often must source a provider from outside the area. In very remote areas, suggestions included linking in with Section 100 provisions to offset distant related costs.

## **Phase Five: Qualitative Research with Consumers**

Most interviews with **HMR consumers** were conducted face-to-face, in their homes, sometimes with a carer present. Consumers were recruited through a range of methods rather than a central source.

The 28 HMR consumers interviewed were over 65, (the oldest 90) and taking an average of eight medications a day, (and up to 20). They were suffering from serious conditions, such as diabetes, cardio-vascular disease, emphysema, arthritis, and asthma. They were on the high end of apparent compliance with their medications and typically presented as alert and highly aware of their range of medications. They demonstrated ways in which they systematically managed their medication regime and most had no prior hospital admissions due to medication issues. All HMR consumers claimed to have consistently attended one GP and one community pharmacy and had been unaware of HMRs before one was suggested by their GP or community pharmacy.

The views of consumers **eligible** for a HMR but who had not received one, were canvassed through ten focus groups – eight with those aged over 60 (oldest participant 94) and two groups with consumers aged 40-60. These ‘eligible’ consumers were recruited through a random community-based approach and not through health professionals.

All ‘eligible’ consumers had multiple serious health conditions, several attended with their oxygen bottle. A number were organ transplant recipients and some had suffered five or six heart attacks. On average they were taking eight different medications a day (with one taking 18). Several were carers of



eligible consumers. ‘On paper’ the consumers appeared to be ideal candidates for HMR. Few had any prior awareness of HMRs.

Trust and confidence in GPs was overwhelming among both HMR & ‘eligible’ consumers. Change of GP had rarely occurred and only due to retirement, relocation of either the GP or the consumer, or the inability to obtain appointments.

Trust and confidence in community pharmacy was very strong, particularly for those over 60, with many having attended the same pharmacy for more than 30 years. Some younger consumers tended to be less loyal. All were satisfied with the staff advice and vigilance received at their local pharmacy.

Consumers who had received a HMR were positive about their experience and avidly praised the professionalism and thoroughness of the pharmacist who conducted the review, however most felt they were already in control before the visit. Although they found the HMR interesting and informative, it was considered ‘*nice but not really necessary*’ as they did not believe it had made a significant difference to their health. Some felt better about their health and were reassured that their own systems of managing their medications were working well.

Some HMR consumers recounted how a problem had been resolved such as the elimination of nightmares or nausea through adjusting dosage timing. For a few, the visit alleviated confusion.

‘Eligible’ consumers tended to be: systematic in management of their medication and strong believers in their own independence and valued it highly. Most presented as being on the high end of compliance with their medication and on the low end of apparent risk, careful to follow the GP’s and pharmacist’s advice and demonstrated how they did so. They took measures to avoid problems with generic brands.

Most ‘eligible’ consumers felt they were coping and did not need the HMR as they were already being well monitored through their GP and community pharmacy. Resilience and independence helped them cope and for some it appeared that a HMR could undermine this. Some also coped best by not knowing details of their medication, but were careful to take it as prescribed.

Post hospital was a time when ‘eligible’ consumers could see it might be necessary and participants in areas with more familiarity with in-home care services, such as the Sunshine Coast, were more receptive to HMRs overall.

Generally the younger consumers (in this research, those aged 40-60) were against the idea of a HMR and perceived it as something for older people. They were ‘*not ready for the white coats to come in yet*’. They were uncomfortable with the concept of a home visit while still physically able to attend a pharmacy.

Cost concerns had led some younger consumers to make conscious decisions to abandon certain medications even though they were aware of the likely consequences.

GPs also saw little relevance for HMRs with younger patients and rarely referred them for HMRs.

## **Enablers and suggestions for improvement**

The interviews with health professionals and consumers around Australia led to the consolidation of a number of specific suggestions for improvement.

Current ‘business’ rules were identified as a barrier to participation and where HMRs work well, it was often in spite of the system rather than because of the system. Often those who had not found ways to modify the model were not participating.

There is a need for the flexibility necessary for practical implementation to be recognised and reflected in the Program itself.

Some health professionals had identified solutions such as direct referral to a preferred accredited pharmacist, who then liaised with the community pharmacy.



There was strong support for (and some opposition to) direct referral to consultant accredited pharmacists, with all those who supported the option agreeing on the need to inform and involve the community pharmacy. Where supported, direct referral was seen as an *option* and *not to replace* the existing pathway from GP to community pharmacy, as this is seen as the primary and preferable pathway where possible.

Supporters of the direct referral option believed it would address barriers to participation presented by the current Program rules, especially where local pharmacies had no accredited pharmacists.

There was also some support for referral by a small number of other health professionals, in specified circumstances, such as palliative care nurse practitioners.

Many GPs felt that ‘on paper’ eligibility does not necessarily mean a HMR is appropriate and this was confirmed by feedback from some accredited pharmacists and consumers. Blanket screenings are considered likely to capture many consumers who would not be in great need of a HMR. Clinical decision making and assessment of high risk patients was widely supported, especially by GPs.

### **Access gaps**

Overall the research confirmed that those in greatest need of a HMR are the least likely to receive one and the greatest gap in access to HMRs is for those consumers at highest risk of medication misadventure including:

- certain patients in the period after hospital discharge
- Indigenous consumers
- culturally and linguistically diverse consumers
- palliative care patients; and
- non-compliant or non-adherent consumers.

It appeared to be rare for a useful and appropriate HMR to have been conducted for any of these types of consumers.

#### **Access gap: post hospital discharge**

Of all areas where HMRs were widely considered to be of value, it is the period post hospital discharge which received the most widespread support.

There was strong support for hospital doctors and senior hospital pharmacists to refer patients directly for a HMR rather than having to go through the patient’s GP, as long as the patient’s GP and community pharmacy were informed. The need for a ‘rapid response’ HMR for post hospital discharge was the major reason for support for an option of referrals being made by the hospital. It is essential that all possible barriers are removed to enable post hospital HMRs to occur within approx 10 days of discharge (earlier if possible) and under the current model this is known to be close to unworkable.

Only those patients considered to be at imminent risk of medication misadventure would be referred and it would be an opportunity for enhancing links between the acute and primary sectors. Hospital based respondents suggested they would be well placed to monitor the effectiveness of HMRs under revised arrangements, as high risk patients typically ‘bounced back’ due to medication problems.

#### **Access gap: Indigenous consumers**

The extremely high incidence of medication misadventure, non-adherence and resulting hospitalisation among Indigenous consumers as well as the flow-on effects such as organ damage and amputations were matters of grave concern to those respondents who work with Indigenous consumers. The co-morbidities because of the lack of adherence to medications were considered to be as high as three to four times that of non-Indigenous consumers.



Overall it is clear that thousands of Indigenous consumers are not currently able to readily access HMRs. As an example, two of Australia's largest regional Aboriginal Health Services, included in this research, with a combined total of 17,000 patients (and at least 1700 diabetic patients) do not currently refer patients for HMRs – but expressed a strong interest in options which would enable them to do so.

For Indigenous consumers in remote areas, a key barrier to access is the required link to a community pharmacy, when most remote Indigenous consumers never set foot in a community pharmacy as it is perhaps 1000kms away and prescriptions are filled through the local Aboriginal Health Service.

HMRs – under redesigned models – were considered to be potentially a valuable tool for education and reassurance. Suggestions for alternative models included linkages to the chronic disease register and pooled funding via the Aboriginal Health Service, so that in-clinic sessional services could be provided in regional cities or regular visits made to remote communities by experienced pharmacists.

The key request was for recognition of the importance of time to build rapport as part of an effective HMR and that multiple HMRs would enable gradual education and follow-up over time.

Despite the inherent difficulties, there was still a preference for HMRs for Indigenous consumers to be provided by pharmacists rather than other health workers wherever possible, as the medication issues were often complex and also because other staff were already struggling with huge workloads.

### **Access gap: culturally and linguistically diverse consumers**

There is a need for the HMR System to incorporate CALD workers and community centres if the Program is to effectively target this high risk group. Taking into account the overall findings of the study, it appears that CALD access to HMRs varies depending on whether the CALD consumer consistently attends the same GP (these consumers tend to have equal access to HMRs) and whether they are able to access a GP or other health professional who speaks their language – if not, they are highly unlikely to be reached by a HMR.

### **Access gap: palliative care patients**

Concern was expressed that many terminally ill and dying patients missed the potential impact on comfort levels that could be achieved through a timely HMR. The unpredictable and short time periods between the terminal and dying phases often meant the GP referral model was inadequate. A HMR during could help eliminate medicines that had become irrelevant and were causing discomfort. Multiple HMRs may be necessary over a short period of time in the palliative care phase.

### **Access gap: non-compliant/non-adherent consumers**

Perhaps by definition, the most difficult consumers to reach with a HMR are those who are the least compliant and the least adherent to their medication regime. Views on this group ranged from *'nothing you can do, it's like shutting the door after the horse has bolted'* to others who believed compliance could be improved with education & reassurance. *'There is a lot of non-compliance, but some of it is wise <because of side effects>, some of it is mistaken, some of it is accidental'*.

## **Findings vs Program objectives**

Based on the views of GPs, accredited pharmacists, consumers and information gathered through the stakeholder and call for submissions phases, as well as observations made during the course of this research, most of those receiving HMRs **present** as:

- Unlikely to misuse their medication
- Using their medications in a safe and appropriate way
- Requiring few if any changes to their medication regimen as a result of the HMR
- Experiencing no substantial change in their quality of life or health outcomes as a result of the HMR



Consumers receiving HMRs did demonstrate an improved knowledge and understanding of their medication as a result of the HMR.

Health professionals did not report an improvement in their understanding of medications as a result of HMRs. Members of the healthcare team did not appear to have increased co-operation as a result of HMRs, even though where these existed they made the path for HMRs much smoother.

HMRs did not appear to be effective in reaching people most at risk of medication misadventure.

Many GPs and pharmacists – including those participating in the Program - consider HMRs to often be ineffective, used inappropriately and implemented inefficiently. Regardless of the actions that can be taken to address Program uptake, it will remain low without a change in the level of support for the Program by GPs. While there are a number of strategies that could be employed to achieve incremental improvements in GP response, a substantial change in their level of interest is unlikely to occur until they can see clear evidence that it is producing substantial benefits for patients.

Participation and interest at the pharmacy level is mixed. Some are enthusiastic. Most are ambivalent. Some are quite negative.

Reported HMR outcomes included providing reassurance to the patient, educating the patient on the importance of a medication and how to take it properly and possible side-effects. Reducing adverse drug events associated with polypharmacy was reported to be rare.

Increasing participation by health professionals and access for consumers requires change to the Program rules to enable flexibility and direct referral, evidence of effectiveness and maintaining the participation of the community pharmacy, GP and accredited pharmacist.

Consumers are unlikely to drive change on HMRs.

*HMRs are a good idea...but'*

There are two different avenues for change:

1. The first involves keeping the current model but making adjustments. This would potentially lead to greater uptake.
2. The second involves changing to a more effective model with a clear focus on consumers who are most in need of a HMR. This would potentially lead to substantial uptake of a more effective service.