

Consumer Perspectives of the Australian Home Medicines Review Program: Benefits and Barriers¹

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ABSTRACT

BACKGROUND: The Australian Home Medicines Review (HMR) is a free consumer service to assist individuals living at home to maximize the benefits of their medicine regimen and prevent medication related problems. It consists of a pharmacist reviewing a person's medicines and collaborating with the general practitioner to optimize the individual's medicine management. The uptake of this service has remained below the projected use although the program has been shown to successfully identify medication related problems and improve patient drug knowledge and adherence.

OBJECTIVES: This study investigates patients' perceived benefits and barriers regarding the Home Medicines Review service who have used the service and those who are eligible for it but have never used it.

METHODS: The consumer perceptions were drawn from 14 semi-structured focus groups with patients and carers belonging to the general HMR target population and to consumer segments that have been postulated to be underrepresented with regard to this service.

RESULTS: The major benefits reported were acquisition of medicine information, reassurance, feeling valued and cared for, and willingness to advocate medication changes to the general practitioner. Perceived barriers were concerns regarding upsetting the general practitioner, pride and independence, confidence issues with an unknown pharmacist, privacy and safety concerns regarding the home visit, and lack of information about the program. Participants agreed that the potential benefits of the service outweighed its potential barriers.

CONCLUSIONS: It is expected that direct-to-consumer promotion of HMRs would increase the uptake of this valuable service. It would be necessary to ensure that the process and benefits of the service are communicated clearly and sensitively to eligible patients and their carers to obviate common consumer misconceptions and/or barriers regarding the HMR service. Further, any direct-to-consumer promotion of the service must enable patient/carer self-identification of eligibility.

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INTRODUCTION

In 2001, the Australian Government established the Home Medicines Review (HMR) Program to assist patients living at home to maximize the benefits of their medicines and prevent medication related problems¹. An HMR is a free consumer service provided jointly by doctors and pharmacists specifically for patients who take multiple medicines each day, have recently spent time in hospital, see multiple general practitioners (GPs) and/or specialist doctors, or are concerned, confused or uncertain about their medicines. The service is initiated by the patient's usual GP who generates a referral to the patient's local pharmacist. The latter organizes a specially trained pharmacist to conduct an interview with the patient, preferably in the patient's home. During the approximately one-hour long visit the patients' medicines are discussed and inspected. The pharmacist summarizes his/her findings in a report to the GP, who then discusses any recommendations with the patient and may make appropriate changes to their medication regime². The involvement of a carer in this process is optional and depends on the individual relationship between patient and carer.

The HMR and similar international programs have been found in multiple studies to successfully identify clinically significant medication related problems, improve patient drug knowledge and adherence, improve patient health and potentially enhance the relationships between GP, pharmacist and patient.¹⁻⁷ It is therefore in the public interest that this cognitive pharmacy service is effectively used by patients who are at highest risk of medication misadventure. However, recent research confirmed that those in greatest need of an HMR are the least likely to receive this service.⁸

Whereas numerous studies have investigated the attitudes of pharmacists and GPs, the health care providers involved in the HMR Program,^{1,8-10} and strategies have been proposed to increase the uptake of the program by these stakeholders, the literature on consumer perspectives is relatively sparse. Only a few studies have investigated the perceptions and/or satisfaction of HMR patients,^{1,8,9,11,12} all resulting in the conclusion that service recipients are generally very pleased and well-satisfied with the HMR service and that they "recognize the benefits arising from the process".^{8,9} However, no specific data exists on the perceived benefits and barriers from the perspective of HMR recipients³ versus those of eligible non-recipients⁴, nor on the role of carers, particularly informal carers, in the uptake and provision of HMRs, who have been found to attend approximately 34% of all HMR interviews.⁹

Likewise, there is a lack of research on the perceptions of specific consumer groups that are underrepresented as HMR recipients, some of which are believed to be at a higher risk of experiencing medication problems than the general HMR target groups. Based on a pharmacist survey, the Schwartzkoff study *Evaluation of HMR* has identified these under-served groups to be older males, people of diverse cultural and language backgrounds, those living in remote or rural (isolated) areas, Aboriginal and Torres Strait Islanders, young people with chronic illnesses and/or other serious health problems and customers of smaller (e. g. one-pharmacist) community pharmacies.⁹ Schwartzkoff explained that older males are less willing to seek and accept health care assistance, and that "younger patients . . . were rarely asked to consider having an HMR",⁹ it has been very difficult for small (particularly one-pharmacist) pharmacies making HMR home visits, community pharmacies in rural locations often find it difficult to deal with HMR referrals, and indigenous people and communities of diverse cultural and language backgrounds are "consistently identified as disadvantaged in access to health . . . services".⁹

A more recent study commissioned by the Australian Government argues that certain patients in the period immediately following hospital discharge, indigenous consumers, culturally and linguistically diverse consumers, palliative care patients, and non-compliant or non-adherent consumers, all being at highest risk of medication misadventure, appear to have rarely received an HMR.⁸

This paper examines and compares the perceptions of HMR recipients towards the HMR program with those of eligible non-recipients and investigates the attitudinal differences between the overall HMR target

population and the under-represented segments identified by the Schwartzkoff study^{5 6}. Additionally, attention is given to the attitudes of carers of both HMR recipients and eligible non-recipients.

METHODS

Data Gathering

A total of 14 focus groups were conducted with 87 HMR-eligible patients and carers who were recruited through voluntarily participating pharmacists throughout Australia. The pharmacists either approached potential participants whilst dispensing medicines for them or on the occasion of an HMR visit. In addition, carers were recruited from a support group for family carers. Assurances were given regarding anonymity and confidentiality. All participants agreed in writing to the research content and process, including audio taping of the focus groups. In line with normal focus group practice, respondents were given an A\$50 reimbursement to cover their costs and time for attending a focus group. Ethics approval was obtained from the University of Sydney Ethics Committee.

Semi-structured focus group discussions were chosen as the most appropriate method of data collection. It has been shown that focus groups offer researchers a powerful investigative potential especially in the areas of consumer behavior, patient-provider collaboration, health literacy research, and disease and medication management.¹³ Specifically, the group discussion format can stimulate the exchange of ideas, assist participants to refine their individual viewpoints by comparing them to other people's opinions, help participants develop their thoughts and beliefs, and stimulate the articulation of attitudes. Moreover, focus groups can provide a protecting place that gives participants a sense of community, which makes them more comfortable in expressing their opinions. Participants are more likely to bring up and discuss concerns and negative thoughts in focus groups than in other data collection methods.¹³

Moderated by HMR-pharmacist researchers who were experienced in qualitative research, the semi structured focus group sessions were opened by a brief statement of the purpose of the focus group and an invitation to discuss how respondents obtain their medications, what kind of medicine problems they tend to experience and how they manage these. The relationships of the participating patients and carers to their pharmacists and GPs were then explored. Following this introductory discussion, the HMR program was explained to eligible non-recipient groups, and participants were asked about their opinions of this service and whether or under which circumstances they would consider using it. Themes discussed were the character and qualification of the HMR pharmacist, the influence of the HMR on the relationship with the patients' local community pharmacist and GP, the potential effects of the HMR on the patients' current medication management, the disclosure of the patients' medical records to the reviewing pharmacist, privacy and safety issues in relation to the home visit and the participants' ideas regarding HMR follow-up activities as well as their overall thoughts and feelings concerning this service.

In addition to the above points, the HMR recipient groups were also asked about their expectations and potential concerns regarding the HMR service during the initiation phase of the HMR (before the HMR visit) and whether and how these attitudes changed during and after the HMR interview. In addition, the HMR recipient groups were encouraged to talk about any actual changes resulting from the HMR visit and subjective outcomes such as health and quality of life changes. They were asked about their overall satisfaction with the service, about any suggestions they could think of for improving the service and whether they would have another HMR in the future and/or recommend it to friends and family.

In all groups it was investigated whether participants would actively ask their GP for a HMR referral. The focus group sessions were concluded with a facilitator's summary of the discussion and the respondents thanked for their time and involvement. Each focus group took between 30 to 70 minutes, depending on the number of participants and their level of interest in the topic.

Participants

In total, 87 consumers participated in 14 focus group discussions, held in four states of Australia (New South Wales, Victoria, Queensland and South Australia). The groups included 69 patients and 18 carers and 8 respondents who identified as both patients and carers. Of the 14 focus groups, 8 were comprised of eligible non-recipients (patients and carers) and 5 consisted of HMR recipients (patients and carers). In addition, there was one carer-only focus group consisting of 2 carers of HMR recipients and 4 carers of eligible non-recipients.

For the purpose of this study, patients were defined as persons who had had an HMR in the past 6 months (HMR recipients) and those who had never had an HMR but were eligible for this service according to the Australian Federal Government's eligibility criteria and risk factors for HMRs⁷ (eligible non-recipients). Carers were defined as persons who provide support to someone with a disability, mental health problem, chronic condition or someone who is frail aged. They could be family members, friends or employees, who care for the patient for between a few hours a week or all day every day.

The average number of participants per focus group was six, with a range of 3 to 10. The age of the participants ranged from 33 to 91 years. 45% were male and 55% female. A definition of each consumer segment and the number of focus groups conducted for each is listed in table 1. Carers and patients participated in 12 out of 14 focus groups with an approximate carer-to-patient ratio of 1:3. No specific focus group was held with younger chronically ill HMR recipients due to a lack of suitable and interested patients.

Table 1: Definition of Consumer Segments and Number of Focus Groups per Segment

Consumer segment	Definition of consumer segment	Number of HMR recipient focus groups	Number of eligible non-recipient focus groups
Older males	Male patients 75 years and older	1	1
Younger patients	Patients under the age of 65, who have a chronic illness and/or other serious health problems	0	2
People living in remote and rural areas of Australia	Patients and carers who belong to the PHARIA ⁸ categories 2-6. Pharmacies located in these areas are eligible for the Rural Pharmacy Maintenance Allowance	1	1
Customers of smaller pharmacies	Patients and carers whose regular community pharmacy usually has only one pharmacist on duty at any one time	1	1
General HMR target population	Patients and carers who are not included in any of the above segments	2	3
		Plus 1 mixed carer-only group	

Analysis

All focus group discussions were audio taped and transcribed verbatim with tracking of individual speakers. In addition, the moderators' assistants made detailed session notes on seating order, body language and indications of group mood. Each focus group session was debriefed by the involved

research team members, impressions of agreement and controversy discussed and the findings summarised in an abridged report. Thematic analysis was used to analyse the data involving a three-step process:¹⁴ 1) Using NVivo 8, codes were generated and collated into tentative themes, which were checked back across the entire data set. 2) The codes were connected into categories and sub-categories and relationships established between categories to find themes. 3) The themes were mapped, defined and names for each theme generated. Discrepancies between researchers were resolved in team discussions involving the chief-investigator and the two co-researchers.

RESULTS

Following, the benefits and barriers of HMRs perceived by recipients and eligible non-recipients of the investigated consumer groups are described. Many of the attitudes are shared by the various respondent groups (recipients/eligible non-recipients, patients/carers; general HMR target groups/low-use segments). The results therefore cover the common views and, where disparate perceptions were raised by specific sub-groups, these are noted. A summary of the perceived HMR benefits and barriers including additional participants' quotes are depicted in table 2.

Perceived Benefits of HMRs

Participants identified four key benefits of having an HMR: acquisition of personalized information and advice regarding medications; reassurance regarding medications and coordination of their care; feeling valued and cared for by a health care provider; and enhancing the patient-provider and pharmacist-GP relationships. Sorting out the medicines cabinet and ensuring the GP's medical records are up-to-date were reported as secondary benefits. The following describes each of these attitudes in detail.

Information acquisition

The first unprompted benefit raised by participants in every focus group was the opportunity to acquire personalized information and advice regarding medications. The majority of respondents reported that the medication instructions which they received from their health care providers (doctors and pharmacists) were sometimes vague and/or inadequate. Printed Medicine Information sheets distributed by pharmacists were largely seen as too general, confusing and 'fear-mongering', rather than being a valuable source of information. Other sources of medicine information such as the Internet and organizations such as the National Prescribing Service were mentioned as being helpful, but were not considered to be sufficiently specific to the individual's health circumstances. Therefore, participants regarded the HMR as an ideal opportunity to better understand the correct dosage and administration method and the effects of each prescribed medicine in relation to their individual disease states, as well as to dispel any confusion such as that caused by brand substitution. A need for more information about possible medication interactions and side effects was also raised and, thus, overall the respondents saw a need to identify inappropriate or detrimental medication therapy.

HMR recipient (general): When I started taking tablets, I had no idea what I was taking or what for . . . I've had my home review and I've just asked about side effects to some of the medication that I've been taking and [the HMR-pharmacist] explained that to me, which was good.

Some respondents however, particularly customers from smaller pharmacies, mentioned that they already received extensive and satisfactory medication advice from their local pharmacist.

When [the pharmacist] is giving you the [medications] they go through it, even though you've got the stuff . . . time after time, they will still go through it with you.

[In response to the facilitator's question if they worried about the interactions between medications]: Well, I don't because that's where I leave it to the pharmacist.

Reassurance and coordination of care

HMR recipients reported that the HMR visit gave them a strong sense of 'peace of mind' that their drug regimen was adequate, coordinated and up-to-date. A lack of reassurance from prescribing doctors and dispensing community pharmacists and an awareness of increasing (usually age-related) cognitive difficulties coping with the prescribed medication regimen were described.

Having [the HMR-pharmacist] check on me [was important] because I'm getting a bit old.

Likewise, eligible non-recipients of all consumer segments considered 'reassurance' to be a key benefit of an HMR. This was often driven by a fear of taking too many or too much medication and, thus of experiencing side effects. Additionally, eligible non-recipients from the various segments hoped that the HMR would help them co-ordinate an overall picture of their medications when seeing multiple GPs and specialists and using different pharmacies.

Carers appreciated that the HMR would help them share their responsibility for the patient's medicines, hence relieve some of the carer's emotional stress.

Carer of HMR recipient: We have feed in from all the doctors and because I know a little bit I do just correlate [the information] . . . [but the HMR is] just taking all that more pressure off me.

Feeling valued and cared for

Many respondents were extremely keen about (eligible non-recipients) and pleased with (HMR recipients) the opportunity to receive undivided attention from a health care provider and spend a relatively long time talking with a pharmacist who would listen non-judgmentally and address their questions and concerns. The concept that a health care professional would help them through a variety of highly personal, often worrying health and medication issues was immensely powerful and engendered participants' emotions of feeling valued and cared for. Interestingly, the older male HMR recipients placed a high value on the reviewing pharmacist's professional and interpersonal skills.

I think [the reviewing pharmacist] would need to be more experienced. A senior. They would need to understand people as well as the effects of the medications.

Enhancing communication and relationships

A perception of the respondents' strengthened relationships with the local pharmacist and GP, and between the pharmacist and GP, was another core benefit, specifically but not solely identified by HMR recipients. Whilst a few respondents stated that their doctor and pharmacist had always collaborated well, the common view *prior* to having an HMR was that the relationship between GP and pharmacist was superficial or virtually non-existent:

Carer: I don't think the doctor has communication with the pharmacy . . . What I'm saying is that once your doctor gives you the prescription you can go to any pharmacist so the doctor is not aware where you're going.

Carer: I think the doctor and the pharmacist, each of them are trying to protect their patch and . . . I don't know whether they're going to sort of happily interact with one another.

The HMR was perceived as a conduit to improving these relationships.

Other benefits

Secondary perceived HMR benefits were the practical advantages of sorting out the patient's medicines on hand, disposing of unnecessary or expired medications, and keeping the doctor's records of the patient's medications up to date. The identification of prescribing and other errors was very rarely mentioned spontaneously as a perceived benefit of an HMR and even once raised by the facilitator, there was little support for this, due to the extremely high levels of trust in both the GP and the pharmacist. Even on prompting, the possible advantage of saving money was not seen as a benefit of HMRs. On prompting, the possibility of an HMR leading to greater independent living was considered valid by only two groups (older males and remote and rural HMR-recipients).

Table 2: Perceived Benefits and Barriers of the HMR – Participants' Voices

	HMR Recipients or their carer	Eligible Non-Recipients or their carer
Benefits:		
Information Acquisition	<p><i>I actually had my medicines in the wrong spot at one time and [the HMR-pharmacist] just said . . . put them in the wardrobe in a cooler spot. (General).</i></p> <p><i>The pharmacist gave us a lot of information and it was fantastic. (Remote and rural)</i></p>	<p><i>Well, you – at least you'd learn what you're actually taking and what it is for. (General)</i></p> <p><i>You would get a more thorough evaluation of what type of, what you're taking and . . . what other things might be interacting with what you're taking maybe. (Younger chronically ill)</i></p> <p><i>Excellent idea [the HMR], yes. Especially taking a few tablets, you might be taking them at the wrong time. They can clash with each other. (General)</i></p>
Reassurance and Coordination of Care	<p><i>[The HMR gives us] a little bit more confidence in taking our medication. Before we were a bit apprehensive taking it because of not knowing if [the medicines] counteract each other.</i></p> <p><i>I thought it [the HMR] was very interesting because it had always worried me about the amount of pills and things.</i></p>	<p><i>Each specialist you go to only treats what he treats and he might give you a medication which will interact in a bad way with another drug from another specialist. They very rarely contact each other, the specialists. In the end you have all these doctors and you need someone like the pharmacist to tie it all together. (General)</i></p> <p><i>[I was] going to the diabetes center . . ., and they changed blood pressure medication. And as soon as I went back to the other doctor, he says no, we won't do that . . . So I go to the specialist center and then he decides no, we'll do something else. You go back up in and say well why did he change it? I said, well, I don't know . . . and you're caught in sort of a war of doctors sometimes. (Younger chronically ill)</i></p>
Feeling Valued and Cared for	<p><i>[The reviewing pharmacist] came in, not judging whatever medication you're on. She was there just</i></p>	<p><i>I think it [the HMR] gives you a sense overall of knowing that there's somebody out there that</i></p>

	HMR Recipients or their carer	Eligible Non-Recipients or their carer
	<i>to help you, to make sure that you were happy with your medication, to make sure you knew everything about [them]. (General)</i>	<i>really gives a damn. (General)</i>
Enhancing Communication and Relationships	<p><i>[The HMR-pharmacist] didn't think the two [medications] together were quite right so when we went to the doctor, she changed her medication around because the chemist had sent her a note . . . I think that's a really good idea. (Older Male)</i></p> <p><i>Even after the tablet review [HMR], he'll [the pharmacist] always ask you is there anything perhaps that he could put down to alert the doctor to. (General)</i></p> <p><i>Well, I felt I knew my new doctor better [after the HMR] because he got a [medication review] report from the pharmacist. (Remote and rural)</i></p>	<i>It's opening up the communication between the pharmacist and yourself, and the doctor so that if there are any complications arising from the prescribed medicines, that you're taking you can pass it on to your pharmacist who then passes it on to your doctor. (General)</i>
Barriers:		
Concern of Upsetting the GP	<i>But [the doctor] might [say], well, I'm the doctor; I know what's best for the patient. (General)</i>	<p><i>I'd be frightened the doctor might say 'oh no, this is checking up on me'. I've got a lot of faith in him. (Carer)</i></p> <p><i>The doctor might get upset . . . (Older male)</i></p> <p><i>You don't want to offend the doctor. (Older male)</i></p>
Pride and Independence	<i>I thought he's [the HMR pharmacist] checking up to see if I'm doing the right thing, and I knew I was doing the right thing. (Remote and rural)</i>	<p><i>I've got everything under control at the moment, that's right, yes. (Carer)</i></p> <p><i>But then, there could be some people who mightn't be as alert as they were when they were 75 and they're hitting 90, and they would be quite happy to concede that they are a bit muddily. And often at the end of the day there's tablets left and will I take them all at once or whatever. And, so, yes, I wouldn't mind a visit. (General)</i></p>
Unknown Pharmacist	<i>Dealing with somebody that you've known for many, many years, having someone come from another pharmacy is still quite acceptable but not as friendly or as intimate. (General)</i>	<i>I think when they come to your house, it becomes a very personal sort of a thing, and you prefer someone that you've had dealings with rather than a stranger. (Customer of a smaller pharmacy)</i>
Home Privacy and Safety Concerns	No concern	<i>I think that [the HMR] would be more thorough if it was done in the home, but I would feel more uncomfortable having it done in the home, but that's my personal choice. (Younger chronically ill)</i>
Desire for more Information and for inclusion in the	<i>Well, if they're going to write things [in a report] I'd be interested . . . I really didn't know anything</i>	<i>There might be ethical problems or whatever, but it'd be interesting to see the original report rather than have it filtered through the doctor.</i>

HMR Recipients or their carer	Eligible Non-Recipients or their carer
process as a carer <i>about the report.</i> (General)	(Younger chronically ill) (On being prompted if they were interested in a written HMR-report): <i>Let's say [the patient] decides to be a bit antsy and hide her report and I still don't know what's going on and I'm still caring for her.</i> (Carer)

Perceived Barriers to HMRs

Amongst those who never had an HMR (eligible non-recipients), possible barriers which would deter them from having an HMR were noted. Concerns focused (in decreasing order of frequency) on: the fear that the HMR could cause deterioration in their relationship with their GP; the belief that they don't need an HMR; having the HMR with an unknown pharmacist; and privacy issues. In addition, eligible non-recipients regretted that lack of HMR knowledge had prevented them from receiving this valuable service.

Concern about upsetting the GP

A significant proportion of respondents felt that GPs ranked higher than pharmacists in the health care hierarchy. They believed that GPs might therefore be reluctant to accept medication recommendations made by pharmacists and that GPs might become upset with the patient for having or asking for an HMR.

HMR recipient A (general): I don't think the GP would like suggestions from the pharmacist. HMR recipient B: Most doctors will take, uh – HMR recipient A: They take offence.

Some customers of smaller pharmacies perceived the pharmacist to be in a good position to conduct the HMR and give the GP formal feedback as they were seen to have more up-to-date and specialized medication knowledge and to be less influenced by drug companies than GPs. Participants from the general HMR target group were split about their trust in the pharmacist's ability and authority to give the GP medication feedback.

Respondents from several consumer segments highlighted that better promotion of the HMR program to GPs could help alleviate negative attitudes that GPs might have towards the service, thus enhancing the likelihood of the HMR being offered to patients at risk. One respondent even suggested that the HMR service was so beneficial that it should be compulsory for doctors to offer them to their patients. Another patient summarized the core role that GPs play in the HMR program by stating: We need to work on the doctors and get the doctor to [promote HMRs] (HMR recipient, customer of small pharmacy).

Pride and Independence

Respondents who perceived that they had no need for an HMR believed that they knew enough about their medications and are in control of them, but would be open to have an HMR in the future, particularly if their cognitive abilities deteriorated.

Eligible non-recipient (younger chronically ill): Some people might see [having an HMR] as an admission that they're getting more dependent, so the younger age groups don't want to do it, but the older age groups have learned to live with that feeling of maybe slightly more dependency, and it's not an issue for them.

One carer of an HMR recipient was careful not to tell friends or family about the HMR experience in order that she and her husband who she cared for were not seen as dependent or inferior.

I haven't told any relatives or any friends of my husband's peccadilloes because I'm frightened they will see him as a devalued person.

However, most other HMR recipients were pleased to discuss the service with others without reservations.

Unknown pharmacist

Discussing the scenario of an unknown pharmacist conducting the HMR, several eligible non-recipients perceived this as a barrier to a satisfactory HMR. These respondents felt less comfortable with the thought of an unfamiliar pharmacist conducting the HMR, and would not as readily entrust personal information to them as they would to their regular pharmacist. Some also thought that an unknown pharmacist would be less credible to the patient's doctor.

Eligible non-recipient (older male): Well, there would be a barrier between you and the chemist if you don't know them.

Other eligible non-recipients and HMR recipients, on the other hand, regarded an external pharmacist as a welcome opportunity to gain a second opinion, to check on any medication problems that their local pharmacist or GP didn't pick up and to steer clear from a potential conflict of financial interest that their local community pharmacist might have.

Eligible non-recipient (younger chronically ill): Even if you had two qualified people, having a second person looked at, it might be a benefit to pick up one thing that someone else couldn't see.

Carer: Well, I think they [unknown pharmacists] are objective and I see it as a check on the [local] pharmacist and the doctor in case, you know, they overlook something.

Home privacy and safety concerns

Particularly some younger chronically ill patients expressed concerns regarding the HMR being conducted in the patient's home. They felt more comfortable having the HMR in a neutral place, conceding that the review would be more thorough if it was done in the patient's home. Older males, participants from the general target groups and customers from smaller pharmacies were only apprehensive of allowing the HMR-pharmacist into their home if the pharmacist was not previously known to them. In such cases, identification, such as a prior phone call to announce their arrival at a particular date and time and a uniform or badge, would alleviate their safety concerns.

The majority of eligible non-recipients however seemed to feel at ease with the home visit and perceived that the medicines review was best conducted in the patient's usual living environment.

Eligible non-recipient (general): I'd rather have [the HMR] in the home. I wouldn't want anyone else to see my big bag of goodies!

Interestingly, none of the HMR recipients had any home privacy concerns. They found the patient's home to be an ideal venue because it made them feel comfortable without time restraints.

HMR-recipient (remote and rural): You feel more comfortable in your own home. . . . it's more personal. You're also not time-limited either, whereas in the pharmacy you can see all the people lining up.

HMR-recipient (general): Being at home is a different atmosphere 'cause if you go to the chemist and you're asking [questions], there's people around you and listening, there's not the same feeling.

Carers of HMR recipients valued the home visit because of the physical difficulties of transporting elderly, sick patients to different places.

Desire for more information before and subsequent to the HMR

A number of HMR recipients wished they had been better informed about the HMR process prior to having the HMR. Some, for example, thought a nurse would conduct the HMR; another person was upset to learn that the HMR-pharmacist was informed about her medical diagnoses without her consent. Others were confused about the role of the HMR pharmacist, speculating that they were merely monitoring the patient's medication adherence.

When [the pharmacist] came, I thought 'I wish I knew she was going to say this, I would've like prepared differently'.

Likewise, many HMR recipients did not know that the HMR-pharmacist issued a post-HMR report to the GP. Several respondents were disappointed that they weren't informed of this and wanted to receive a copy of the report to understand the pharmacist's recommended actions, to feel in control of the HMR outcomes, to be able to refer back to it for future reference, and/or to be informed about the content of the communication between pharmacist and GP. Participants from the younger age groups particularly wanted to ensure that the post-HMR advice from their GP was consistent with the pharmacist's recommendations.

Eligible non-recipient (younger chronically ill): It'd be interesting to see the original report rather than have it filtered through the doctor . . . Because the doctor might filter what he reads and even subconsciously, so you can say, well, what did he mean when he said this and whatever, put him on the spot.

Also, the need for an up-to-date medication list of what to take, when and how was repeatedly raised by participants of various consumer segments.

Eligible non-recipient (general): I actually presumed there was going to be a written . . . statement to say, you know, if you're taking something in the morning you should be taking at night, he [the HMR-pharmacist] can just write down: 'make sure you take such and such at night', just in simple one-syllable words and you're there, and your family can see that too when they come.

The majority of participating eligible non-recipients regretted that they had not known about the existence of the HMR-program prior to participating in this study and suggested that this valuable service should be promoted more widely.

Some carers of HMR recipients felt completely excluded from the HMR process. They regretted that they were not invited, hence were not present at the medication review, and that they did not receive any feedback on the HMR results, which compromised their ongoing care for the patient.

[The patient] told [the pharmacist] that [the carer] didn't care for her properly. I didn't know what had been written about us [the carer] . . . [as the pharmacist] said "due to privacy I can't show you that form" . . . But then the thing what upset me was, what if what she said was true. What if I wasn't looking after her properly? Nobody followed it up.

Overall, we found that HMR recipients, although some of them had had major reservations *prior* to having their first HMR, were highly satisfied with their HMR experience and desirous of having another HMR if appropriate. Eligible non-recipients were split between those who wanted an HMR or would be happy to have one if their GP requested it for them, and those who did not see a personal need for having an HMR (at the present time) in spite of recognizing the benefits that the HMR service provides and perceiving it as a valuable service for others. No respondent perceived the service to be of no value. The congruence of attitudes towards the HMR between eligible non-recipients and HMR recipients prior to receiving the service demonstrates that there is no evident difference between the groups with respect to their willingness to participate in an HMR.

DISCUSSION

Whilst our finding of the high consumer satisfaction levels with the HMR is consistent with the results from earlier studies,^{1,8,9,12} the insights that this study gained into specific problems that patients and carers perceived regarding accepting or asking for an HMR are new. These concerns need close examination, as they could influence whether the service is taken up by high-risk patients or refused with the resultant risk of the patients experiencing adverse drug events.

The most prominent concern voiced by all types of participants was the worry that their participation in an HMR could upset the GP, which meant that there was the possibility of patients rejecting having an HMR even before discussing this with their doctor. The role of the GP as being the gatekeeper to the uptake of HMRs has been identified in several studies, one of which suggested “that the HMR referral is GP-generated rather than led by patient demand”.¹⁵ Similarly, Campbell Research & Consulting argued that the HMR uptake will remain low without a change in the level of support for the program by GPs.⁸ In addition to these findings, our study reveals the direct link that exists between the consumer awareness of the GP’s power position and its negative implications for the HMR uptake in the patients’ minds, specifically in situations where the HMR was suggested to the patient by someone other than the GP.

Another concern that could impede the uptake of the HMR was the reported lack of transparency about the HMR process which points to an absence of a thorough patient education process regarding the purpose, benefits and procedural steps of the HMR at the time of its initiation. The implications of under-informed consumers who may hold incorrect assumptions regarding a health service that they can choose to accept or reject are concerning. As Fogg¹⁶ notes citing Waller (1999)⁹: “What a person thinks is the purpose of a medication review is likely to influence their perception of its appropriateness and usefulness”. We therefore suggest that adequately addressing the service benefits as well as potential recipient concerns at the time of the service initiation could not only help patients to have a clear and positive picture of what to expect but also obviate any reservations related to issues of pride and independence, an unknown pharmacist and/or domestic privacy.

Another concern that emerged from this study is the perception held by some carers of being left out of the medication review process and, related to that, the carers’ uncertainty about their care recipient’s medication issues. Similar problems have been identified by Smith et al¹⁷ who found that approximately 5% of the carers who participated in their study wanted more information on routine medication details.¹⁷ Whilst the carers in Smith’s study reported problems of not being informed about their care recipients’ medication changes, they were at the same time aware of the prescribers’ dilemma in juggling information disclosure to carers with the care recipients’ right to privacy.¹⁷ Other studies found that managing medication contributed to the stress of caring,¹⁸ that carers generally expressed stronger information needs and required different types of information than patients,¹⁹ and that the provision of specific information to carers was vital in the process of developing competency as a carer.^{20 21} The unmet information need of carers has been shown to cause widespread carers’ dissatisfaction²²⁻²⁴ and added to the carers’ difficulty in defining their caring position in relation to the care recipient and their health care

professionals.²² In light of this existing research, our study findings are a timely reminder that it is necessary to review the role and status of carers in the provision of HMRs to care recipients.

The disinclination of older male eligible non-recipients to seek medication advice and their skepticism about how they could benefit from an HMR is another noteworthy issue. An integrative literature review that critically analyzed 124 studies on help-seeking behavior in the context of gender, supports the assumption that masculinity beliefs of white middle-class men are a significant variable influencing their health risk appraisal and help-seeking behavior. The review reported that men were poor attendees for preventative medicine, consistently ignored symptoms of ill health, and avoided or delayed seeking professional help from the health services for fear of “appearing weak, hypochondriacal (sic), or lacking in masculinity”.²⁵ Such gender-specific ideologies could be an important factor in a man’s decision to accept or seek an HMR, but further research is required to investigate the variations between men of differing socio-economic status, age and ethnicity.²⁵ It is critical that any promotional messages for the HMR service emphasize that having an HMR is not an admission of inferiority or lack of independence.

Finally, inferences can be drawn from the perceptions of customers of smaller pharmacies, who appeared better informed about their medications, exhibited relatively higher levels of self-confidence with managing their medicines, higher awareness levels of the HMR program and better relationships with their local pharmacist than other groups. Whilst this finding needs to be verified through further research, it highlights the value and importance of the day-to-day consulting and advisory role of community pharmacists, particularly with regard to patients who would benefit from enhanced medication advice but don’t belong to the most at-risk HMR target groups.

In summary, it is expected that direct-to-consumer promotion of the HMR program could greatly increase the uptake of this valuable service. Care must be taken that any promotional messages clearly communicate details about the HMR purpose, process and benefits as well as the patient eligibility criteria, in order to obviate misconceptions and/or barriers regarding the service and to prevent the misuse of the service by those who are not at (highest) risk of medication misuse.

STUDY LIMITATIONS

There are several limitations of this study. First, the participants of the carer-only focus group were recruited from a carer support group. Consumers attending support groups are likely to be more highly educated, desire more information, and/or use more adaptive coping strategies.²⁶ It might therefore be possible that the views of the carer-only group were more sophisticated or detailed than those of the average carer, or that any concerns that more aware and/or matured carers might have already processed, remained unreported. However, the comments from the mixed patient-carer focus groups, where the carers were not recruited through a carer support group, are largely congruent with the comments of the carer-only group.

Second, studies based on focus group research are limited by the social contexts in which they are situated, potentially causing problematic silences and/or exaggerated speech.²⁷ However, we found that such potential drawbacks were outweighed by the opportunities that the group sessions offered us. Specifically, the unfolding group dynamics helped participants to explore and clarify their own perspectives, stimulated the exchange of experience in a relaxed atmosphere fostering mutual disclosure, and highlighted the values shared by patients who are at risk of medication misadventure.²⁸

Third, patients who were offered but refused to have an HMR were not specifically recruited for this study and neither did the study include patients who are house-bound due to their physical inability to attend a focus group. However, it is assumed that housebound patients would usually have a carer and the inclusion of carers in our study could have therefore to some extent mitigated the exclusion of house-bound patients. The perceptions of patients who refused an HMR would be a valuable addition to this

research. Further, research with larger patient samples and quantitative research would be beneficial to verify correlations, for example between patients' attitudes towards HMRs and their relationships with doctors and pharmacists.

CONCLUSION

While individuals who had experienced the HMR were overall highly satisfied with the service, a number of barriers to the use of the HMR program were identified regarding that might be addressed via direct-to-consumer promotion. Care must be taken that in any such promotional messages, the purpose of the HMR, its procedural steps and its benefits are clearly communicated to the public to prevent the occurrence of common misconceptions and/or barriers regarding the service. Attention has to be given not to exclude carers of HMR eligible patients from the medication review process and to address older male patients in a gender-sensitive manner. Additionally, it is of utmost importance that any marketing strategies include a precise and easily understandable definition of the HMR eligibility criteria in order to capture the most at risk HMR target population and decrease the probability of non-eligible patients requesting an HMR from their GP.

Notes

¹ Source: <http://www.medicareaustralia.gov.au/provider/pbs/fourth-agreement/hmr.jsp>

² Source: <http://www.guild.org.au/mmr/content.asp?id=53>

³ Patients who have had an HMR in the recent past

⁴ Patients who have never had an HMR but would qualify for this service according to the Australian Government's eligibility criteria and risk factors

⁵ This paper does not include the Aboriginal and Torres Strait Islander and ethnic consumer groups. Due to their distinctly different circumstances, the attitudes of these consumer segments are discussed in a separate paper.

⁶ Statistics on the use of the HMR service by specific consumer groups, except for gender and age-related statistics were not available from the Australian Government.

⁷ HMR eligibility requirements as set out by the Australian Government (<http://www.health.gov.au/internet/main/publishing.nsf/Content/ppsa-hmr>):

Patients who may benefit from a HMR include those:

- taking 5 or more regular medications;
- who are confused or worried about their medicines (or forget to take their medicines);
- taking more than 12 doses of medication per day;
- who have had a significant change to their medication regime;
- with literacy or language difficulties, dexterity problems, impaired sight, or those with cognitive difficulties such as dementia;
- seeing a number of different doctors, including GPs and specialists;
- recently discharged from hospital.

⁹ Waller, V., Consumer perspectives on the DiNCQUM GP polypharmacy in the Elderly Program, Divisions National Consortium for the Quality Use of Medicines in General Practice (DiNCQUM), June 1999.

⁹ PHARIA: Pharmacy Accessibility/Remoteness Index of Australia; www.gisca.adelaide.edu.au/projects/pharia_0708/PhARIA_info.html#cat

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