

## The potential role for a pharmacist in a multidisciplinary general practitioner super clinic

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### RESEARCH

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### ABSTRACT

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#### Background

The Australian government's General Practitioner (GP) super clinics programme aims to provide well-integrated, multidisciplinary, patient-centred care for people with chronic disease. However, there is no research into the current role of pharmacists in this setting.

#### Aims

To explore the perspectives of GP super clinic staff on current and potential (future) pharmacist-led services provided in this setting.

#### Methods

Individual interviews (facilitated using a semi-structured interview guide and thematically analysed) were conducted with purposively sampled staff of a GP super clinic in a semi-rural location in the state of New South Wales, until theme saturation. Participating staff included (n=9): three GPs, one pharmacist, one nurse, one business manager, and three reception staff.

#### Results

Three themes emerged conveying perspectives on: working relationships between staff; a pharmacist's current role; and potential future roles for a pharmacist. All clinic staff actively engaged the pharmacist in their "team approach". Currently established roles for home medicines reviews (HMRs) and drug information were well supported, but needed to be expanded, for example, with formalised case conferences between GPs, pharmacists, and other staff. New roles needed to be explored in auditing medication use, optimising medication records, specialised drug information, dispensing, and prescribing. Although GPs had differing views about opportunities for pharmacists' prescribing in this setting, they saw several benefits to this service, such as reducing the time pressure on GPs to enable more effective consultations.

#### Conclusion

Results suggest a pharmacist's services can potentially be better used within the multidisciplinary super clinic model of care to address current gaps within the semi-rural practice setting. Any future role for the pharmacist could be addressed as part of a formalised, strategic approach to creating an integrated healthcare team, with attention to funding and government legislation.

#### Key Words

super clinic, general practice, pharmacist-led services, pharmacist prescribing, home medicines review, multidisciplinary clinic

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#### What this study adds:

##### 1. What is known about this subject?

Pharmacist-led interventions can improve medicines use, although the integration of pharmacists into multidisciplinary teams has traditionally been limited to tertiary (hospital) care.

## 2. What new information is offered in this study?

A pharmacist's expertise (medication review, drug information) is highly valued in a GP super clinic (primary care) setting, with support for expanded roles in monitoring (medicines use, prescribing), medication profiling, and prescribing.

## 3. What are the implications for research, policy, or practice?

There is a critical need to develop strategies, incorporating appropriate remuneration and funding, to further explore and support the integration of pharmacists and expansion of their services into multidisciplinary primary care clinics.

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## Background

Chronic diseases are associated with high healthcare use and costs in the community. The Australian government's GP super clinic programme is designed to provide well-integrated, multidisciplinary patient-centred care, via a range of health services in a single location, focusing particularly on the needs of people with chronic disease.<sup>1</sup>

Pharmacists are experts in medications. They can support the role of the general practitioner (GP) in primary care to optimise medicine use and management. Targeted interventions (e.g., medication review) by pharmacists can improve medicines use,<sup>2</sup> appropriateness of prescribing,<sup>3</sup> and the prescribing of evidence-based therapies.<sup>4</sup> Pharmacist-led interventions can also successfully optimise therapies that require complex risk versus benefit assessments.<sup>5</sup> Furthermore, comprehensive pharmacy disease management services (e.g., for asthma), which use a patient-centred approach, can improve self-management and adherence to therapy, as well as clinical outcomes.<sup>6–7</sup> Given that pharmacotherapy is the first-line healthcare intervention used in primary care, GP super clinics present an opportunity for GPs and pharmacists to work collaboratively in co-located health services to optimise medicines use by patients.

GP super clinics are a fairly recent innovation in Australian primary health care, comprising one part of the government's 2007 suite of reforms across the health sector.<sup>8</sup> As such, any pharmacist service within a super clinic would have to follow a new and innovative practice model. Pharmacists have been integrated into primary care clinics overseas with success.<sup>9–13</sup> A recent Australian study has explored the experiences of stakeholders during the integration of pharmacists in primary care settings.<sup>13</sup> In Australia, integrating a pharmacist into a general practice

setting can improve the timeliness and completion rates of home medicines reviews (HMRs).

There has been much discussion around the potential role of pharmacists in GP super clinics in Australia<sup>14–17</sup> and integrated primary healthcare teams.<sup>16–18</sup> However, there is no research into the current role of a pharmacist in an Australian GP super clinic. This study explored the perspectives of healthcare practitioners and clinic staff about the current pharmacist services, and potential future roles, in a GP super clinic setting.

## Method

A qualitative study comprising individual face-to-face interviews was conducted. The interviews were facilitated by two experienced researchers using a semi-structured interview guide, which was developed using an exploratory case study approach.<sup>19</sup> The interviews were recorded and transcribed verbatim by an independent third party (a transcription company) and participants were de-identified. The transcripts were thematically analysed using manual inductive coding to elicit key emergent themes; interviews were conducted to ensure theme saturation. Approval was granted from the institutional Human Research Ethics Committee.

The sampling frame for this study comprised all 19 staff of a GP super clinic, including the clinic administrators (i.e., receptionists), who were regarded to be the central and initial contact points for all patients and staff in coordinating referrals and appointments (Figure 1). Using purposive sampling, clinic staff were invited to participate in an interview to canvas a range of perspectives (Figure 1).

The clinic is one arm of a GP super clinic located within a semi-rural location in New South Wales, Australia, representing an area of lower cost housing; the major patient demographics of the clinic are elderly patients and families with lower-earning capacity/pensions. The clinic operates on a "hub and spoke" model for GP super clinics, where a closely located clinic is the "hub" and other "spokes" are within the area (within 50km). Within this clinic, the pharmacist is available on-site (for consultation) once every fortnight (for one day from 9am to 5pm).

## Results

Nine staff members of the clinic participated in individual interviews, each of around 20 minutes in length. These included GP (1), pharmacist (1), registered nurse (1), administrator (business manager) (1), and reception staff (3). Three themes emerged conveying staff perspectives on

the nature of working relationships between clinic staff; current role of the pharmacist in the clinic; and potential future roles for a pharmacist in the clinic.

#### **Nature of working relationships between clinic staff**

The clinic purposefully refers patients to other allied health professionals in the area, and its staff believe they have good, open lines of communication with these colleagues (Table 1). Within the clinic, a major strategy for maintaining communication between all staff is the weekly staff meeting. The part-time nature of some healthcare professionals (HCPs), the dynamics of the daily practice, and the lack of a designated meeting room, means that the staff meetings are rarely attended by all staff and consequently focus on administrative issues. However, the possibility of having the pharmacist attend the regular staff meetings and using them as a forum for case conferences and information exchange was emphasised.

Participants spoke about very positive working relationships they have developed: “Quite close-knit” (2), “good communication between the pharmacists and the GPs” (2), and “excellent interaction” (1) were some positive comments relating to staff relationships. Further, respect for the observations and feedback from non-HCP staff as being of value to the “team approach” to health care at the clinic was outlined. Reference to the reception staff as being the “eyes and ears” (7) of the clinic was an example.

#### **Current role of the pharmacist in the clinic**

Within this clinic, the pharmacist’s role focuses on home medicines reviews, including patient education and counselling, and providing drug information to staff, albeit constrained by having only one day per fortnight allocated for these services.

##### *Home Medicines Reviews*

Participants spoke of the value of having the pharmacist currently involved in the HMRs (Tables 2 and 3), including provision of patient education and counselling, improved health outcomes for patients through medication changes, communication with the GP, periodic re-evaluation of patients’ medications, and access to the pharmacist’s knowledge of medications.

Staff had varying perceptions about patients’ level of acceptance of HMRs because not all patients necessarily agreed to having one (Table 4). Staff suggested that some patients appear to be resistant to change and/or have “uneasy” perceptions about the intentions of an HMR. For those patients who happily participated with the pharmacist

in the HMR process and were able to positively embrace changes in their management plans, significant improvements to health outcomes have been observed.

In trying to deliver optimal HMR, the pharmacist was impeded by the generally “one-off” nature of the service, and was therefore not always fully aware of the patient’s medical history.

*“The difficulty with the medication review by a pharmacist is they’re not familiar with the clinical picture of the patient ... they’ve only seen them once.” (9)*

Many staff, particularly GPs, suggested that this challenge could be overcome by having patients access the pharmacist’s services more than once per fortnight and for more than one visit as part of the HMR.

*“[the pharmacist, has] got to be here more, see the patients more, or maybe see a patient a few times, and then say, ‘Look, I’ll do the review’. Because at the moment, I think they basically see the patient once, look at their medication, and make a determination.” (9)*

##### *Information provision*

A current role of the pharmacist was to respond to the clinic staff requests for drug information (Table 5). GPs are targeted by drug company representatives and having the pharmacist available to discuss new drugs was advantageous, and the existing relationship among clinic staff allowed for successful information exchange.

#### **Potential future roles for a pharmacist in the clinic**

All participants felt a pharmacist could expand his/her role within a clinic environment (Table 6) to include: monitoring patients’ use of and GPs’ prescribing of medications; optimising medications records; further accessing the pharmacist’s drug knowledge; having a dispensary on-site; and possibly pharmacist prescribing.

##### *Monitoring medication use and GP prescribing*

Participants universally supported the possibility of the pharmacist taking on an expanded role in monitoring patients’ use of medications, stating that collecting this information would be very useful. One staff member related an example from a Brisbane clinic (QLD) where additional GPs were employed in a monitoring capacity.

*“They reviewed each patient on a daily or weekly or monthly basis, and reported back to the GP. GPs would get a report every so often, if there was a change. So*

*they did the monitoring. Someone else did the monitoring, so it doesn't have to be [the regular GP]." (9)*

When asked if the pharmacist could undertake this monitoring role, the interviewee suggested:

*"It wouldn't matter who did it. It was just a matter of knowing what you're doing, and doing it... it was very good. You knew that the patients' levels were monitored and managed." (9)*

In addition to monitoring patients' use of medicines, it was suggested that a pharmacist could also monitor GPs' prescribing patterns within a clinic to assist with self-reflection and achieving best practice.

#### *Optimising medication records*

Expanding the pharmacist's role into optimising medication records (patient files) was suggested, providing GPs and nurses with up-to-date information on patients' regimens. The opportunity for the pharmacist to undertake this role presents itself when he/she accesses the electronic patient files to complete the HMR reports.

#### *Further access to knowledge*

Participants indicated that drawing further on the pharmacist's specific knowledge of medications would be possible and a useful and important role to pursue, including educating the general public.

#### *Dispensing*

Having a full-time pharmacist working within a dispensary on-site was suggested as a very valuable asset to the clinic. However, current legislation governing the proximity of pharmacies could impact on this for many clinics.<sup>20</sup>

#### *Prescribing*

A particular issue for clinic staff was efficiently handling the needs of patients requiring prescriptions for continuing medication, but who had lost prescriptions, run out of medication, and had no further repeats. Reception staff and GPs were concerned by the amount of time spent on patients requiring re-issue of prescriptions. However, opinions differed as to whether the pharmacist could take a lead role in re-issuing prescriptions. One participant reiterated the pharmacist's time constraints and the need for patients to be more familiar with the pharmacist if this role could be explored further:

*"She is only here once a fortnight at the moment... she'd get extremely busy, with doing her reviews as well*

*as handling that sort of stuff... more it's sort of getting the doctor to say okay, you need to come and see me... It would only take for them to get familiar with [the pharmacist] before they'd be comfortable to see her." (3)*

While participants indicated that many patients would rather not see the GP to pick up their new prescriptions, they also felt that there was a need for clinical review with the GP, as the decisions relating to medication have to be firmly situated within the patient's full medical history, which the pharmacist may not be privy to.

One participant was strongly in favour of pharmacists assisting with prescribing (based on previous experience with pharmacist prescribers in the UK), and the benefits of pharmacist prescribing were also recognised by other clinic staff. One staff member spoke positively of having the pharmacist take a lead role in prescribing, but indicated the pharmacist, nurse, and GP should liaise about the management of the patient. Several participants felt there were issues confounding a role for pharmacists' in prescribing, changing, or adjusting medication, and saw the constraints of time and legislation as being prohibitive.

#### *Constraints on potential future roles*

Some notable constraints continually arose regarding opportunities for the pharmacist to further contribute to the clinic's service provision (Table 7): the time the pharmacist was physically on-site; funding constraints, whereby only HMRs had financial support from the government; and government legislation relating to pharmacists and prescribing issues.

There was consensus that the clinic's patients would benefit from having the pharmacist work full-time or an additional day per week, but this was limited by funding availability. The government's funding framework (Medicare) for services provided by pharmacists was discussed as being limited to HMRs, and the practicalities of this funding framework limited their vision for increased pharmacy services within the clinic. It was also suggested that it would be helpful for the pharmacist to be paid for following up after HMRs, rather than currently providing the service for free.

The legal constraints around pharmacists prescribing were also discussed. Although pharmacists in other countries (the United Kingdom, Canada, the United States)<sup>21–24</sup> have government approval for some prescribing roles, this is not currently the case in Australia. However, one participant noted that the Pharmacy Guild of Australia was lobbying in

this regard, referring to the “medication continuance”/“continued dispensing” initiative, wherein pharmacists can supply a standard pack of a HMG-CoA reductase inhibitor (“statin” for high cholesterol) or oral contraceptives under certain specific conditions:<sup>30</sup>

*“They’re negotiating with the government to do repeat prescriptions for pills, and there was one other—I think antihypertensive...” (9).*

## Discussion

Our study has found that within a GP super clinic in a semi-rural setting a pharmacist can provide, and be supported in, home medicines reviews and drug information. Practically all participants were keen to expand this service, suggesting that increasing the pharmacist’s presence at the clinic would improve contact with patients. There were varying levels of support for expanding the pharmacist’s role into the areas of monitoring (GP prescribing, patients’ medication use), optimising patient records, providing drug information, dispensing, and prescribing, although time and money were key constraints.

The current role of the pharmacist within the clinic, one of provision of HMRs and drug information, was well supported, consistent with Freeman et al.’s exploratory work,<sup>16</sup> which described a similar role for pharmacists in the general practice setting. It has been found that HMR recommendations are more likely to be implemented when a pharmacist is integrated into a practice.<sup>25</sup> The usefulness of HMRs in this clinic setting in terms of patient education, communication with GPs, and review of medication regimens are supported.<sup>26</sup>

Ways to enhance ongoing communication between GPs and pharmacists were suggested, including regular formalised case conferences, and extending the HMR process beyond the current “one-off” service. More fully integrating the pharmacist into a clinic<sup>27</sup> would enable him/her to see patients on an ongoing basis to improve communication on all levels and patient outcomes.

Various potential new roles for the pharmacist were discussed, the expansion of which would help cement a base of trust and respect between pharmacists and their colleagues to facilitate more innovative roles. Auditing of prescribing and medication use was viewed by GPs as potentially useful, as described elsewhere,<sup>16,18</sup> which is already established in hospitals and some clinics. Possible expansion into pharmacist prescribing received more mixed responses as, although participants could see the utility of

this, a range of concerns were expressed, including a need for GP review, overlapping roles with the GP, pharmacists’ limited knowledge of the patient’s history, and legislation. Pharmacist prescribing remains a contentious issue within the Australian healthcare environment. It is perceived both positively and negatively by pharmacists, patients, and practice managers, but only negatively by GPs.<sup>16</sup> GPs’ expectations of pharmacists’ roles, and views on possible expansion of their roles, have not always been encouraging.<sup>16,28</sup>

GP-pharmacist collaboration within a clinic setting is challenging<sup>12</sup> and highly dependent upon the experiences and perceptions of the individuals involved. Factors previously identified as critical in increasing GPs’ acceptance of a pharmacist’s integration into a primary care team include adaptability and practical demonstration of potential use and benefit.<sup>12,29</sup> Indeed, one of the GPs in this study was very supportive of pharmacist prescribing based on previous positive experiences with this service overseas, whereas other GPs were more hesitant. GPs recognise the benefits of pharmacist services through exposure over time,<sup>10</sup> and acknowledging this may assist in establishing trust and acceptance of new roles. In our study, staff also recognised the importance of regular meetings to furthering a team approach to patient care within the clinic. The adoption of a formalised, deliberate, and strategic approach within these meetings towards establishment and evaluation of an integrated healthcare team<sup>12,30,31</sup> would assist in establishing shared expectations of the pharmacist’s role and capabilities.

Funding is needed for the pharmacist to expand his/her role within the clinic and provide additional services. A lack of remuneration for pharmacist services above and beyond dispensing and HMRs was reported in our study, as has been previously identified in the expansion of a pharmacist’s role.<sup>12,13,28</sup> Currently, the clinic pharmacist is only funded for a single HMR, while follow-up visits (as many as six) are conducted by the pharmacist without remuneration, as are other services, including providing drug information (involving research and the printing of information), and attending case conferences. In addition, HMR funding has recently been capped at only 20 HMRs per pharmacist per month.<sup>32</sup> Proposing a funding model which includes remuneration to pharmacists for these services acknowledges their value and importance in improving patients’ quality of life of, and would enable pharmacists to pursue additional roles. Suggestions include:

- Government remuneration for pharmaceutical services,<sup>13,16</sup> although this funding is finite.
- Having pharmacists as salaried employees within a clinic, akin to practice nurses.<sup>13</sup>
- Division of roles so that the pharmacist facilitates the patient consultation for the GP, and thus make visits to the GP more efficient, allowing greater capacity to generate revenue for the clinic through streamlined patient consultations.

## Conclusion

A pharmacist's services can potentially be better used within the multidisciplinary super clinic model of care to address current gaps within the semi-rural practice setting and/or issues in medicines management. Currently, established roles in home medicines reviews and drug information are well supported within this environment, and need to be expanded, e.g., with formalised case conferences. New roles should be explored in auditing medication use, optimising medication records, specialised drug information, dispensing, and prescribing. Any future role for the pharmacist could be addressed as part of a formalised, strategic approach to creating an integrated healthcare team, with attention to funding and government legislation.

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## PEER REVIEW

Externally peer reviewed.

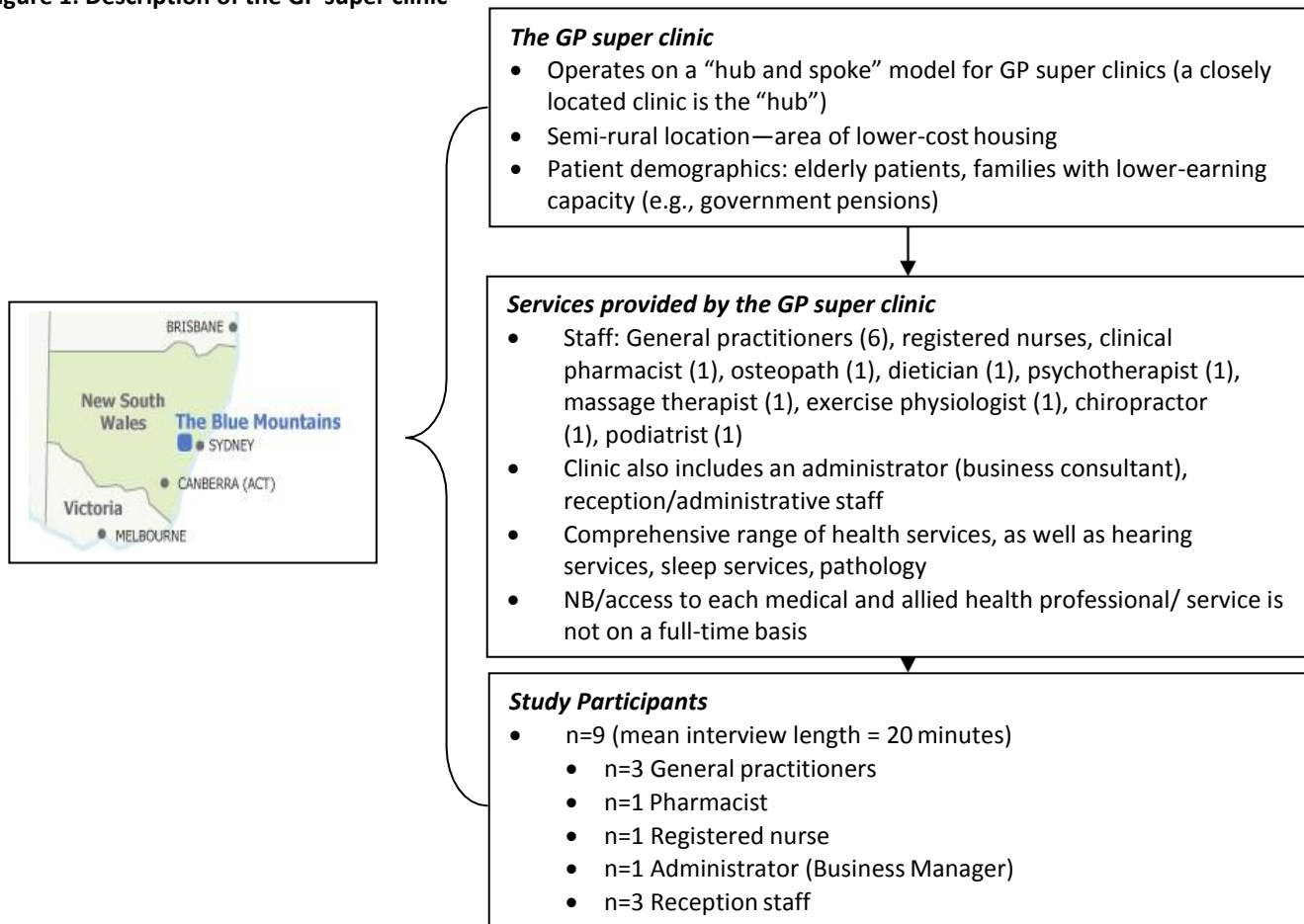
## CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

## ETHICS COMMITTEE APPROVAL

The University of Sydney Human Research Ethics Committee: project number 14194.

**Figure 1: Description of the GP super clinic**



Reference for Map: <http://www.bluemts.com.au/info/about/maps/>

**Table 1: Nature of working relationships between clinic staff**

Aspect	Quote(s)
Relationship with other allied health professionals in the area	<i>“We just have an alliance, almost, with them [Allied Health]. But there is good communication with the different health professionals, where a doctor might refer to their exercise physiologist, say, and a letter will come back saying, ... ‘This is what we’ve identified. This is the treatment plan we’ve opted for.’” (2)</i>
Clinic meeting	<i>“Within that clinical meeting, periodically, we should have the pharmacist and the dietician. It doesn’t always have to be both, or the nurse... I’d like to see the pharmacist get involved in those. When new drugs come along, we’d go to a meeting we should sit and talk and the pharmacist should put information about the data and about side effects and costs.” (8)</i>
Role of reception staff	<i>“[operating] as a team approach because if our nurse sees something or another GP sees something we need to communicate it back to ourselves or even reception, because they’re the eyes and ears.” (7)</i>



**Table 2: Current roles—process of the home medication reviews (HMRs)**

Process	Quote(s)
Identification of eligible patients generally by the GP, but also by the nurses.	<p><i>"...so we recognise that a patient's on a complex medication regime, then they... quite possibly could benefit from the home medicines review to try and, you know, minimise medication, if possible, and just to ensure that what they're on is appropriate." (6)</i></p> <p><i>"What normally happens is that the patient would come in, or the doctor might think of a patient who they haven't seen for awhile who's eligible. So they would have a consultation with the GP. The GP would make the referral. They would then have an appointment with [the pharmacist]... followed by an appointment with the GP" (2)</i></p> <p><i>"I identify patients that are eligible for home medicines or would benefit mainly from a home medicines review through some of the health assessments that we do here." (Nurse)</i></p>
Reception staff contact the patient and arrange an appointment time.	<p><i>"We book an appointment with [the pharmacist] and then we follow that with an appointment with a GP." (2)</i></p> <p><i>"When we make the appointment...[the pharmacist] can come to you if you like." (3)</i></p>
The pharmacist conducts the HMR at the patient's home.	<p><i>"She will ... go and visit the patient at home ... obviously with a referral from the GP. She sits down with them, and talks about everything that they're taking." (2)</i></p> <p><i>"It's easier if they're at home...they do like the idea that they don't have to go out and they'll come to them." (3)</i></p> <p><i>"I start talking to them about every medication. And I tell them 'I'm here basically to make sure everything is OK.'" (Pharmacist)</i></p> <p><i>"Sometimes patients don't know what their medications are for. They just say, 'We just take it because the doctor wants us to take it.' And so it's my role to explain to them. I tell them, 'You have the right to know. You need to know, because noone is going to look after you but yourself.'" (Pharmacist)</i></p>
The pharmacist's recommendations are recorded in the electronic patient notes.	<p><i>"[the pharmacist] writes her recommendations directly into our software system and then the GP can access those." (6)</i></p> <p><i>"[the pharmacist] does it by notes and then it comes up in a consultation and it's marked as her name so the doctors know that's her [comment]." (3)</i></p>
If appropriate, the pharmacist and GP have a conference about the patient, it may be short and informal or a formal case conference.	<p><i>"Well, I guess it is done sometimes where the pharmacist will go into the GP's room and have a consultation with the GP and the patient... the actual recommendations and prescriptions afterwards is between the pharmacist and the GP." (6)</i></p> <p><i>"[the pharmacist] goes out and visits them, she comes back here and speaks to the referring GP." (2)</i></p> <p><i>"The pharmacist comes to see us after they've done the review... I found that quite useful, because a lot of—we have such a large patient base that you can't carry it all in your head, every patient." (9)</i></p>
A follow-up appointment is made with the GP.	<p><i>"... as long as the GP's available what we try to do is get them, if they're coming up here for an appointment, they see the pharmacist first and then we try and get them to see the GP after, to go through the recommendations straightaway so they're not going away and getting forgotten, or they just don't come back for another appointment." (3)</i></p>

**Table 3: Current roles—perceived value of the pharmacist’s provision of HMRs**

Value	Quote(s)
Assistance with patient understanding of medications	<i>“Because we do have more elderly patients, we’ve utilised our clinical pharmacist quite heavily here. Because there’s just confusion as to what do I take? When do I take it? What’s the dose? Obviously, contra-indications between different medications, and what not. That’s where we rely very heavily on [the pharmacist] to help our patients to sort it out.” (2)</i>
Patient education and counselling	<i>“Warfarin management and things like that ... educating patients on medicines and how they should be taking them and the importance of monitoring and things like that... in terms of adherence or compliance, it’s more just reiterating the facts and you know, reinforcing why the patient is on the medication and what the importance of taking that medication is.” (6)</i>
Improved health outcomes for patients through medication changes	<i>“... sometimes the clinical interventions that I do are so simple, but it makes just a big difference in people’s life.” (Pharmacist)</i>
Communication with the GP	<i>“But the feedback from the therapeutics is terrific. That’s really useful.” (9)</i>  <i>“of the ones [recommendations] I’ve read she’s made good comments.” (GPB)</i>
Periodic re-evaluation of patients’ medications	<i>“Since this HMR review’s come, it’s been helpful. It’s like a sort of second opinion about medication and review. As you know, people are on medication for years, and it often never gets changed.” (9)</i>
Pharmacist’s knowledge of medications	<i>“...interactions of medications...if they’re on multiple medications and they’re seeing different GPs. Because they still feel that they can see one GP for one condition, one for another one and they don’t share that information.” (7)</i>

**Table 4: Current roles—perceived acceptance of HMR process by patients**

View	Quote(s)
Not all patients agree to have one	<i>“Some don’t want anything to do with it, which is fine because it’s their choice, right? It’s just a free service offered to them.” (4)</i>
Some patients are resistant to change	<i>“But some ... just resent it because they hear things that they don’t want to hear. They’re so used to taking the same thing and the same amount for so long that any change—it may be exactly the same thing but listed as something different or also incorporates something else—but, no, ... they don’t like change.” (4)</i>
Patients with “uneasy” perceptions of HMR	<i>“Sometimes other people are a bit funny because when you go and do home visits at home they think you’re there to check on them because you don’t think they are doing the right thing... ‘I am just physically here to make sure you know what your medications are for and you’re getting the best therapy.’ And so that changes totally the attitude of them.” (Pharmacist)</i>
Some patients embrace the process	<i>“I think, the feedback that we’ve been having from the patients, it’s that they now feel more confident in their medications... [the pharmacist’s] simplifying it for them. She’s making them healthier by making sure that the dosages are right, and just making it much less complex for them.” (2)</i>

**Table 5: Current roles—pharmacist providing information to clinic staff**

Role	Quote(s)
New drugs	<i>“I think that pharmacists are underestimated personally. They’ve got a knowledge base on medications, which is incredibly important and also utilising medications in the right way. We’re pushed by drug reps to prescribe medications which aren’t necessarily any better than another one.” (GPA)</i>  <i>“They come and ask me about medications all the time, the new medications. And I sit down and explain to them what it’s for and how to use it.” (Pharmacist)</i>
Provision of written information	<i>“Most of the time it’s verbal, but sometimes when the doctors tell me they need more information, I go and do research and give them printout information.” (Pharmacist)</i>
Feedback	<i>“We are quite pleased with the information that we’ve been receiving from the clinical pharmacist, but also I guess the close interaction that we have in discussions with her around different patient management.” (6)</i>  <i>“Well, certainly making us aware of some of the things like PPIs and Metformin and the impacts of [for example] B<sub>12</sub> absorption and those sorts of things, just guiding some of the pathology investigations, I guess that we’re doing for patients and ensuring that we are adequately investigating those aspects.” (6)</i>

**Table 6: Potential future roles for a pharmacist in the GP super clinic**

Role	Quote(s)
Monitoring medication use and GP prescribing	<p><i>“It would be good if the pharmacist could actually look at the data and see is the patient too demanding, as in asking for too many scripts. Are they utilising it, is there a way of checking they are actually taking it? I think there would be a way of doing that... Are they taking the right medication, the right strength? Do we need to give them one medication; can we substitute with another one? Are they on multiple medications that are like a cocktail? Is there any way that we can reduce side effects? There are lots of core root methods that a pharmacist could do that, and you could do that by doing audits.” (7)</i></p> <p><i>“So I would like to have a pharmacist up there all the time, expand their role... one of the important roles could be data collection on what we're prescribing. Also finding out what the end result of it was... Find out what the result of giving the antibiotics is, in terms of side effects. You could be looking at patients that didn't get antibiotics for upper respiratory and those who did... useful to have a pharmacist who looked at our pattern of prescribing. The PBS gives us our pattern compared to a use population, but it's different from our demographic.” (8)</i></p>
Optimising medication records	<p><i>“The other thing the pharmacist can do is also to update the record of the patient, optimising the medication... So if the pharmacist does optimising of that, that's going to be an excellent idea for them to clean up the record and make it up to date with the instructions and what the current medications are.” (1)</i></p>
Further access to knowledge	<p><i>“We could certainly have some periodic open forums in the practice if it's big enough, and invite local people along. Have the pharmacist there. I'm talking about the common things like diabetes and hypertension, heart failure, that sort of thing.” (8)</i></p>
Dispensing	<p><i>“Ideally, I suppose, in a super clinic, you want a dispensary. It's really important. As I said, for the doctors, too, to have that feedback ... When you've got one there, it's like having an x-ray, a pathology unit, you're constantly talking to them, and it improves the quality of care that you can dispense.” (GPC)</i></p>
Prescribing	<p><b>Hesitance about:</b></p> <p><i>“We prefer that they make an appointment [with the GP], then they get seen. To make sure they're on track... I mean we all know that there's so many repeats for a reason.” (3)</i></p> <p><i>“I mean the big problem we have here is patients wanting prescriptions and they don't want to be seen, which you can't do if you haven't seen them in six months. In the past they may have done that. You can't do that if they're on blood pressure medication. You need to monitor their blood pressure, monitor their renal function, that kind of thing and that's a slow process for patients to realise.” (7)</i></p> <p><i>“Actually changing medications and prescribing and things like that I don't know if that would be appropriate because the GP may be making decisions based on other clinical problems that the pharmacist isn't aware of. You know the GP might know the patient for 10 years and know all their history and what they've been on before and what they've been in hospital for... whereas the pharmacist doesn't have that scope to make those ultimate decisions.” (6)</i></p> <p><b>Support for:</b></p> <p><i>“If you had a pharmacist prescribe it, yes they could do that. You just see the GP once a year for review, or the nurse who can then liaise with the GP, and you've got the pharmacist next door who is quite happy to adjust medications up, down, perfect. I'm happy. I've done that. I've done that with pharmacists.” (7)</i></p> <p><i>“It would probably take a bit off the pressure of the doctors writing out scripts.” (5)</i></p> <p><i>“I think, absolutely, look, pharmacists, nurse practitioners, any number of people, and then we could actually go back to practicing some medicine, instead of spending probably 25–30 per cent of our time in routine procedures that aren't really that medical.” (9)</i></p> <p><i>“Time management, ease-ability of seeing somebody, familiarity, same patient. The patient also... it's them taking responsibility and realising if they come to the doctors it's so efficient and they come back. Seeing results. Having the time. I mean that pharmacist does have the 10 minutes just to do a blood pressure whereas the doctor's going to have to do whatever else they have to do. The results, they just talk for themselves, don't they really, and just making sure they take medications.” (7)</i></p>

**Table 7: Constraints on potential future roles for the pharmacist**

Constraint	Quote(s)
Time availability	<p><i>“On my wish list would probably be for [the pharmacist] to be able—she is physically able to be here more frequently.” (2)</i></p> <p><i>“So I would like to have a pharmacist up there all the time.” (8)</i></p> <p><i>“You’d just simply have a time where the pharmacist is here. Not just one session a week, or something. [the pharmacist would] be here maybe twice a week.” (9)</i></p>
Funding availability	<p><i>“I guess we haven't really thought of these other things because they're not available because—I mean Medicare fund Home Medicines Reviews for patients with five or more medications. So that's what we're going to use it for and that's basically the end of the story... at the end of the day I guess you can't bill for more than doing Home Medicines Review, which is what they're [pharmacists] going to do.” (6)</i></p>
Lack of funding for follow-up	<p><i>“... for me to do five or six follow-ups ... I don't get paid for them. There should be some sort of funding for follow ups for medication reviews.” (Pharmacist)</i></p> <p><i>“I think it would be lovely if they [the pharmacist] could come back periodically... after a two-month period and go, ‘So how did you get on? Did you do any of this.’ Because at the moment there isn't actually a scope to do that... It's like, okay they've done this, but why have they not done this? Have they changed this? Why haven't they changed this? Has it been beneficial? Has it not? So you're probably even going to be able to do a pilot program to see: Is this working? Is it not working?” (7)</i></p>