

The practice pharmacist: a natural fit in the general practice team

SUMMARY

There is evidence that pharmacist integration into the general practice team may improve clinical and non-clinical outcomes.

The roles of the practice pharmacist can be considered under three categories – patient-directed roles, clinician-directed roles and system- or practice-directed roles.

The integration of pharmacists into the general practice team would reduce fragmentation of patient care and medication misadventure.

If practice pharmacist services are to be flexible to suit the heterogeneity of general practices, a flexible funding model is needed.

Introduction

The healthcare needs of the community are becoming more complex. An increasing number of patients have multiple morbidities and require complex and intensive medical care.¹ Complicated medicine regimens are being managed by multiple prescribers.² Despite focused interventions designed to curb harms associated with medicine use, hospital admissions related to medicines were estimated to cost \$1.2 billion in 2011–12.³ An Australian report found that up to 12% of people attending general practice had experienced an adverse drug event in the previous six months.³

In Australian primary care, there has been a shift in philosophy and practice from siloed, fragmented care towards patient-centred, coordinated, multidisciplinary care. Use of the practice's clinical information system for care planning and care coordination (including medication management) is increasing. It is now common to see nurses and allied health professionals integrated into the general practice team with models such as the patient-centred medical home described as a future best practice.⁴ However, most community pharmacists practise independently of general practice teams.

Australia has followed the international lead in exploring the role of the practice pharmacist.⁵ This is defined as 'a pharmacist who delivers professional services from or within a general practice medical centre with a coordinated, collaborative and integrated approach with an overall goal to improve the quality use of medicines of the practice population'.⁶

The concept of the practice pharmacist has been supported by the Pharmaceutical Society of Australia, the Consumers Health Forum of Australia and United General Practice Australia.^{7–9}

The evidence

The majority of the current evidence examining an integrated model of pharmacist and GP care is positive. A recent systematic review and meta-analysis of pharmacist-delivered services in general practice included 38 studies. Of these, 25 reported positive effects on at least one primary outcome measure and 13 demonstrated no effect.¹⁰ Interventions usually involved medication review, with or without other activities delivered with the GP such as education, medication monitoring and adjusting therapy. Four clinical markers were used to assess the effect of interventions – blood pressure, glycosylated haemoglobin, cholesterol, and the Framingham Risk Score. Results of the meta-analysis favoured the pharmacist intervention with significant improvements observed in all clinical markers compared to the control groups. Positive effects were more likely to be seen with pharmacist-delivered multifaceted interventions in conjunction with follow-up of patients compared to interventions that delivered a service in isolation. There was limited or no effect on outcomes related to quality of life, patient satisfaction, symptoms, and use of health service.

Individual studies have shown improvements in other outcomes including:

- identification and reduction of medicine-related problems
- patient adherence to medicines
- process measures such as timeliness
- appropriateness of prescribing
- reduction in total number of medications.^{11–16}

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The transition of patients with chronic and complex diseases from hospital to the community is a critical time with an increased risk of medication misadventure and re-hospitalisation.¹⁷ A UK study found that sending discharge letters to practice pharmacists as well as GPs improved the coordination of care and implementation of consultant recommendations for treatment.¹⁸

The large-scale PINCER trial found that a practice pharmacist-led intervention to reduce clinically important medicine-related problems was cost-effective.¹⁹ Australian studies have also reported cost savings ranging from \$44–\$100 per patient.^{20,21} A 2015 report commissioned by the Australian Medical Association and published by Deloitte Access Economics indicated that for every \$1 invested, \$1.56 in benefits could be generated. This equates to \$544.87 million in savings over four years.²²

One of the key elements described in the literature is that, in addition to becoming integrated into the general practice team, the pharmacist's access extended to the patient's electronic health record.^{11-16,18-21} This allows the practice pharmacist to view the patient's past medical history, pathology, specialist correspondence and previous medicines, which are all crucial when providing pharmaceutical care. It also facilitates better care coordination and collaboration between the practice pharmacist, GP and other members of the integrated team.

The role of the practice pharmacist

Local studies have determined the views of pharmacists, GPs and consumers on potential roles for a practice pharmacist. Studies which detail the role of the practice pharmacist in the intervention can also be considered.^{10,11,14,19,23,24}

These roles can be considered under three broad categories – patient-directed roles, clinician-directed roles, and system- or practice-directed roles (Box).

A recent survey of Australian pharmacists⁶ found that 26 were working in or from a general practice medical centre. The most common services they undertook included comprehensive medication review, responding to clinical enquiries from GPs and responding to enquiries from other health professionals.

Challenges to describing the role of the practice pharmacist also exist. Perceptions of the pharmacist as solely being a dispenser of medicines or a retailer creates uncertainty around their utility within an integrated medical team in the minds of the medical profession, patients and funders. Some of the roles listed in the Box are currently conducted, in varying degrees, by other members of the general practice team. Adoption of these by a practice pharmacist

Box Roles that may be conducted by a practice pharmacist

Patient-level activities

- Comprehensive medication review
- Focused medication review #
- Medication reconciliation
- Transition care
- Adverse drug reaction review
- Therapeutic drug monitoring
- Drug information
- Dose adjustments/prescribing*
- Medication cost

Clinician-level activities

- Drug information
- Education
- Student/registrars training

Practice/system-level activities

- Clinical prescribing review and feedback
- Drug sample management
- Medication recall/shortage management
- Public health initiatives
- Pharmacovigilance

a focused review on particular disease or medicine, for example a review of antihypertensive therapy

* models of pharmacist integration in the UK, Canada, New Zealand and the USA incorporate models of pharmacist prescribing in collaboration with the patient's GP

could be viewed by some as a threat. Allowing the pharmacist to assume the lead in these roles would enable established team members to focus on their core roles while making best use of the pharmacist's unique skill set.

No two general practices are alike. The role of the pharmacist should therefore be flexible to meet the needs of the community based on the individual skills or interests of GPs and pharmacists. For example, uncontrolled asthma may be particularly common in the local population and thus the role of the pharmacist should be targeted toward this. There must also be core services provided by the pharmacist which allow a degree of consistency and enable large-scale and longitudinal review of the model and its benefits.

Funding practice pharmacists

A number of potential barriers to integrating pharmacists into general practice have been highlighted – namely a lack of remuneration and 'turf wars'.^{23,24} The latter appears to be a perceived and not a realised barrier given the support for this

model by both medical and pharmacy organisations. The absence of dedicated and sustainable funding to facilitate pharmacist integration continues to be the biggest barrier to implementation.

At a time of healthcare funding review and reform, careful consideration is required by funding bodies, policy makers and the pharmacy profession when examining models of remuneration. Various funding models have been suggested^{7,25,26} which need to be pragmatically considered in tandem with current health policy reforms. If the services by practice pharmacists are to be flexible, a flexible funding model is needed. A rigid model, such as fee-for-service may not allow services to be customised to the specific needs of the medical centre and the community. A blended funding model, in which payment for services undertaken by the practice pharmacist is calculated and remunerated in a variety of ways from government and private payers, could be explored.²⁷ These hybrid models are used to address shortcomings associated with single-based funding models.²⁸ Many other allied health professional services delivered through general practice are funded via private sources such as private health insurers and patient contributions. Importantly, whichever funding model is implemented, appropriate governance and methods of reviewing the use of funds should be established and enforced.

What does this mean for community pharmacists?

A practice pharmacist has the potential to reduce fragmentation of care, improve medication management and improve communication between GPs and pharmacists working within community pharmacies. Medication reconciliation is a critical process to reduce medication errors on transfer of patients from hospital back to the home or residential aged care. Creating an accurate medication list for the patient is beneficial to the patient's usual GP as well as community pharmacists, especially when packing dose administration aids.²⁶ A practice pharmacist can also be a link to existing community pharmacy services. Patients will benefit from improved liaison between community pharmacists and GPs.

What needs to be done beyond remuneration?

General practice-based pharmacists may need to apply different skills compared to many pharmacists working in other settings. The Advanced Pharmacy Practice Framework for Australia supports the recognition of pharmacists with skills and experience for the practice pharmacist role.²⁹

A role description needs to be developed to help medical centres and fund-payers understand the diverse range of activities of a practice pharmacist. Greater awareness of the clinical governance role and practice improvement initiatives is required.

The introduction of the practice pharmacist within a complex and challenging health system may have some associated risks, whether these are fiscal, clinical, or otherwise. Evaluation and clinical governance of services to patients and the practice as a whole should be established from the outset and considered from a variety of perspectives.

Conclusion

The primary purpose of a practice pharmacist would be to support GPs to minimise the risks associated with medicines and optimise patient outcomes through the quality use of medicines. Integrating pharmacists into general practice would reduce fragmentation of care and medication misadventure using the distinctive knowledge and skills of pharmacists. Collaborative medication management between the GP and the pharmacist could reduce costs to the health system from adverse drug events and sub-optimal adherence to medication regimens. Funding models need to be further investigated to ensure cost-effectiveness of flexible models of care. ◀

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