



# Repeat prescribing policy in New Zealand general practice: making it better

Steven Lillis MBChB, FRNZCGP, FAcadMed, MGP, PhD;<sup>1,2</sup> Liza Lack BM BS, MHSc, FRNZCGP<sup>1</sup>

<sup>1</sup> General Practice and Primary Health Care, Faculty of Medical and Health Sciences, The University of Auckland Grafton Campus, Grafton, Auckland, New Zealand

<sup>2</sup> Corresponding author. Email: [steven.lillis@outlook.co.nz](mailto:steven.lillis@outlook.co.nz)

## ABSTRACT

**INTRODUCTION:** Repeat prescribing is common in New Zealand general practice. Research also suggests that repeat prescribing is a process prone to error. All New Zealand general practices have to comply with requirements to have a repeat prescribing policy, with the details of the policy to be designed by the practice.

**AIM:** To inform the development of practice policy, research was undertaken with experienced general practitioners to identify and mitigate risk in the process.

**METHODS:** At the 2019 annual conference of the Royal New Zealand College of General Practitioners, a workshop was held with 58 experienced general practitioner participants. The group was divided into six small groups, each with the task of discussing one aspect of the repeat prescribing process. The results were then discussed with the whole group and key discussion points were transcribed and analysed.

**RESULTS:** Issues identified included: improving patient education on appropriateness of repeat prescribing; having protected time for medicine reconciliation and the task of repeat prescribing; reducing the number of personnel and steps in the process; and clarity over responsibility for repeat prescribing.

**DISCUSSION:** This research can inform the local development of a repeat prescribing policy at the practice level or be used to critique existing practice policies. Attention was also drawn to the increasing administrative burden that repeat prescribing contributes to in general practice.

**Keywords:** General practice; prescribing; patient safety; health policy

## Introduction

Who can prescribe and what they can prescribe is legislated by the Medicines Regulations Act, 1984.<sup>1</sup> The Medical Council of New Zealand is the regulator, providing oversight of prescribing.<sup>2</sup> Repeat prescribing is a convenient and cost-effective method of continuing to provide medication for managing chronic diseases. Over recent years, there has been an increasing international focus on potential errors in the prescribing process and methods of mitigating such risk.<sup>3–7</sup> There needs to

be a local approach to both understanding the safety issues and implementing change at the practice level. Approaches to improving safety in New Zealand health systems need to reflect local medical culture, management structures and available software systems.

General practice in New Zealand has evolved over the last 25 years from a small business model to being part of integrated networks with accountability for both personal health care and population-based health outcomes.<sup>8</sup> This shift

J PRIM HEALTH CARE  
2020;12(4):373–376.  
doi:10.1071/HC20098  
Received 1 September 2020  
Accepted 4 December 2020  
Published 22 December 2020

## WHAT GAP THIS FILLS

**What is already known:** It is a requirement that general practices in New Zealand have a repeat prescribing policy, but no guidance is provided as to what this policy should be.

**What this study adds:** This research suggests a structured approach to either devising such a policy or reviewing an existing one.

emphasises management of health-care interactions with patients where face-to-face consultations are a part, rather than the main method, of delivering health care. The challenge posed by the COVID-19 pandemic has accelerated the adoption of new technologies.<sup>9</sup> New models of delivering care have emerged that focus on proactive care, a team approach to delivering care, a focus on preventative care, national health targets and better efficiency in using scarce health-care resources.<sup>10</sup> Electronic medical records become an essential care delivery tool in this emerging environment, as medical records become records of continuity of care.

Prescribing in such an environment is complex. Nurse practitioners, practice nurses with prescribing rights, pharmacist prescribers, nurse specialists and other doctors in a practice may all participate in clinical decision-making and prescribing as independent practitioners, yet they are all part of the same team. Although there are considerable advantages to this team approach, poor coordination among health-care providers becomes a risk that is evident in prescribing and repeat prescribing. Rather than repeat prescribing being seen as an isolated brief event, it has become a process that can be described and analysed.

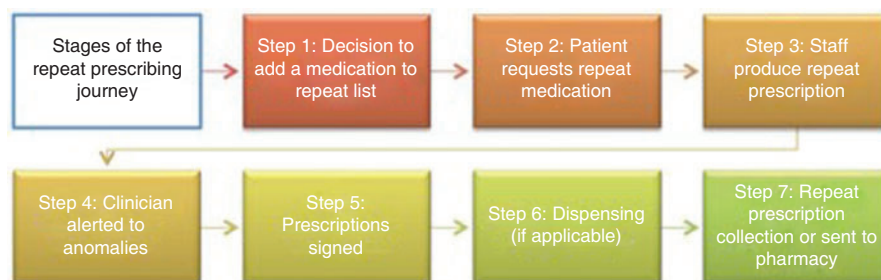
The Royal New Zealand College of General Practitioners (RNZCGP) has recognised the importance of prescribing processes in the quality frameworks of Foundation Standard and Cornerstone, where a repeat prescribing policy is required, but the detail of such policy is left to individual practices to develop. General practice in New Zealand is characterised by a wide variety of business models, differing patient demographics and ownership arrangements. Diversity is a positive feature, but also makes consistency of approach to processes difficult. Development and critique of practice policy on repeat prescribing needs to occur at the practice level. This paper discusses the results of a workshop held with general practitioners (GPs) to identify risks and measures to mitigate risk in repeat prescribing to inform implementation or review of repeat prescribing policy at the practice level.

## Methods

We used a Medical Protection Society structure for assessing risk in repeat prescribing (Figure 1).<sup>11</sup> In this model, the prescribing process involves seven steps, each with distinct identifiable risks. One of the steps is dispensing. As most general practices do not dispense medication, we removed this step from the consideration. The model allows 'process mapping' that visually describes a series of events that need to occur, as well as who and what is involved at each step.<sup>12</sup>

At the 2019 RNZCGP conference, the authors held a workshop. Attendees were informed there that we intended to communicate the results to the wider primary care community by publication or presentations. The study was constructed as a minimal

Figure 1. Medical Protection Society structure for assessing risk in repeat prescribing.



risk observational study and therefore formal ethical approval was not required.

The participants were divided into six equal sized groups and each group was asked to focus on one step and to discuss the risks associated with it. Each group used poster paper to capture the salient points of their discussion and presented the results to the entire group at the end of the workshop for wider discussion. All poster paper comments were collected and the results transcribed by the researchers, as were notes from the wider discussion. A deductive thematic analysis was undertaken using the Medical Protection Society structure to provide overarching themes to guide the analysis.<sup>13</sup>

## Results

The hour-long workshop had 58 attendees who participated in the research. Almost all the participants were vocationally registered GPs in active practice.

### Step 1 – Determining if a medication should be able to be requested by a patient as a repeat prescription

Although there were some obvious considerations mentioned, such as right medication, right dose and right route, some less obvious components were also mentioned. These included: patient education regarding the circumstances when a repeat prescription should not be requested (even if it is listed as available as a repeat); the length of time before clinical review; and ensuring that relevant hospital letters and discharge information on medication have been incorporated into the list of medications that can be requested.

### Step 2 – Patients request a repeat prescription

Problems with this step included: undue patient pressure to provide a repeat prescription when clinical acumen suggests a review before prescribing is appropriate and being aware that patients may stock-pile medications by requesting early repeats. Compliance issues may become evident if the request for prescribed medication is late. Urgent requests can be problematic from a safety

perspective, as there may be no allocated time to do the task appropriately.

### Step 3 – Staff produce the repeat prescription

There was a consensus that only prescribers should print off repeat prescriptions. Having other staff such as reception or administrative staff undertake this task leads both to the dangers of non-medical persons completing what is essentially a clinical task, as well as double-handling with associated increased risk of error.

### Step 4 – Clinician alerted to anomalies

There was discussion about work overload leading to desensitisation to anomalies that would otherwise be recognised. To be undertaken safely, experienced clinicians should be responsible for this part of the process. Protected clinical time is important to enable clinicians to adequately review prescriptions.

### Step 5 – Prescription is signed

Concern was raised about the possibility of forged signatures on prescriptions. This was considered rare and would probably be ameliorated, but not completely eliminated, by e-prescribing. Legibility of signatures is a perennial issue, but again, not one of high risk in an increasingly electronic world.

### Step 6 – Dispensing

This step focuses on the transfer of responsibility from general practice clinician to pharmacist, with potential problems of sending the prescription to the wrong pharmacy, losing the prescription (either patient or practice) and security of patient information.

Payment for repeat prescriptions was also mentioned as an issue.

## Discussion

It is in both patients' and practices' interest to offer repeat prescribing as a service. It is also necessary to understand the risks associated with the service and to mitigate these where possible. Patient education

about when to request a repeat prescription and, more importantly, when not to request one, raises questions. Improving health literacy among patients should be a goal of every practice, yet there is seldom time to achieve this in an increasingly pressured clinical environment. Long-term planning and allocation of resource are needed if a practice is intent on improving health literacy with its potential gains of efficient and effective patient use of practice time and increasing patient autonomy.

Similarly, updating regular medication lists with changes made in secondary care environments is a recognised important step in improving care and reducing prescribing errors.<sup>14</sup> It can also prove challenging from several perspectives. Finding protected time to complete the task, delays in receiving discharge summaries and outpatient letters, and lack of clarity as to responsibility between secondary and primary carers for prescribing of particular medications can all confound the intention of an accurate list of current medications.

Advancing technology is also changing repeat prescribing. A patient portal reduces the number of steps and people involved with repeat prescribing and is therefore likely to reduce errors. Add-on software such as 'reScript' removes all paper from the repeat prescribing process and thus reduces the number of steps in prescribing, with increased efficiency and better safety. Internationally, e-prescriptions are increasingly common and are generally considered to reduce error.<sup>15,16</sup>

A strength of this research is the background of the participants in the workshop; most were vocationally registered GPs with practical understanding and experience of 'coal-face' practice. Care must be taken over generalising the results of a workshop to the wider profession, as the participants were self-selected from a group of RNZCGP conference attendees.

Critical steps for safe repeat prescribing have emerged from this research and suggest that a practice policy based on these steps would be of benefit. Alternatively, an existing policy could be critically examined in light of this research. Clearly, each practice should review any such document to ensure fit with the requirements of the practice and modify as required.

## Competing interests

The authors declare that they have no competing interests.

## Funding

This research did not receive any specific funding.

## References

1. Ministry of Health. Medicines Regulations Act 1984 [Internet]. Wellington: Ministry of Health; 1984. [cited 2020 October 20]. Available from: <http://www.legislation.govt.nz/regulation/public/1984/0143/latest/whole.html>
2. Medical Council of New Zealand. Statement on Good Prescribing Practice. [cited 2020 October 20]. Available from: <https://www.mcnz.org.nz/our-standards/statements-definitions-and-publications>
3. Avery T, Barber N, Ghaleb M, et al. Investigating the prevalence and causes of prescribing errors in general practice: The Practice Study. London: General Medical Council; 2012.
4. Swinglehurst D, Greenhalgh T, Russell J, Myall M. Receptionist input to quality and safety in repeat prescribing in UK general practice: ethnographic case study. *BMJ*. 2011;343:d6788. doi:10.1136/bmj.d6788
5. Price J, Man SL, Bartlett S, et al. Repeat prescribing of medications: a system-centred risk management model for primary care organisations. *J Eval Clin Pract*. 2017;23(4):779–96. doi:10.1111/jep.12718
6. Lillis S, Lord H. Repeat prescribing – reducing errors. *J Prim Health Care*. 2011;3(2):153–8. doi:10.1071/HC11153
7. Lillis S, Macklin N, Thorn M, et al. Repeat prescribing safety survey. *J Prim Health Care*. 2019;11(3):243–8. doi:10.1071/HC19019
8. Atmore C. General practice evolution in New Zealand: hybridisation in action. *J Prim Health Care*. 2017;9(3):220–4. doi:10.1071/HC17043
9. Cave JA, Phizackerley D. Virtual revolution? *Drug Ther Bull*. 2020;58:114. doi:10.1136/dtb.2020.000039
10. Ernst & Young. Evaluation of the New Zealand Health Care Home, 2010–2016. Auckland: Ernst & Young; 2017.
11. Medical Protection Society. Risk alert: Repeat prescribing [Internet]. 2013 [cited 2020 October 20]. Available at: <https://www.medicalprotection.org/uk/articles/risk-alert-repeat-prescribing>
12. Kumar P. Process mapping – Health Quality and Safety Commission [Internet]. 2015. [cited 2020 October 20]. Available at: <https://www.hqsc.govt.nz/assets/Medication-Safety/collaborative/PR/LS1/004-process-mapping-Prem-Kumar.pdf>
13. Nowell LS, Norris JM, White DE, Moules NJ. Thematic analysis: striving to meet the trustworthiness criteria. *Int J Qual Methods*. 2017;16(1):1–16. doi:10.1177/1609406917733847
14. Deetjen U. European e-prescriptions: benefits and success factors. Cyber Studies Programme, 2016. Oxford, UK: University of Oxford.
15. Esmaeil Zadeh PE, Tremblay MC. A review of the literature and proposed classification on e-prescribing: functions, assimilation stages, benefits, concerns, and risks. *Res Social Adm Pharm*. 2016;12(1):1–9. doi:10.1016/j.sapharm.2015.03.001
16. Mekonnen AB, Abebe TB, McLachlan AJ, Jo-anne EB. Impact of electronic medication reconciliation interventions on medication discrepancies at hospital transitions: a systematic review and meta-analysis. *BMC Med Inform Decis Mak*. 2016;16(1):112. doi:10.1186/s12911-016-0353-9