Repeat prescribing practice in New Zealand

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ABSTRACT

Aim

To describe current repeat prescribing practice in New Zealand general practice.

Method

A self-completion questionnaire sought information from a random sample of general practitioners on repeat prescribing procedures.

Results

The practice of repeat prescribing without face-to-face consultation is widespread. Practices most commonly receive requests from patients by telephone to the practice nurse and/or receptionist. Clinical record review is often, but not always, undertaken by the doctor before the request is authorised. New patients and patients requesting recently commenced medication are very likely to be asked instead to come in for reassessment, while well-known patients on stable medication will most often be re-assessed six-monthly. Doctors are least likely to authorise repeat prescriptions for anxiolytics and antidepressants, for older patients, or those who have not attended within the last six months.

Conclusions

Respondents were very aware of the need for regular review and the clinical caution required for safe repeat prescribing. Clinical record review was found wanting for well-known patients on stable medication, although regular reassessment was intended. Good repeat prescribing systems are necessary to ensure a safe and effective service for patients.

Key words

Repeat prescribing, general practice, New Zealand

(NZFP 2002; 29:19–23)

Introduction

The issuing of a prescription for a previously prescribed medication without a face-to-face consultation with the patient is apparently commonplace. Repeat prescribing is considered accepted practice here[1] and in other developed countries.[2-4] Review has been sparse prior to the last decade. There is little information about this type of prescribing in the New Zealand setting, although the Royal New Zealand College of General Practitioners' Practice Standard Guidelines make mention of the need for repeat prescribing policies.[5]

Definitions of repeat prescribing vary. In the UK the issuing of a prescription without a consultation is different from repeat dispensing, where there is repetition of supplies of medication from a single prescription.[6] More recently, the term 'repeat prescription' has also been defined as all those items prescribed for a second or subsequent time, regardless of whether a face-to-face consultation took place.[7] Repeat prescribing by a GP without face-to-face consultation is the subject of this paper.

The benefits of repeat prescribing to the patient include convenience for long-term medication. Reduced waiting times, travelling times and costs are obvious advantages. For GPs time savings occur, although this is offset by the time taken by other practice staff to process requests for prescriptions.[8]

Risks include lack of recognition of changes in medical conditions, or

the development of side effects. The ability to check on correct drug taking, potential drug interactions and drug wastage is reduced.[6, 8]

Psychotropic, cardiovascular and gastro-intestinal drugs are among the most common drugs issued via repeat prescription.[1] There are well-documented problems of addiction, ineffectiveness and unwanted side effects with these drug groups,[10, 11] so timely review and proper authorisation are important. This is particularly so for the elderly who not only are more likely to receive these drugs than other age groups, but are also more likely to receive them via a repeat prescription.[9]

This study describes current practice for repeat prescribing in New Zealand. It identifies cardinal features of best practice and draws attention to some areas for improvement.

Method

A self-completion questionnaire was posted to a random sample of 300 general practitioners (GPs). The practitioners were randomly selected from the Royal New Zealand College of General Practitioners' (RNZCGP) membership database. Two reminders were sent out.

The survey sought information on practice policies and procedures of repeat prescribing. Repeat prescribing was defined as 'a repeat prescription that is issued by the practitioner, without a face-to-face consultation with the patient'.

The questionnaire listed a number of drug groups. GPs were asked to indicate on a Likert scale the extent to which these were prescribed without a face-to-face consultation. Three vignettes described clinical situations detailing a repeat prescription for a particular drug. The data was collected from December 2000 – January 2001.

Responses to the survey were collected, and the data was entered into a Microsoft Access 97 database. The quantitative data was imported into Epi Info for analysis. Comments were analysed qualitatively by coding and categorising the themes.

The Wellington Ethics Committee reviewed the study proposal, and deemed formal review unnecessary.

Results

A total of 205 questionnaires were returned. Eleven out of the initial 300 questionnaires were excluded from the sample due to the practitioner no longer being in active practice or current practice, or not able to be reached at the given address, giving a 71% response rate. The RNZCGP database from which the sample was drawn contains 92% of those registered as active general practitioners with the Medical Council of New Zealand.[12] The gender balance and distribution by year of graduation of the respondents is comparable to that of the national RNZCGP database. There was no significant difference between responders and non-responders with respect to gender or year of graduation.

Sixty-two per cent of the respondents in the study were male and 38% female. Forty-eight per cent were in a two to three doctor practice, 25% were in a four to five doctor practice, 14% were in solo practice, and 12% were in larger group practices. Fifty-seven per cent worked in suburban practice, 15% in inner city practices, 14% in rural practice and 9% in semi-rural practice.

> Psychotropic, cardiovascular and gastro-intestinal drugs are among the most common drugs issued via repeat prescription

Ninety-four per cent of respondents said they were members of the RNZCGP, 65% said they belonged to an Independent Practitioners Association (IPA), while 46% indicated that they were members of the NZ Medical Association. Seventy-three per cent of respondents received payment on a fee-for-service basis. Twenty-three per cent received some capitated funding.

Key points

- The practice of repeat prescribing without face-to-face consultation is widespread.
- Clinical record review is often, but not always, undertaken by the doctor before the request is authorised.
- New patients and patients requesting recently commenced medication are very likely to be asked instead to come in for reassessment, while well-known patients on stable medication will most often be re-assessed six-monthly.
- Doctors are least likely to authorise repeat prescriptions for anxiolytics and anti-depressants, for older patients, or those who have not attended within the last six months.
- Good repeat prescribing systems are necessary to ensure a safe and effective service for patients.

Repeat prescribing requests

Ninety-nine per cent of GPs had at some time renewed a prescription without a face-to-face consultation with the patient. Ninety-five per cent charged a fee for supplying a repeat prescription, most commonly between NZ$11.00 and NZ$15.00 per prescription. The standard fee for a non-subsidised face-to-face consultation ranges between NZ$35.00 and NZ$55.00.

Practices most commonly received requests for repeat prescriptions by phone-call to the practice nurse (85%) and/or to the receptionist (69%). Less popular methods included note or letter (38%), fax (33%), e-mail (6%), and phone-call to a prescription call-line (2%).

Most respondents (71.5%) reported that the practice nurse processed requests and printed the prescription,

while 49% said that this was also done by the receptionist. Only 18% of GPs were involved in this initial step. More than one person was often involved in the initial processing of requests for repeat prescriptions.

Clinical record review

Patients well-known to the doctor, on stable medication, were less likely to receive record review at the time of their repeat prescription request (61% of doctors) than those on new medication (98% of doctors).

Patients new to the doctor were very likely to be actively reviewed for both stable and new medication requests (98%, 99% of doctors respectively). Ninety-nine per cent of respondents would review a new patient on new medication, with 80% undertaking extensive review.

Recall for clinical assessment

For a well-known patient on stable medication, 94% of respondents would recall for assessment at least six-monthly. Six per cent would recall annually, or at a longer interval. For such a patient, 63% would recall for six-monthly reassessment, 30.5% would recall for three-monthly assessment, and 0.5% would recall after a month. Respondents commented that for many patients on long-term medication, it is intended that only every alternate prescription is issued as a repeat without a face-to-face consultation. In some instances, the practice nurse could undertake blood pressure assessment at the time of a repeat prescription request (e.g. anti-hypertensives, oral contraceptives).

> Of the drug groups enquired about, doctors were least comfortable about repeat prescribing anxiolytics, anti-depressants, insulin and oral hypoglycaemics

For a well-known patient on new medication, 97% of respondents would recall at least three-monthly (54% after a month, 43% at three months).

For a new patient on stable medication, 87% of doctors would recall at least three-monthly (77% at three months, 10% after a month)

For a new patient on new medication, 97% would recall at least three-monthly (82% after a month, 15% at three months).

Repeat prescribing of different drug groups

Respondents were asked about a number of drug groups, and how often they would be prepared to prescribe each without a face-to-face consultation (Table 1).

Of the drug groups enquired about, doctors were least comfortable about repeat prescribing anxiolytics, anti-depressants, insulin and oral hypoglycaemics. Doctors were more comfortable about repeat prescribing antihistamines, oral contraceptives and topical creams and ointments. Some commented that while some drug groups are frequently repeat prescribed, only one repeat is given before reassessment.

Repeat prescribing for a clinical scenario

Three case vignettes were described. Respondents commented on aspects of the associated prescribing. When asked to describe further action, respondents could respond with more than one option.

Vignette One

Vignette One described a 28-year-old patient again requesting Ranitidine for gastro-oesophageal reflux. She was last seen nine months ago. Sev-

Table 1. Repeat prescription of drug groups (without a face-to-face consultation) (n = 205)

Drug group	Never/rarely		Sometimes		Frequently/almost always	
	Number	%	Number	%	Number	%
Anti-depressants	114	56	79	39	9	4
Anti-histamines	18	9	73	36	111	54
Anti-hypertensives	52	25	91	44	57	28
Anxiolytics	140	68	51	25	11	5
Asthma drugs	28	14	93	45	81	40
Gastro-oesophageal reflux drugs	21	10	87	42	94	46
Hormone replacement therapy	31	15	85	42	84	41
Insulin	109	53	69	34	25	12
Non-steroidal anti-inflammatory drugs	32	16	116	57	55	27
Oral contraceptives	36	18	62	30	104	51
Oral hypoglycaemics	103	50	77	38	23	11
Topical medication (creams, ointments etc.)	19	9	75	37	105	51

enty-four per cent of respondents would not authorise the request. Of those respondents, 76% would ask the patient to come in for a consultation, 23% would further consult the patient's medical records, and 17% would further discuss the situation with the patient on the telephone. Some respondents commented that supply would depend on whether the diagnosis had been confirmed with endoscopy or H. pylori testing.

Vignette Two

Vignette Two described a 58-year-old patient requesting a repeat prescription for Quinapril. An overall blood pressure drop was recorded from 190/102 to 170/96 in the last consultation three months ago. Ninety-eight per cent of respondents would not authorise this request without further action. Of these, 96.5% would request the patient to come in for a doctor consultation. Four per cent of these respondents would further consult the patient's medical records, while a further 3% would further discuss the matter with the patient over the telephone. There were many comments about the need for further evaluation and possible change in medication. Some suggested that the practice nurse might give a consultation and blood pressure check.

Vignette Three

Vignette Three described an elderly patient requesting a repeat prescription of Diclofenac for pain due to osteoarthritis. She had not been seen for 14 months. Ninety-two per cent of respondents would not authorise this request without further action. The majority of these (84%) would ask the patient to come in for a face-to-face consultation. Fifteen per cent would discuss the situation with the patient on the phone, and 5% would further consult the patient's medical records. Many commented they would be unhappy with the use of non-steroidal anti-inflammatories in a woman of this age. Nearly all said 14 months was too long a period without review.

Discussion

This study describes the issuing of repeat prescriptions without face-to-face consultation as reported by general practitioners in New Zealand. It is common practice and comparable to other countries, particularly the UK.[4,7]

Given the near-universal use of telephones/faxes/e-communication in modern primary care, requests from patients for repeat prescriptions are likely to continue. Repeat prescribing is now an entirely justifiable part of general medical practice.[13] The challenge for prescribers is to provide a safe and effective service, where systems are in place to review patients and their medications at appropriate intervals.

Despite the potential benefits, and the advent of better quality patient records with computerisation, the practice of repeat prescribing has been found wanting in several key areas. Problems with the handling of prescription requests have been described,[14] as well as deficiencies with the on-going clinical aspects of the prescribing.[15,16]

The challenge for prescribers is to provide a safe and effective service, where systems are in place to review patients and their medications at appropriate intervals

Repeat prescribing has been described as three principal tasks – production, management control and clinical control.[16]

The study shows production of the prescription (receiving requests and printing) being handled by the practice nurse, and/or receptionist. Repeat prescriptions may save time for the doctor, but consume practice nurse and receptionist time. In many cases, more than one person was involved in production of the prescription. The study did not explore confidentiality issues regarding prescription requests, but this area of practice may deserve closer attention when several people are involved in the process.

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Management control is described[16] as comprising checks on authorisation, compliance and review, often carried out by a practice manager. This study did not ask specifically about manager involvement in repeat prescribing, but these tasks were included in questions about the doctor's role.

Clinical control constitutes authorisation and periodic review. The RNZCGP recommends that practices have 'a policy for reviewing the necessity and appropriateness of repeat prescriptions, where appropriateness means ensuring prescriptions do not allow for over-prescribing, drug interactions, and abuse by patients'.[5] UK recommendations about good prescribing systems state that 'all prescriptions should be reviewed and signed by a doctor who knows that patient and who has direct access to the clinical record'.[6]

While nearly all respondents indicated that they would review the clinical records for new patients, and those on new medication, only two-thirds would review the clinical record for a known patient on stable medication. However, most GPs would recall known patients on stable medication for assessment at least six-monthly, and those on new medication at least three-monthly. Thus, while respondents intended to issue only every alternate prescription without a face-to-face consultation, it was not clear how information about time since last review and previous clinical measurement results were found without checking the clinical record each time a prescription was authorised.

The type of drug group made a difference to the willingness to repeat

prescribe in the study. The reluctance to repeat prescribe anxiolytics and antidepressants is not surprising, given the propensity for addiction and unstable clinical situations to occur in patients on these medications. This finding is consistent with general prescribing practice in New Zealand for these drug groups.[17, 18]

The clinical scenarios revealed that most GPs would want more information before issuing a repeat prescription in situations where a pattern of regular prescription with regular review at an appropriate interval was not evident. Most would ask the patient to come in for a face-to-face consultation. The study did not explore the nature of the practice nurse's consulting role in repeat prescribing, but this is an area where considerable activity took place.

Unlike the UK, patients in New Zealand pay the GP directly for consultations and repeat prescriptions. This study did not explore patient expectation, but it would be reasonable to assume that patients pay in expectation of a safe and effective service for repeat prescriptions, just as they do for consultations. Consumer perceptions about repeat prescribing practices are an area worthy of further investigation.

In conclusion, this study found that repeat prescribing is commonplace in New Zealand general practice. Most GPs indicated the need for regular review when issuing a repeat prescription, and most were well aware of the clinical caution required for safe repeat prescribing, particularly with some drug groups, yet the study indicates that adequate review may not always happen in practice. The study found that known patients on stable medication did not always get active review of their clinical records, although most GPs would ask patients to consult at regular intervals. This study addressed a lack of research on repeat prescribing in New Zealand and raises questions that need further research on how all members of the general practice team, including patients, manage repeat prescriptions and the associated confidentiality issues.

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References

1. Parker J, Schrieber V. Repeat prescribing – a study in one practice. Journal of the Royal College of General Practitioners 1980; 30:603–606.
2. Cohen H, Garwood H. Intervention to reduce telephone prescription requests. Can Fam Physician 1997; 43:1952–6.
3. Martin C. Could repeat prescriptions identify patients needing extended medical review? An exploratory study. Aust Fam Physician 2000; 29:492–7.
4. Rokstad K, Straand J. Drug prescribing during direct and indirect contacts with patients in general practice. A report from the More & Romsdal Prescription Study. Scand J Prim Health Care 1997; 15:103–8.
5. Royal New Zealand College of General Practitioners. Aiming for excellence in general practice. Standards for general practice. Wellington: Royal New Zealand College of General Practitioners, 2000.
6. National Audit Office. Repeat prescribing by general medical practitioners in England. London: National Audit Office, 1993.
7. Harris C, Dajda R. The scale of repeat prescribing. Br J Gen Pract 1996; 46:649–53.
8. Drury M. Safe practice in repeat prescribing. Practitioner 1990; 234:127–8.
9. Nicol F, Gebbie H. Repeat prescribing in the elderly. A case for audit? Scott Med J 1984; 29:21–24.
10. Goudie BM, McKenzie PE, Cipriano J, Griffin EM, Murray FE. Repeat prescribing of ulcer healing drugs in general practice — prevalence and underlying diagnosis. Aliment Pharmacol Ther 1996; 10:147–50.
11. North D, McAvoy B, AM P. Benzodiazepine use in general practice – is it a problem? NZ Med J 1992; 105:287–9.
12. Wilkinson M, Flegg K. Who are the GPs of New Zealand? New Zealand Family Physician 2001; 28:260–263.
13. Taylor RJ. Repeat prescribing – still our Achilles' heel? [letter; comment]. Br J Gen Pract 1996; 46:640–1.
14. Cox S, Wilcock P. Improving the handling of repeat prescribing: http://www.jr2.ox.ac.uk/Bandolier, 2000.
15. McGavock H, Wilson-Davis K, Connolly JP. Repeat prescribing management – a cause for concern? [see comments]. Br J Gen Pract 1999; 49:343–7.
16. Zermansky AG. Who controls repeats? [see comments]. Br J Gen Pract 1996; 46:643–7.
17. National Preferred Medicines Centre. Case Studies 47–49. Wellington: National Preferred Medicines Centre, 1996.
18. National Preferred Medicines Centre. Case Studies 55–57. Wellington: National Preferred Medicines Centre, 1997.