

## Patient perspective

# Medicines in primary care: towards a patient-centred approach to quality

Alison Blenkinsopp BPharm PhD FRPharmS

Professor of the Practice of Pharmacy, Keele University School of Pharmacy, UK

Alan Hassey MSc MB BS DRCOG FRCGP

General Practitioner, Fisher Medical Centre, Skipton, UK

Gill Dorer

Patient Representative and Advocate for Explicit Standards in Health Care, UK

### ABSTRACT

Access to, and use of, medicines were key areas identified for improvement in *the NHS Plan* in 2000.

In this discussion paper and in relation to the primary care setting we:

- consider the problems that patients have in accessing and using medicines

- review relevant initiatives in NHS policy and practice, and their effects
- propose standards for patient-centred medicines management

**Keywords:** access to medicines, patient-centred care, patient information, prescriptions, quality improvement

### How this fits in with quality in primary care

#### What do we know?

Access to and use of medicines are important areas for quality improvement in primary care.

#### What does this paper add?

Based on problems that patients have in accessing and using medicines, this paper argues for patient-centred management of medicines. Primary care teams can adapt and use our proposed patient-centred standards.

## Introduction

Every day 2.8 million prescription items on 1.3 million prescriptions are dispensed in primary care. Seventy percent of these are 'repeat prescriptions', which are repeated long-term prescriptions where the doctor does not necessarily review the patient. Recent years have seen concerted efforts to improve the quality of medicines management. ('Medicines management is a system of processes and behaviours that determines how medicines are used by patients and by the NHS.'<sup>1</sup>) *The NHS Plan* promised changes that would improve access to medicines and convenience in obtaining

repeat prescriptions for patients.<sup>2</sup> More recently, changes in NHS contracts for general practice and community pharmacists have increased the emphasis on good medicines management. Finally, the concept of information as therapy and the development of NHS information prescriptions offer the opportunity for better patient access to information about medicines. Taken together, these changes have considerable potential to improve healthcare quality. But looked at from a patient's perspective how does the quality of the service measure up in 2007?

## Problems with repeat medicines

The lack of research on the problems that patients experience in relation to repeat prescriptions is noteworthy. However, in 2002 the local teams of clinicians and managers participating in the national Medicines Management Services Collaborative (MMSC) identified the following areas for improvement based on analysis of their own practices and patients:<sup>1</sup>

- prescription review
- medication monitoring
- improvement of general practitioner (GP) computer and repeat prescribing systems
- better prescription collection and delivery services
- development of concordance between patients and healthcare professionals.

Patients also experience more basic practical problems; these are summarised in Box 1, with some examples in patients' own words in Box 2.

### Box 1 Patients' problems with repeat medicines

- Running out of medicines at different times
- Intended changes to medicines made during hospital admission not implemented after discharge
- Pharmacy does not have sufficient stock to fill all prescription items
- Difficulty in getting medicines out of normal working hours and on bank holidays
- Lack of understanding of reasons for practice repeat prescription policies or how local systems work, e.g. why is 48 hours' notice necessary for a repeat prescription? Why can't I order repeat prescriptions over the phone?
- Difficulties in getting to the surgery and/or pharmacy
- Unanswered questions about the treatment and/or the condition
- Practical problems with packaging and formulation of medicines, e.g. tablets difficult to swallow
- Lack of confidence in medicine when it appears in a different format, new packaging, new name

The prevalence of these problems is difficult to establish. Some practitioners argue that the low level of complaints from their patients about these issues must mean that they are not perceived as a real problem by patients. However, patients may have low expectations of the system based on their previous experience and assume that is just 'how things are'. The 'cost' in terms

### Box 2 In patients' own words ...

'Went to pick up prescription at chemist told it was not there, phoned the surgery was told that they were sorry it had not been done but they would fax it straight away to [A] where it could be picked up. Went 4 hours later to [A] surgery, was told they did not have the prescription, [A] phoned [B] who said sorry it had been missed again and they would fax it to [A] as soon as they had got a doctor to sign it. One repeat prescription = 3 visits to chemist, 2 visits to doctors and 1 phone call.' (extract from minutes, Practice Patient Forum meeting)

'The practice introduced a new system for processing repeat prescriptions: patients could no longer request them over the telephone but only in person or by post. Mr C complained about the new policy and asked if his wife (who has MS) could be treated as an exception, in view of her frequent, regular repeat prescriptions. The practice refused.' (Parliamentary and health services ombudsman)

'My local pharmacy offers a prescription collection service. When I went to ask them to collect my prescription they said the medicines would be ready in a week's time. My prescription isn't for anything special. I asked why it would take so long. They couldn't really answer. Anyway I got the prescription from the surgery myself and took it to the pharmacy to be dispensed. It took far less than a week!' (patient's story)

'My dad needs eye drops – the same ones every month. And every month he takes this same prescription into the local (independent) pharmacy and every month the pharmacist says "We'll have to order them". So usually it involves two trips to the pharmacy. Anyway last month my dad took the prescription and the pharmacist told him to come back the next morning. He went back the next morning and the pharmacist said the eye drops hadn't arrived and asked him to call back in the afternoon. Which he did but that was three trips to the pharmacy! Anyway recently a new pharmacy opened (large company). My dad was a bit sick of the old one so he went to the new one. The pharmacist asked him if he got the same drops regularly. She said she could collect the prescription from the surgery and order the eye drops in advance. He asked me why the first pharmacist couldn't do that.' (son of patient with long-term eye condition)

'I have nine items on my repeat prescription printout. Everything runs out at slightly different times because the repeat printout is linked to the initial prescribing date for each medicine. I find myself putting a repeat prescription request to the pharmacy most weeks. Another frustration is that three items are only for one month's supply, the rest for two months. Oh for consistency! And then when the prescription is dispensed I find that some medicines come in a totally new look – new packaging or new name – which is confusing at least and risky at worst.' (patient's story)

of time and inconvenience to patients is not always recognised or thought about as a cost by clinicians.

One study found that there was misalignment in repeat intervals for prescriptions of one in five older people.<sup>3</sup> Unintentional changes to medicines following hospital discharge for a substantial proportion of patients have been reported in several studies.<sup>4</sup> There is widespread acknowledgement that patients might not be taking the medicines the clinician thinks they are taking. In one area a nurse has been seeing patients identified as being at risk of avoidable hospital admissions during 2007. When she talked with patients in their own homes she compared the medicines and doses they were actually taking with what the practice records showed they should be taking (often eight, nine or ten medicines). There was not a single case where the two lists were the same.

Patients' understanding of their condition and the medicines used to treat it may not be as complete as clinicians sometimes think, exemplified by a study in diabetes which showed a lack of understanding about treatment in type 2 diabetes. One in five patients thought it was not very important to take their medicines and was unaware of the complications of diabetes.<sup>5</sup> For many patients the manufacturer's leaflet in the medicines pack may be the only piece of information received. A recent review has shown that many patients do not value these leaflets and want information more tailored to their needs, including information about their condition as well as the treatment.<sup>6</sup> The same review found consistent evidence that patients want to know more about the side-effects of medicines, but many side-effects are never discussed with the GP and only 1% are aware that patients can report them on a yellow card.<sup>7</sup> Patients' wishes to know more about their condition and treatment are well illustrated in the findings of the 2006 national survey of people with diabetes.<sup>8</sup> Almost a quarter said they had not received sufficient information at the time their diabetes was diagnosed. When a medicine is prescribed

for the first time patients need explanation, information, and the opportunity for discussion. However, many GPs and nurses find it difficult to allocate sufficient time for this in routine consultations. A recent randomised controlled trial found that proactive community pharmacist follow-up by telephone with patient-centred advice increased adherence and reduced medicine-related problems.<sup>9</sup> The simple questions used by the pharmacist began with 'How are you getting on with your medicines?' before asking more specifically about any problems with the new medicine, how the patient was taking it and whether they had any questions about it.

## Changes in NHS policy and their effects

In 2000 *The NHS Plan* made a series of commitments relating to repeat medicines (see Table 1).

Progress is more advanced in some areas than others, and some interdependencies have emerged. The Electronic Prescriptions Service (EPS), for example, has the potential to enable fuller implementation of other services such as repeat dispensing. Currently most practices and pharmacies have to use a cumbersome system of hard-copy prescriptions and records for repeat dispensing. It is therefore perhaps not surprising that in 2006 only 0.7% of prescription items in England were dispensed through repeat dispensing.

The Department of Health is introducing information prescriptions,<sup>10</sup> and a set of pilots will be evaluated before a future service is specified. One pilot specifically deals with information about medicines for children across hospital and primary care. The government's recently announced NHS Choices website will offer, among other things, 'Access to a vast library of approved medical literature, previously only available to clinicians, to enable a deeper understanding of conditions & treatment options'.<sup>11</sup>

## Primary care contractual changes

Both the revised 'new General Medical Services' (nGMS) contract and its Quality and Outcomes Framework (QOF) in 2004 and the new Community Pharmacy Contractual Framework (CPCF) in 2005 included several requirements and incentives relating to medicines management (see Box 3).

**Table 1** Commitments made in *The NHS Plan* and progress by 2007

<i>NHS Plan</i> service commitment	Progress by 2007
'Electronic prescribing of medicines by 2004 giving patients faster and safer prescribing as well as easier access to repeat prescriptions. By 2004, electronic prescriptions will be routine in the community as well as hospitals.'	The Electronic Prescribing (ePrescribing) programme is currently focused in secondary care and aims to facilitate development and delivery of systems to improve patient safety by reducing prescribing and administration errors in hospitals. ePrescribing systems will enable medications to be managed electronically from prescribing through to supply and administration. It should also reduce paperwork, improve audit trails for medication and improve communication (for example, between hospital departments and community pharmacies).
'Transfer of prescription data between GPs, pharmacies and the Prescription Pricing Authority will be carried out electronically, using the NHSNet, in the large majority of cases by 2008, or even earlier.'	National roll-out began in 2005. By March 2007 the Electronic Prescriptions Service (EPS) <sup>a</sup> using Release 1 systems was responsible for 'over 8% of daily prescription messages' and '1669 practices were actively operating EPS'. Later in 2007 'initial implementer' primary care trusts (PCTs) will use Release 2 systems prior to full roll-out in 2008. Thus by the end of 2008 patients should be able to nominate a pharmacy where their prescriptions will be sent electronically. Repeat dispensing will then become more feasible to implement on a wider scale.
'The introduction this year (2000) of "Patient Group Directions", which enable nurses and other professionals to supply medicines to patients according to protocols authorised by a doctor and a pharmacist.'	Patient Group Directions (PGDs) are now widely used in primary care, e.g. practices; walk-in centres; community pharmacies.
'By 2004 a majority of nurses should be able to prescribe.'	Independent prescribing by nurses and pharmacists is now established with flexibility to prescribe any medicine from the <i>British National Formulary</i> according to individual competence.
'... a wider range of over-the-counter medicines available.'	Several key medicines have been switched from prescription-only medicines (POM) to P (pharmacy), mainly for self-limiting acute problems (e.g. chloramphenicol eye drops).
'By 2004 every primary care group or trust will have schemes in place so that people get more help from pharmacists in using their medicines.'	New pharmacy contract was introduced in 2005 with repeat dispensing as an 'essential' and medicines use review (MUR) as an 'advanced' service.
'By 2004 there will be repeat dispensing schemes nationwide to make obtaining repeat prescriptions easier for patients with chronic conditions.'	At the end of 2006 repeat dispensing schemes were operating in many PCTs but only involved 0.7% of prescription items.
'NHS Direct nurses will be in regular contact to help patients manage their medicines and check that older people living alone are all right.'	NHS Direct 'is keen to develop ... these [interactive digital TV] and online services further' to support people with long-term conditions. <sup>12</sup>

<sup>a</sup> EPS, formerly Electronic Transfer of Prescriptions, ETP.

### Box 3 Medicines management in nGMS and CPCF

#### Prescription review

- nGMS QOF included medication review for people on repeat medicines since 2004
- CPCF includes a locally commissioned enhanced service termed clinical medication review

#### Medication monitoring

- Addressed in parts of the QOF (e.g. to ensure that lithium levels in therapeutic range in mental health)

#### GP computer and repeat prescribing systems

- Criterion in nGMS QOF for maximum time between repeat prescription request and prescription being available

#### Better prescription collection and delivery systems

- Repeat dispensing included in CPCF, implementation using hard-copy systems prior to full implementation of the EPS

#### Development of concordance between patients and healthcare professionals

- Medicines Use Review introduced in the Community Pharmacy Contractual Framework in 2005

The GMS QOF introduced the first standards for prescription ordering and collection, and for medication review:

- the number of hours from requesting a prescription to availability for collection by the patient is 72 hours or less (excluding weekends and bank/local holidays)
- a medication review is recorded in the notes in the preceding 15 months for all patients being prescribed four or more repeat medicines (excluding over-the-counter (OTC) and topical medications): standard 80%.

More patients do now have their medicines reviewed and the Medicines Management Services Collaborative made this a key area of work from its inception, which pre-dated the QOF by several years. There are different types of review, not all of which involve the patient or carer. Ideally the patient or carer will be involved in the review. This is not a requirement of the QOF, and practices are likely to prioritise cases where face-to-face discussion is likely to be of particular benefit (for example multiple medical conditions and medicines, patients frequently admitted to hospital, and those in residential or nursing home settings). Medicines use

review (MUR) by community pharmacists is intended to focus on practical aspects of medicines use, provide education to increase patients' understanding of their medicines, and to act as a filter for identifying patients who might need a clinical medication review from the GP or practice pharmacist. However, evidence so far suggests that MUR is not yet sufficiently integrated into primary care in a number of ways.<sup>13</sup> GPs and primary care nurses can refer patients to a local community pharmacist for a MUR where, for example, a new medicine has been started and the clinician perceives a need for further education and information, or a patient is taking several medicines and they seem to be having problems in managing them.

## Practice-driven changes

Other changes have been introduced by local practitioners to meet patients' needs. When compared with the situation in 2000:

- prescription ordering using email and fax has been introduced by some practices
- prescription collection arrangements between pharmacies and surgeries are much more widespread
- prescription delivery is offered by many pharmacies
- information leaflets are now offered by many surgeries using the practice computer system.

There are no figures on the extent of changes in prescription-ordering methods in practices. Some practices are wary of introducing email or faxed requests, for safety reasons. Anecdotally, a high proportion of repeat prescriptions are now dealt with within existing informal collection and delivery arrangements. This should make the process of nominating a preferred pharmacy for the EPS straightforward for many patients. Although there are professional standards for prescription-collection services, these do not include a minimum time in which the collected prescription will be dispensed.<sup>14</sup> Prescription delivery is offered by many community pharmacy services in response to patient need, and its costs are met by pharmacies, with no contribution from the NHS. Unsurprisingly not all pharmacies offer the service and since it is not an NHS service there are no nationally agreed criteria to define who should be eligible to have their medicines delivered. Pharmacies tend to operate informal criteria and offer the service to patients who are housebound or who have mobility problems. There are no data on the extent of usage of information leaflets by practices. A small study found variability between practices and between individual clinicians within practices.<sup>15</sup>

## Towards patient-centred standards for medicines management

In Box 4 we set out a list of possible standards for discussion and local adaptation.<sup>16</sup> Achieving quality in medicines management is only possible through local collaboration between general practice, community

### Box 4 Possible standards for discussion and local adaptation<sup>a</sup>

- 1 The patient can opt for electronic transfer of their prescriptions to a nominated pharmacy and/or a local prescription collection service.
- 2 The patient can opt to receive the repeat dispensing service.
- 3 Housebound patients can choose to have their medicines delivered to their home.
- 4 The repeat prescribing system ensures that medicines do not run out at different times.
- 5 Reasons for any changes in the repeat prescribing system are clearly communicated to patients.
- 6 The patient knows:
  - why each of their medicines has been prescribed, when and how to take them
  - common side-effects of each medicine and what to do about them, including the option of completing a yellow card
  - any tests that are needed in relation to their medicines and what the numbers mean when the results come back
  - how long each treatment is likely to continue
  - what he/she can do for himself/herself that could help their condition/s.
- 7 The patient can obtain the information they need about each of their medicines.
- 8 The patient has been asked if they have any problems with getting medicines out of their packs and/or using their medicines.
- 9 Medicines are reviewed at regular intervals. Where the review is to be conducted together with the patient an appointment is offered; where a 'paper-based' review is conducted the patient is informed that it has taken place and reasons why any changes have been made.
- 10 General practices and community pharmacies provide feedback to each other on areas where medicines management systems can be improved.

<sup>a</sup> Adapted from Department of Health, 2003.<sup>15</sup>

pharmacy and other settings where medicines are prescribed (e.g. walk-in centres) in primary care. Input from patients is needed to identify local issues and discuss possible solutions. Those practices that do not have a patient participation group can find alternative ways of achieving this.

A set of possible survey questions to assess areas where standards are met or not met is listed in Box 5.

### Box 5 Questions to identify performance against medicines management standards<sup>a</sup>

- Do you ever have problems getting your medicines or ordering repeat prescriptions? (Standards 1–5)
- Do you know what each of your medicines is for and how long you have to take them for? (Standard 6)
- Do you know how to take each medicine? (Standard 6)
- Do you need any information about any of your medicines or do you have any questions about them? (Standard 7)
- Do you have problems getting medicines out of boxes and bottles? (Standard 8)
- Do you have problems using your medicines (e.g. inhaler, eye drops) (Standard 8)
- When did someone last review your medicines? (Standard 9)
- What changes would help improve the way that you get your repeat medicines? (all standards)
- Any other problems or any questions about your medicines?

<sup>a</sup> Adapted from: Bellingham, 2004.<sup>17</sup>

## Conclusions

Medicines management in primary care has improved in many respects since the publication of *The NHS Plan* in 2000. Primary care teams could adapt and use our proposed patient-centred standards, audit current performance and work with patients towards improvement in the areas identified.

### ACKNOWLEDGEMENTS

We would like to thank Julia Bundock, specialist primary care nurse, for her comments on the draft article

## REFERENCES

- 1 National Prescribing Centre. Medicines management services – why are they so important? *MeReC Bulletin* 2002;12(6). [www.npc.co.uk/MeReC\\_Bulletins/2001\\_Volumes/pdfs/vol12no6.pdf](http://www.npc.co.uk/MeReC_Bulletins/2001_Volumes/pdfs/vol12no6.pdf) (accessed 4 May 2007).
- 2 Department of Health. *The NHS Plan*. London: Department of Health, 2000.
- 3 Hartzig V, Langley CA, Marriott JF and Wilson KA. Polypharmacy and asynchronous prescribing in elderly patients within primary care. *International Journal of Pharmacy Practice* 2001;9(suppl):R77.
- 4 Duffin J, Norwood J and Blenkinsopp A. An investigation into medication changes initiated in general practice after patients are discharged from hospital. *Pharmacy Journal* 1998;261:R32.
- 5 Association of British Pharmaceutical Industry, Diabetes UK, Ask About Medicines. *The Diabetes Information Jigsaw*. [www.abpi.org.uk/publications/pdfs/diabetes\\_jigsaw.pdf](http://www.abpi.org.uk/publications/pdfs/diabetes_jigsaw.pdf) (accessed 4 May 2007).
- 6 Raynor DK, Blenkinsopp A, Knapp P *et al*. A systematic review of quantitative and qualitative research on the role and effectiveness of written information available to patients about individual medicines. *Health Technology Assessment* 2007;11(5).
- 7 Medicines and Healthcare Products Regulatory Agency. *Risks and Benefits of Medicines and Medical Devices – Perceptions, Communication and Regulation*. 2006. [www.mhra.gov.uk/home/idcplg?IdcService=SS\\_GET\\_PAGE&useSecondary=true&SSDocName=CON2025474](http://www.mhra.gov.uk/home/idcplg?IdcService=SS_GET_PAGE&useSecondary=true&SSDocName=CON2025474)
- 8 Healthcare Commission. *Diabetes: the views of people with diabetes*. London: Healthcare Commission, 2007.
- 9 Clifford S, Barber N, Elliott RA, Hartley E and Horne R. Patient centred advice is effective in improving adherence to medicines. *Pharmacy World and Science* 2006; 28:165–70.
- 10 Department of Health. *Our Health, our Care, our Say: a new direction for community services*. London: Department of Health, 2006.
- 11 Department of Health. *Hewitt unveils Patient Choice for all*. London: Department of Health, 2007. [www.gnn.gov.uk/environment/fullDetail.asp?ReleaseID=277419](http://www.gnn.gov.uk/environment/fullDetail.asp?ReleaseID=277419) &NewsAreaID=2&NavigatedFromDepartment=False (accessed 4 May 2007).
- 12 Department of Health. *Supporting People with Long Term Conditions to Self Care*. London: Department of Health, 2006.
- 13 Blenkinsopp A, Celino G, Bond C and Inch J. Medicines use reviews: the first year of a new community pharmacy service. *Pharmacy Journal* 2007;278:218–23.
- 14 Royal Pharmaceutical Society of Great Britain. *Code of Ethics and Standards*. 2006. [www.rpsgb.org.uk/pdfs/coe060524.pdf](http://www.rpsgb.org.uk/pdfs/coe060524.pdf) (accessed 4 May 2007).
- 15 Blenkinsopp A and Dost A. *Support for Self Care in General Practice and Urgent Care Settings*. London: Department of Health, 2006.
- 16 Department of Health. *Management of Medicines: a resource to support implementation of the wider aspects of medicines management for the National Service Frameworks for Diabetes, Renal Services and Long-Term Conditions*. London: Department of Health, 2003. [www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4088754](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4088754) (accessed 4 May 2007).
- 17 Bellingham C. Improving medicines management in intermediate care. *Pharmacy Journal* 2004;273:349–50.

## CONFLICTS OF INTEREST

None.

## ADDRESS FOR CORRESPONDENCE

Alison Blenkinsopp, Medicines Management, School of Pharmacy, Keele University, Keele, Staffordshire ST5 5BG, UK. Tel: +44 (0)1782 583444; fax: +44 (0)1782 713586; email: [a.blenkinsopp@mema.keele.ac.uk](mailto:a.blenkinsopp@mema.keele.ac.uk)

Received 3 April 2007

Accepted 19 April 2007